



NSW SOUTH COAST FLOOD SUMMARY AUGUST 2015

Report MHL2397
September 2015

Prepared for:



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NSW South Coast Flood Summary August 2015

Report MHL2397
September 2015

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Cover Photograph: Nowra Bridge, Shoalhaven River, taken by P Clark 26/08/2015

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Foreword

This report is a summary of the August 2015 flood event on the New South Wales (NSW) south coast, commissioned by the NSW Office of Environment and Heritage (OEH). The area of focus for this flood report ranges from Woronora Dam to Wagonga Inlet in the south. OEH manages an extensive data network in the NSW coastal zone. Manly Hydraulics Laboratory (MHL) operates and maintains the coastal data network under an annual contract to OEH.

Additional flood data is provided by the Department of Primary Industries Water (DPI Water), Bureau of Meteorology (BoM), WaterNSW and Sydney Water Corporation (SWC). Sarah Dakin, Bernard Tse and Zoran Tripovic of MHL undertook data analysis and reporting. Martin Fitzhenry from the Environment Programs Branch, OEH directed the report preparation.

An electronic copy of this report can be downloaded at www.mhl.nsw.gov.au.

Summary

In August 2015 heavy rains and damaging winds occurred in the Illawarra and south coast regions of New South Wales. The severe weather conditions were driven by a low pressure system, also referred to as an East Coast Low, that developed off the southern New South Wales Coast. Overnight on the 23rd to 24th August 2015 the low pressure system intensified off the Illawarra Coast. Between the 24th and 26th August large areas recorded more than 300mm of rainfall. Nowra recorded a 2-day total of 390 mm, its highest 2-day total for any month since records began in 1942 (previous record was 297.8 mm on 11-12 June 1991). The heavy rain resulted in substantial flooding in the Illawarra and south coast regions, with several storages including Lake Burragorang and Warragamba Dam reaching full capacity. Flood Warnings were issued by BoM for St Georges basin, Nepean and Hawkesbury river, and the Shoalhaven river.

During the flood period, MHL staff were able to monitor the situation via real-time data network and provided clients and the public with near real time access to rainfall, wave, wind and water levels via customised client webpages and MHL's public webpage at www.mhl.nsw.gov.au. MHL deployed a field team in the flood-affected areas to obtain flood status checks and to be available to remedy any system failures from Wednesday 26th August to Friday 28th August.

During the flood events, the BoM used water level and rainfall data, quantitative precipitation forecasts and radar information to generate predicted water levels at warning locations on the flood-affected rivers. The water level predictions were used by the BoM to issue flood watches, flood warnings and severe weather warnings for heavy rain and local flooding.

During the 23rd to 31st August 2015 flood event Nowra Bridge experienced a moderate flood event and at Moruya Bridge it was a less than minor event, based on SES flood classifications.

This report presents water level, wave and rainfall hydrometric data collected during the 23rd August to 28th August 2015 flood event in the south coast region of NSW. This report incorporates water level and rainfall data provided from the BoM, DPI Water, WaterNSW and SWC. Data collection, storage and presentation were undertaken by MHL for OEH.

Please note that all data has only had preliminary checks performed and data in this report is not quality controlled to a specified error margin.

Contents

1. INTRODUCTION	1
2. OFFSHORE WAVE DATA	6
3. WATER LEVEL AND RAINFALL DATA	10
3.1 Water level and rainfall overview	10
3.2 River region overview	10
4. WORONORA, NEPEAN AND AVON RIVER REGIONS	11
4.1 Woronora, Nepean and Avon river region - water level	11
4.2 Woronora, Nepean and Avon river region - rainfall	12
5. WOLLONGONG AND LAKE ILLAWARRA REGION	22
5.1 Wollongong and Lake Illawarra - water level	22
5.2 Wollongong and Lake Illawarra - rainfall	23
6. SHOALHAVEN RIVER REGION	70
6.1 Shoalhaven north east water - level	71
6.2 Shoalhaven river region – north east - rainfall	72
6.3 Shoalhaven river region - central - water level	99
6.4 Shoalhaven river region – central - rainfall	100
6.5 Shoalhaven river region - south - water level	127
6.6 Shoalhaven river region – south - rainfall	127
7. JERVIS BAY TO ULLADULLA REGION	140
7.1 Jervis Bay to Ulladulla region - water level	140
7.2 Jervis Bay to Ulladulla region - rainfall	141
8. CLYDE RIVER REGION	148
8.1 Clyde river region - water level	148
8.2 Clyde river region - rainfall	148
9. MORUYA RIVER REGION	161
9.1 Moruya river region - water level	161
9.2 Moruya river region - rainfall	162
10. COILA, TUROSS AND WAGONGA INLET RIVER REGION	175
10.1 Coila, Tuross and Wagonga Inlet river region - water level	175
10.2 Coila, Tuross and Wagonga Inlet river region - rainfall	175

APPENDICES

A Station performance	A1
B Flood photographs August 2015 event	B1
C Intensity-frequency-duration new AEP version formulated in 2013	C1
D DPI Water level station local gauge datum to AHD conversion table	D1

TABLES

Table 2.1 Ocean wave storm summary – 20 to 26 August 2015	6
Table 2.2 Ocean wave storm summary – 28 August to 1 September 2015	7
Table 3.1 Water Level and Rainfall Site Summary	10

Table 4.1 Woronora, Nepean and Avon river region flood peaks	11
Table 4.2 Woronora, Nepean and Avon river region daily rainfall totals	12
Table 5.1 Wollongong flood peaks	22
Table 5.2 Wollongong and Lake Illawarra daily rainfall totals	23
Table 5.3 Wollongong and Lake Illawarra daily rainfall totals	24
Table 5.4 Wollongong and Lake Illawarra daily rainfall totals	25
Table 6.1 Shoalhaven river region – north east flood peaks	71
Table 6.2 SES flood classification for Nowra Bridge	71
Table 6.3 Shoalhaven river region – north east daily rainfall totals	72
Table 6.4 Shoalhaven river region – north east daily rainfall totals	73
Table 6.4 Central Shoalhaven river region flood peaks	99
Table 6.5 Central Shoalhaven river region daily rainfall totals	100
Table 6.6 South Shoalhaven river region flood peaks	127
Table 6.7 South Shoalhaven river region daily rainfall totals	127
Table 7.1 Jervis Bay to Ulladulla region flood peaks	140
Table 7.2 Jervis Bay to Ulladulla region daily rainfall totals	141
Table 8.1 Clyde river region flood peaks	148
Table 8.2 Clyde river region daily rainfall totals	148
Table 9.1 Moruya river region flood peaks	161
Table 9.2 SES flood classification for Moruya Bridge	161
Table 9.3 Moruya river region daily rainfall totals	162
Table 10.1 Coila, Tuross and Wagonga Inlet river region flood peaks	175
Table 10.2 Coila, Tuross and Wagonga Inlet river region daily rainfall Totals	175
Table A1 Station performance	A2

FIGURES

Figure 1.1a	Mean sea level pressure and Radar images 24th - 25th August 2015
Figure 1.1b	Mean sea level pressure and Radar images 26th - 27th August 2015
Figure 1.2	NSW rainfall analysis August 2015
Figure 1.3	Nowra wind rose 23rd-31st August
Figure 2.1	Station locations waverider bouys
Figure 2.2	Sydney and Port Kembla waverider buoy significant wave height and direction
Figure 4.1	Station locations Woronora, Nepean and Avon river regions
Figure 4.2	Woronora, Nepean and Avon water level 20th - 31st August 2015
Figure 4.3	Woronora, Nepean and Avon water level 20th - 31st August 2015
Figure 4.4	Woronora, Nepean and Avon water level 20th - 31st August 2015
Figure 4.5	Woronora, Nepean and Avon water level 20th - 31st August 2015
Figure 4.6	Woronora, Nepean and Avon water level 20th - 31st August 2015
Figure 4.7	Woronora, Nepean and Avon rainfall 20th - 31st August 2015
Figure 4.8	Albion Park intensity frequency duration August 2015
Figure 4.9	Robertson intensity frequency duration August 2015
Figure 5.1	Station locations Wollongong and Lake Illawarra region
Figure 5.2	Wollongong and Lake Illawarra region water level 20th - 31st August 2015
Figure 5.3	Wollongong and Lake Illawarra region water level 20th - 31st August 2015
Figure 5.4	Wollongong and Lake Illawarra region water level 20th - 31st August 2015
Figure 5.5	Wollongong and Lake Illawarra region water level 20th - 31st August 2015
Figure 5.6	Wollongong and Lake Illawarra region rainfall 20th - 31st August 2015
Figure 5.7	Wollongong and Lake Illawarra region rainfall 20th - 31st August 2015
Figure 5.8	Wollongong and Lake Illawarra region rainfall 20th - 31st August 2015
Figure 5.9	Wollongong and Lake Illawarra region rainfall 20th - 31st August 2015
Figure 5.10	Wollongong and Lake Illawarra region rainfall 20th - 31st August 2015
Figure 5.11	Wollongong and Lake Illawarra region rainfall 20th - 31st August 2015
Figure 5.12	Bulli intensity frequency duration August 2015
Figure 5.13	Rixons Pass intensity frequency duration August 2015

Figure 5.14 Russell Vale intensity frequency duration August 2015
 Figure 5.15 Bellambi intensity frequency duration August 2015
 Figure 5.16 Balgownie intensity frequency duration August 2015
 Figure 5.17 Mt Pleasant intensity frequency duration August 2015
 Figure 5.18 Figtree intensity frequency duration August 2015
 Figure 5.19 Mt Kembla intensity frequency duration August 2015
 Figure 5.20 Dombarton Loop intensity frequency duration August 2015
 Figure 5.21 Whytes Gully intensity frequency duration August 2015
 Figure 5.22 Wongawilli intensity frequency duration August 2015
 Figure 5.23 Darkes Road intensity frequency duration August 2015
 Figure 5.24 Cringila intensity frequency duration August 2015
 Figure 5.25 Port Kembla intensity frequency duration August 2015
 Figure 5.26 Berkeley intensity frequency duration August 2015
 Figure 5.27 Kanahooka intensity frequency duration August 2015
 Figure 5.28 Dapto intensity frequency duration August 2015
 Figure 5.29 Cleveland Road intensity frequency duration August 2015
 Figure 5.30 Huntley Colliery intensity frequency duration August 2015
 Figure 5.31 Upper Calderwood intensity frequency duration August 2015
 Figure 5.32 Wollongong intensity frequency duration August 2015
 Figure 5.33 Nurrewin intensity frequency duration August 2015
 Figure 5.34 Clover Hill intensity frequency duration August 2015
 Figure 5.35 North Macquarie intensity frequency duration August 2015
 Figure 5.36 Little Lake Entrance intensity frequency duration August 2015
 Figure 5.37 Shellharbour intensity frequency duration August 2015
 Figure 5.38 Tongarra intensity frequency duration August 2015
 Figure 5.39 Yellow Rock Road intensity frequency duration August 2015
 Figure 5.40 Jamberoo intensity frequency duration August 2015
 Figure 5.41 Bombo intensity frequency duration August 2015
 Figure 5.42 Kiama intensity frequency duration August 2015
 Figure 6.1 Station locations Shoalhaven river region - overview
 Figure 6.2 Station locations Shoalhaven river region - north east
 Figure 6.3 Shoalhaven river region north east water level 20th - 31st August 2015
 Figure 6.4 Shoalhaven river region north east water level 20th - 31st August 2015
 Figure 6.5 Shoalhaven river region north east water level 20th - 31st August 2015
 Figure 6.6 Shoalhaven river region north east water level 20th - 31st August 2015
 Figure 6.7 Shoalhaven river region north east water level 20th - 31st August 2015
 Figure 6.8 Shoalhaven river region north east rainfall 20th - 31st August 2015
 Figure 6.9 Shoalhaven river region north east rainfall 20th - 31st August 2015
 Figure 6.10 Shoalhaven river region north east rainfall 20th - 31st August 2015
 Figure 6.11 Fitzroy Falls Dam intensity frequency duration August 2015
 Figure 6.12 Barrengarry intensity frequency duration August 2015
 Figure 6.13 Hampden Bridge intensity frequency duration August 2015
 Figure 6.14 Wattamolla intensity frequency duration August 2015
 Figure 6.15 Brogers No. 2 intensity frequency duration August 2015
 Figure 6.16 Foxground intensity frequency duration August 2015
 Figure 6.17 Broughton Creek at Broughton Vale intensity frequency duration August 2015
 Figure 6.18 Broughton Creek intensity frequency duration August 2015
 Figure 6.19 Bomaderry Creek at Bomaderry intensity frequency duration August 2015
 Figure 6.20 Grassy Gully intensity frequency duration August 2015
 Figure 6.21 Nowra Boat Shed intensity frequency duration August 2015
 Figure 6.22 Nowra intensity frequency duration August 2015
 Figure 6.23 Greenwell Point intensity frequency duration August 2015
 Figure 6.24 Bumbulla intensity frequency duration August 2015
 Figure 6.25 Yalwal intensity frequency duration August 2015
 Figure 6.26 Touga intensity frequency duration August 2015

- Figure 6.27 Station locations Shoalhaven river region - central
- Figure 6.28 Shoalhaven river region central water level 20th - 31st August 2015
- Figure 6.29 Shoalhaven river region central water level 20th - 31st August 2015
- Figure 6.30 Shoalhaven river region central rainfall 20th - 31st August 2015
- Figure 6.31 Shoalhaven river region central rainfall 20th - 31st August 2015
- Figure 6.32 Bungonia at Bungonia intensity frequency duration August 2015
- Figure 6.33 Windellama intensity frequency duration August 2015
- Figure 6.34 Nerriga intensity frequency duration August 2015
- Figure 6.35 Millendale intensity frequency duration August 2015
- Figure 6.36 Oallen (Hillview) intensity frequency duration August 2015
- Figure 6.37 Hillview intensity frequency duration August 2015
- Figure 6.38 Oallen (Moga) intensity frequency duration August 2015
- Figure 6.39 Duuan Durra intensity frequency duration August 2015
- Figure 6.40 Mongarlowe (Leweston) intensity frequency duration August 2015
- Figure 6.41 Station locations Shoalhaven river region - south
- Figure 6.42 Shoalhaven river region south water level 20th - 31st August 2015
- Figure 6.43 Shoalhaven river region south water level 20th - 31st August 2015
- Figure 6.44 Shoalhaven river region south rainfall 20th - 31st August 2015
- Figure 6.45 Shoalhaven river region south rainfall 20th - 31st August 2015
- Figure 6.46 Mongarlowe intensity frequency duration August 2015
- Figure 6.47 Braidwood intensity frequency duration August 2015
- Figure 6.48 Braidwood (Mountview) intensity frequency duration August 2015
- Figure 6.49 Mountview intensity frequency duration August 2015
- Figure 6.50 Mongarlowe River at Monga intensity frequency duration August 2015
- Figure 6.51 Oranmeir intensity frequency duration August 2015
- Figure 6.52 Shoalhaven at Kadoona intensity frequency duration August 2015
- Figure 6.53 Snowball intensity frequency duration August 2015
- Figure 7.1 Station locations Jervis Bay to Ulladulla region
- Figure 7.2 Jervis Bay to Ulladulla region water level 20th - 31st August 2015
- Figure 7.3 Jervis Bay to Ulladulla region water level 20th - 31st August 2015
- Figure 7.4 Jervis Bay and Ulladulla region rainfall 20th - 31st August 2015
- Figure 7.5 Jervis Bay and Ulladulla region rainfall 20th - 31st August 2015
- Figure 7.6 Currarong intensity frequency duration August 2015
- Figure 7.7 Tomerong (Eucalypt Lane) intensity frequency duration August 2015
- Figure 7.8 Tomerong Creek intensity frequency duration August 2015
- Figure 7.9 Glennely Creek intensity frequency duration August 2015
- Figure 7.10 Vincentia intensity frequency duration August 2015
- Figure 7.11 Sassafras intensity frequency duration August 2015
- Figure 7.12 Island Point Road intensity frequency duration August 2015
- Figure 7.13 Fishermans intensity frequency duration August 2015
- Figure 7.14 Porters Creek Dam intensity frequency duration August 2015
- Figure 7.15 Lake Conjola intensity frequency duration August 2015
- Figure 7.16 Ulladulla intensity frequency duration August 2015
- Figure 7.17 Ulladulla AWS intensity frequency duration August 2015
- Figure 8.1 Station locations Clyde river region
- Figure 8.2 Clyde river region water level 20th - 31st August 2015
- Figure 8.3 Clyde river region water level 20th - 31st August 2015
- Figure 8.4 Clyde river region rainfall 20th - 31st August 2015
- Figure 8.5 Burrill Lake intensity frequency duration August 2015
- Figure 8.6 Lake Tabourie intensity frequency duration August 2015
- Figure 9.1 Station locations Moruya river region
- Figure 9.2 Moruya river region water level 20th - 31st August 2015
- Figure 9.3 Moruya river region rainfall 20th - 31st August 2015
- Figure 9.4 Moruya river region rainfall 20th - 31st August 2015
- Figure 9.5 Majors Creek intensity frequency duration August 2015

- Figure 9.6 Araluen intensity frequency duration August 2015
- Figure 9.7 Bettowynd intensity frequency duration August 2015
- Figure 9.8 McGregors Creek intensity frequency duration August 2015
- Figure 9.9 Burra Creek intensity frequency duration August 2015
- Figure 9.10 Moruya Airport intensity frequency duration August 2015
- Figure 9.11 Bendethera intensity frequency duration August 2015
- Figure 9.12 Plumwood Airport intensity frequency duration August 2015
- Figure 10.1 Station locations Coila, Tuross and Wagonga Inlet
- Figure 10.2 Coila, Tuross and Wagonga Inlet river region water level 20th - 31st August 2015
- Figure 10.3 Coila, Tuross and Wagonga Inlet river region water level 20th - 31st August 2015
- Figure 10.4 Coila, Tuross and Wagonga Inlet river region rainfall 20th - 31st August 2015
- Figure 10.5 Tuross River at Eurobodalla intensity frequency duration August 2015
- Figure 10.6 Belowra intensity frequency duration August 2015
- Figure 10.7 Barlows Bay intensity frequency duration August 2015
- Figure 10.8 Regatta Point intensity frequency duration August 2015

1. Introduction

In August 2015 an intense low pressure system caused severe storm conditions and flooding in the south coast region of NSW.

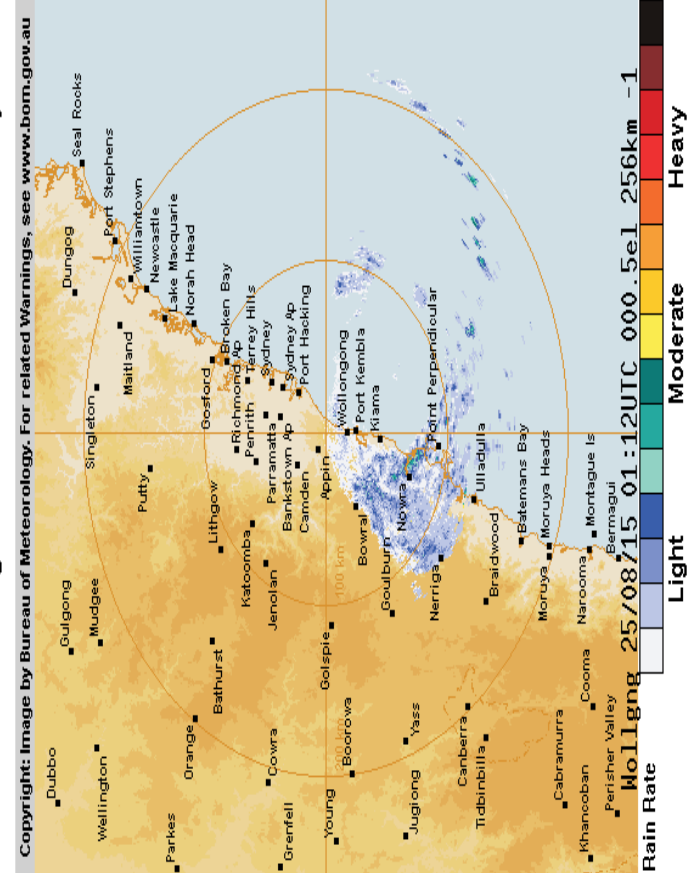
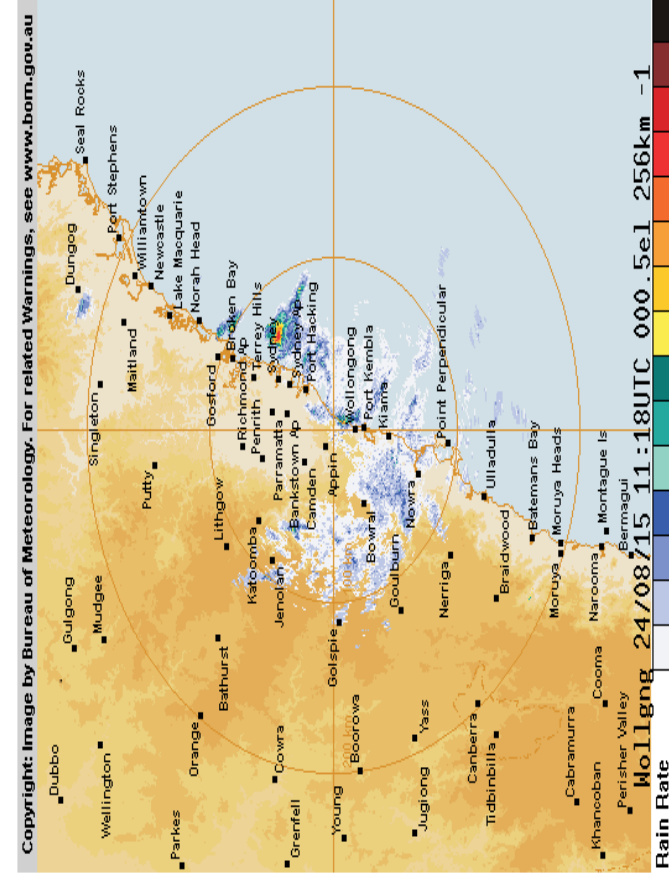
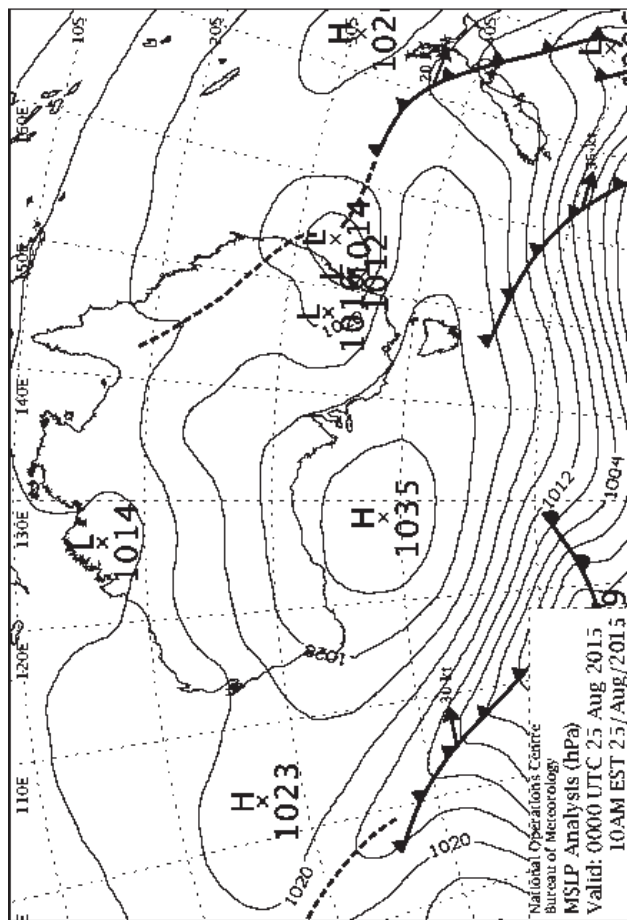
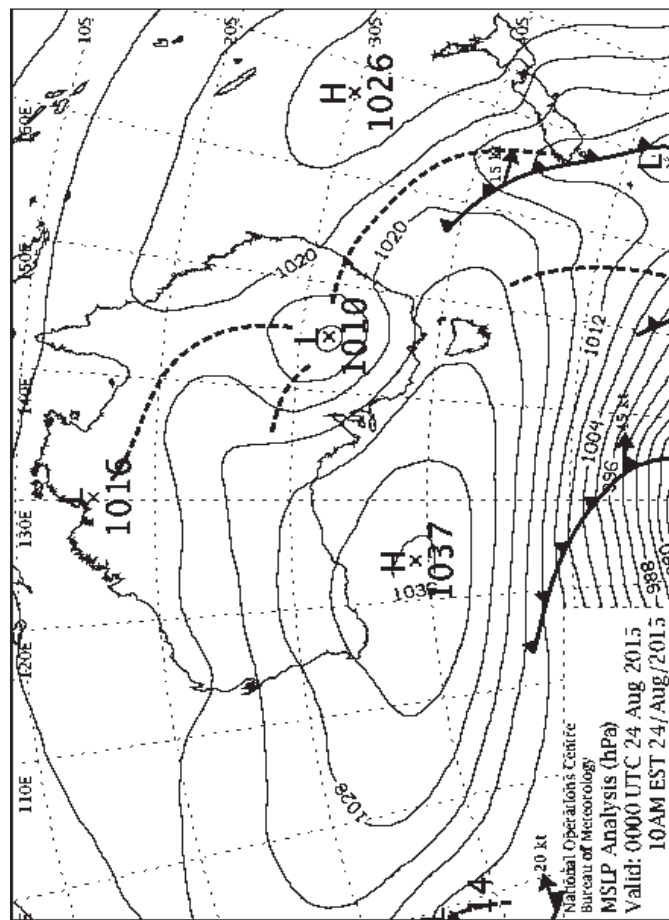
Figure 1.1 presents atmospheric pressure charts from 24th to 27th of August 2015. The east coast low originated in central Australia and moved towards the south coast of NSW before dissipating in the Tasman Sea.

Figure 1.2 shows the total rainfall recorded across NSW during August 2015. Figure 1.3 displays a wind rose from Nowra for 23rd August to 31st August where the strongest winds blew from the south, with a maximum wind gust of 89km/h recorded on 25th August 2015.

During the flood events, the monitoring networks of water level recorders and rainfall gauges operated by MHL, on behalf of OEH, were used extensively by the BoM, the NSW State Emergency Service (SES) and local councils to generate flood warnings, emergency response and delivery of services. Rainfall and water level data captured during the event is summarised by river region in Sections 3 to 10 of this report. Station performance during the events is summarised in Appendix A. Photographs taken during the event are presented in Appendix B.

OEH commissioned to prepare a report to summarise the August 2015 flood event, which includes supplementary flood data provided from BoM, DPI Water, WaterNSW and Sydney Water. Maps of the study areas by river regions are found in Sections 3 to 10 of this report.

Rainfall intensity frequency duration (IFD) curves have been generated using the Australian Rainfall and Runoff 1987 format in millimetres per hour. In addition IFD curves have been generated using the new IFD format (BoM IFD Design Rainfall 2013) with results in millimetres (refer to Appendix C). This will allow this flood summary report to be comparable with past reports and future reports as we transition the IFD format to the BoM IFD Design Rainfall 2013 version.



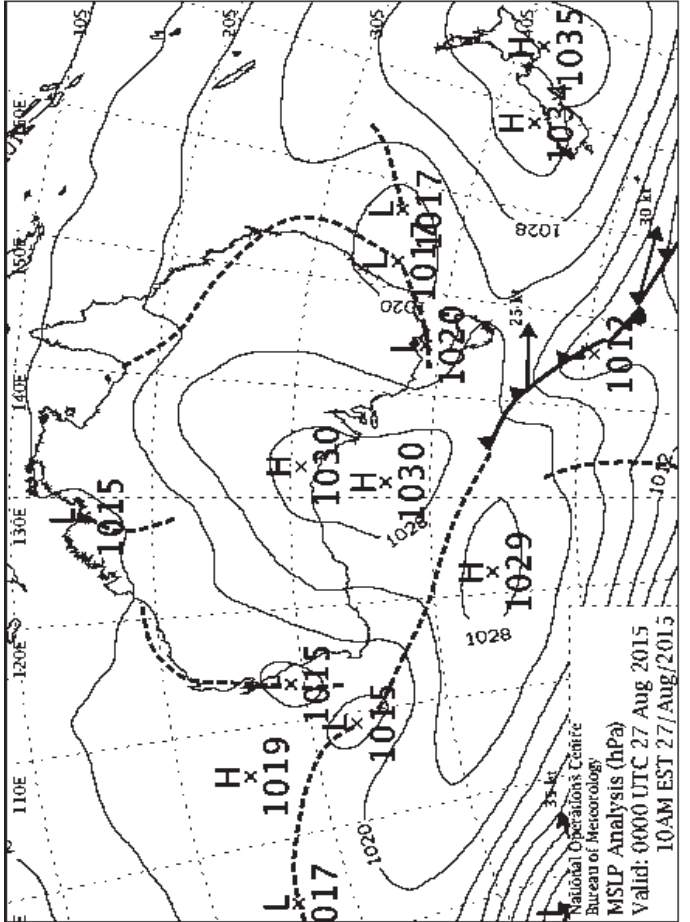
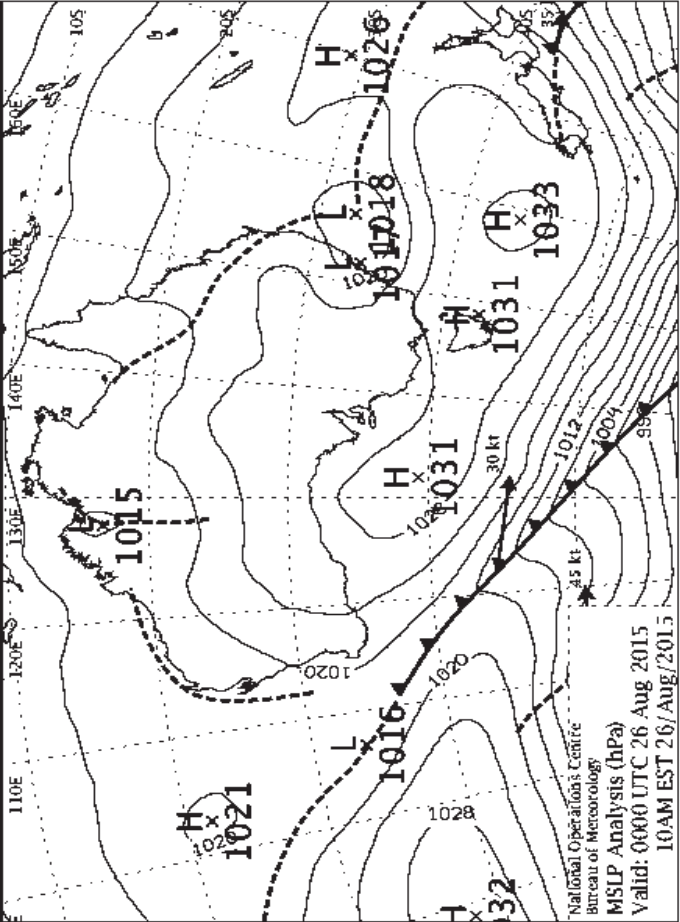
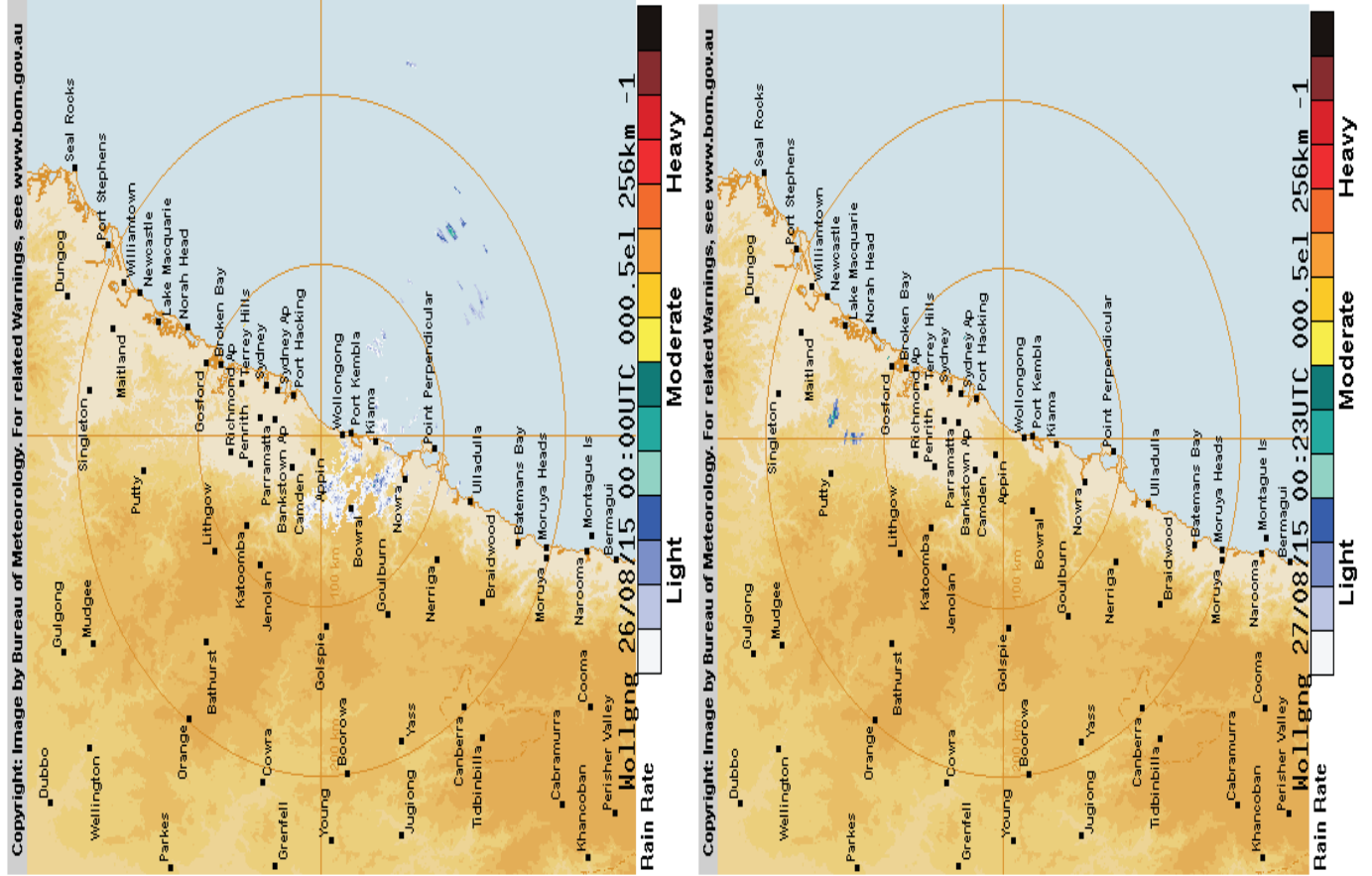
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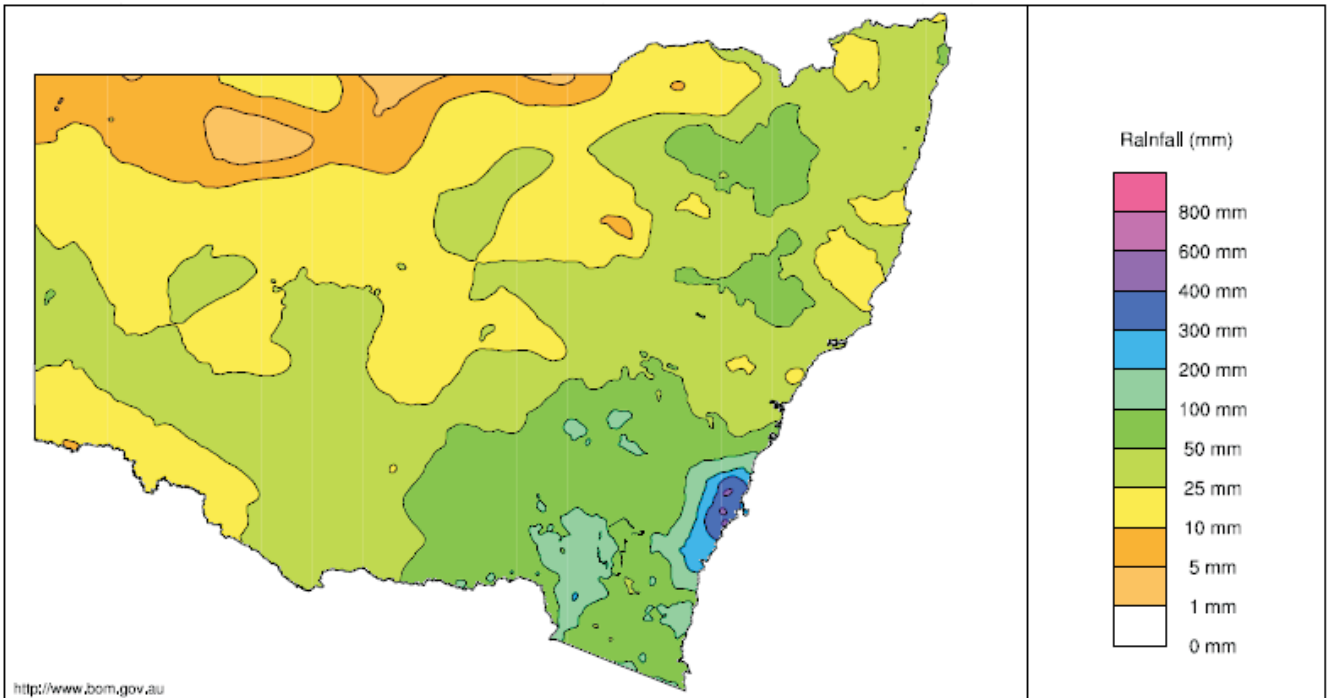
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Source: Australian Bureau of Meteorology 2015

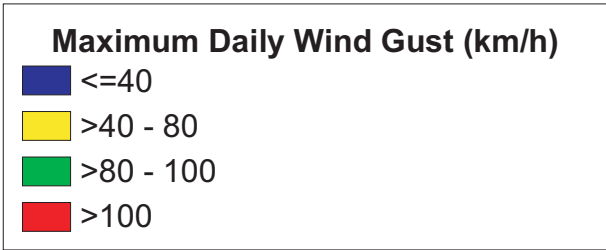
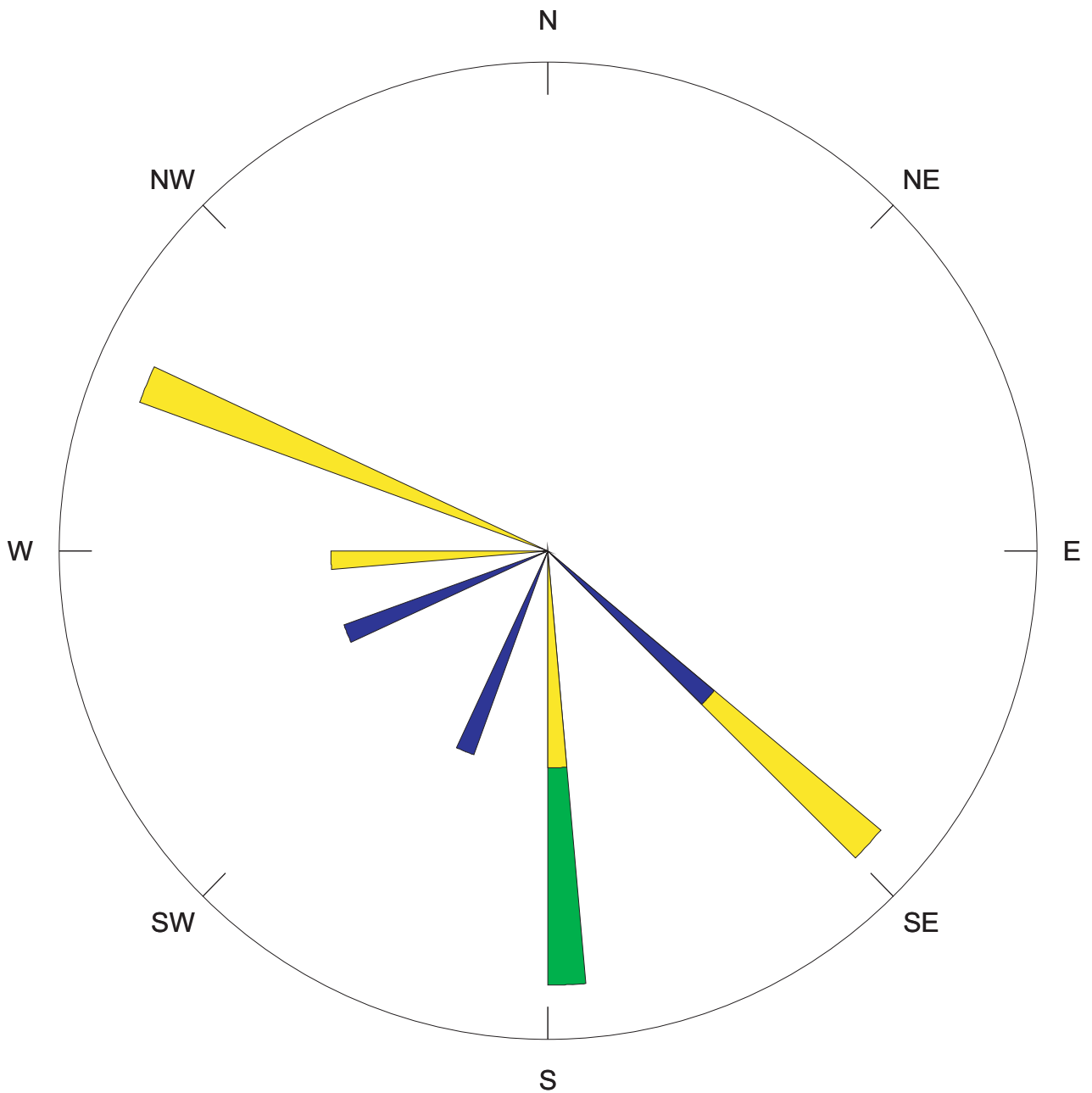


<http://www.bom.gov.au>

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Issued: 03/09/2015

Source: Australian Bureau of Meteorology 2015



Source: Australian Bureau of Meteorology 2015

2. Offshore wave data

Since 1974, ocean wave conditions along the NSW coast are being monitored by the NSW OEH Waverider Buoy network. The Sydney and Port Kembla Waverider Buoys were able to monitor the ocean wave conditions during the intense low pressure system on the NSW south coast in August 2015, the low pressure system originated in central Australia and moved towards the south coast of NSW before dissipating in the Tasman Sea. Based on over 40 years of wave data recorded at the Port Kembla Waverider Buoy station, the average recurrence interval estimate for the 4.5 m peak storm significant wave height is less than 1 in 1 year.

Table 2.1 and Table 2.2 summarise the ocean wave conditions recorded at Sydney and Port Kembla Waverider buoys during the August 2015 flood event. Refer to Figure 2.1 for a location map of Sydney and Port Kembla Waverider buoys. Figure 2.2 presents the time series plots of wave height, period and direction for each Waverider buoy station for the month of August 2015.

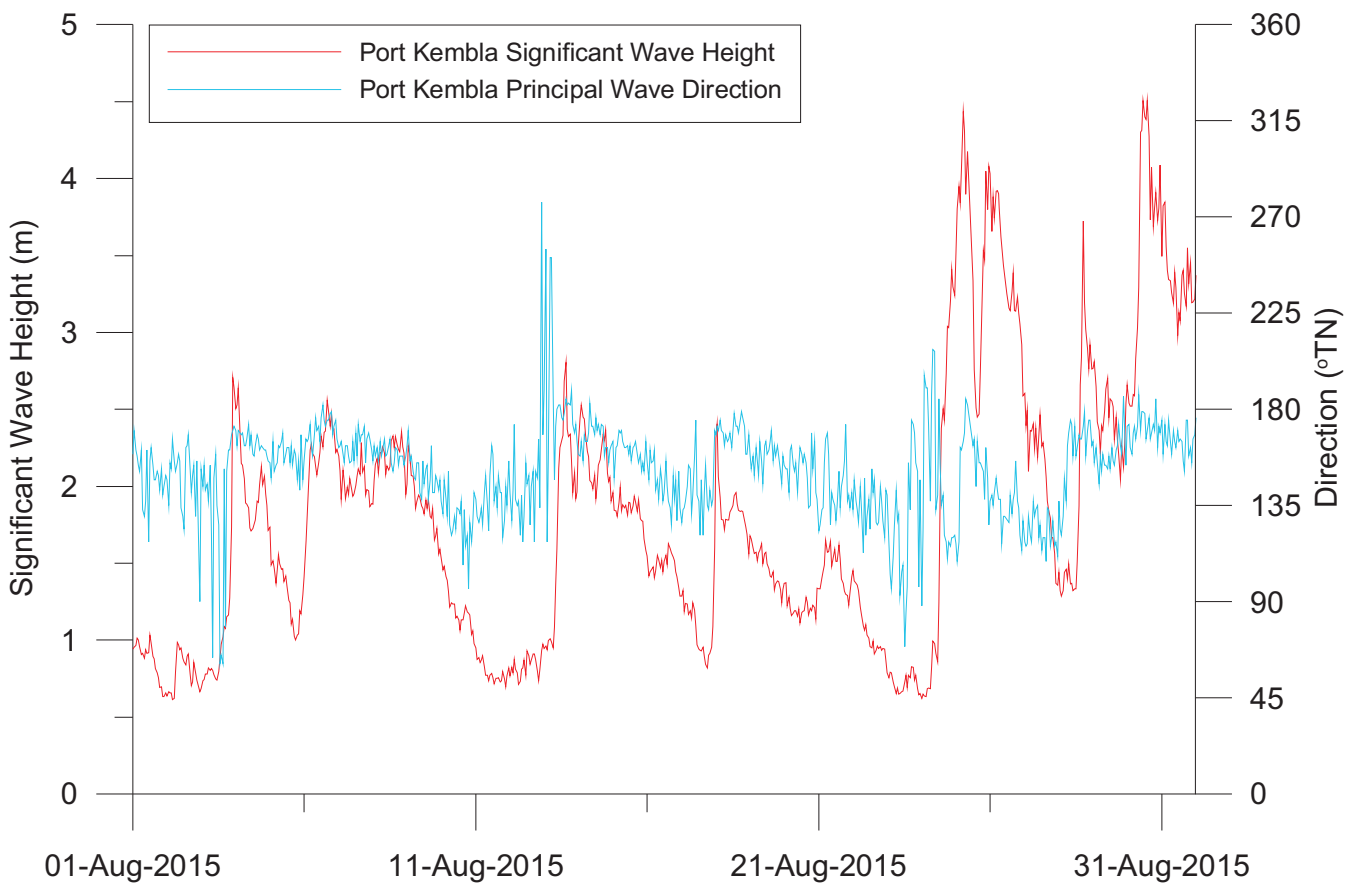
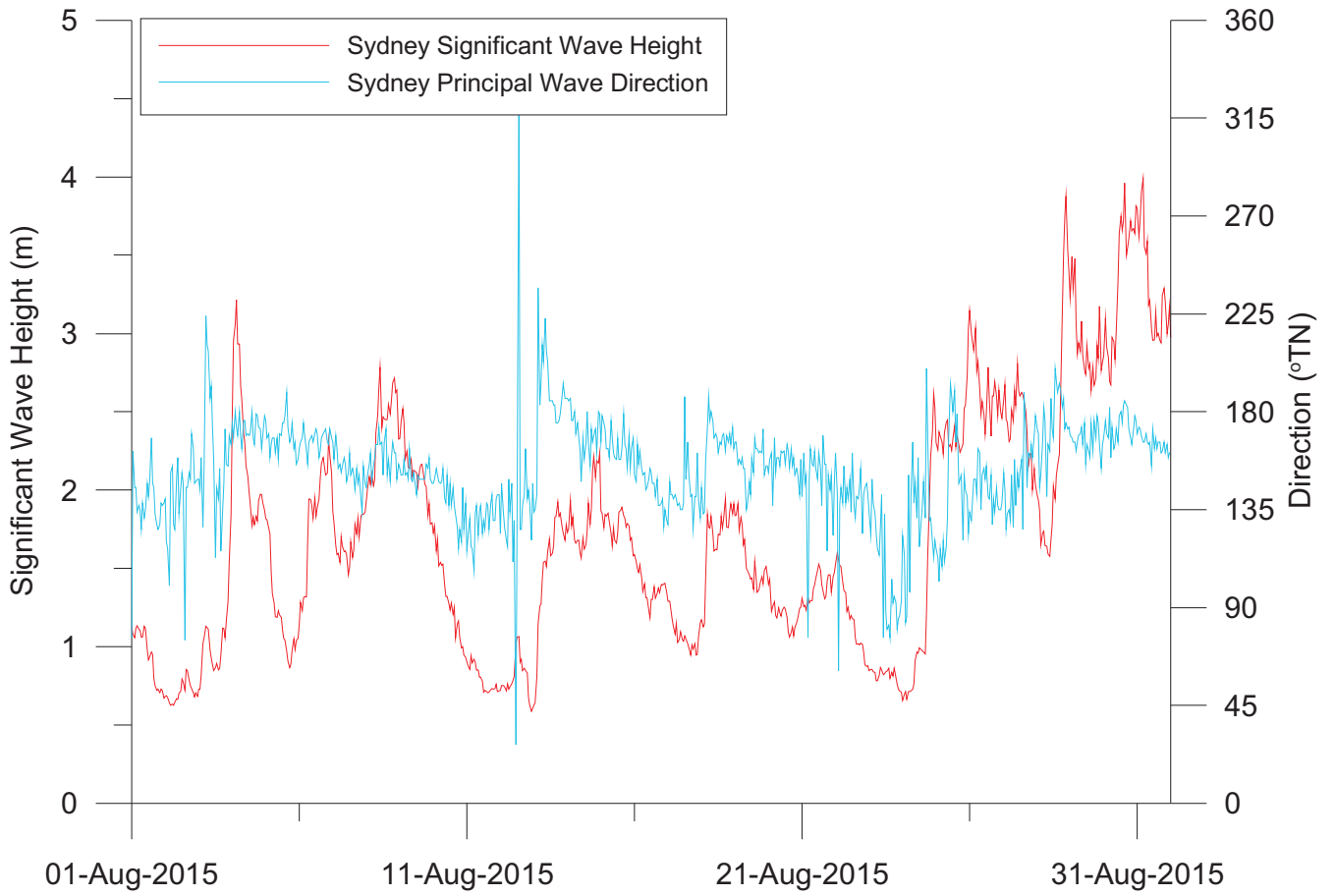
Table 2.1 Ocean wave storm summary – 20 to 26 August 2015

Wave Conditions	Sydney	Port Kembla
Peak Significant Wave Height (m)	3.1	4.4
Date and Time of Peak Significant Wave Height (hrs EST)	26/08/15 @ 0000hrs	25/08/15 @ 0500hrs
Peak Maximum Wave Height (m)	6.0	10.1
Spectral Peak wave period at storm peak (secs)	10.8	9.8
Wave Direction at Storm Peak (° TN)	134	165
Storm Duration for Hsig greater than 3 m (hrs)	4	42
Storm Duration for Hsig greater than 4 m (hrs)	0	7
Average Recurrence Interval for Storm Peak Hsig (years)	0.04	0.3

Table 2.2 Ocean wave storm summary – 28 August to 1 September 2015

Wave Conditions	Sydney	Port Kembla
Peak Significant Wave Height (m)	4.0	4.5
Date and Time of Peak Significant Wave Height (hrs EST)	31/08/15 @ 0400hrs	30/08/15 @ 1100hrs
Peak Maximum Wave Height (m)	7.1	10.4
Spectral Peak wave period at storm peak (secs)	12.9	13.8
Wave Direction at Storm Peak (° TN)	166	179
Storm Duration for Hsig greater than 3 m (hrs)	1	9
Storm Duration for Hsig greater than 4 m (hrs)	50	56
Average Recurrence Interval for Storm Peak Hsig (years)	0.1	0.3





3. Water level and rainfall data

3.1 Water level and rainfall overview

A number of hydrometric stations are maintained by agencies including MHL, DPI Water, Water NSW, BoM and Sydney Water in the area of interest from Wollongong local government area in the north to Wagonga Inlet in the south. Table 3.1 displays the number of stations operated by these agencies. It is noted that not all stations are included in this flood summary report. WaterNSW non-telemetered stations are not presented. Other sites are excluded due to overlap between agency station locations. A full list of stations for which data is presented in this summary report is provided in Appendix A. Appendix D provides a table of offsets to convert local gauge datum to Australian height datum for the DPI Water water level stations.

Table 3.1 Water Level and Rainfall Site Summary

Station Type	MHL		DPI Water		Water NSW		BoM		Sydney Water	
	Total	Included	Total	Included	Total	Included	Total	Included	Total	Included
Water Level	50	50	20	19	52	44	-	-	-	-
Rainfall	21	21	7	7	53	4	56	48	16	14
Wave	2	2	-	-	-	-	-	-	-	-

3.2 River region overview

An overview of water level and rainfall stations in the south coast region is provided in the maps at the start of each section. The south coast regions are grouped as follows:

- Figure 4.1 – Woronora, Nepean and Avon rivers
- Figure 5.1 – Wollongong and Lake Illawarra
- Figure 6.1 – Shoalhaven river
 - Figure 6.2 Shoalhaven north east
 - Figure 6.27 Shoalhaven central
 - Figure 6.41 Shoalhaven south
- Figure 7.1 – Jervis Bay to Ulladulla
- Figure 8.1 – Clyde river
- Figure 9.1 – Moruya river
- Figure 10.1 – Coila, Tuross and Wagonga Inlet

4. Woronora, Nepean and Avon river regions

4.1 Woronora, Nepean and Avon river region - water level

The locations of water level stations within the Woronora, Nepean and Avon river region are shown in Figure 4.1. The water level data for the period 20th to 31st August 2015 are displayed graphically in Figures 4.2 to 4.6. The peak observed water levels are listed in Table 4.1.

There are no current SES flood classifications for this region of interest.

Table 4.1 Woronora, Nepean and Avon river region flood peaks

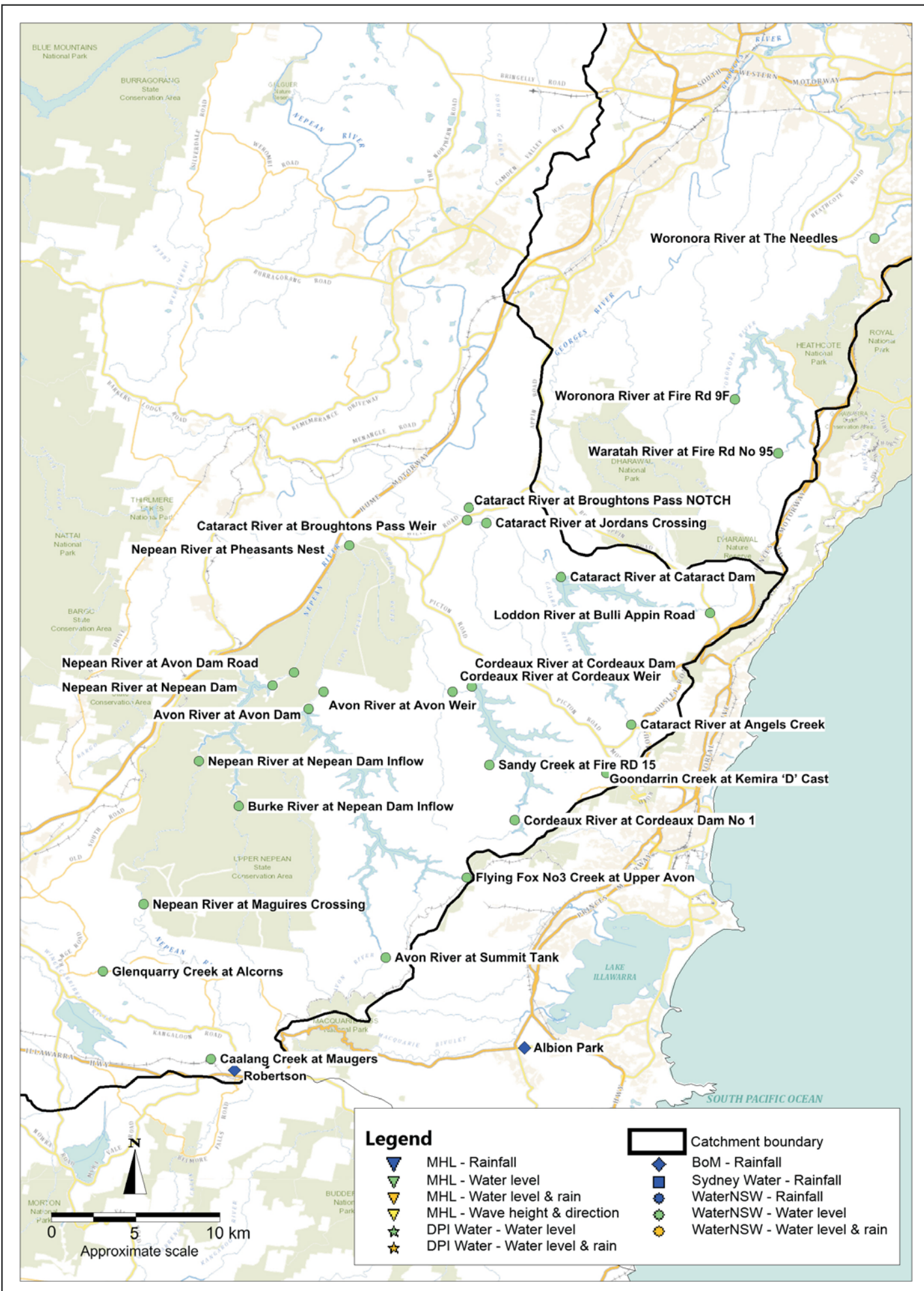
Station Name	Station No.	Site Owner	Datum	Peak level (m)
Woronora River at The Needles	213211	WaterNSW	Local Datum	0.34
Waratah River at Fire Rd No 95	2132102	WaterNSW	Local Datum	0.70
Woronora River at Fire Rd 9F	2132101	WaterNSW	Local Datum	0.28
Cataract River at Angels Creek	2122323	WaterNSW	Local Datum	2.23
Cataract River at Broughtons Pass Notch	212230	WaterNSW	Local Datum	1.28
Cataract River at Broughtons Pass Weir	212233	WaterNSW	Local Datum	0.25
Cataract River at Cataract Dam	212232	WaterNSW	Local Datum	-0.90
Cataract River at Jordans Crossing	212231	WaterNSW	Local Datum	0.41
Loddon River at Bulli Appin Road	2122322	WaterNSW	Local Datum	3.02
Cordeaux River at Cordeaux Dam	212220	WaterNSW	AHD	303.62
Cordeaux River at Cordeaux Weir	212221	WaterNSW	Local Datum	0.88
Goondarrin Creek at Kemira 'D' Cast	2122201	WaterNSW	Local Datum	1.33
Flying Fox No3 Creek at Upper Avon	2122112	WaterNSW	Local Datum	0.91
Sandy Creek at Fire RD 15	2122205	WaterNSW	Local Datum	0.97
Glenquarry Creek at Alcorns	2122341	WaterNSW	Local Datum	2.10
Avon River at Avon Dam	212211	WaterNSW	Local Datum	0.17
Avon River at Summit Tank	2122111	WaterNSW	Local Datum	2.78
Nepean River at Avon Dam Road	212204	WaterNSW	Local Datum	15.80
Nepean River at Maguires Crossing	212209	WaterNSW	Local Datum	5.57
Nepean River at Nepean Dam	212205	WaterNSW	AHD	318.38
Nepean River at Nepean Dam Inflow	2122051	WaterNSW	Local Datum	4.98
Nepean River at Pheasants Nest	212203	WaterNSW	Local Datum	2.85
Caalang Creek at Maugers	212274	WaterNSW	Local Datum	1.40

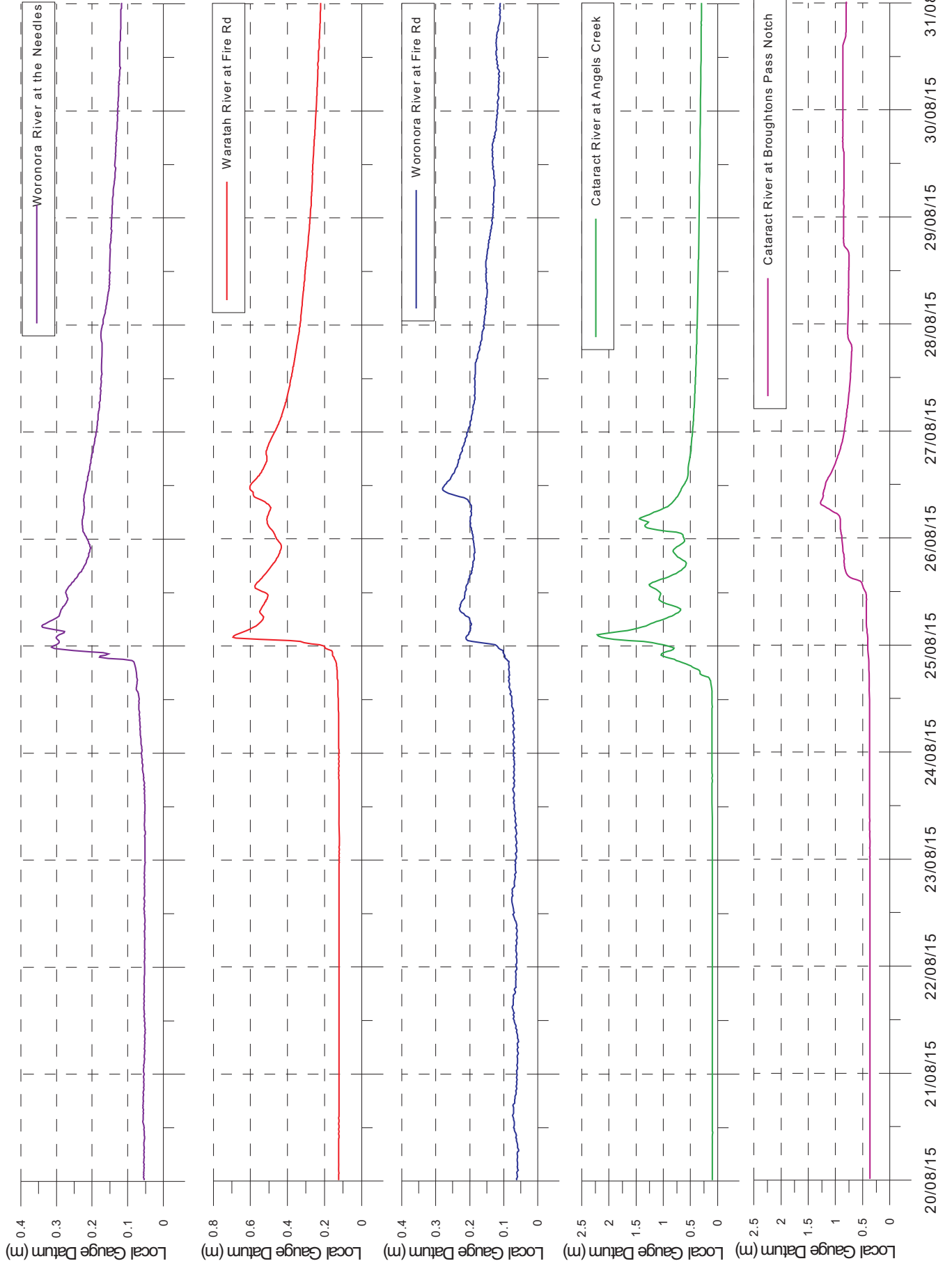
4.2 Woronora, Nepean and Avon river region - rainfall

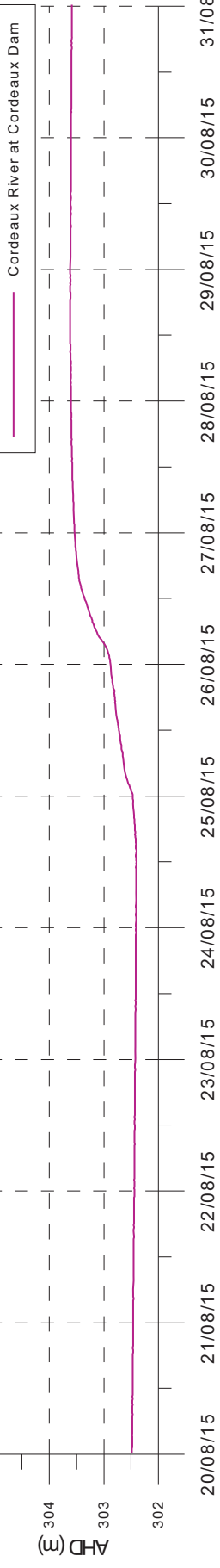
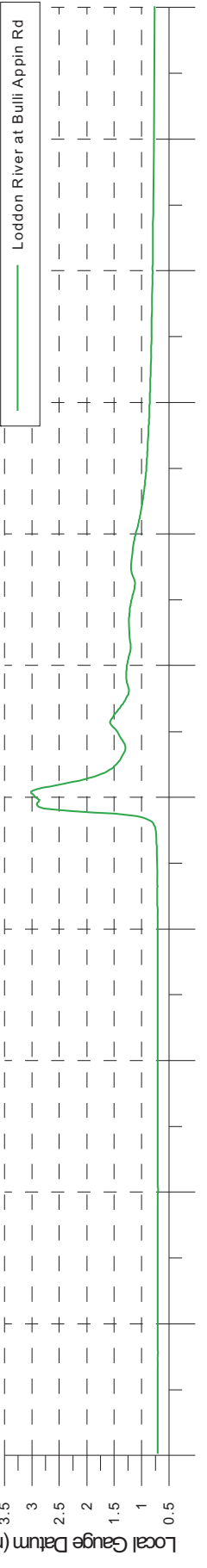
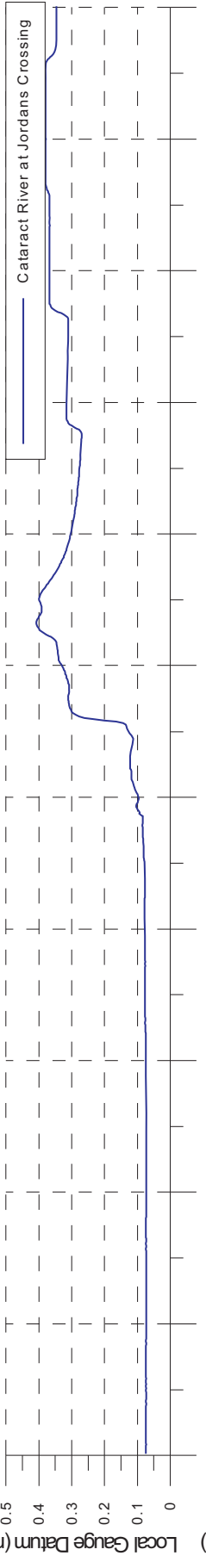
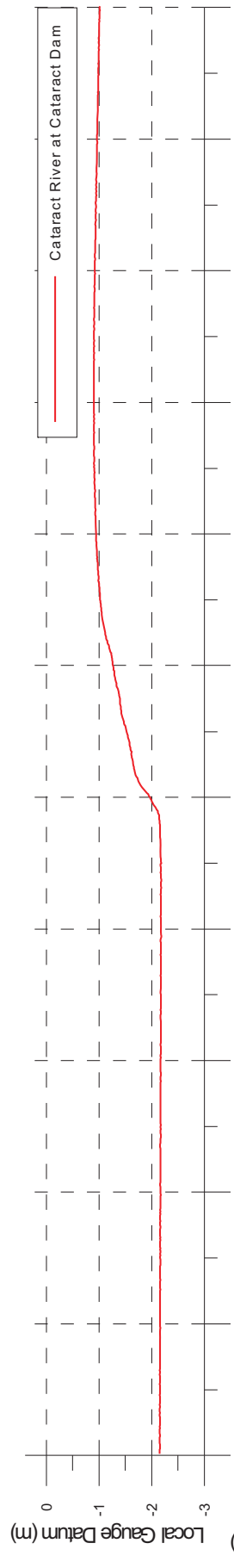
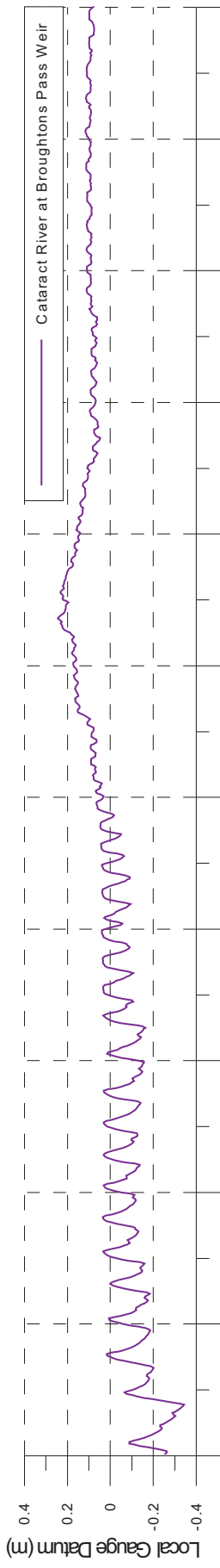
24 hour rainfall totals up until 9.00 a.m. are displayed in Table 4.2 and Figure 4.7 for the period 20th to 31st August 2015. The rainfall data and intensities are displayed graphically in Figures 4.8 and 4.9.

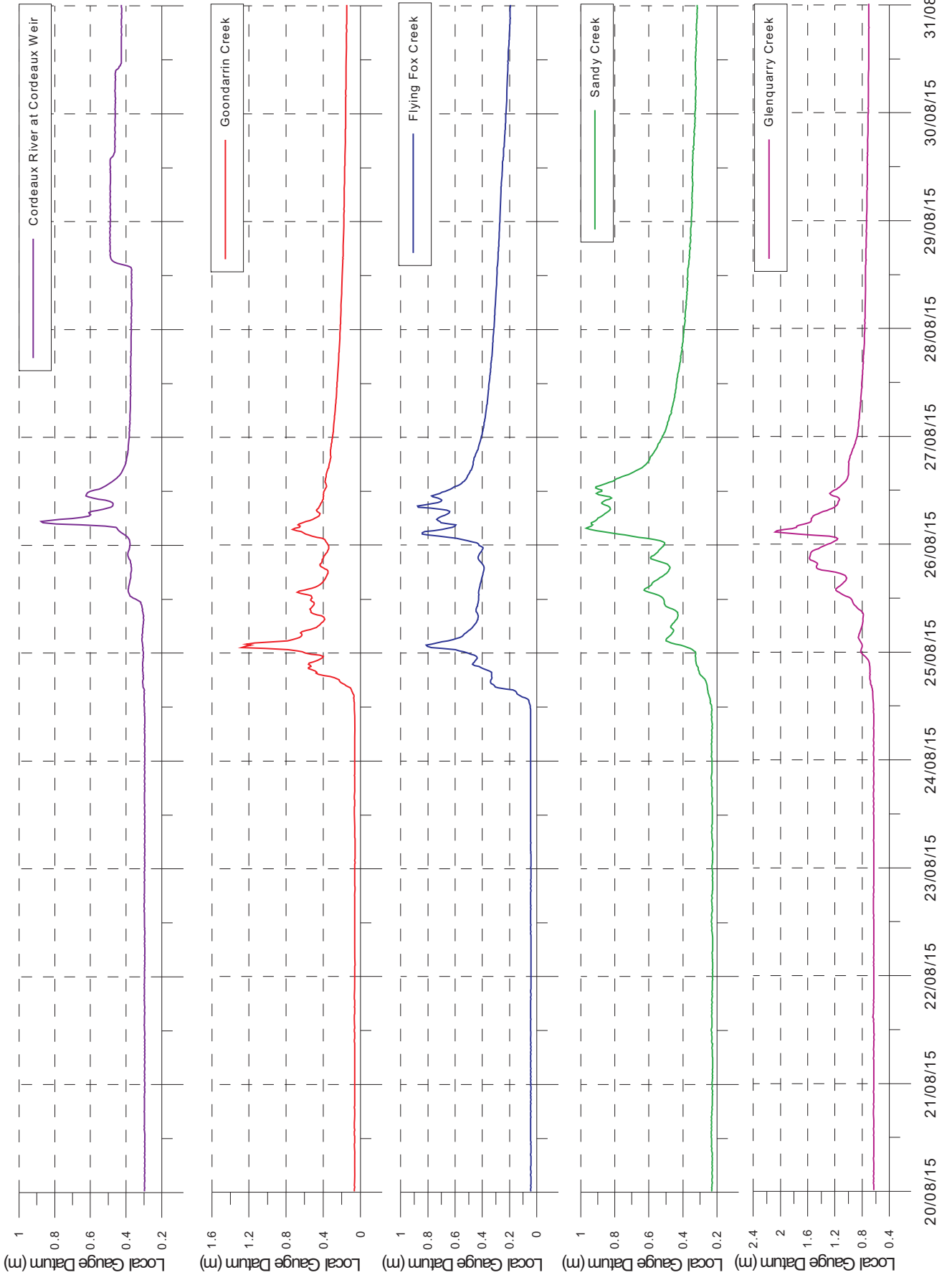
Table 4.2 Woronora, Nepean and Avon river region daily rainfall totals

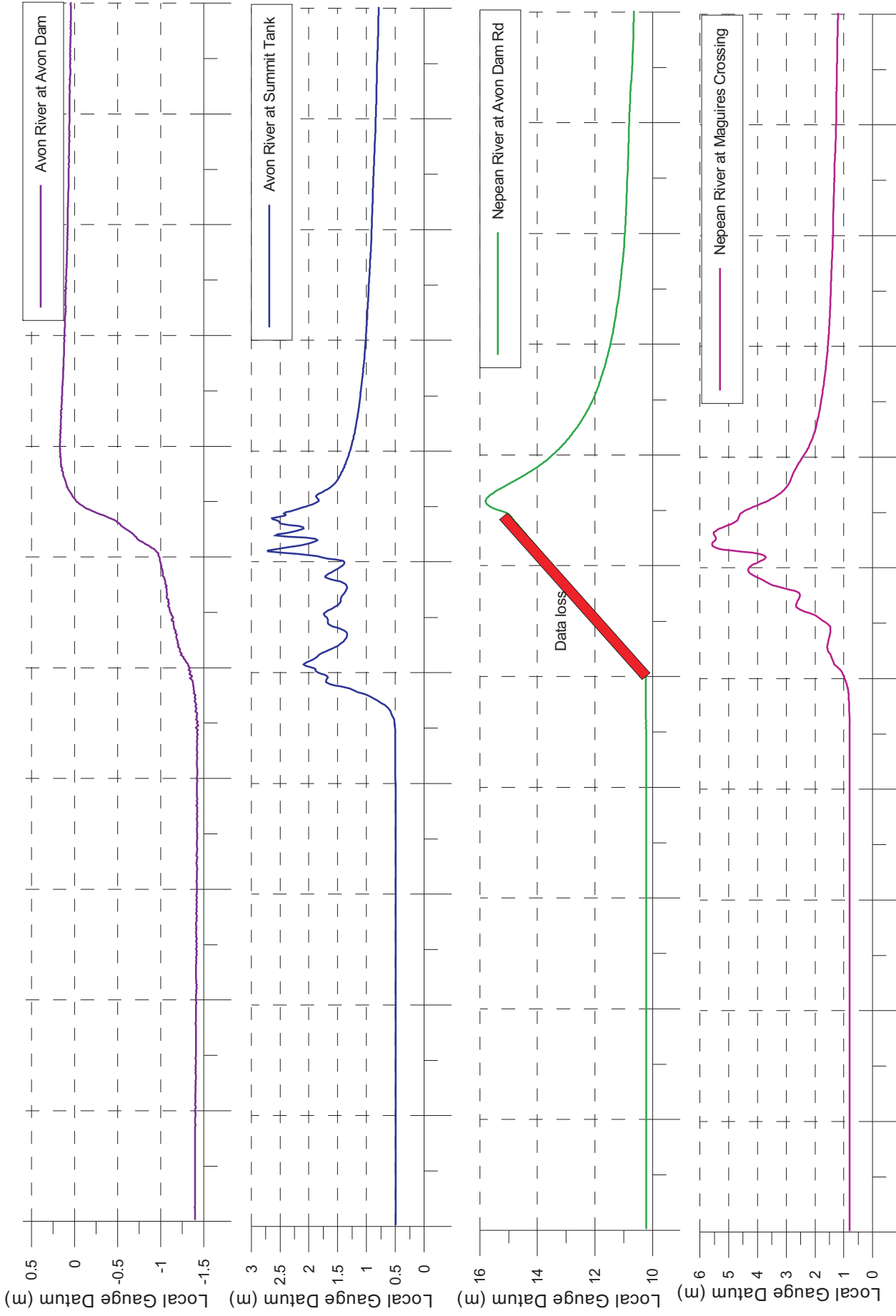
Date	Albion Park (mm)	Roberston (mm)
	BOM	BOM
20/08/2015	0.0	0.0
21/08/2015	0.0	0.0
22/08/2015	0.0	0.0
23/08/2015	0.0	0.0
24/08/2015	1.0	2.0
25/08/2015	119.2	147.0
26/08/2015	203.4	120.0
27/08/2015	32.2	21.0
28/08/2015	1.4	0.0
29/08/2015	0.6	0.0
30/08/2015	0.0	0.0
31/08/2015	0.0	0.0
Total	357.8	290.0

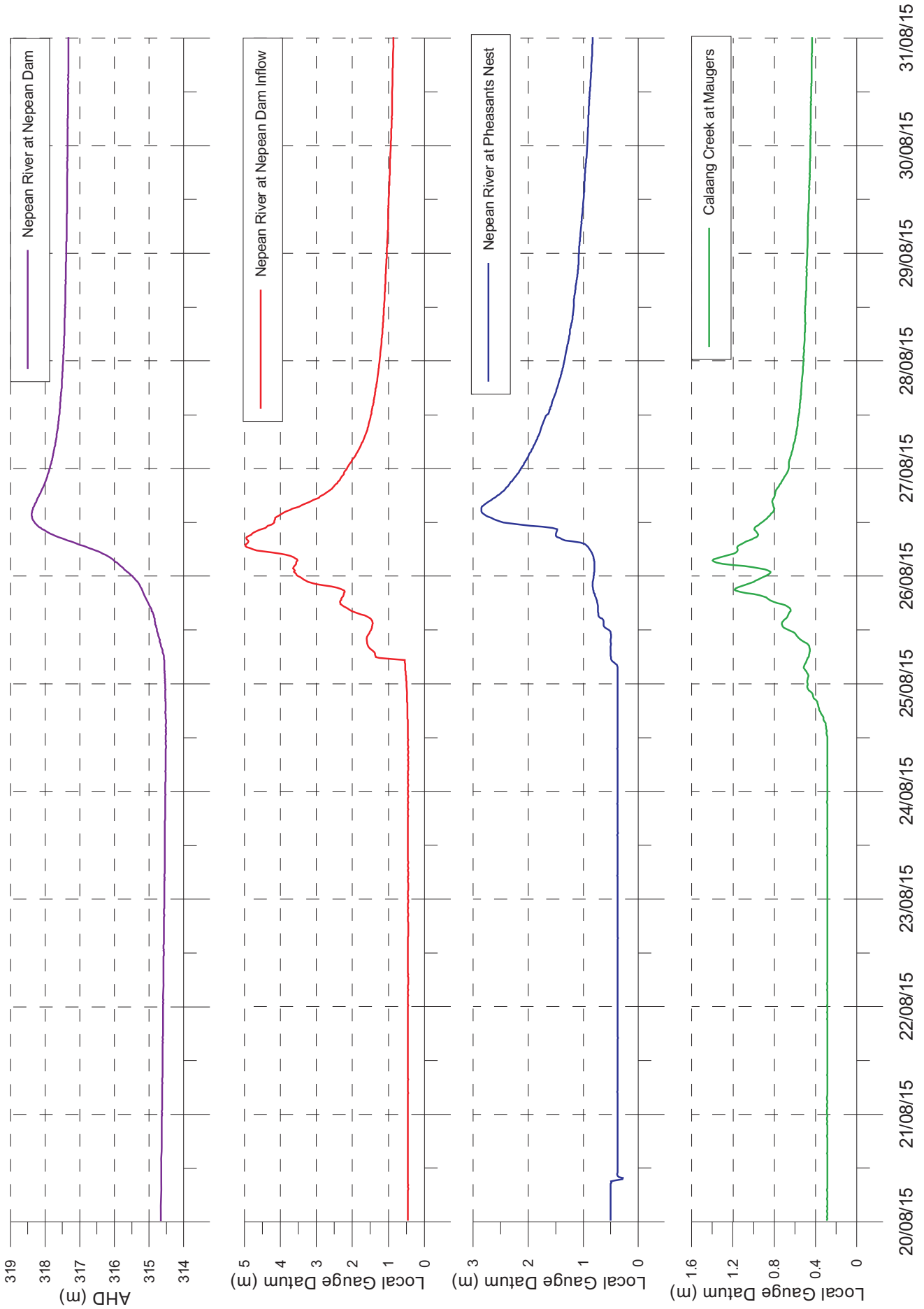


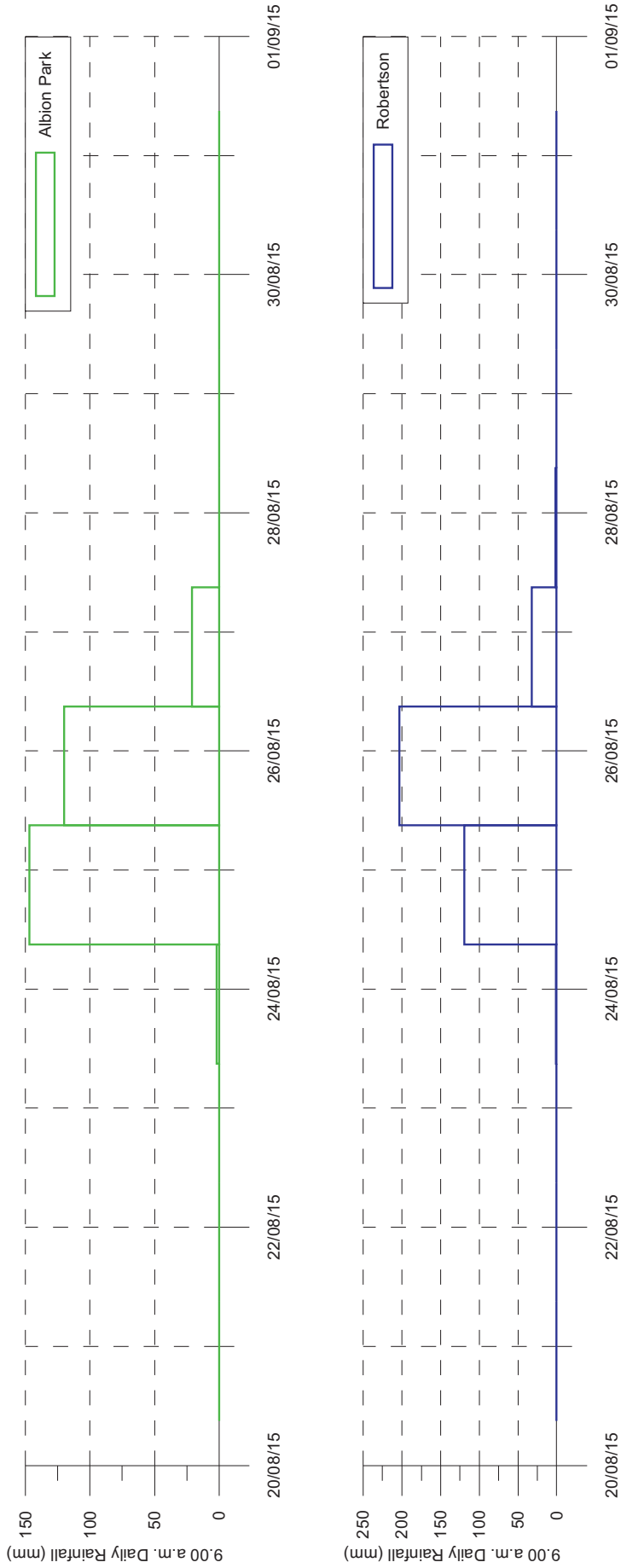


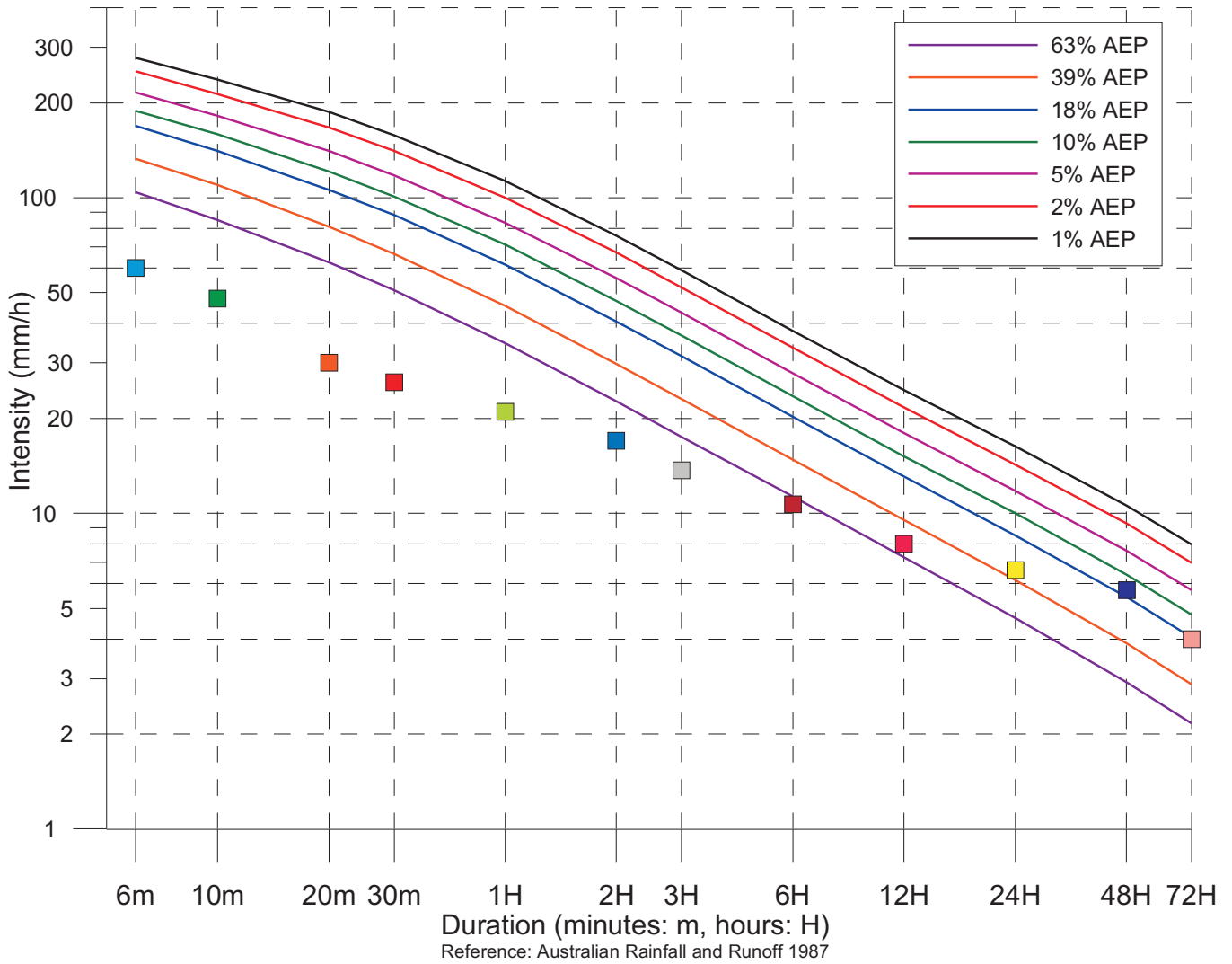








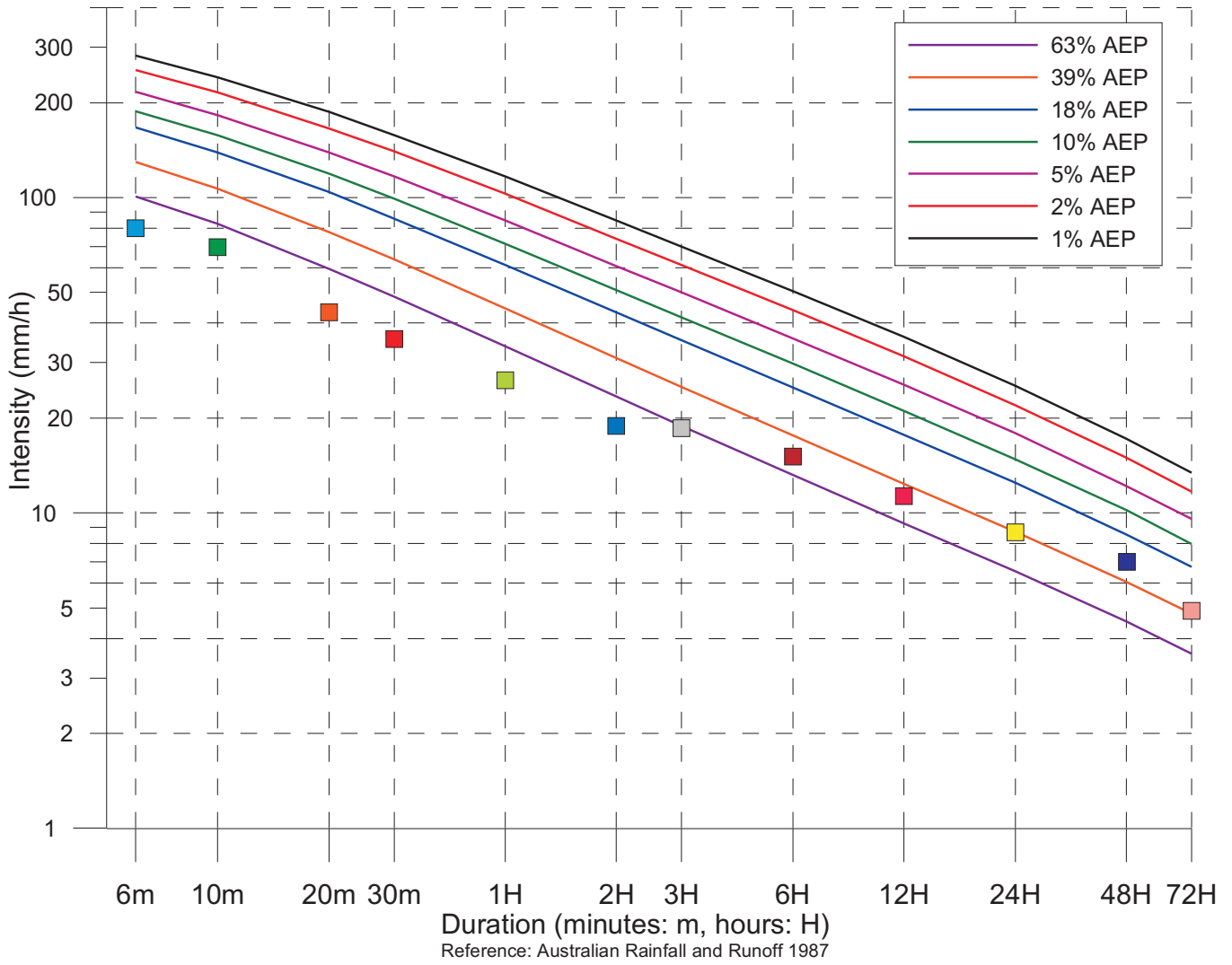




Albion Park Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	60	07:46_26/08/2015
10m	48	23:40_25/08/2015
20m	30	00:48_25/08/2015
30m	26	06:52_26/08/2015
1H	21	06:52_26/08/2015
2H	17	06:52_26/08/2015
3H	13.7	06:12_26/08/2015
6H	10.7	04:12_26/08/2015
12H	8	23:26_25/08/2015
24H	6.6	11:52_24/08/2015
48H	5.7	11:52_24/08/2015
72H	4	01:08_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*





Robertson Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	80	00:44_26/08/2015
10m	69.6	00:42_26/08/2015
20m	43.2	01:50_26/08/2015
30m	35.6	00:22_26/08/2015
1H	26.4	01:52_26/08/2015
2H	18.9	00:10_26/08/2015
3H	18.6	00:06_26/08/2015
6H	15.1	00:00_26/08/2015
12H	11.3	17:36_25/08/2015
24H	8.7	07:00_25/08/2015
48H	7	11:48_24/08/2015
72H	4.9	06:16_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*



5. Wollongong and Lake Illawarra region

5.1 Wollongong and Lake Illawarra - water level

The locations of water level stations within the Wollongong and Lake Illawarra region are shown in Figure 5.1. The water level data for the period 20th to 31st August 2015 are displayed graphically in Figures 5.2 to 5.5. The peak observed water levels are listed in Table 5.1.

There are no current SES flood classifications for Wollongong.

Table 5.1 Wollongong flood peaks

Station Name	Station No.	Site Owner	Datum	Peak level (m)
Hewitts Creek Upstream	214410	MHL	AHD	12.29
Hewitts Creek Downstream	214411	MHL	AHD	12.02
Hewitts Creek Entrance	214408	MHL	AHD	1.91
Bellambi	214488	MHL	AHD	1.795
Towradgi Creek Upstream	214477	MHL	AHD	2.07
Towradgi Creek Downstream	214475	MHL	AHD	2.09
Balgownie Road	214409	MHL	AHD	13.16
Cabbage Tree Creek Upstream	214405	MHL	AHD	5.80
Cabbage Tree Creek Downstream	214406	MHL	AHD	5.58
Fairy Creek Upstream	214403	MHL	AHD	2.21
Fairy Creek Downstream	214404	MHL	AHD	2.13
Byarong Creek Upstream (Koloona Ave)	214425	MHL	AHD	0.15
Byarong Creek Downstream (Koloona Ave)	214426	MHL	AHD	0.22
Byarong Creek (F6)	214420	MHL	AHD	6.63
Blackmans Parade Upstream	214430	MHL	AHD	0.16
Blackmans Parade Downstream	214431	MHL	AHD	0.18
Koonawarra Bay	214440	MHL	AHD	0.64
Cudgerie Bay	214416	MHL	AHD	0.66
Lake Illawarra Entrance	214417	MHL	AHD	0.70
Princes Highway (Macquarie Rivulet)	214402	MHL	AHD	1.67
Little Lake Entrance	214467	MHL	AHD	0.70
Macquarie Rivulet at Albion Park	214003	DPI Water	Local Datum	2.06
Minnamurra	214442	MHL	AHD	1.08
Minnamurra River at Browns Lane	214010	DPI Water	Local Datum	3.79

5.2 Wollongong and Lake Illawarra - rainfall

24 hour rainfall totals up until 9.00 a.m. are displayed in Table 5.2 to 5.4 and Figures 5.6 to 5.11 for the period 20th to 31st August 2015. The rainfall data and intensities are displayed graphically in Figures 5.12 to 5.42.

Table 5.2 Wollongong and Lake Illawarra daily rainfall totals

Date	Bulli (mm)	Rixons Pass (mm)	Russell Vale (mm)	Bellambi (mm)	Balgownie (mm)	Mt Pleasant (mm)	Figtree (mm)	Mt Kembla (mm)	Dombarton Loop (mm)	Whytes Gully (mm)	Wongawilli (mm)	Darkes Rd (mm)	Cringila (mm)	Port Kembla (mm)	Berkeley (mm)
	Sydney Water	MHL	MHL	BoM	BoM	MHL	BoM	MHL	MHL	MHL	MHL	MHL	BoM	MHL	Sydney Water
20/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23/08/2015	2.5	2.0	2.0	2.2	2.0	2.5	0.5	1.0	1.0	0.5	0.5	0.5	0.0	0.5	0.5
24/08/2015	1.0	1.5	0.5	0.8	1.0	0.0	1.0	1.0	1.5	1.0	0.5	1.0	1.0	1.0	1.5
25/08/2015	191.0	143.5	161.0	190.2	122.5	139.0	93.0	123.0	197.0	133.5	176.0	137.0	111.0	127.5	127.0
26/08/2015	32.5	49.5	41.5	31.8	65.5	59.5	47.0	65.5	101.5	81.5	84.0	80.0	49.0	53.5	61.0
27/08/2015	9.5	8.0	9.5	14.8	5.5	8.0	11.5	17.0	28.5	19.5	18.5	24.0	11.0	12.0	15.5
28/08/2015	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
29/08/2015	0.5	0.5	0.5	0.4	0.5	0.0	0.0	0.5	0.0	0.5	0.5	0.5	1.0	0.5	0.5
30/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	237.0	205.5	215.0	240.2	197.0	209.0	153.0	208.0	329.5	236.5	280.0	243.0	173.0	195.0	206.5

Table 5.3 Wollongong and Lake Illawarra daily rainfall totals

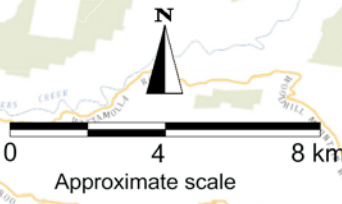
Date	Kanahooka (mm)	Dapto (mm)	Cleveland Rd (mm)	Huntley Colliery (mm)	Upper Calderwood (mm)	Wollongong (mm)	Nurrewin (mm)	Clover Hill (mm)	North Macquarie (mm)	Little Lake Entrance (mm)	Shellharbour (mm)
	Sydney Water	Sydney Water	MHL	MHL	MHL	BoM	MHL	MHL	MHL	MHL	Sydney Water
20/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23/08/2015	0.5	0.5	0.5	1.0	1.0	0.8	1.5	1.0	1.0	1.5	2.0
24/08/2015	1.5	1.0	1.0	0.5	2.5	1.8	1.5	1.0	1.5	1.0	1.0
25/08/2015	141.0	150.5	173.5	146.5	133.5	158.6	128.5	122.5	112.5	144.5	166.0
26/08/2015	82.5	89.0	80.5	121.5	110.5	92.2	141.5	152.0	99.5	68.5	70.0
27/08/2015	16.5	24.0	15.5	23.0	14.5	16.6	29.0	34.0	19.5	11.5	9.0
28/08/2015	0.0	0.0	0.0	0.0	0.0	0.2	1.0	1.0	0.5	0.0	0.0
29/08/2015	0.5	1.0	1.0	1.0	0.5	0.0	0.5	0.5	0.0	0.0	0.5
30/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	242.5	266.0	272.0	293.5	262.5	270.2	303.5	312.0	234.5	227.0	248.5

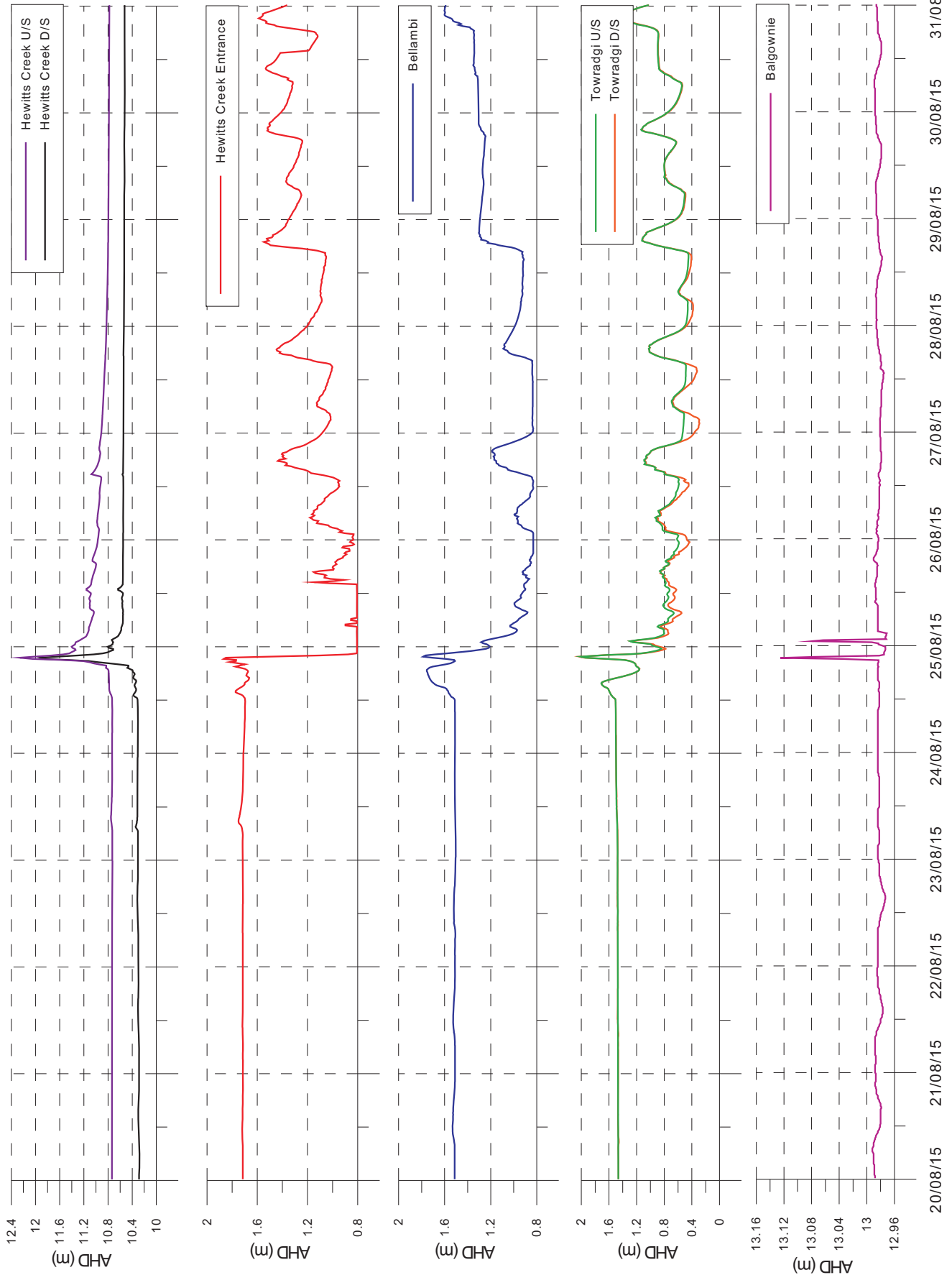
Table 5.4 Wollongong and Lake Illawarra daily rainfall totals

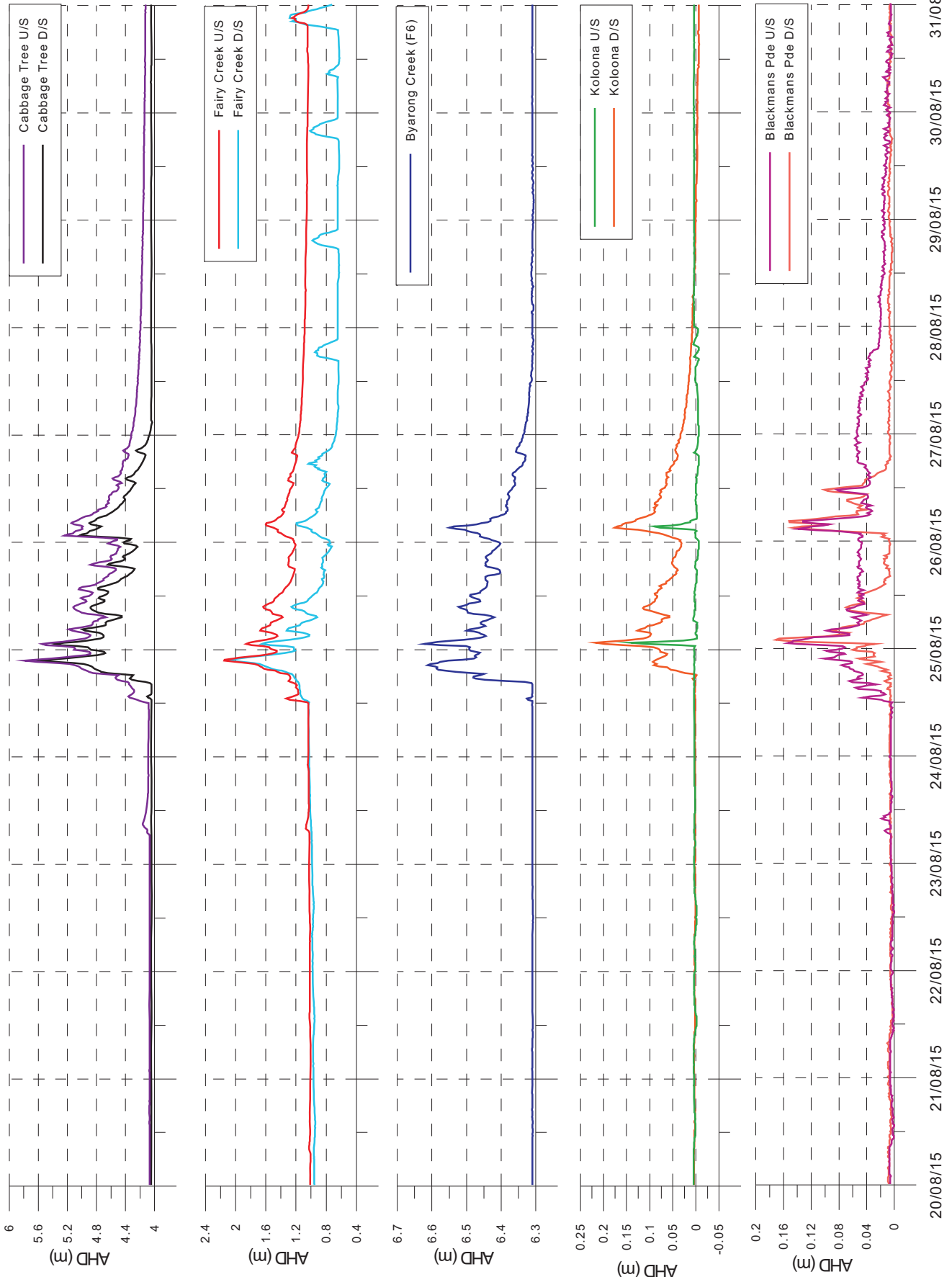
Date	Tongarra (mm)	Yellow Rock Rd (mm)	Jamberoo (mm)	Bombo (mm)	Kiama (mm)
	Sydney Water	MHL	Sydney Water	Sydney Water	Sydney Water
20/08/2015	0	0	0	0	0
21/08/2015	0	0	0	0	0
22/08/2015	0	0	0	0	0
23/08/2015	1	0	0.5	0.5	0.5
24/08/2015	1.5	1	0.5	0.5	0.5
25/08/2015	112.5	161	185	200	219
26/08/2015	101	100	134	92	113.5
27/08/2015	19	19.5	19.5	19	11
28/08/2015	1	1	2	0.5	1
29/08/2015	0.5	0.5	0.5	1.5	2.5
30/08/2015	0	0	0	0	0
31/08/2015	0	0	0	0	0
Total	236.5	283.0	342.0	314.0	348.0

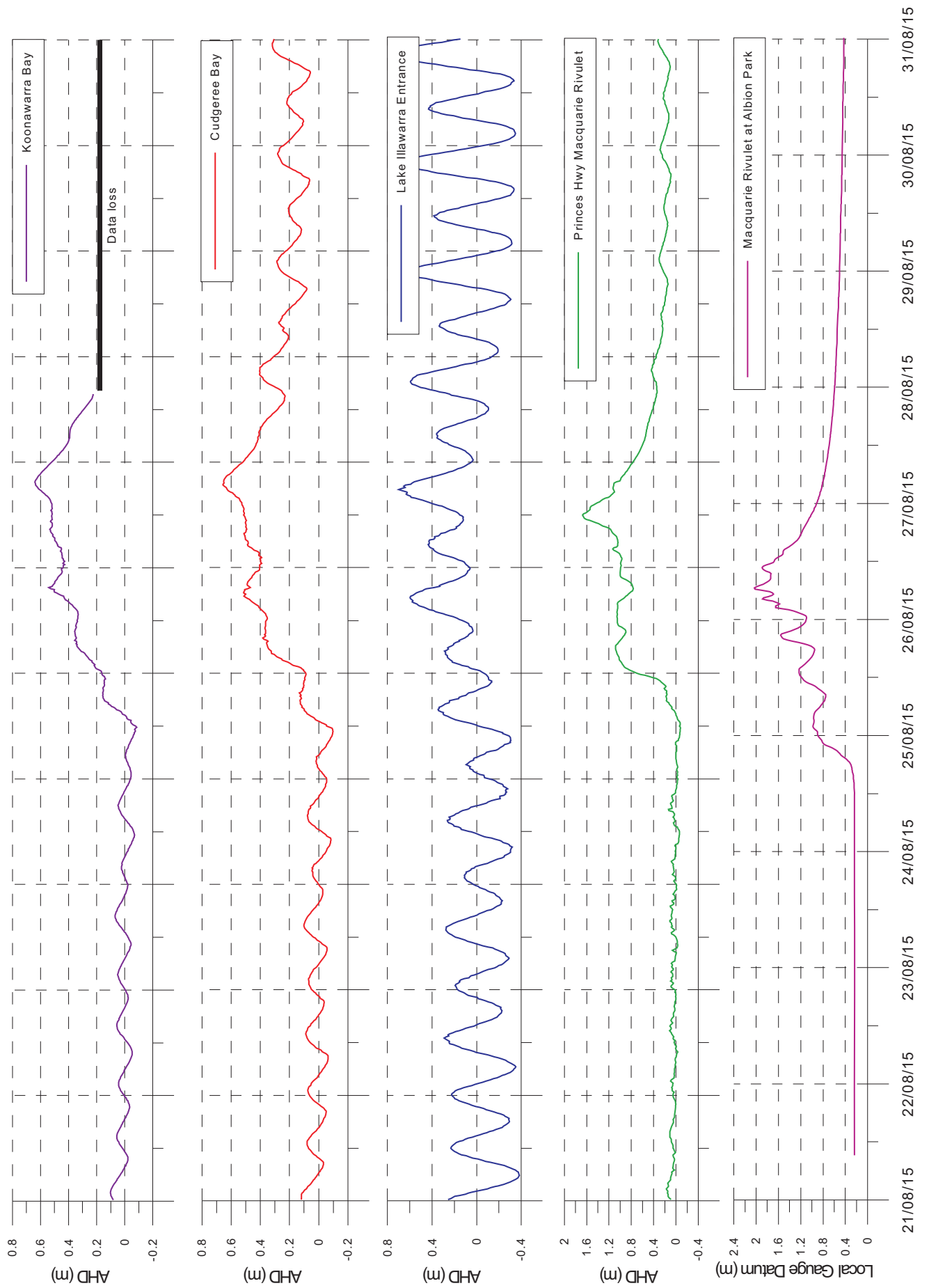
Legend

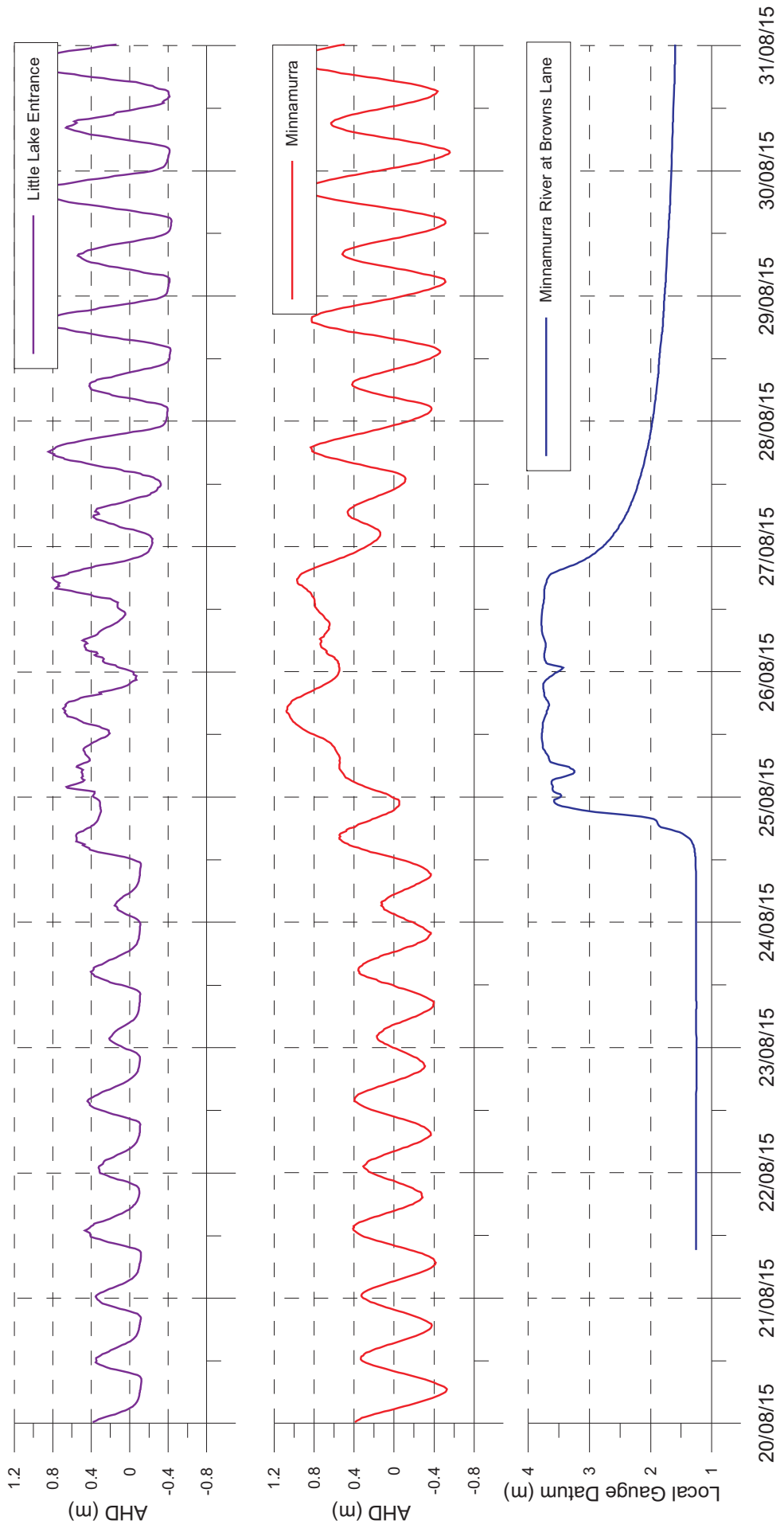
- MHL - Rainfall
- MHL - Water level
- MHL - Water level & rain
- MHL - Wave height & direction
- DPI Water - Water level
- DPI Water - Water level & rain
- Catchment boundary
- BoM - Rainfall
- Sydney Water - Rainfall
- WaterNSW - Rainfall
- WaterNSW - Water level
- WaterNSW - Water level & rain

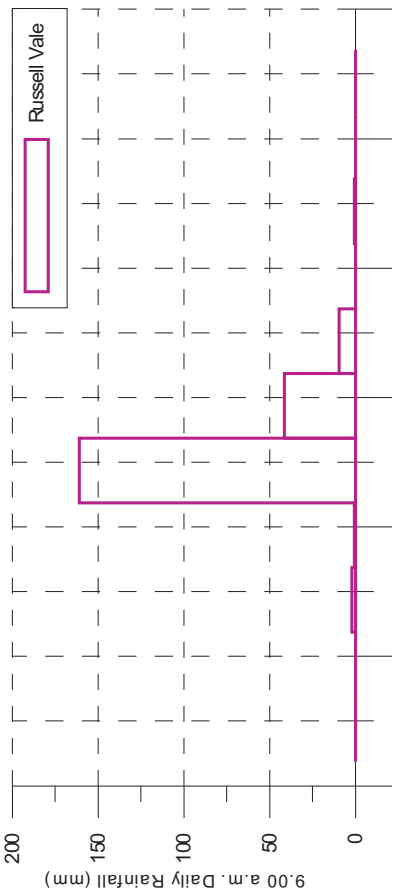
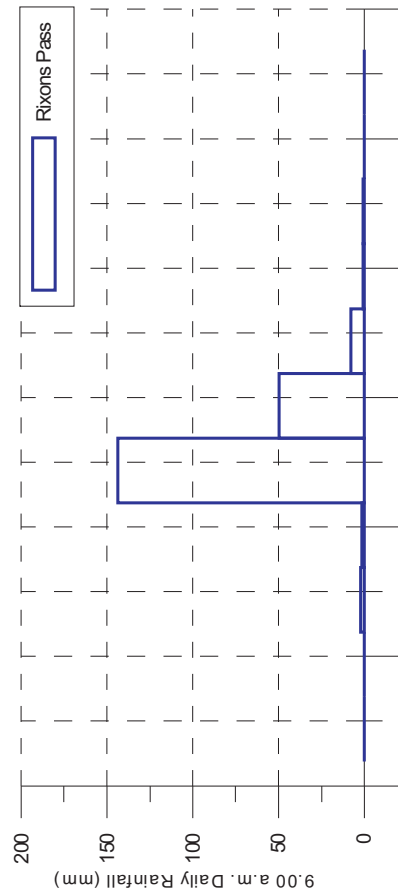
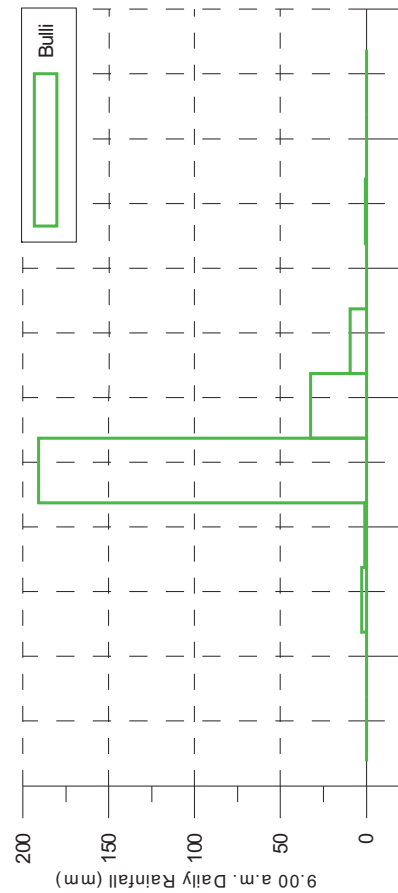
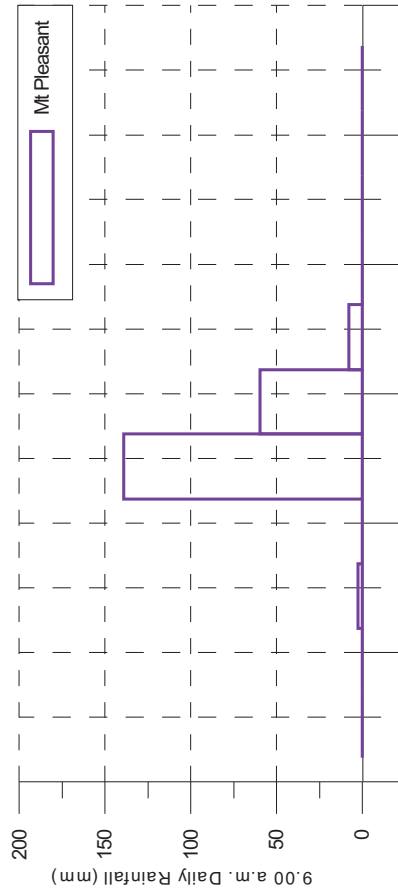
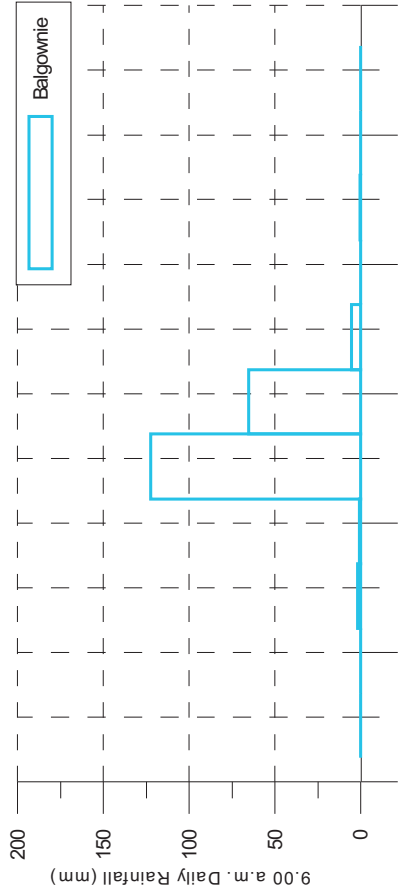
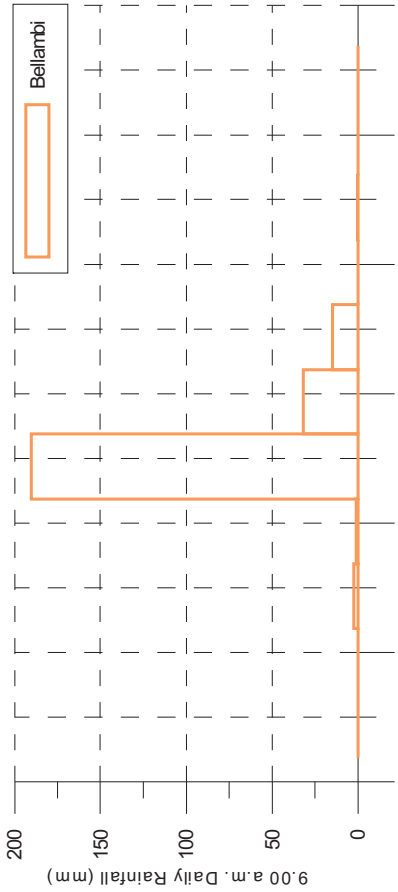


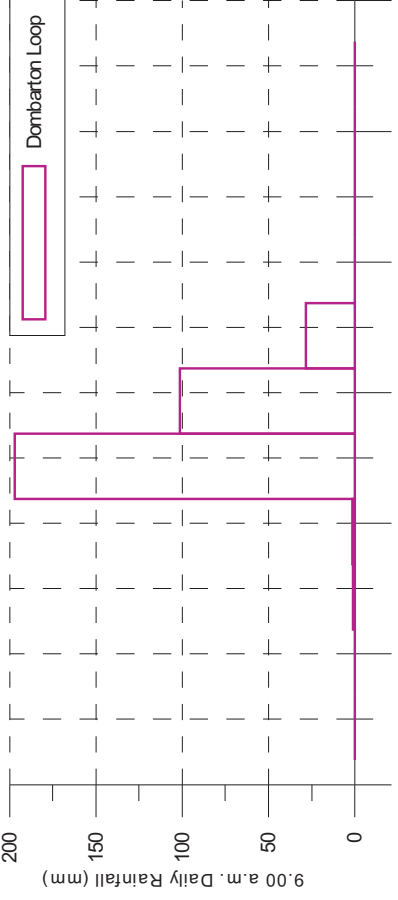
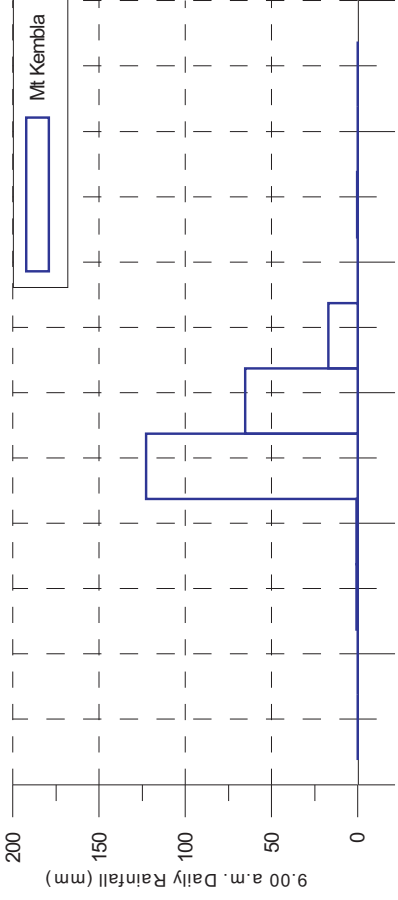
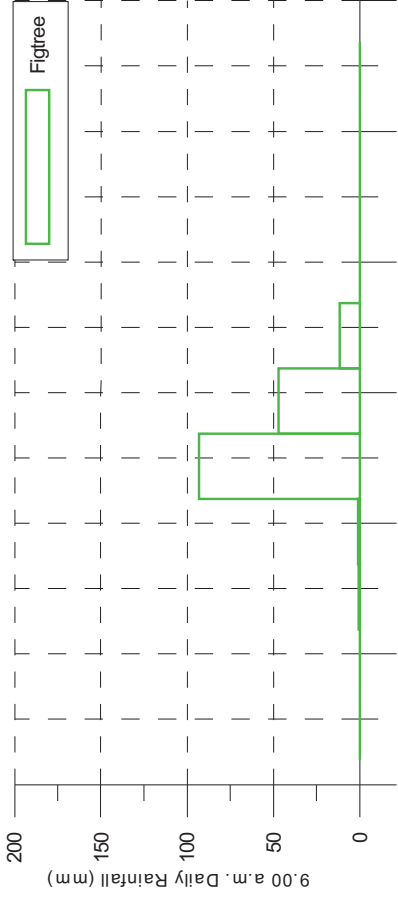
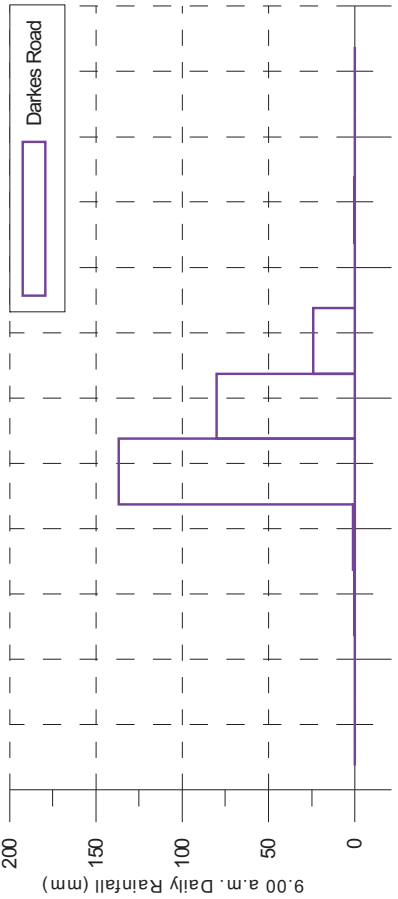
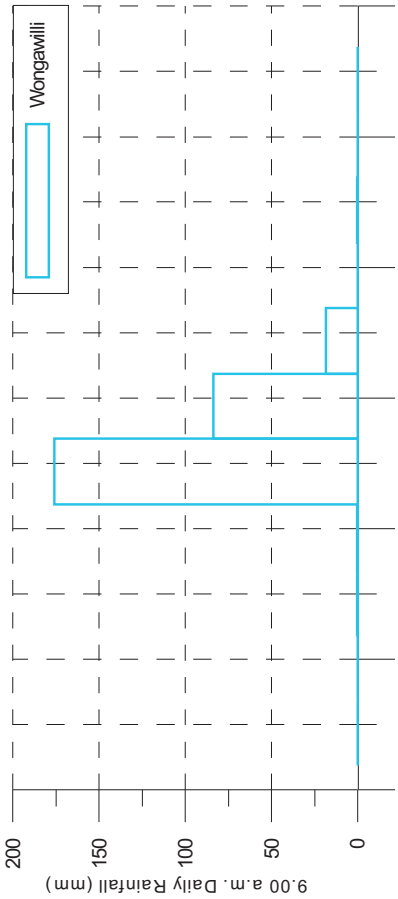
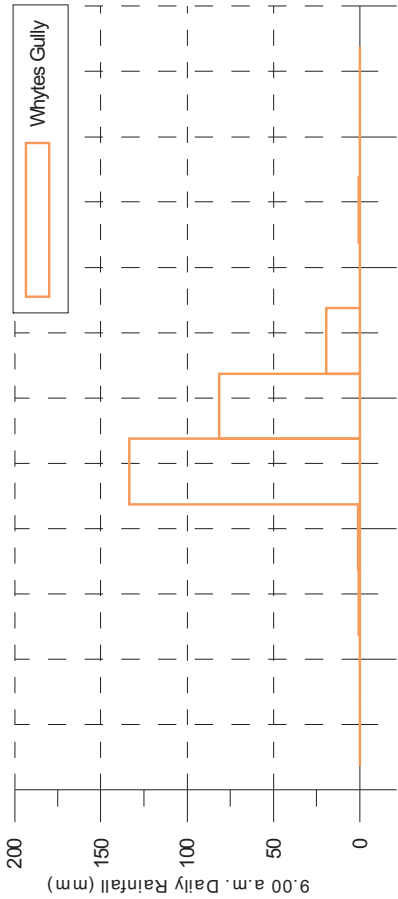


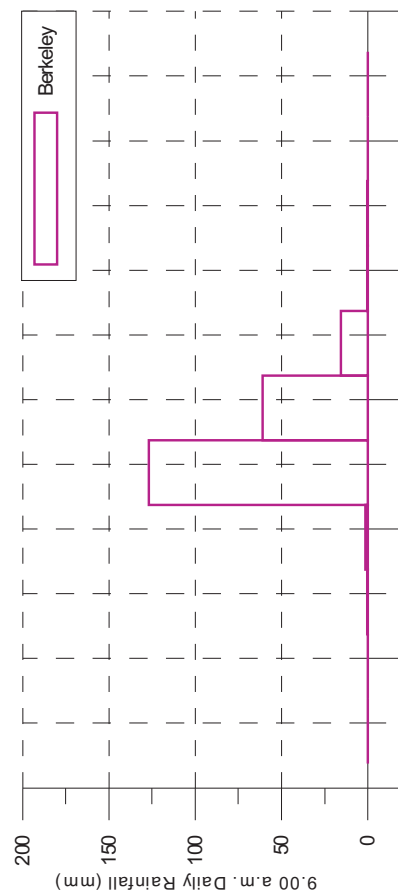
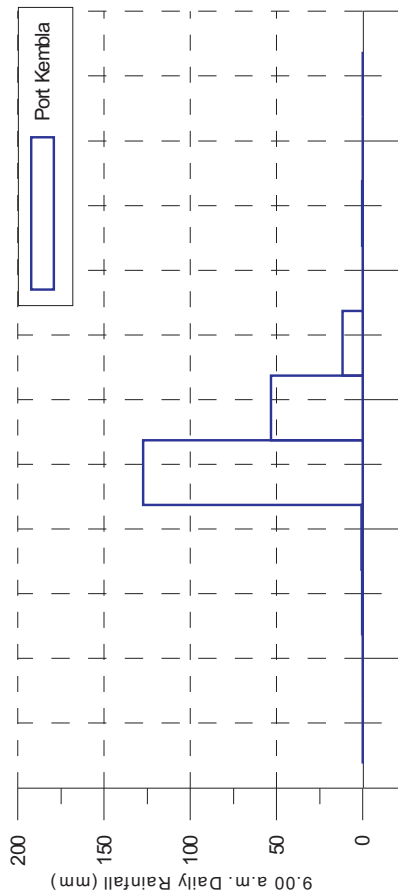
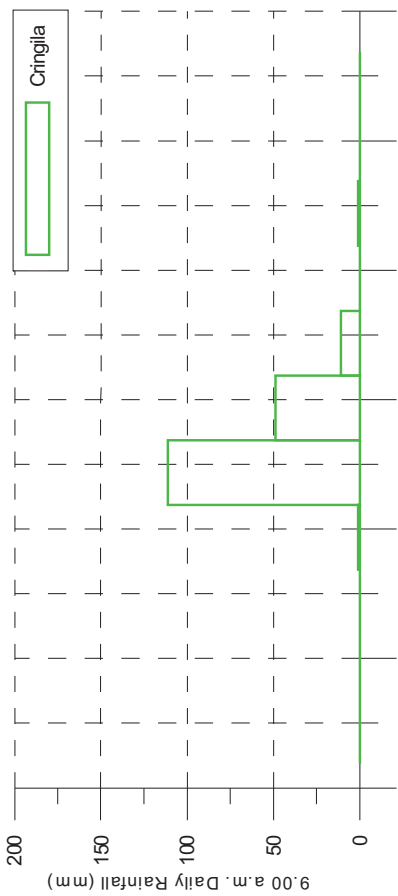
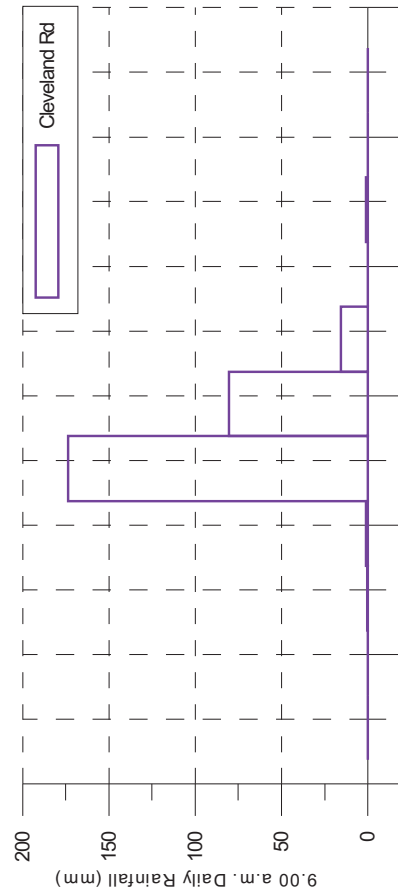
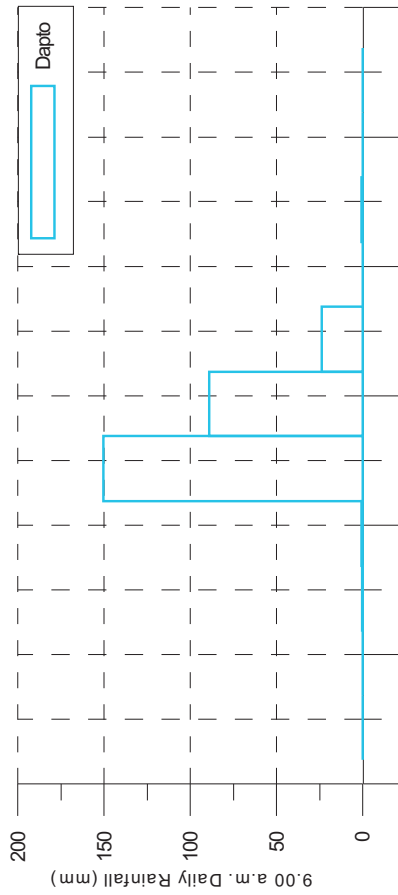
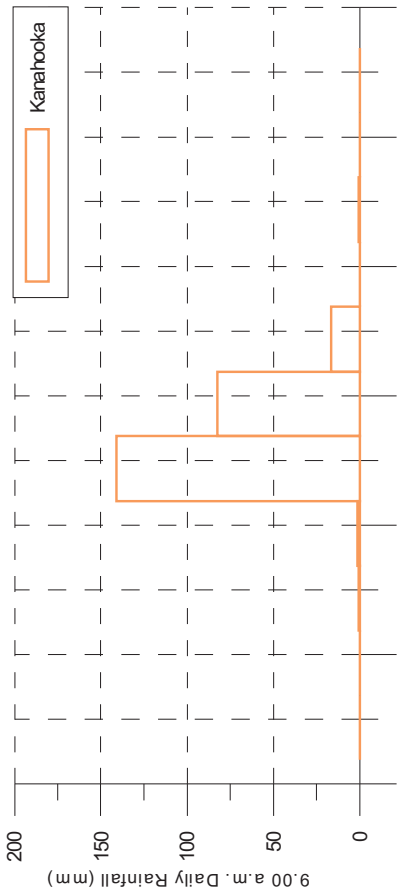


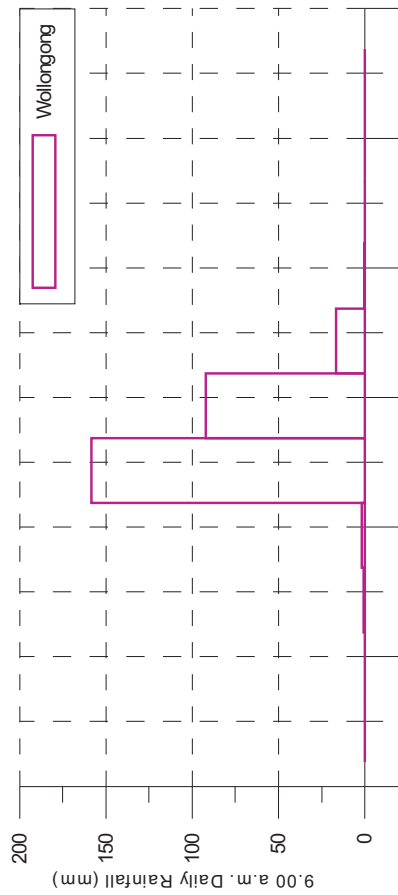
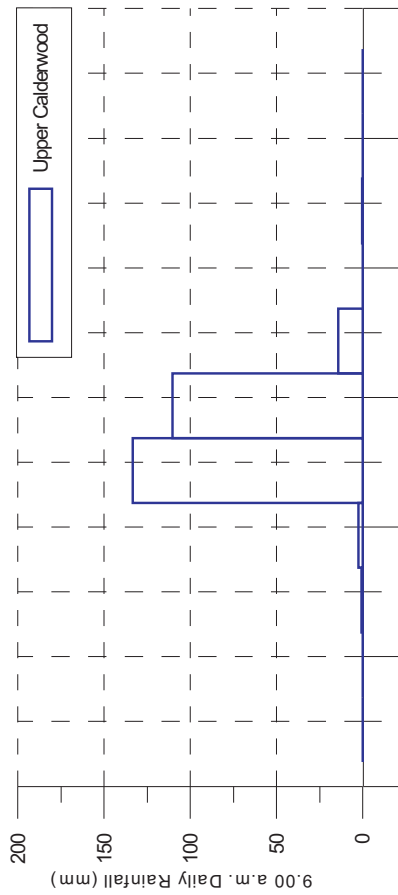
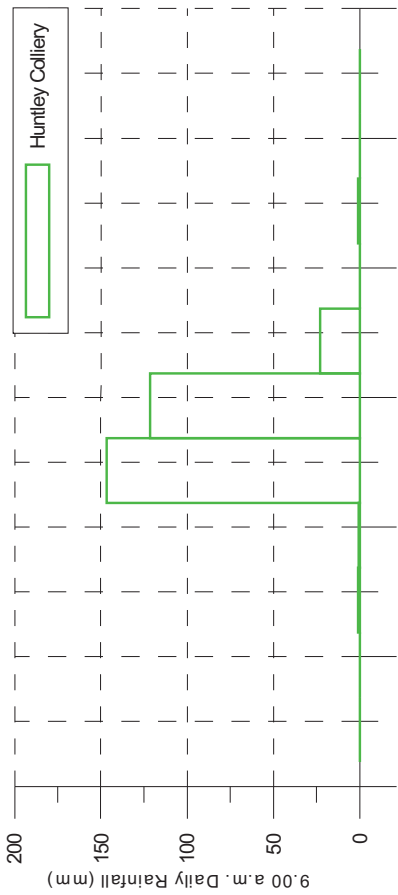
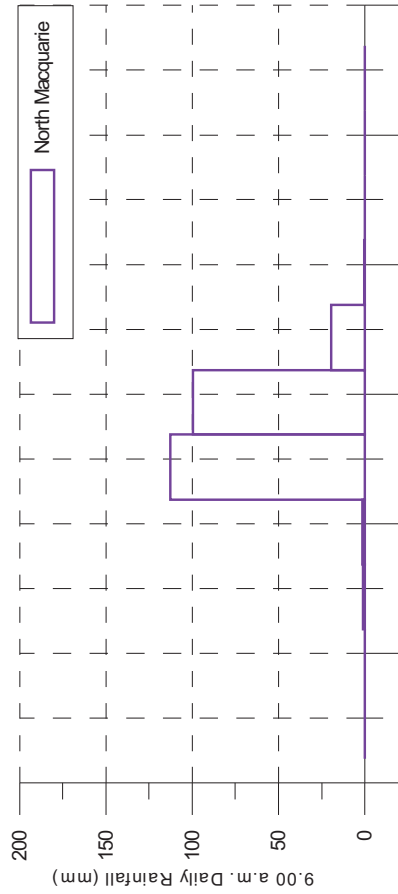
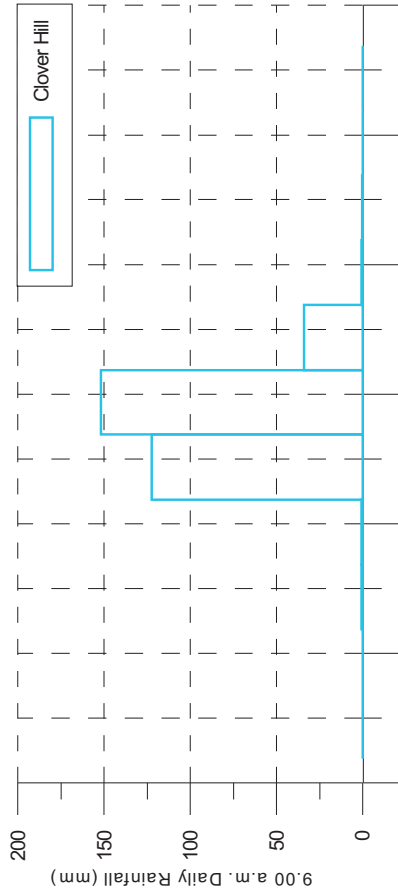
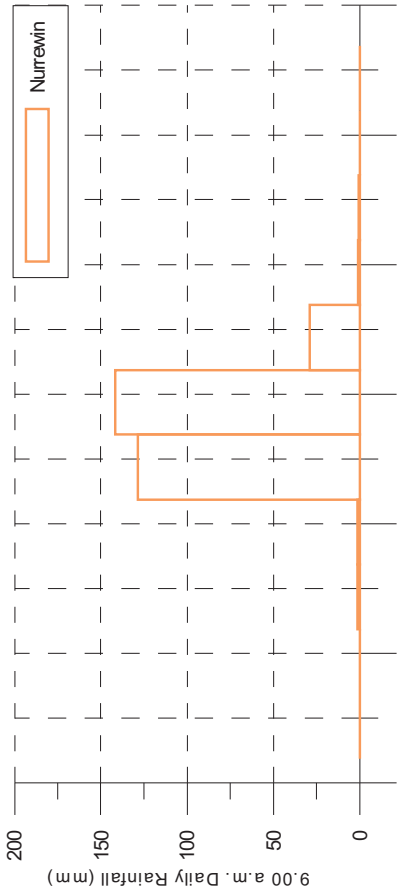


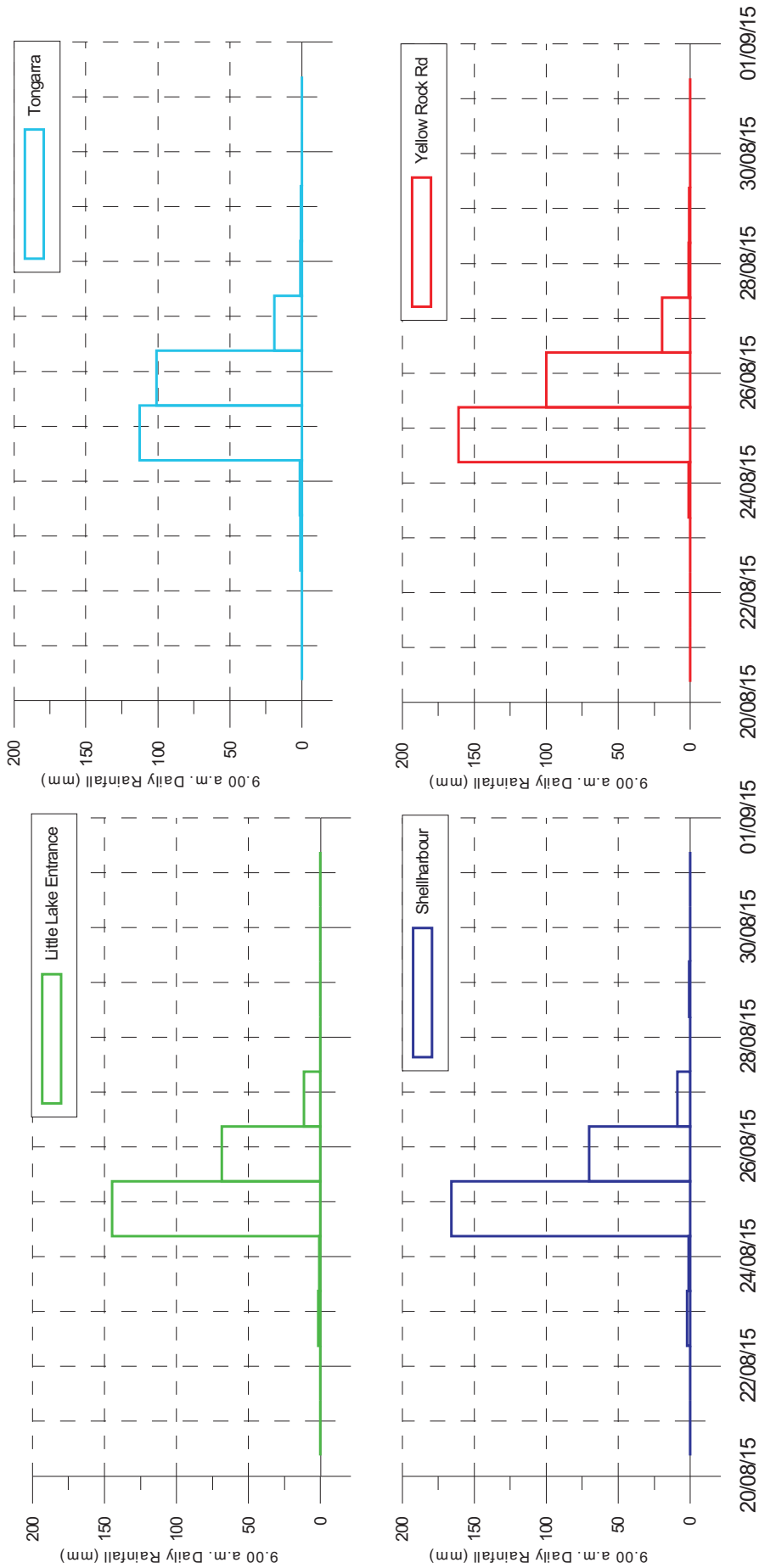


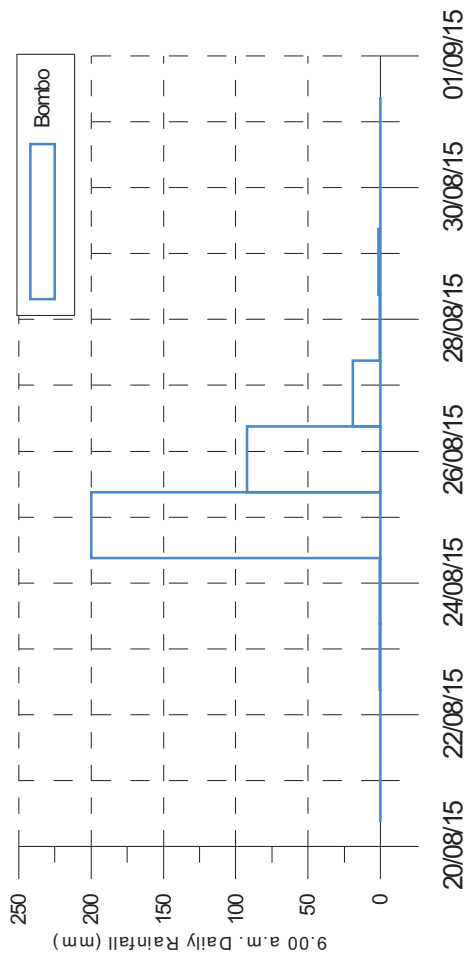
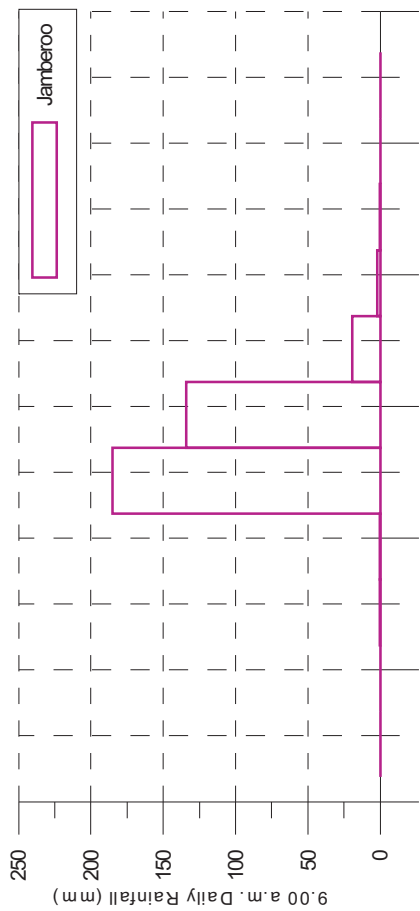
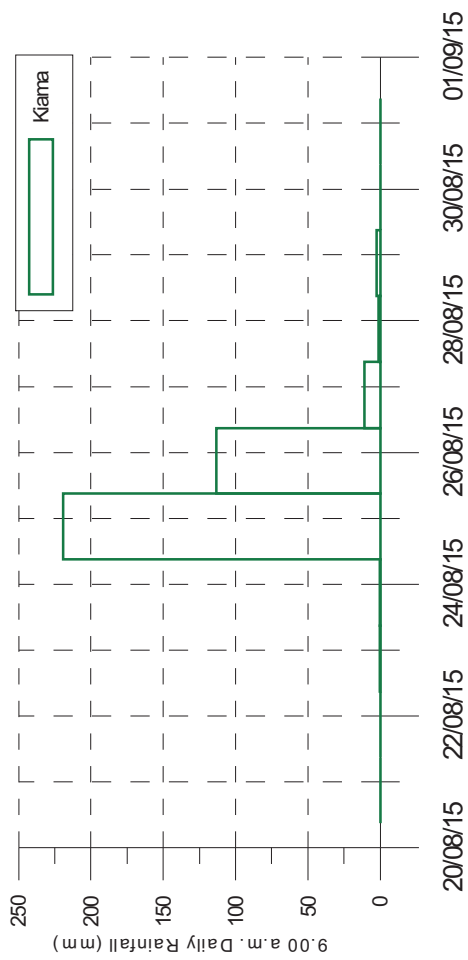


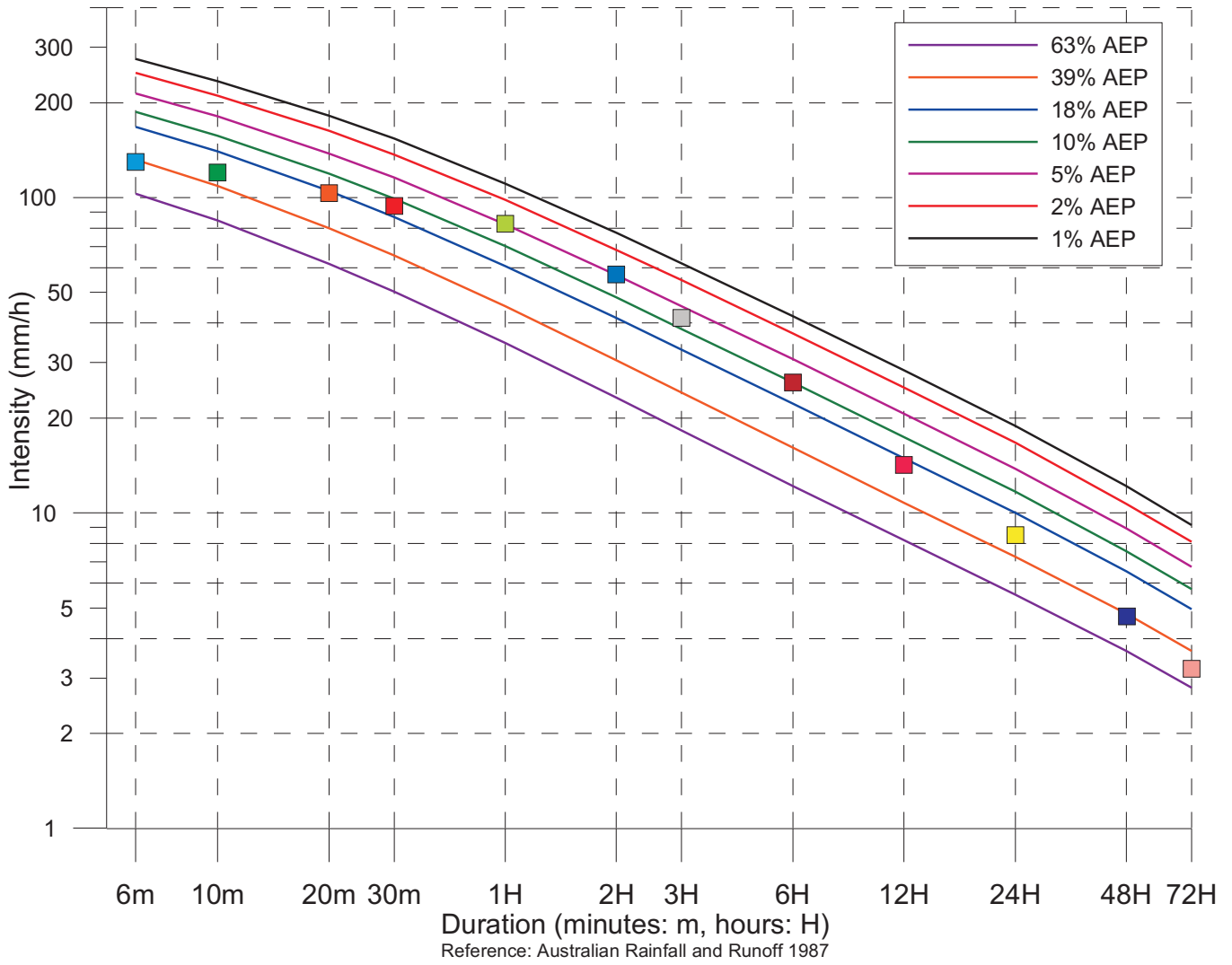








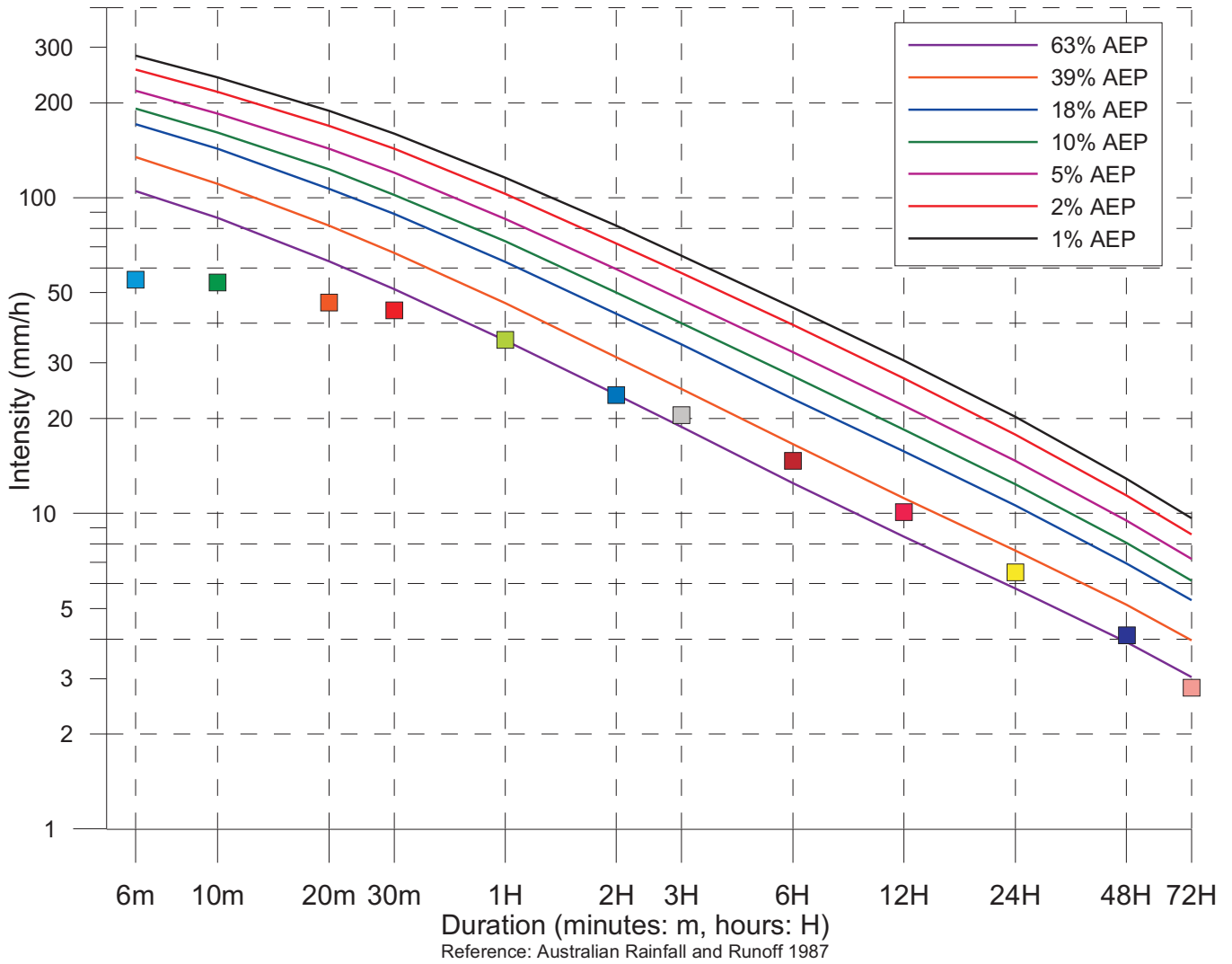




Bulli Rainfall Intensity		
01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	130	21:10_24/08/2015
10m	120	21:08_24/08/2015
20m	103.5	21:04_24/08/2015
30m	94	20:46_24/08/2015
1H	82.5	20:32_24/08/2015
2H	57	19:52_24/08/2015
3H	41.5	18:48_24/08/2015
6H	25.9	18:36_24/08/2015
12H	14.2	12:40_24/08/2015
24H	8.5	13:56_24/08/2015
48H	4.7	12:08_24/08/2015
72H	3.2	23:44_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

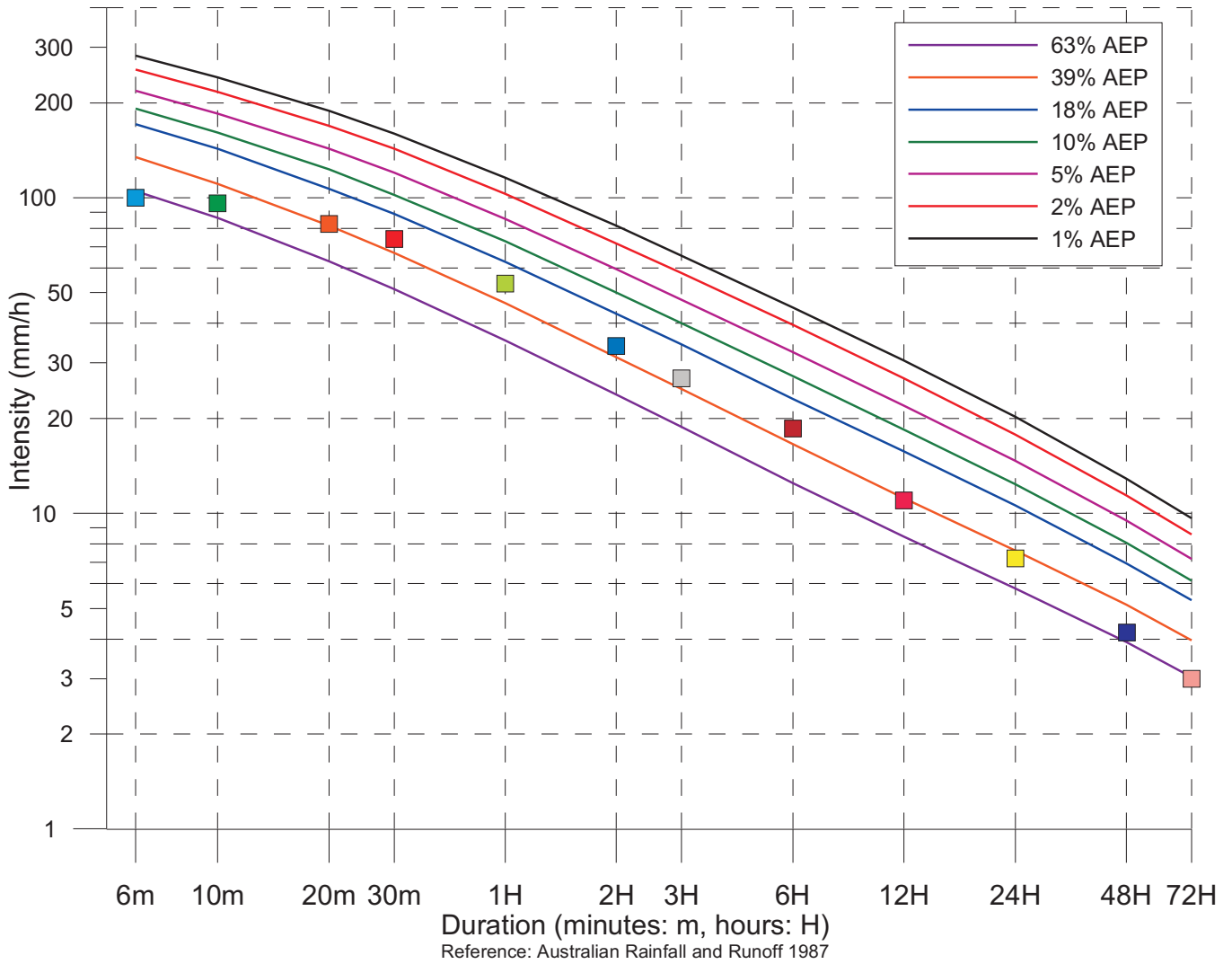




Rixons Pass Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	55	20:56_24/08/2015
10m	54	20:54_24/08/2015
20m	46.5	20:48_24/08/2015
30m	44	20:38_24/08/2015
1H	35.5	20:32_24/08/2015
2H	23.7	19:42_24/08/2015
3H	20.5	18:36_24/08/2015
6H	14.7	18:38_24/08/2015
12H	10.1	14:04_24/08/2015
24H	6.5	14:04_24/08/2015
48H	4.1	12:02_24/08/2015
72H	2.8	19:56_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

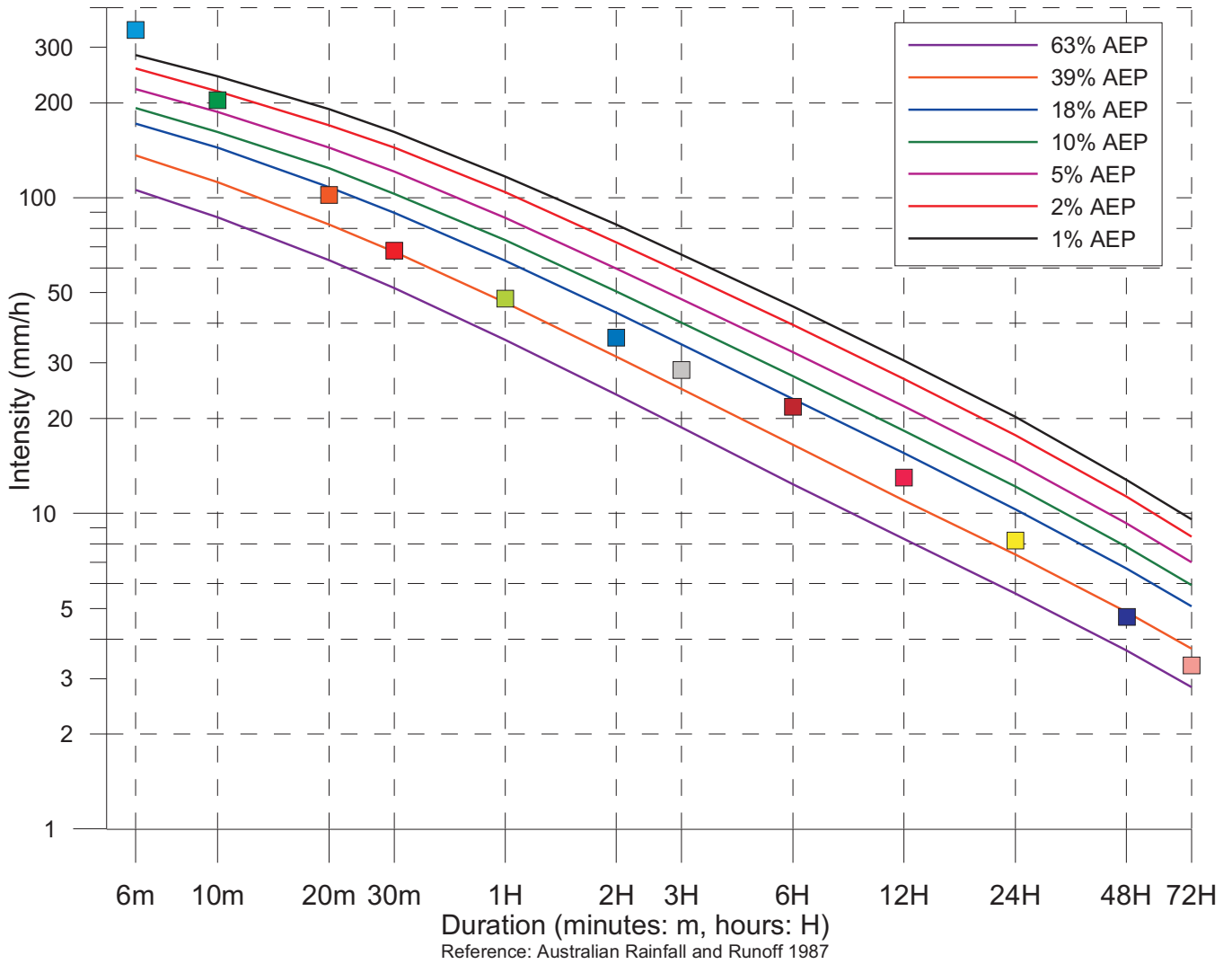




Russell Vale Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	100	21:02_24/08/2015
10m	96	20:58_24/08/2015
20m	82.5	20:50_24/08/2015
30m	74	20:40_24/08/2015
1H	53.5	20:30_24/08/2015
2H	34	19:50_24/08/2015
3H	26.8	18:38_24/08/2015
6H	18.6	18:38_24/08/2015
12H	11	13:46_24/08/2015
24H	7.2	13:46_24/08/2015
48H	4.2	10:42_24/08/2015
72H	3	20:10_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

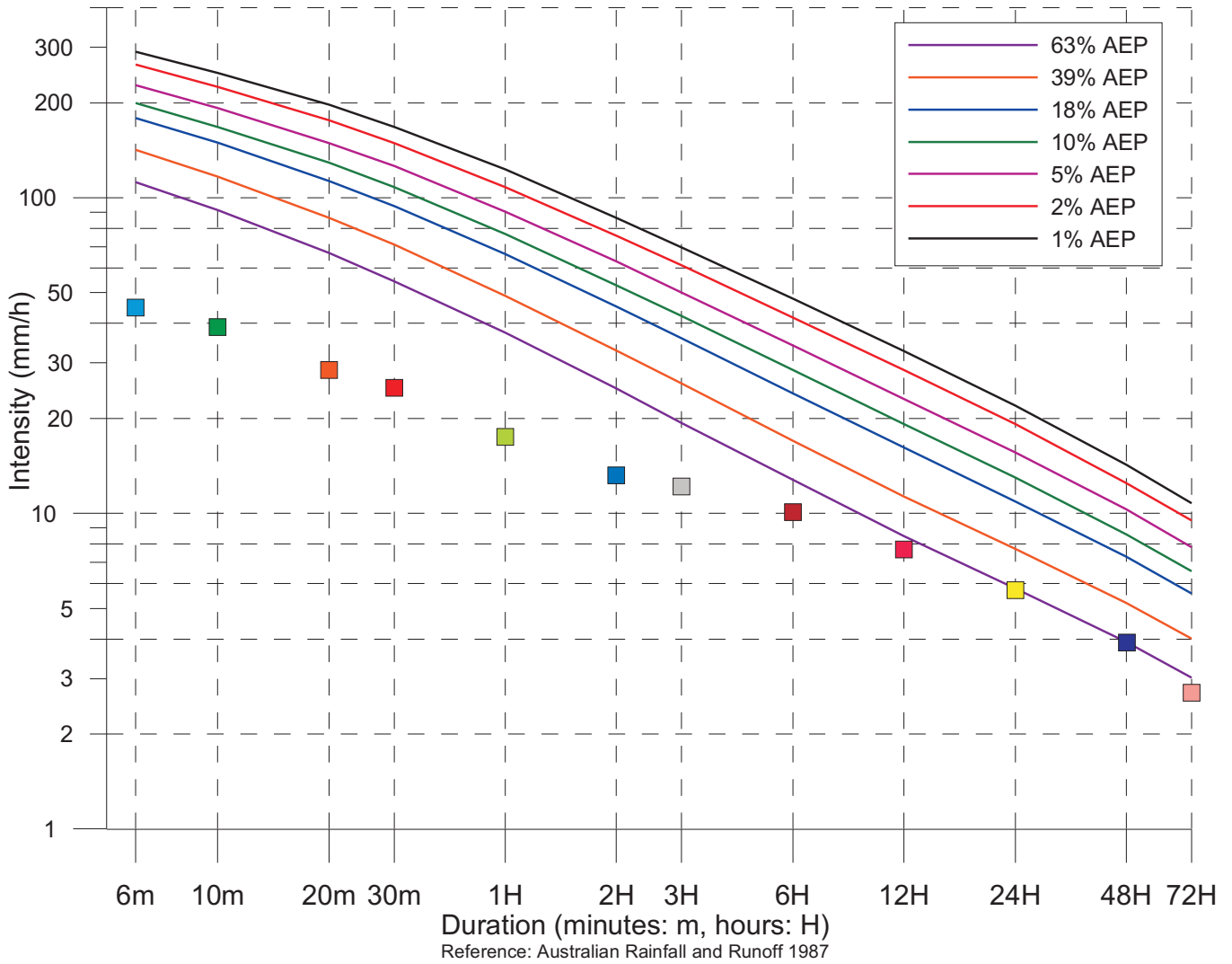




Bellambi Reservoir Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	340	21:28_24/08/2015
10m	204	21:28_24/08/2015
20m	102	21:28_24/08/2015
30m	68	21:28_24/08/2015
1H	48	21:28_24/08/2015
2H	36	20:28_24/08/2015
3H	28.5	19:28_24/08/2015
6H	21.8	18:58_24/08/2015
12H	13	18:28_24/08/2015
24H	8.2	12:28_24/08/2015
48H	4.7	10:28_24/08/2015
72H	3.3	10:28_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

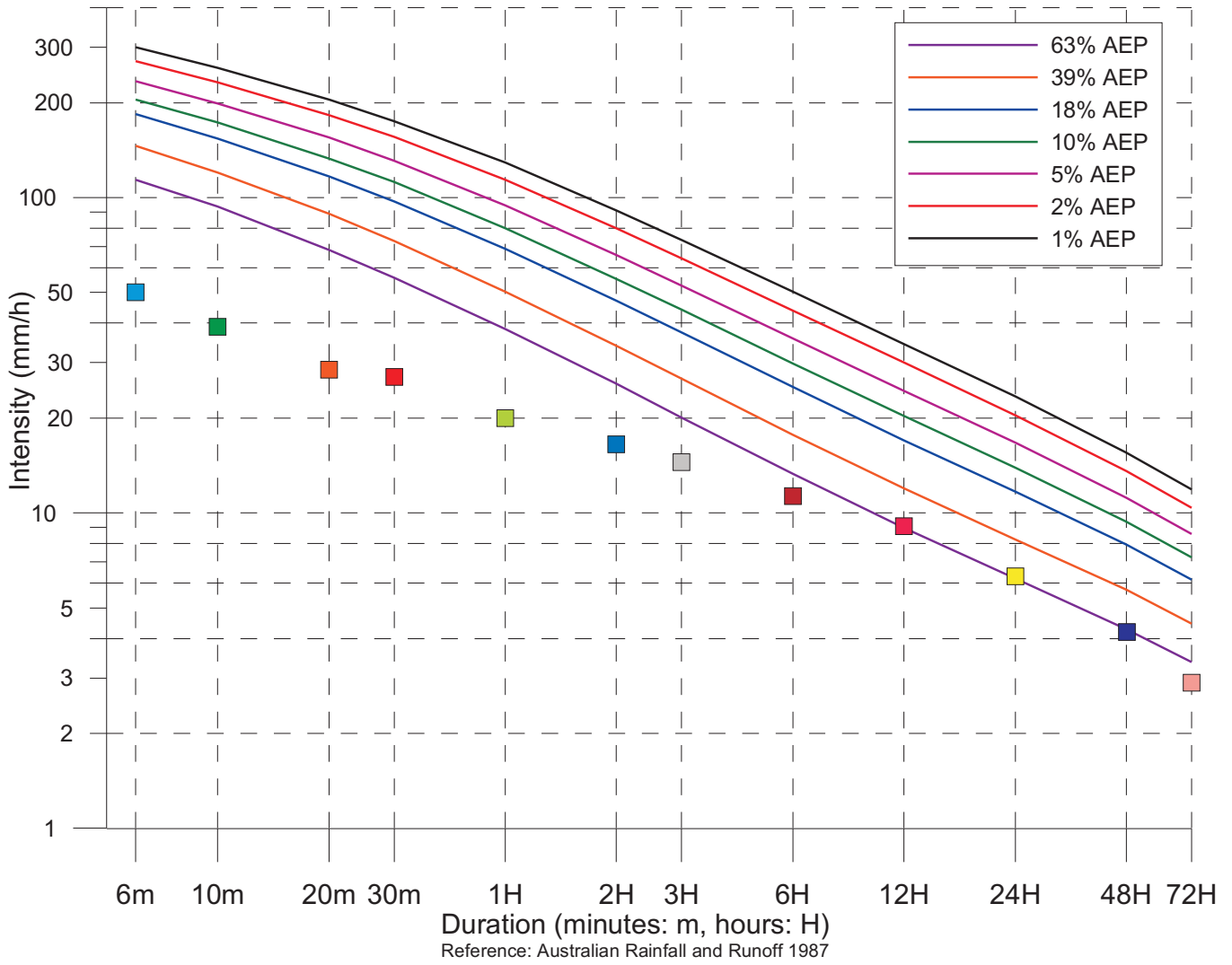




Balgownie Reservoir Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	45	00:40_25/08/2015
10m	39	20:44_24/08/2015
20m	28.5	20:42_24/08/2015
30m	25	20:42_24/08/2015
1H	17.5	20:34_24/08/2015
2H	13.2	19:34_24/08/2015
3H	12.2	18:14_24/08/2015
6H	10.1	19:00_24/08/2015
12H	7.7	16:16_24/08/2015
24H	5.7	14:16_24/08/2015
48H	3.9	11:56_24/08/2015
72H	2.7	20:36_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

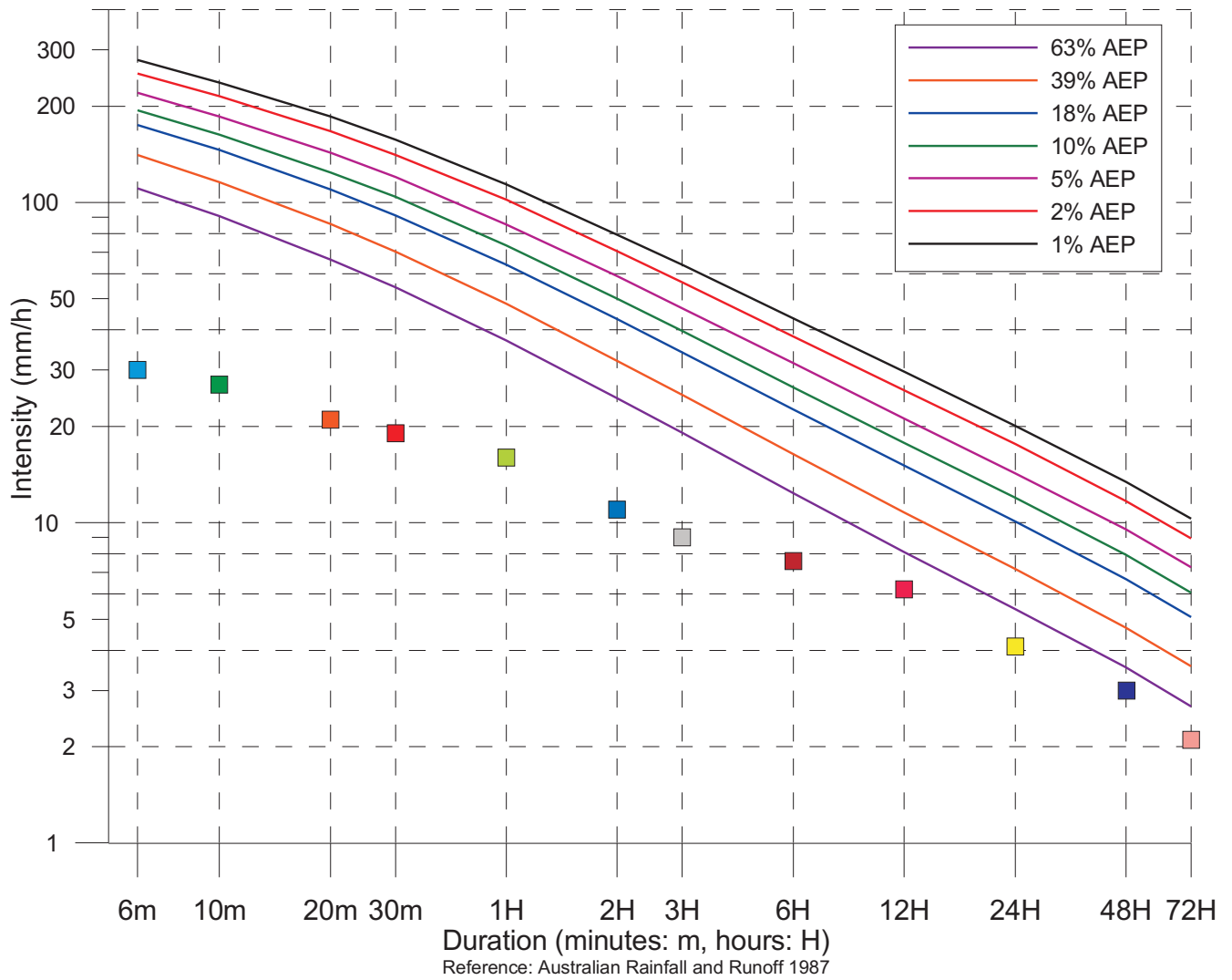




Mt Pleasant Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	00:42_25/08/2015
10m	39	00:42_25/08/2015
20m	28.5	00:42_25/08/2015
30m	27	00:24_25/08/2015
1H	20	00:10_25/08/2015
2H	16.5	18:08_24/08/2015
3H	14.5	18:10_24/08/2015
6H	11.3	19:02_24/08/2015
12H	9.1	16:10_24/08/2015
24H	6.3	13:58_24/08/2015
48H	4.2	10:36_24/08/2015
72H	2.9	10:36_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

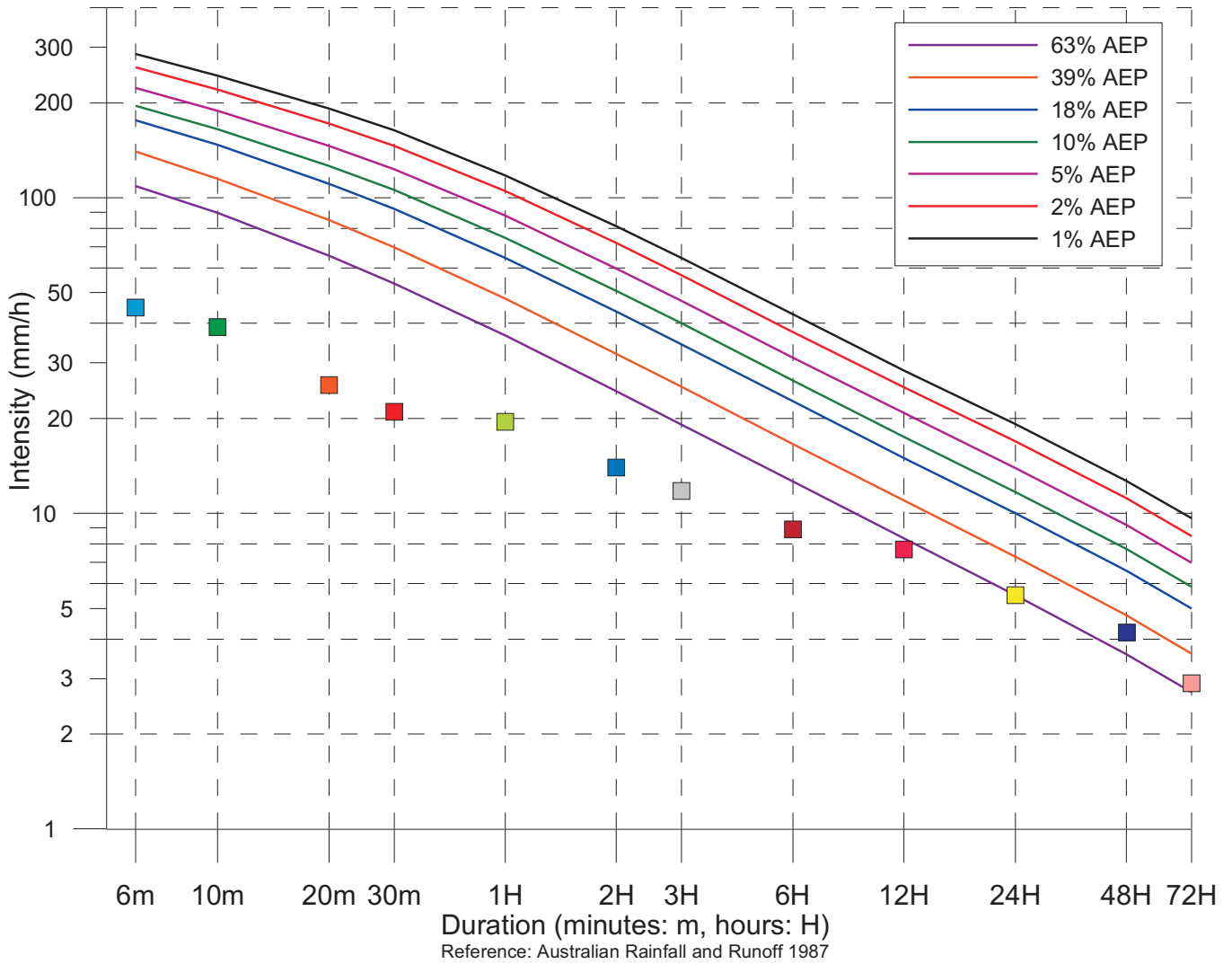




Figtree Bowling Club Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	30	14:30_24/08/2015
10m	27	00:24_25/08/2015
20m	21	00:46_25/08/2015
30m	19	00:30_25/08/2015
1H	16	00:12_25/08/2015
2H	11	23:00_24/08/2015
3H	9	22:40_24/08/2015
6H	7.6	19:06_24/08/2015
12H	6.2	16:04_24/08/2015
24H	4.1	12:06_24/08/2015
48H	3	11:54_24/08/2015
72H	2.1	20:38_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

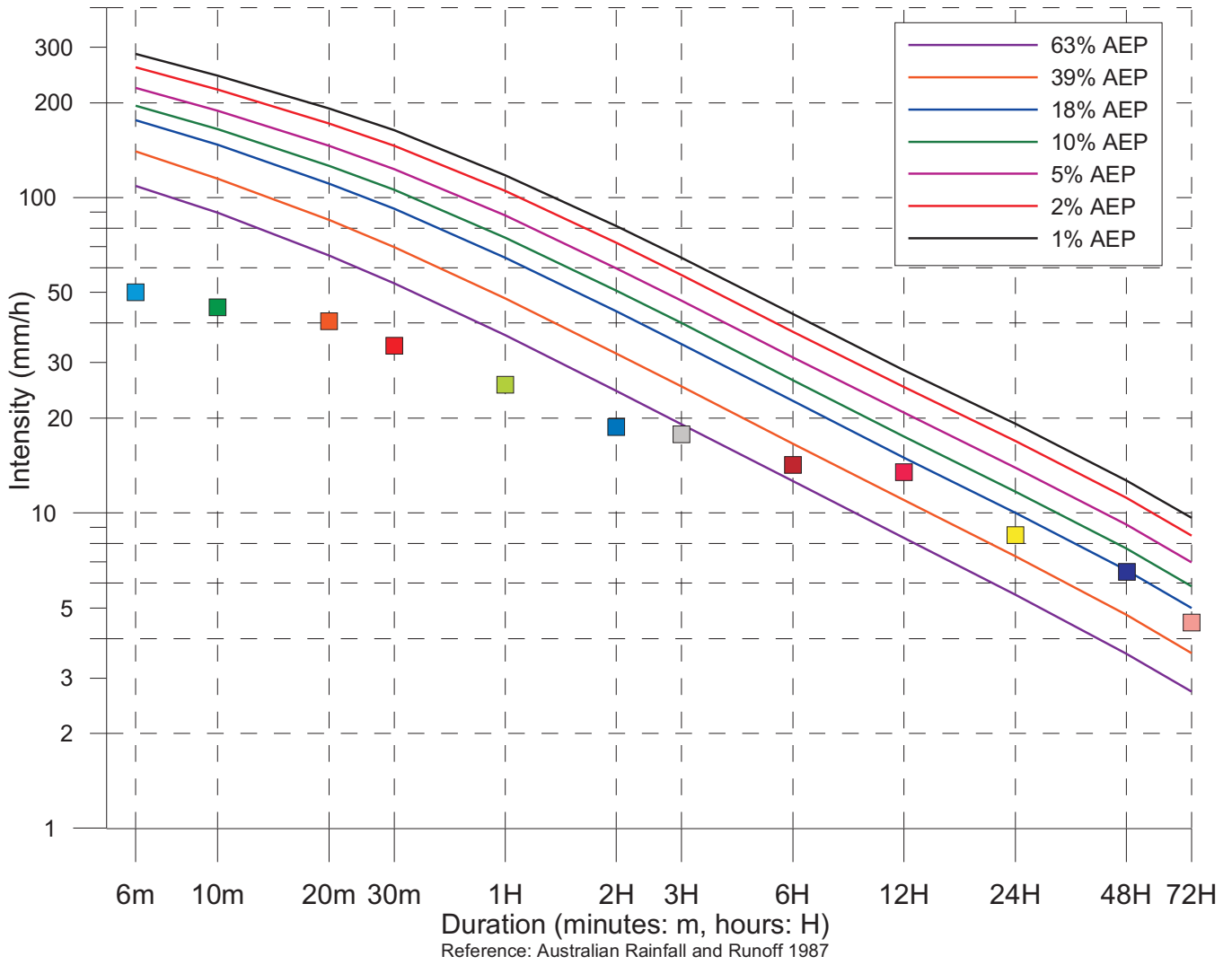




Mt Kembla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	45	01:34_25/08/2015
10m	39	01:30_25/08/2015
20m	25.5	01:28_25/08/2015
30m	21	01:12_25/08/2015
1H	19.5	00:42_25/08/2015
2H	14	23:54_24/08/2015
3H	11.8	22:54_24/08/2015
6H	8.9	19:48_24/08/2015
12H	7.7	16:02_24/08/2015
24H	5.5	12:04_24/08/2015
48H	4.2	11:56_24/08/2015
72H	2.9	10:20_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

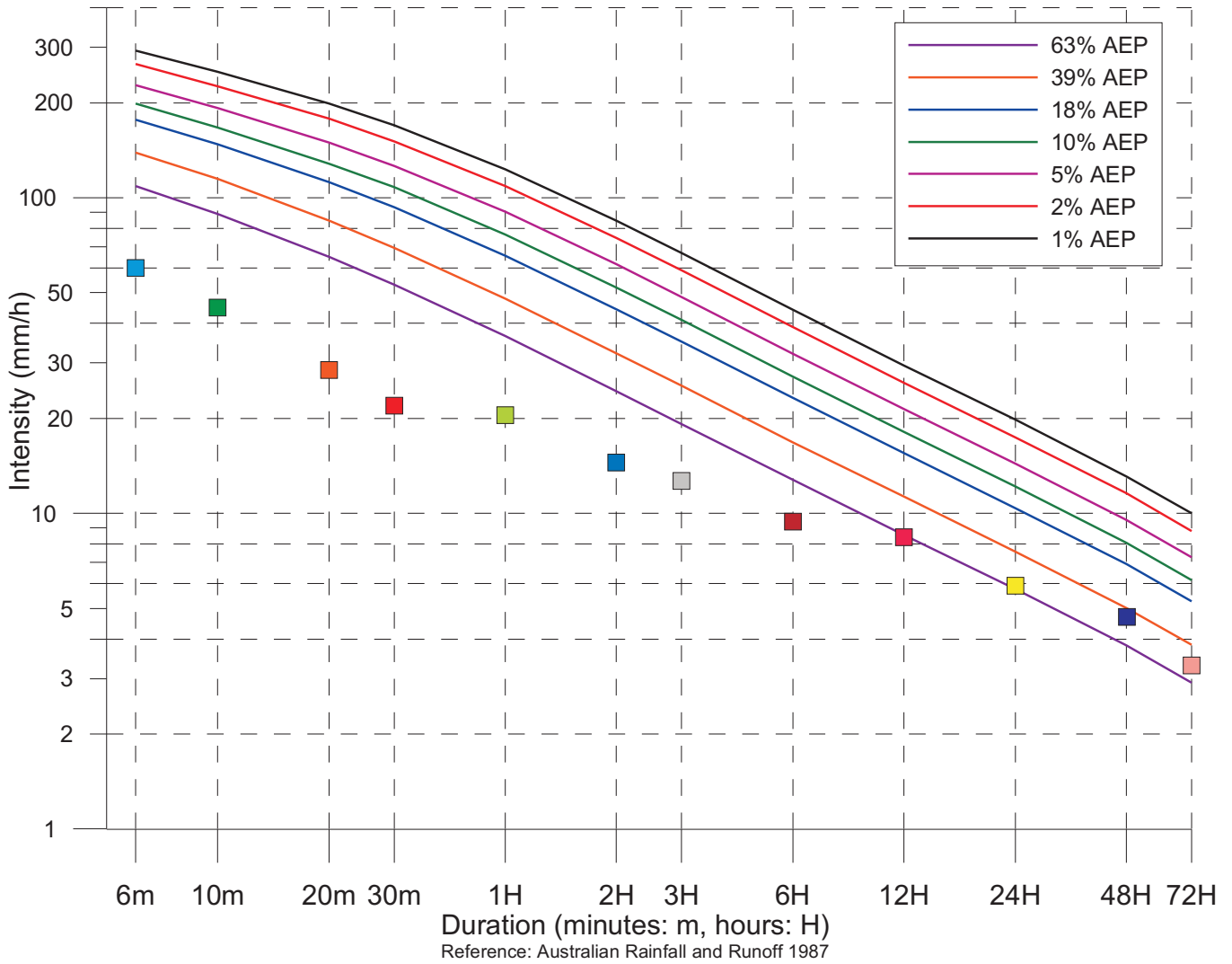




Dombarton Loop Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	15:56_24/08/2015
10m	45	00:38_25/08/2015
20m	40.5	00:32_25/08/2015
30m	34	00:32_25/08/2015
1H	25.5	00:32_25/08/2015
2H	18.7	23:16_24/08/2015
3H	17.8	22:38_24/08/2015
6H	14.2	14:18_24/08/2015
12H	13.5	13:22_24/08/2015
24H	8.5	11:54_24/08/2015
48H	6.5	12:06_24/08/2015
72H	4.5	10:08_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

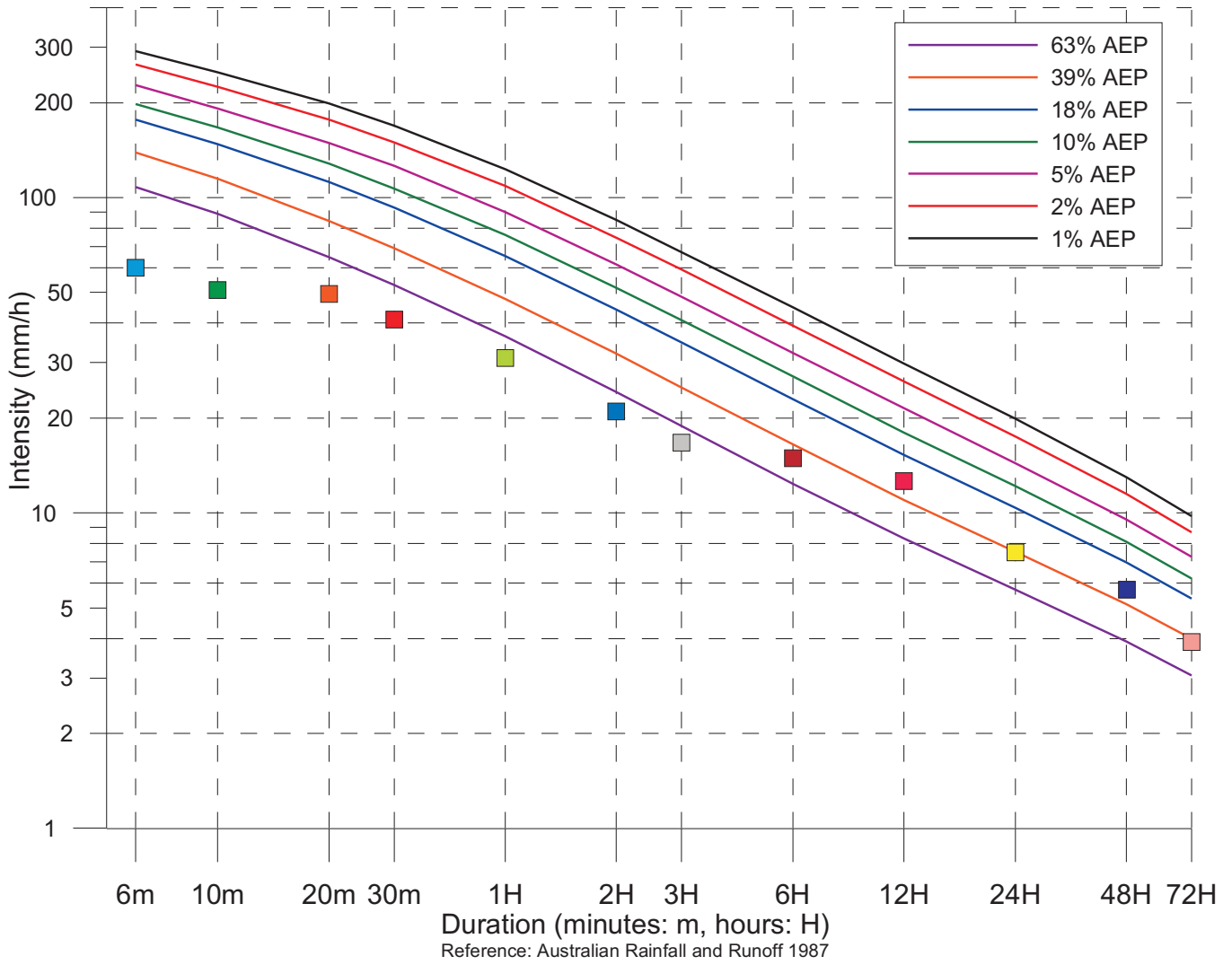




Whytes Gully Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	60	02:34_26/08/2015
10m	45	02:32_26/08/2015
20m	28.5	01:38_26/08/2015
30m	22	01:24_26/08/2015
1H	20.5	01:40_26/08/2015
2H	14.5	00:42_26/08/2015
3H	12.7	22:44_24/08/2015
6H	9.4	19:44_24/08/2015
12H	8.4	14:16_24/08/2015
24H	5.9	11:56_24/08/2015
48H	4.7	12:04_24/08/2015
72H	3.3	20:14_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

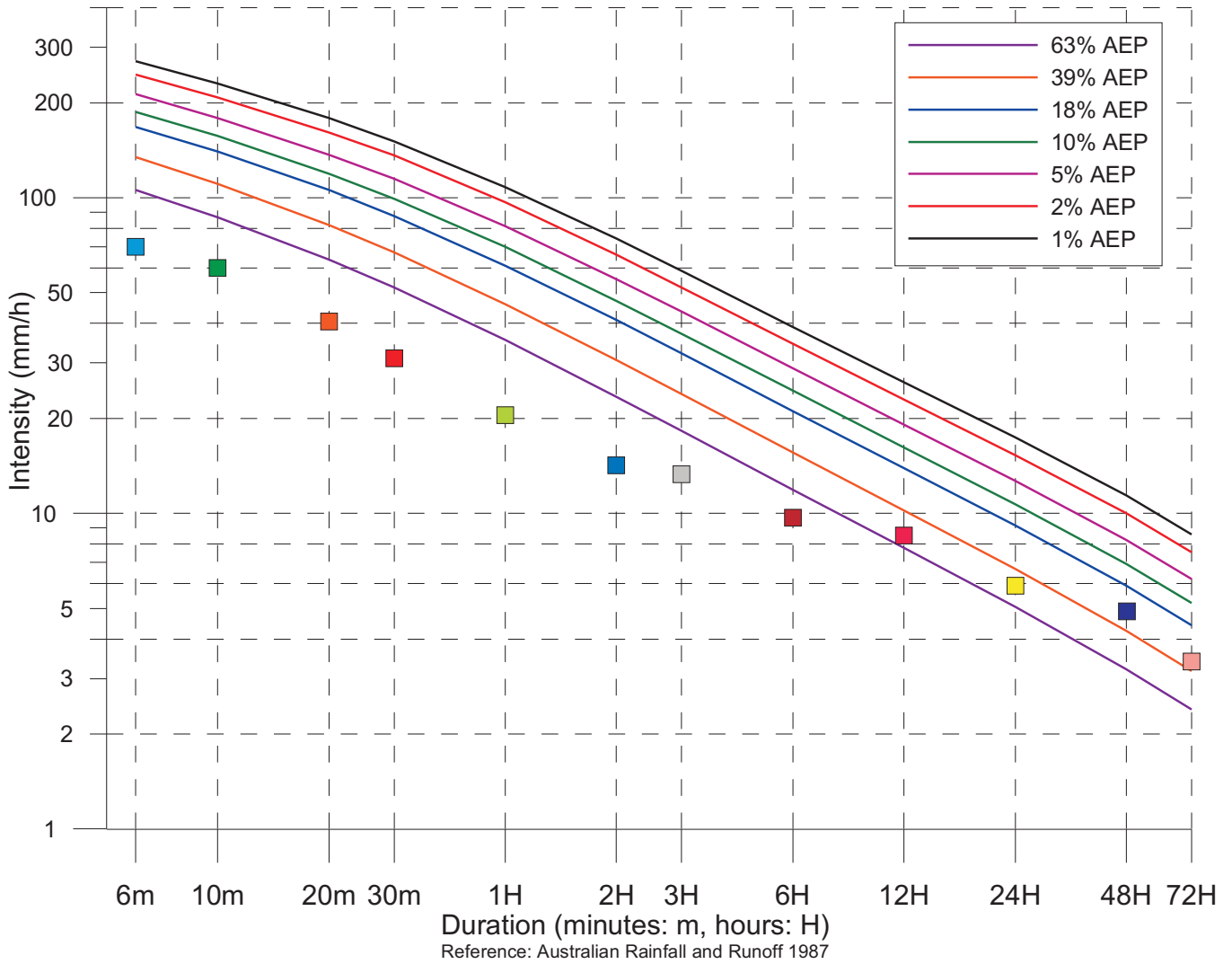




Wongawilli Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	60	15:44_24/08/2015
10m	51	15:46_24/08/2015
20m	49.5	15:44_24/08/2015
30m	41	15:38_24/08/2015
1H	31	15:22_24/08/2015
2H	21	15:12_24/08/2015
3H	16.7	13:32_24/08/2015
6H	14.9	15:14_24/08/2015
12H	12.6	13:30_24/08/2015
24H	7.5	11:52_24/08/2015
48H	5.7	11:52_24/08/2015
72H	3.9	10:12_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

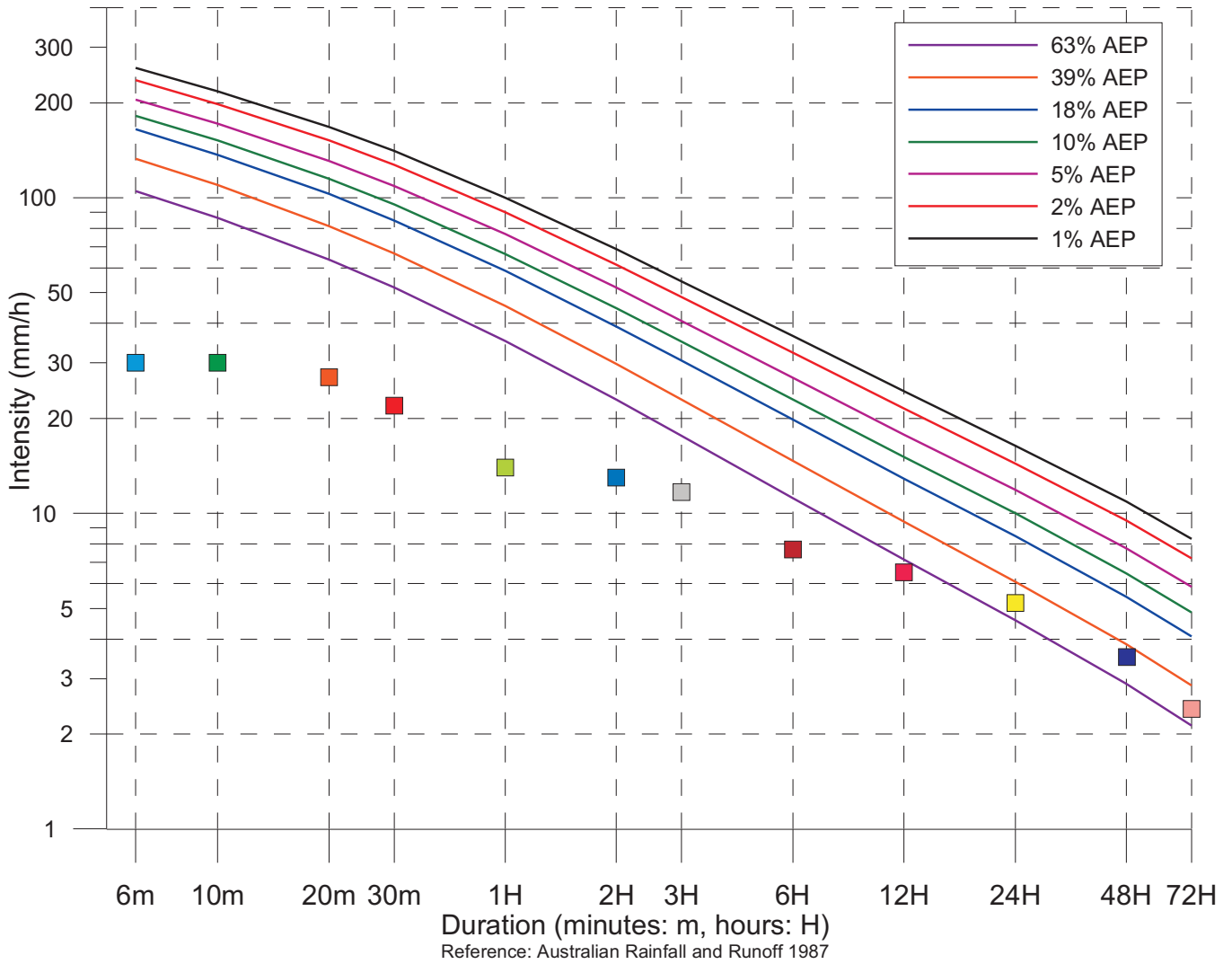




Darkes Road Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	70	01:52_26/08/2015
10m	60	01:48_26/08/2015
20m	40.5	01:40_26/08/2015
30m	31	01:36_26/08/2015
1H	20.5	01:08_26/08/2015
2H	14.2	00:00_26/08/2015
3H	13.3	22:42_24/08/2015
6H	9.7	19:42_24/08/2015
12H	8.5	14:04_24/08/2015
24H	5.9	12:04_24/08/2015
48H	4.9	12:04_24/08/2015
72H	3.4	00:14_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

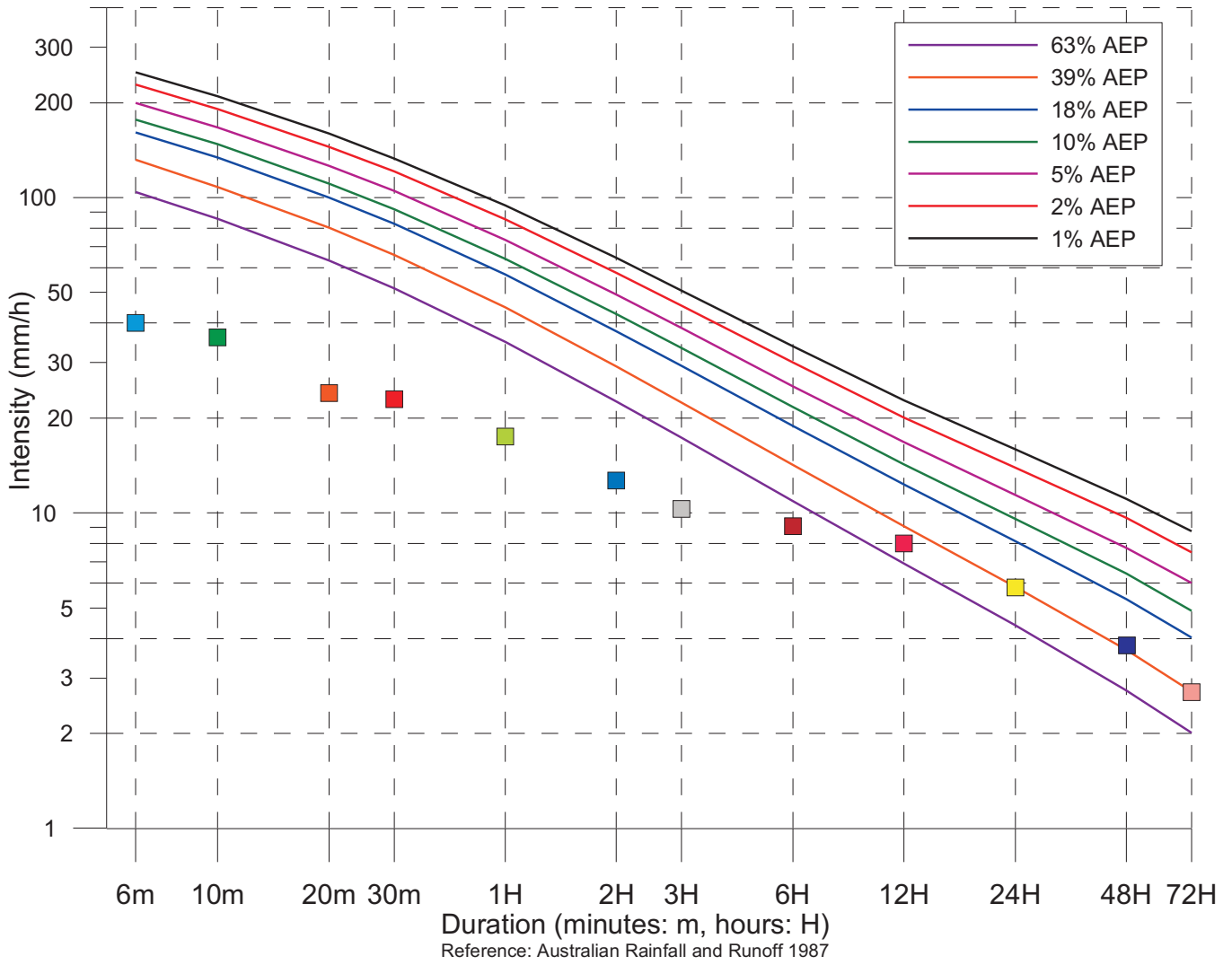




Cringila Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	30	07:10_25/08/2015
10m	30	12:14_24/08/2015
20m	27	12:08_24/08/2015
30m	22	12:06_24/08/2015
1H	14	08:18_25/08/2015
2H	13	07:10_25/08/2015
3H	11.7	06:56_25/08/2015
6H	7.7	05:04_25/08/2015
12H	6.5	22:52_24/08/2015
24H	5.2	11:52_24/08/2015
48H	3.5	11:52_24/08/2015
72H	2.4	11:52_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

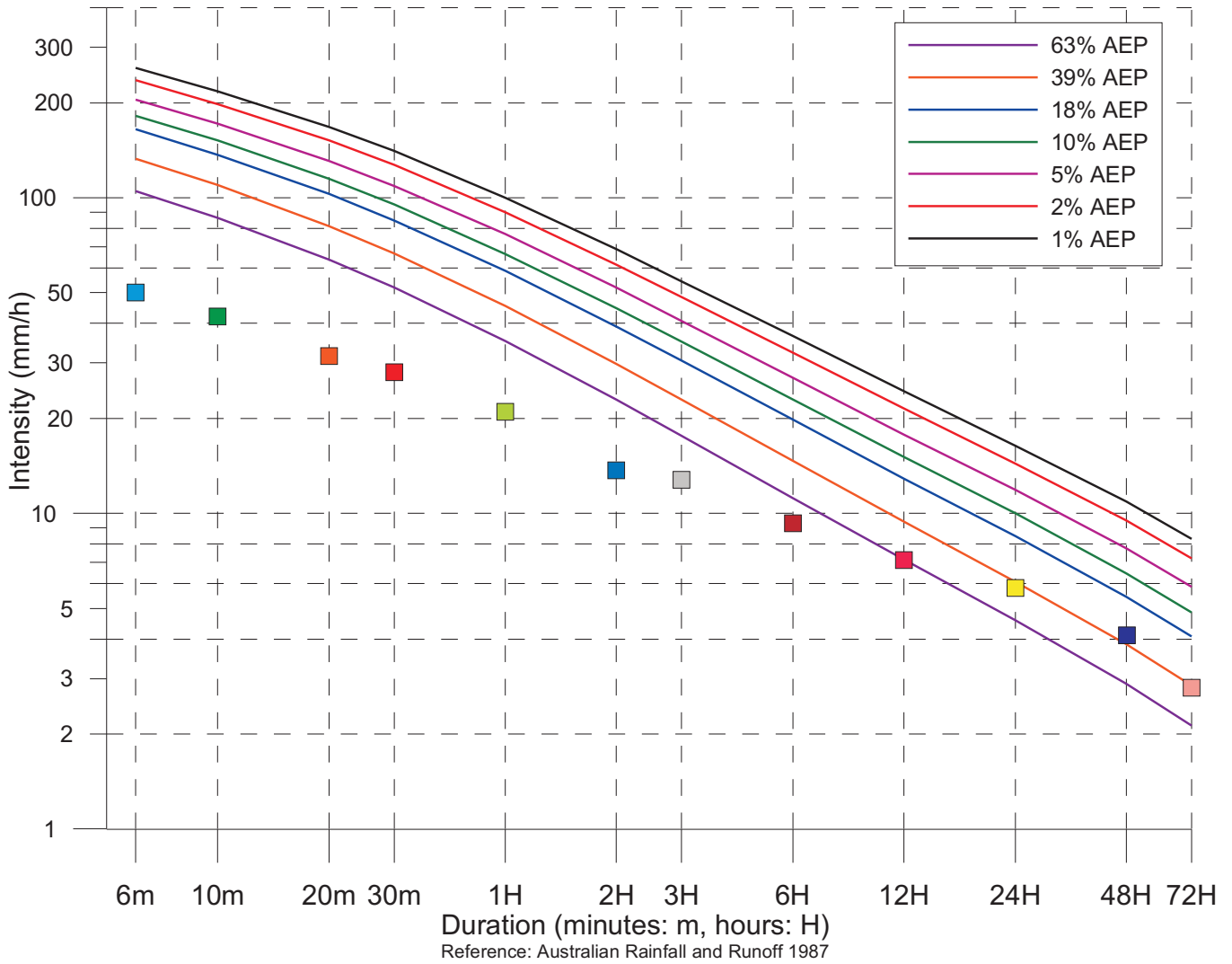




Port Kembla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	40	02:06_26/08/2015
10m	36	02:02_26/08/2015
20m	24	01:00_25/08/2015
30m	23	00:48_25/08/2015
1H	17.5	00:36_25/08/2015
2H	12.7	23:36_24/08/2015
3H	10.3	23:36_24/08/2015
6H	9.1	19:52_24/08/2015
12H	8	21:16_24/08/2015
24H	5.8	11:50_24/08/2015
48H	3.8	11:50_24/08/2015
72H	2.7	20:46_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

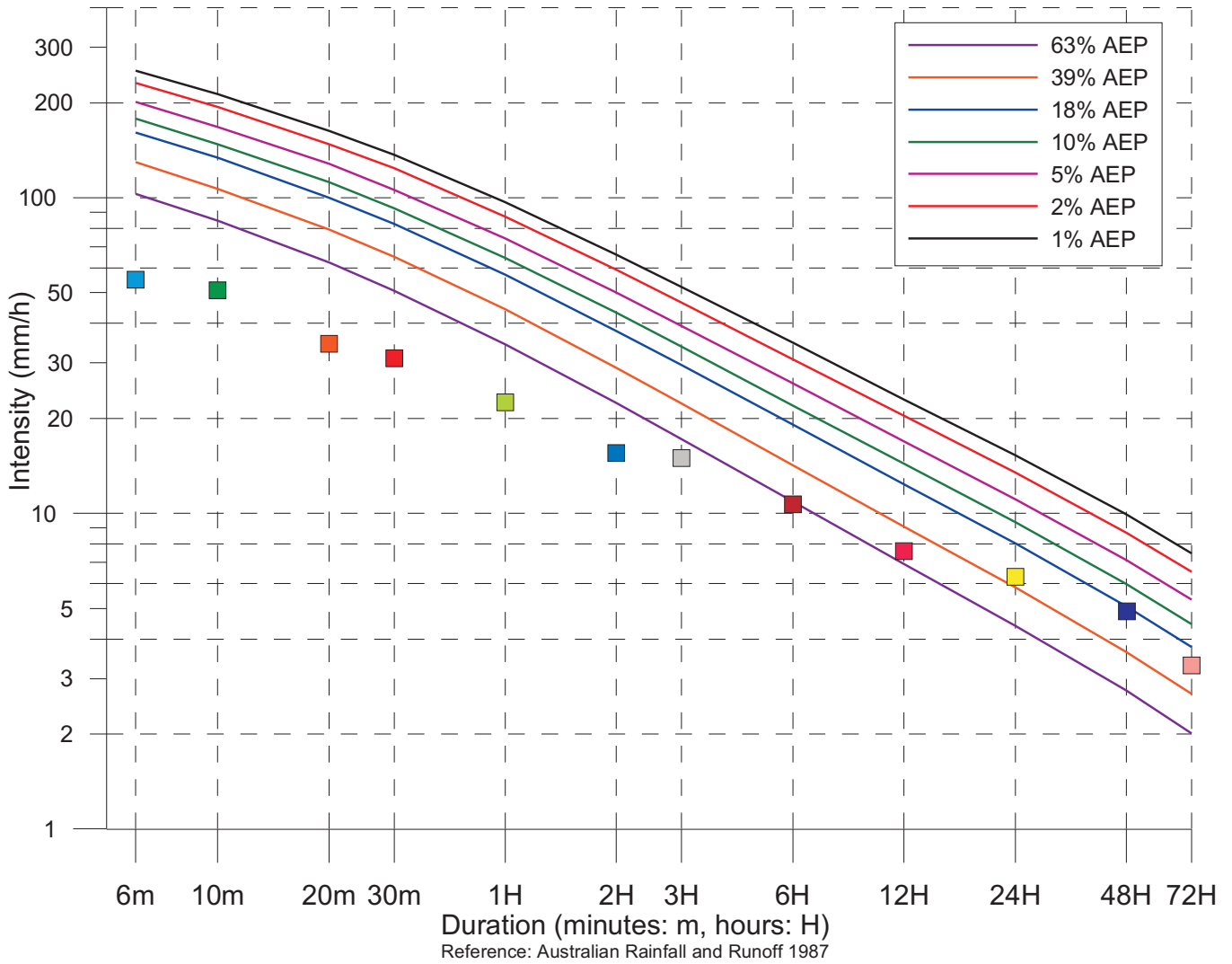




Berkeley Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	12:14_24/08/2015
10m	42	12:14_24/08/2015
20m	31.5	12:08_24/08/2015
30m	28	00:54_25/08/2015
1H	21	00:28_25/08/2015
2H	13.7	23:42_24/08/2015
3H	12.8	22:46_24/08/2015
6H	9.3	19:42_24/08/2015
12H	7.1	21:12_24/08/2015
24H	5.8	11:56_24/08/2015
48H	4.1	11:56_24/08/2015
72H	2.8	19:44_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

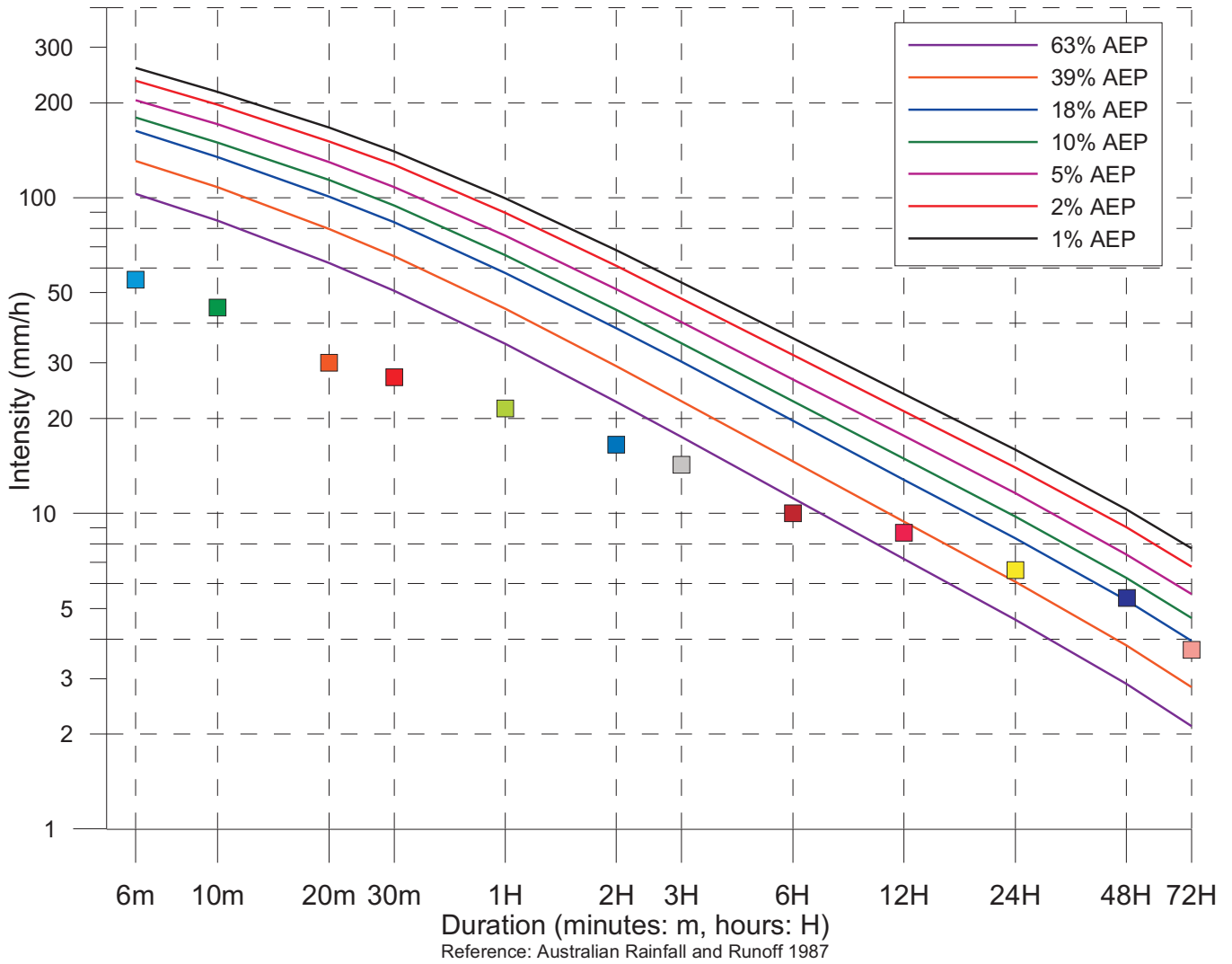




Kanahooka Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	55	01:48_26/08/2015
10m	51	01:44_26/08/2015
20m	34.5	00:52_25/08/2015
30m	31	00:50_25/08/2015
1H	22.5	00:30_25/08/2015
2H	15.5	23:16_24/08/2015
3H	15	22:38_24/08/2015
6H	10.7	19:42_24/08/2015
12H	7.6	20:50_24/08/2015
24H	6.3	11:56_24/08/2015
48H	4.9	11:56_24/08/2015
72H	3.3	01:04_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

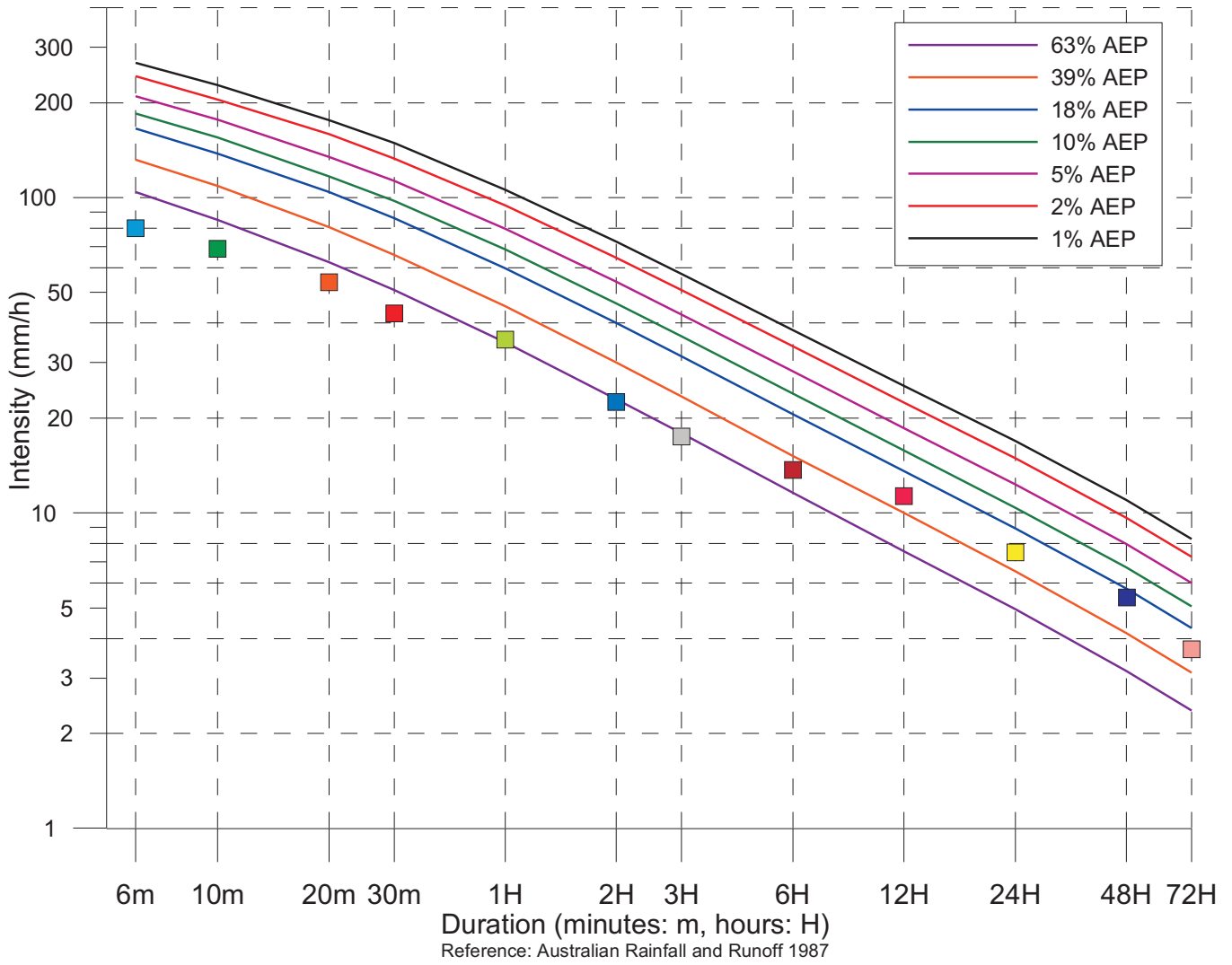




Dapto Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	55	11:08_26/08/2015
10m	45	11:08_26/08/2015
20m	30	04:14_26/08/2015
30m	27	00:38_25/08/2015
1H	21.5	15:16_24/08/2015
2H	16.5	14:16_24/08/2015
3H	14.3	22:42_24/08/2015
6H	10	19:48_24/08/2015
12H	8.7	14:16_24/08/2015
24H	6.6	11:54_24/08/2015
48H	5.4	12:00_24/08/2015
72H	3.7	02:48_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

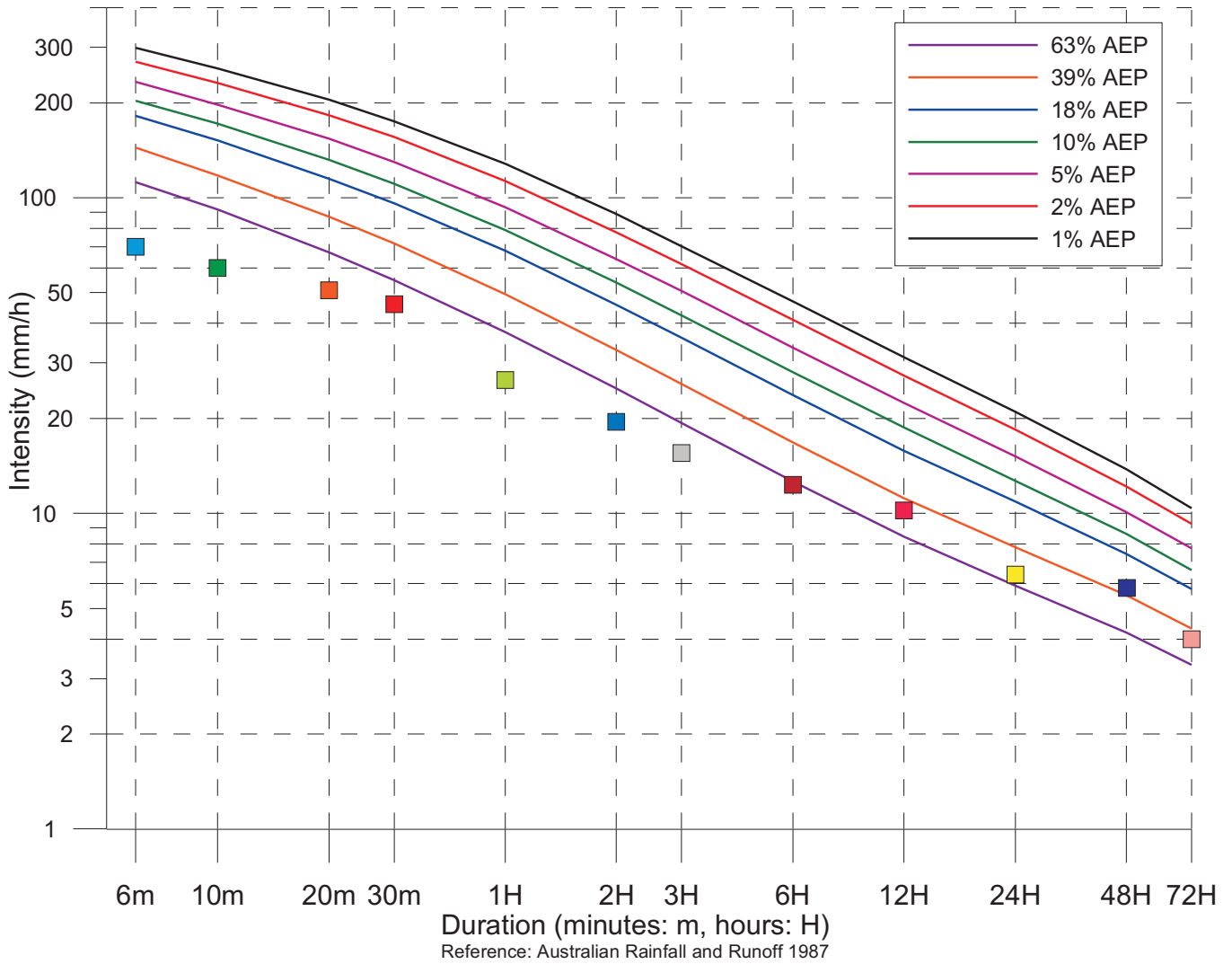




Cleveland Road Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	80	15:52_24/08/2015
10m	69	15:50_24/08/2015
20m	54	15:46_24/08/2015
30m	43	15:36_24/08/2015
1H	35.5	15:16_24/08/2015
2H	22.5	15:16_24/08/2015
3H	17.5	14:18_24/08/2015
6H	13.7	15:16_24/08/2015
12H	11.3	13:20_24/08/2015
24H	7.5	12:02_24/08/2015
48H	5.4	11:58_24/08/2015
72H	3.7	02:28_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

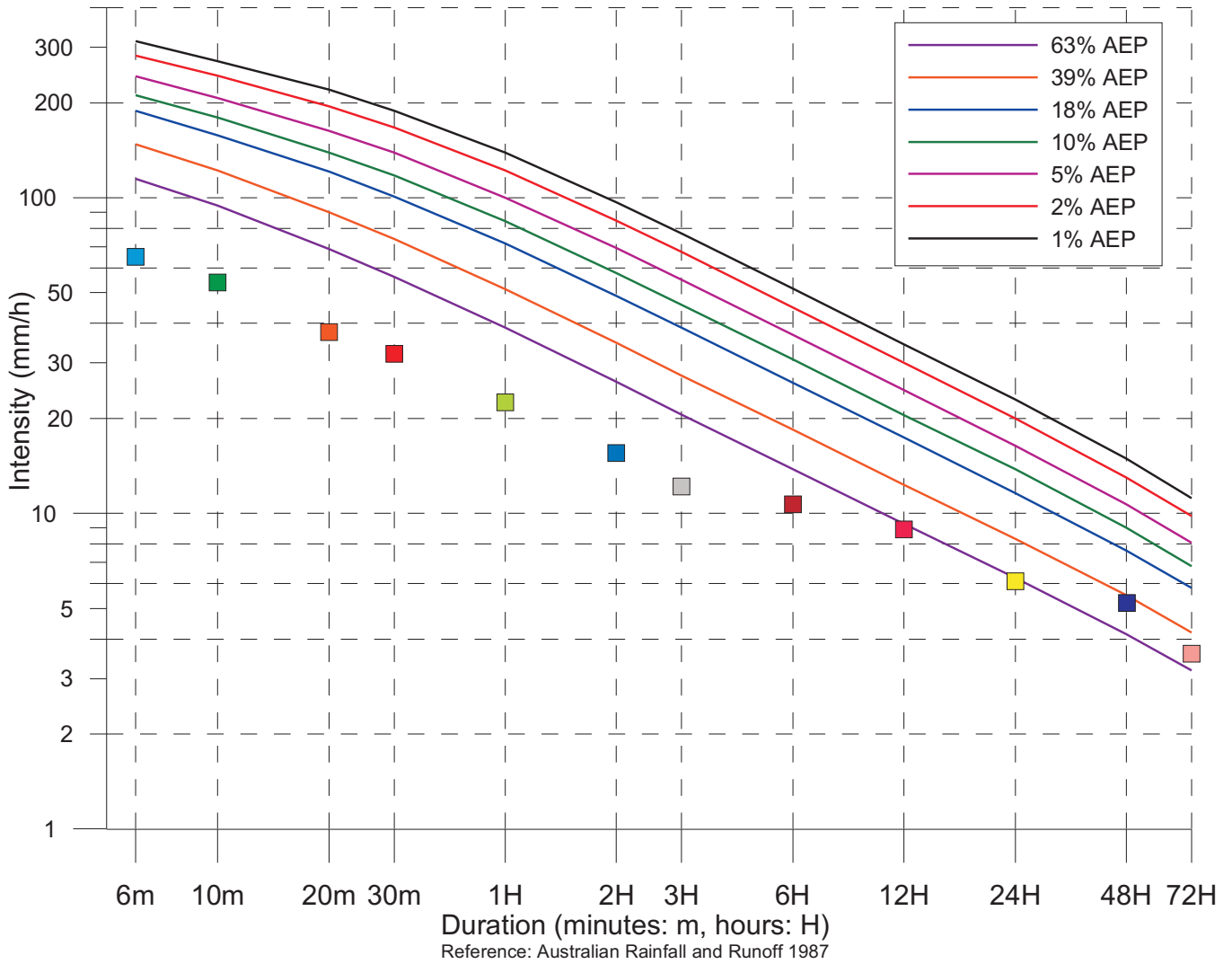




Huntley Colliery Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	70	23:42_25/08/2015
10m	60	23:42_25/08/2015
20m	51	23:36_25/08/2015
30m	46	23:28_25/08/2015
1H	26.5	23:28_25/08/2015
2H	19.5	07:00_26/08/2015
3H	15.5	06:52_26/08/2015
6H	12.3	15:28_24/08/2015
12H	10.2	13:22_24/08/2015
24H	6.4	11:48_24/08/2015
48H	5.8	11:48_24/08/2015
72H	4	11:48_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

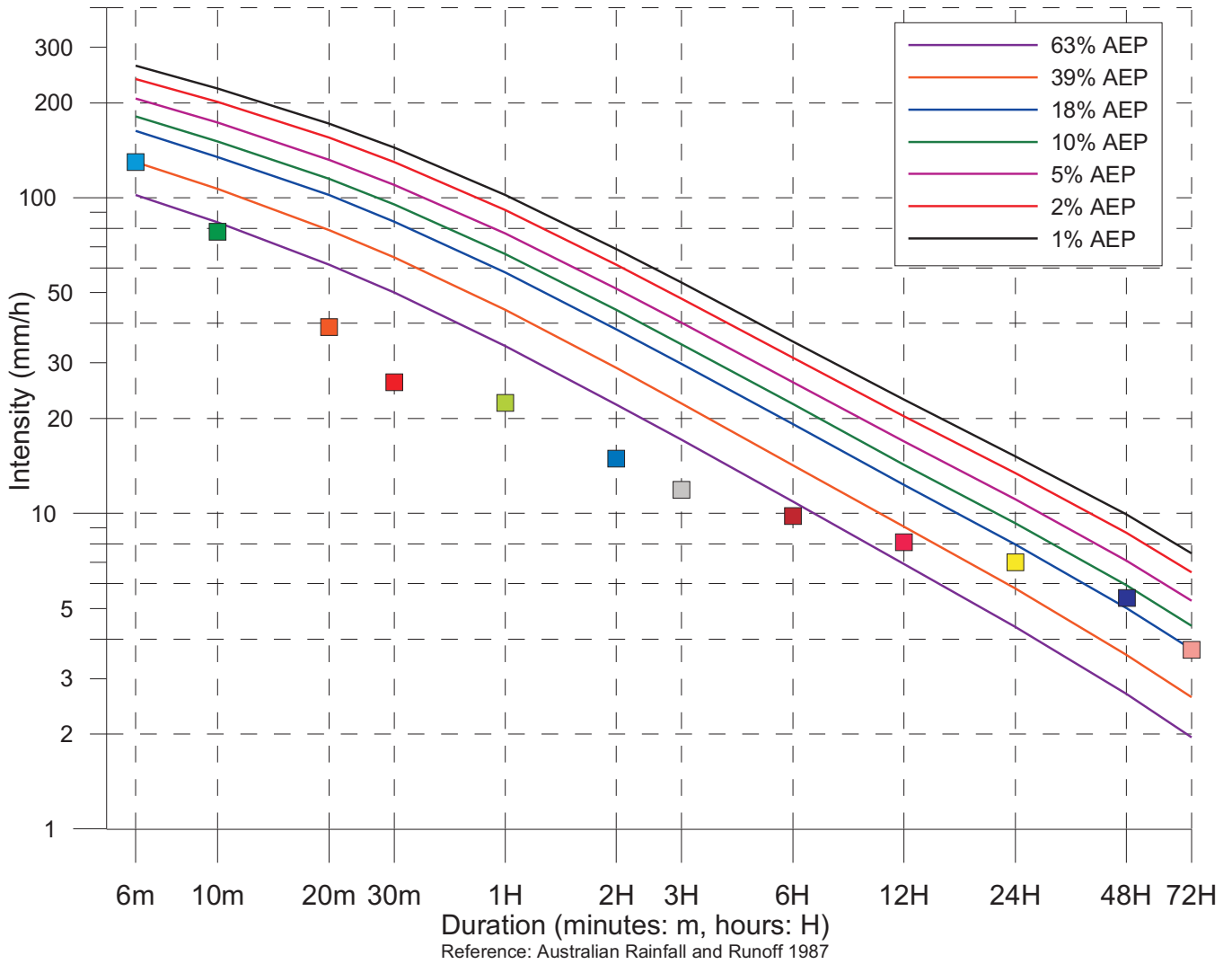




Upper Calderwood Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	65	01:36_26/08/2015
10m	54	01:34_26/08/2015
20m	37.5	01:26_26/08/2015
30m	32	01:14_26/08/2015
1H	22.5	00:50_26/08/2015
2H	15.5	23:52_25/08/2015
3H	12.2	18:14_24/08/2015
6H	10.7	15:28_24/08/2015
12H	8.9	13:42_24/08/2015
24H	6.1	11:50_24/08/2015
48H	5.2	11:50_24/08/2015
72H	3.6	19:54_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

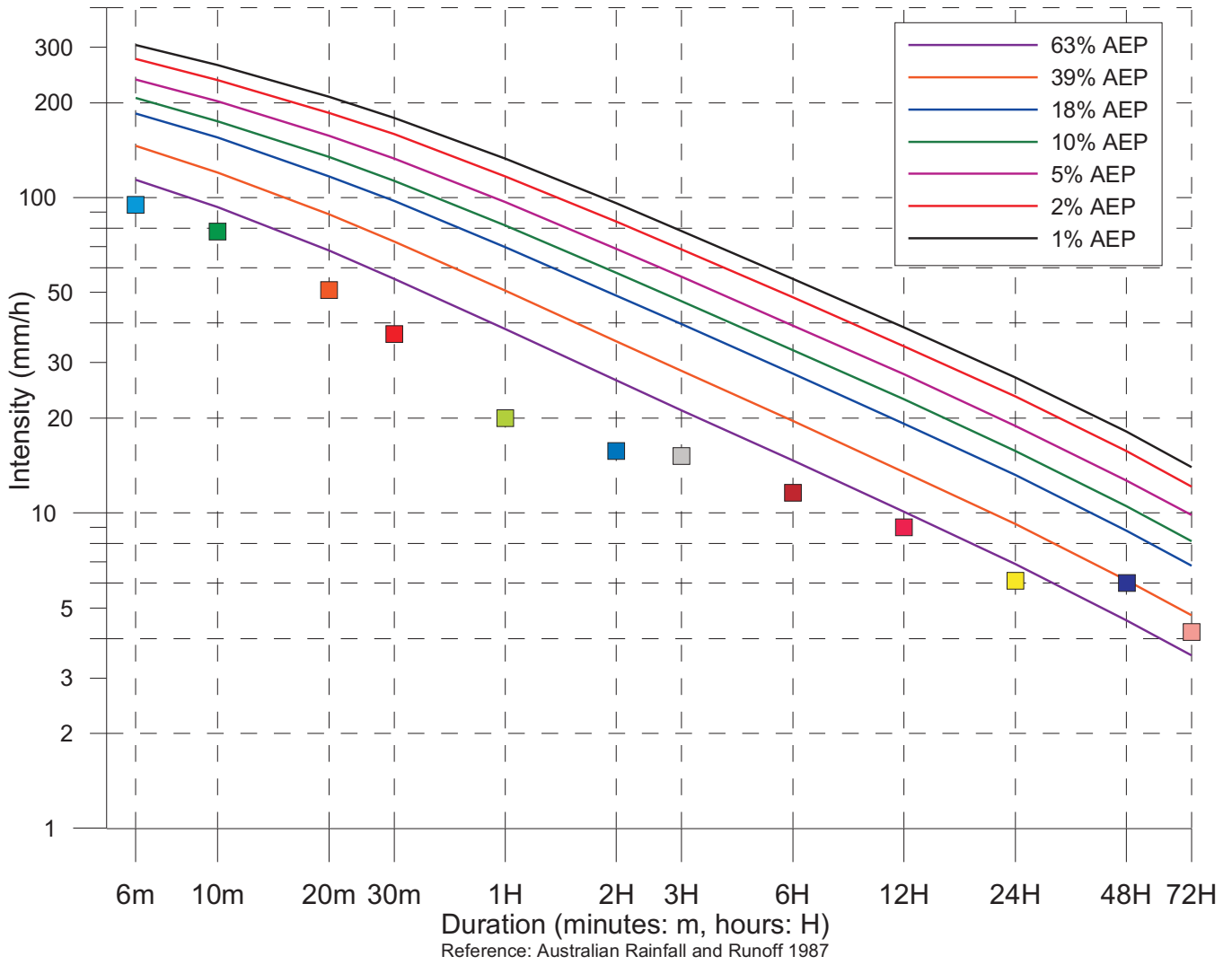




Wollongong Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	130	04:58_26/08/2015
10m	78	04:58_26/08/2015
20m	39	04:58_26/08/2015
30m	26	15:58_24/08/2015
1H	22.4	15:58_24/08/2015
2H	14.9	15:28_24/08/2015
3H	11.9	14:28_24/08/2015
6H	9.8	11:58_24/08/2015
12H	8.1	14:28_24/08/2015
24H	7	11:58_24/08/2015
48H	5.4	11:58_24/08/2015
72H	3.7	23:58_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

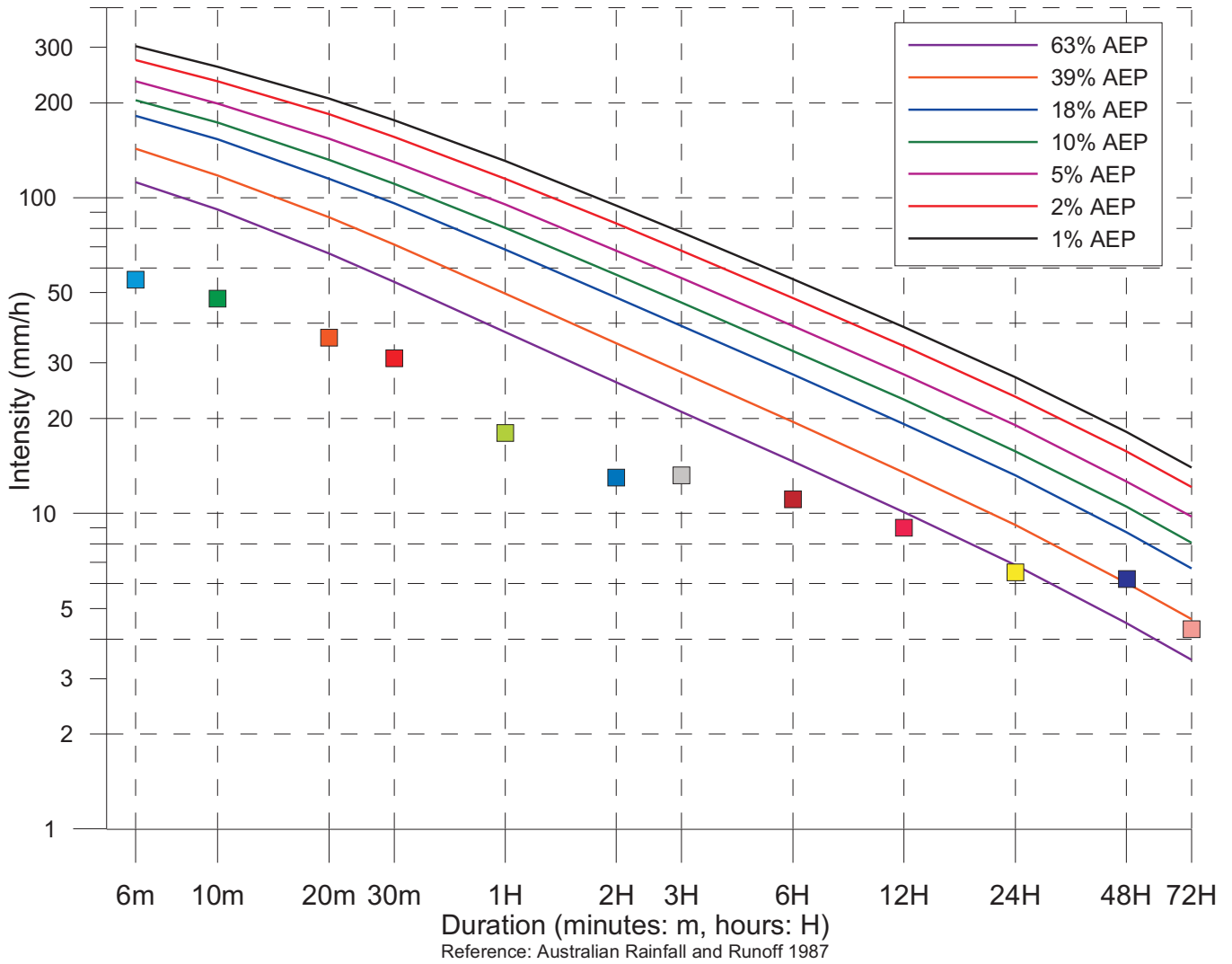




Nurrewin Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	95	02:38_26/08/2015
10m	78	02:36_26/08/2015
20m	51	02:36_26/08/2015
30m	37	02:36_26/08/2015
1H	20	02:30_26/08/2015
2H	15.7	00:56_26/08/2015
3H	15.2	00:04_26/08/2015
6H	11.6	00:02_26/08/2015
12H	9	23:46_25/08/2015
24H	6.1	09:44_25/08/2015
48H	6	13:32_24/08/2015
72H	4.2	19:44_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

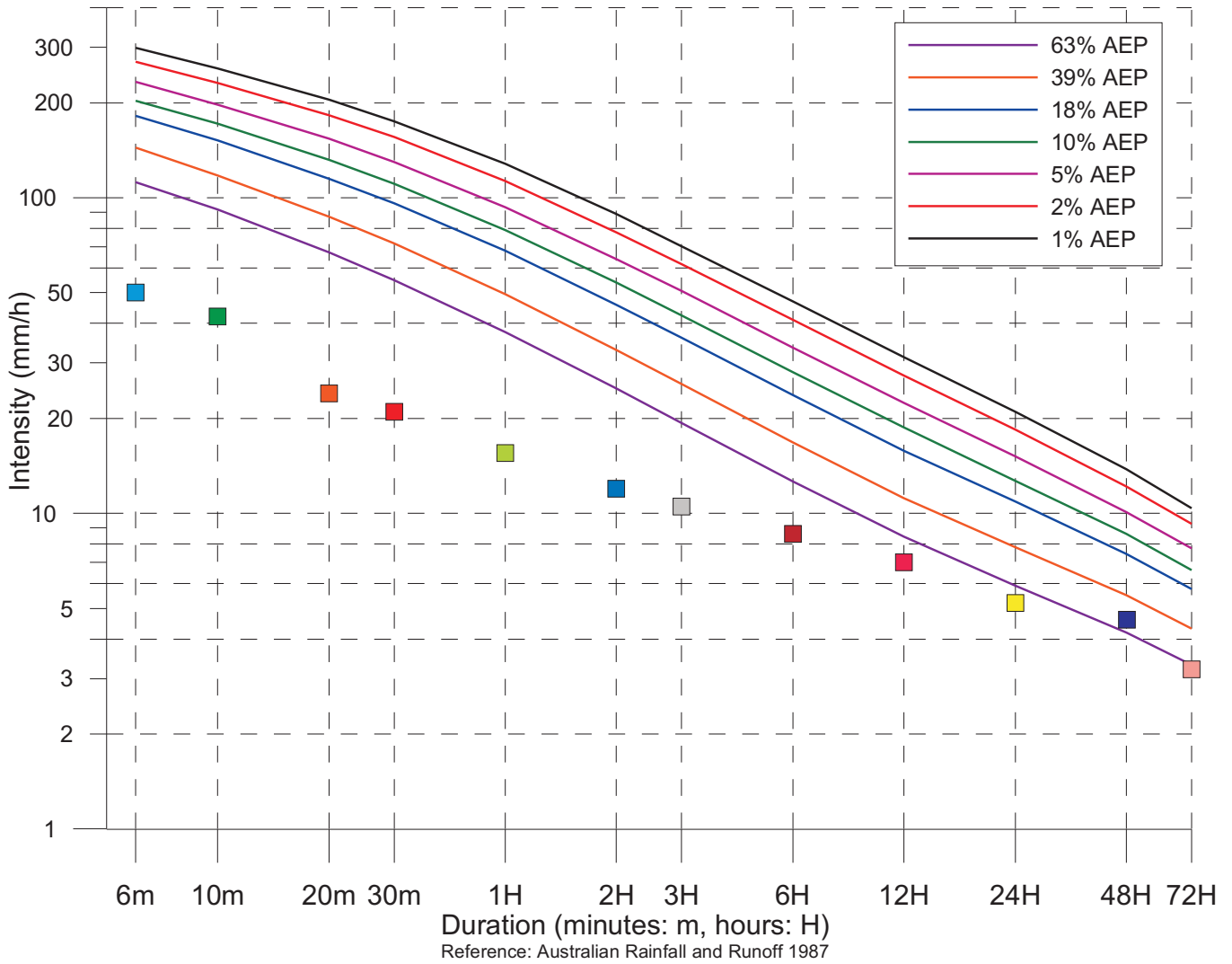




Clover Hill Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	55	02:38_26/08/2015
10m	48	02:38_26/08/2015
20m	36	02:36_26/08/2015
30m	31	02:34_26/08/2015
1H	18	02:06_26/08/2015
2H	13	19:52_24/08/2015
3H	13.2	00:06_26/08/2015
6H	11.1	00:00_26/08/2015
12H	9	23:50_25/08/2015
24H	6.5	11:02_25/08/2015
48H	6.2	13:42_24/08/2015
72H	4.3	19:58_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

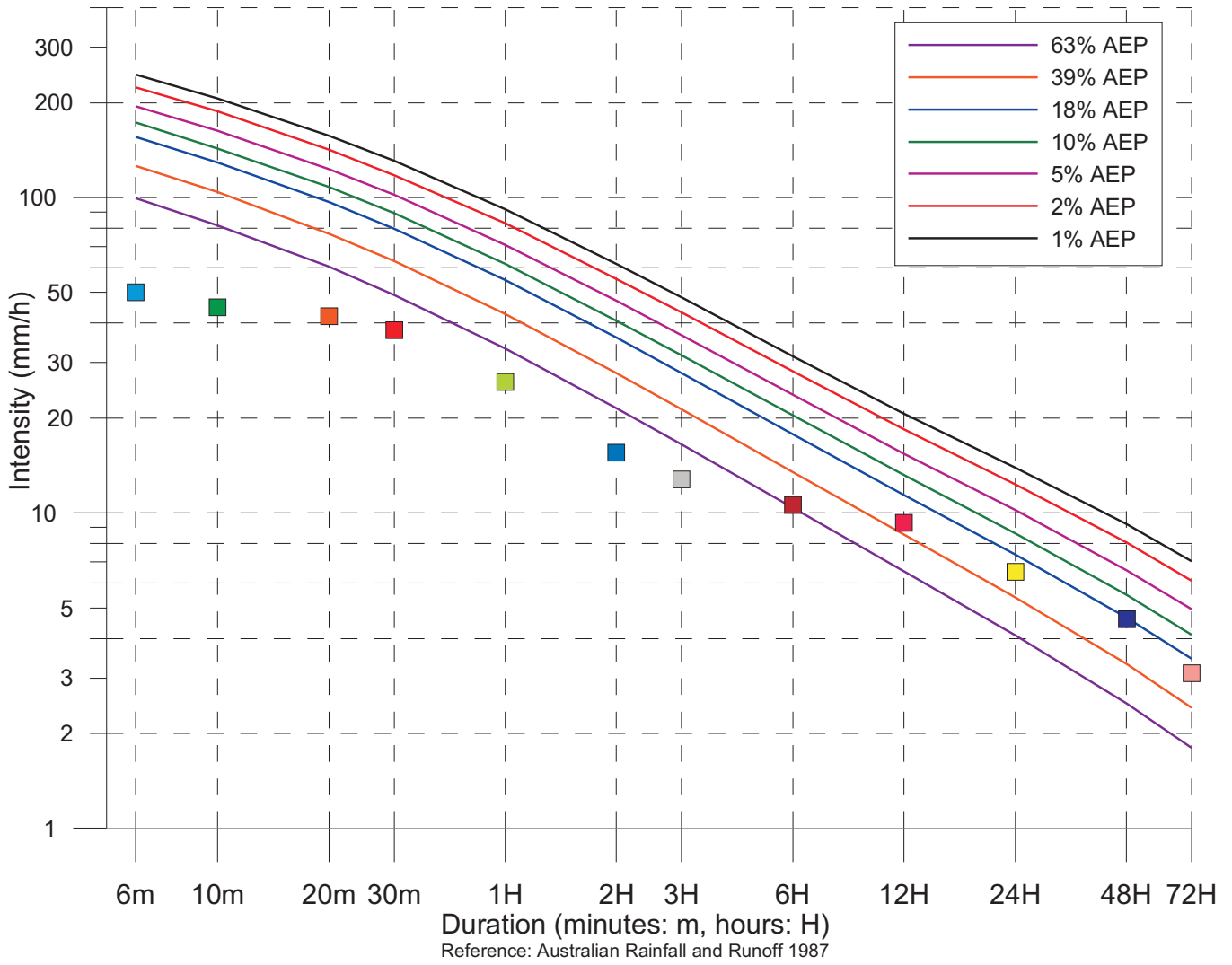




North Macquarie Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	23:50_25/08/2015
10m	42	23:48_25/08/2015
20m	24	23:48_25/08/2015
30m	21	07:32_26/08/2015
1H	15.5	07:20_26/08/2015
2H	12	06:42_26/08/2015
3H	10.5	06:42_26/08/2015
6H	8.6	03:40_26/08/2015
12H	7	13:34_24/08/2015
24H	5.2	11:46_24/08/2015
48H	4.6	11:46_24/08/2015
72H	3.2	01:16_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

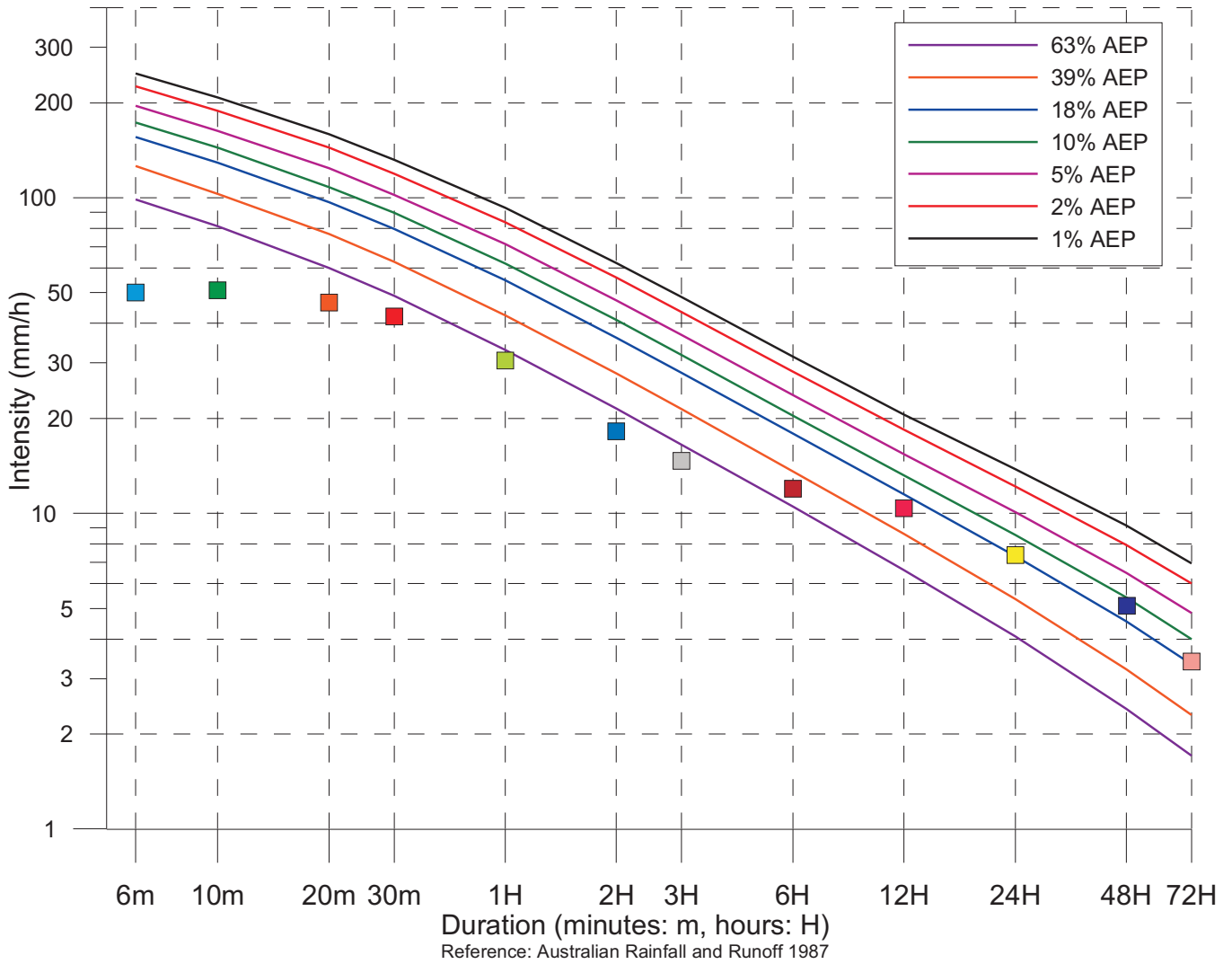




Little Lake Entrance Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	01:06_25/08/2015
10m	45	01:04_25/08/2015
20m	42	00:58_25/08/2015
30m	38	00:58_25/08/2015
1H	26	00:32_25/08/2015
2H	15.5	23:28_24/08/2015
3H	12.8	22:48_24/08/2015
6H	10.6	23:26_24/08/2015
12H	9.3	22:30_24/08/2015
24H	6.5	11:34_24/08/2015
48H	4.6	11:34_24/08/2015
72H	3.1	01:54_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

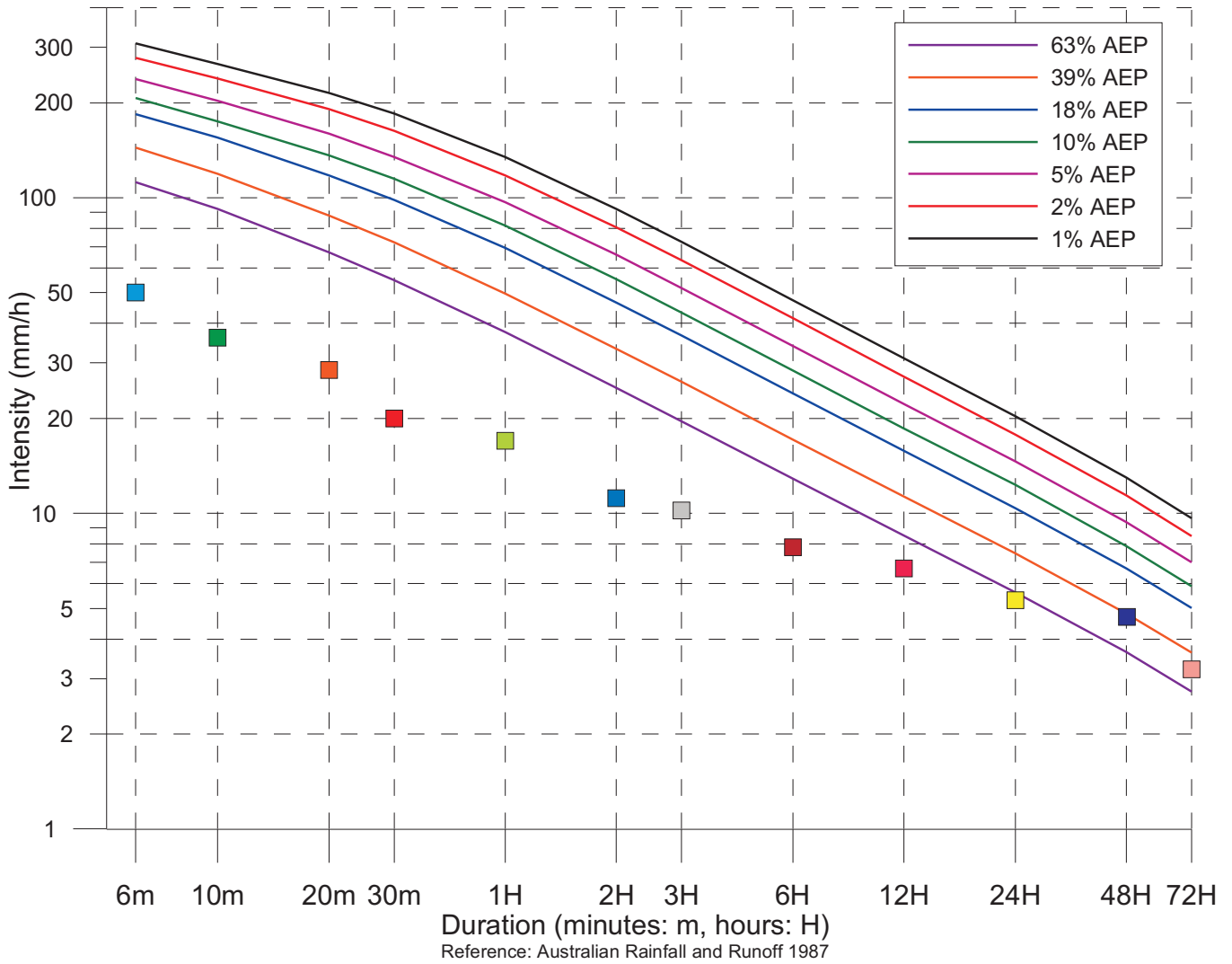




Shellharbour Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	01:08_25/08/2015
10m	51	01:04_25/08/2015
20m	46.5	00:56_25/08/2015
30m	42	00:58_25/08/2015
1H	30.5	00:30_25/08/2015
2H	18.2	23:30_24/08/2015
3H	14.7	22:46_24/08/2015
6H	12	23:26_24/08/2015
12H	10.4	22:54_24/08/2015
24H	7.4	11:42_24/08/2015
48H	5.1	11:42_24/08/2015
72H	3.4	22:30_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

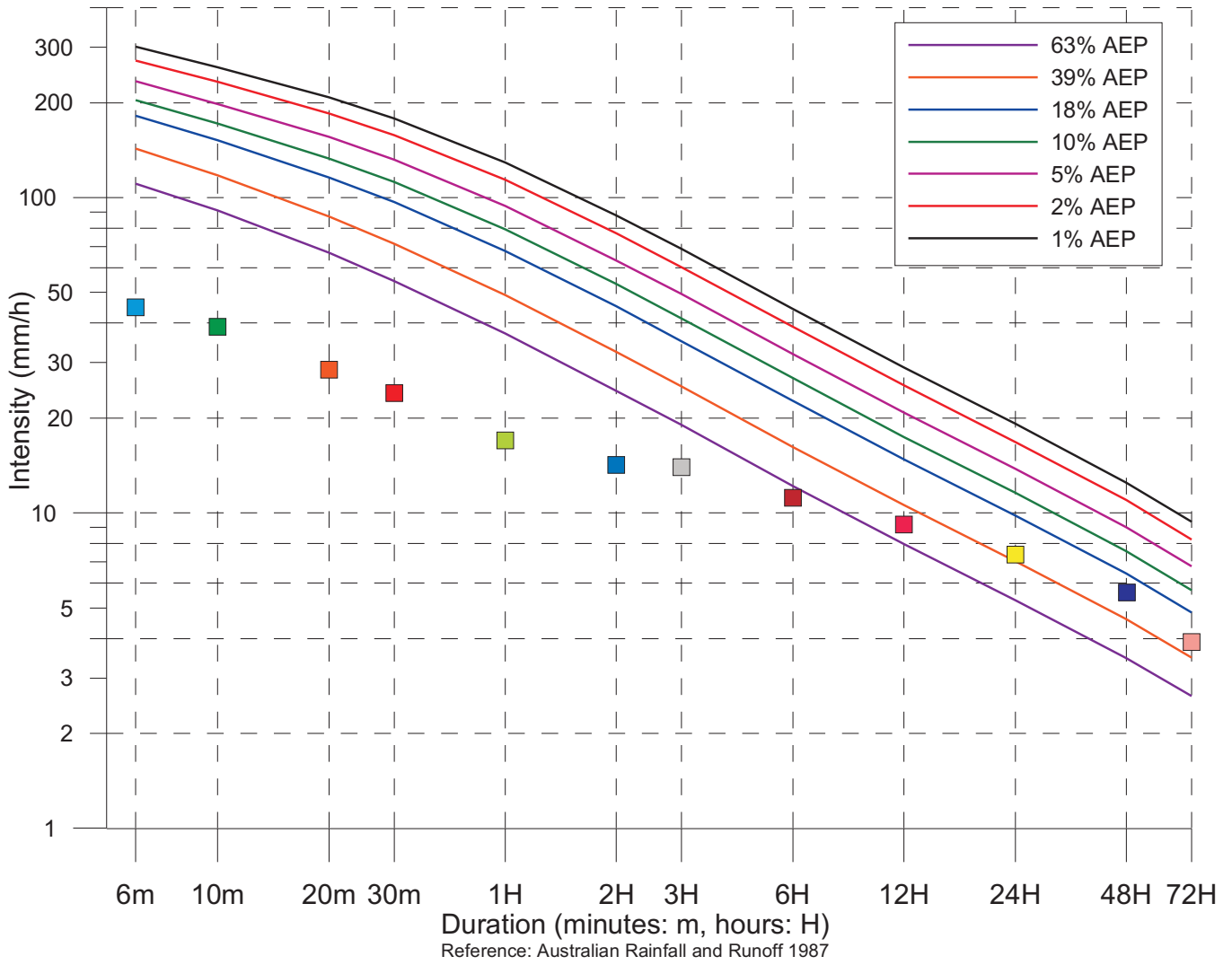




Tongarra Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	00:18_26/08/2015
10m	36	00:16_26/08/2015
20m	28.5	00:14_26/08/2015
30m	20	00:16_26/08/2015
1H	17	23:46_25/08/2015
2H	11.2	23:36_25/08/2015
3H	10.2	18:20_24/08/2015
6H	7.8	17:46_24/08/2015
12H	6.7	13:32_24/08/2015
24H	5.3	11:46_24/08/2015
48H	4.7	11:46_24/08/2015
72H	3.2	00:52_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

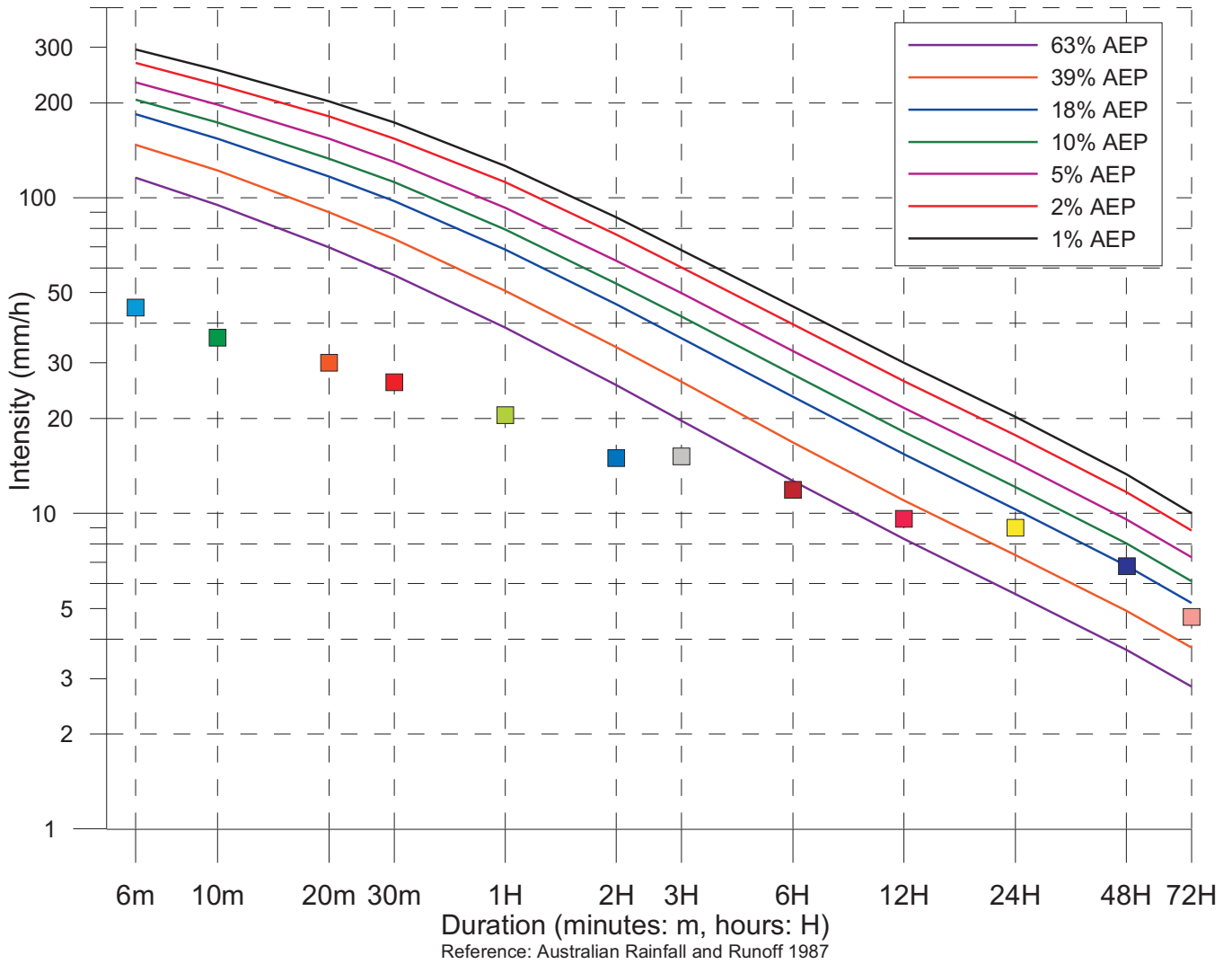




Yellow Rock Road Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	45	23:54_25/08/2015
10m	39	15:34_24/08/2015
20m	28.5	07:32_26/08/2015
30m	24	07:28_26/08/2015
1H	17	07:20_26/08/2015
2H	14.2	19:40_24/08/2015
3H	14	18:24_24/08/2015
6H	11.2	15:32_24/08/2015
12H	9.2	11:48_24/08/2015
24H	7.4	11:44_24/08/2015
48H	5.6	11:40_24/08/2015
72H	3.9	20:14_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

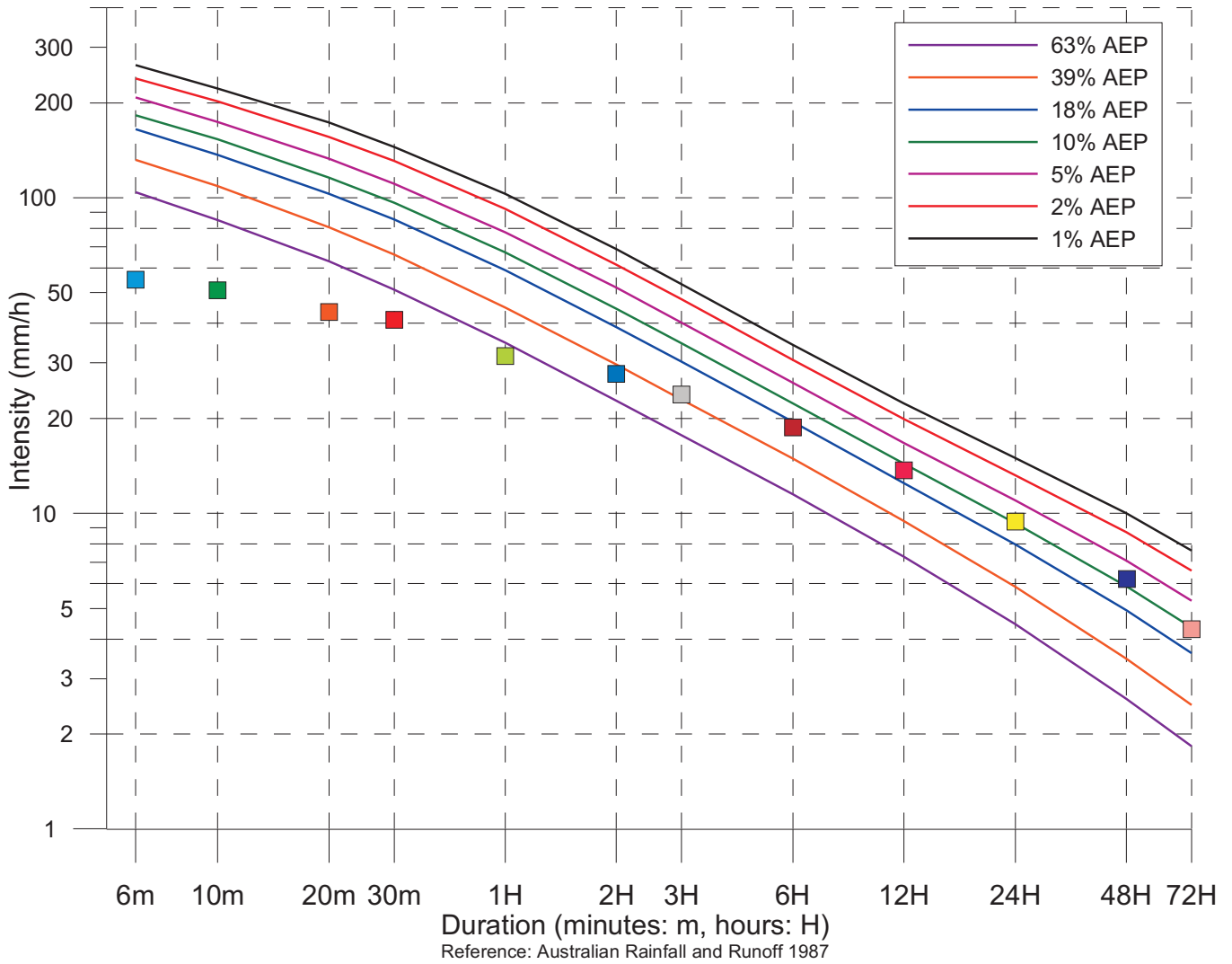




Jamberoo Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	45	00:08_26/08/2015
10m	36	07:36_26/08/2015
20m	30	07:30_26/08/2015
30m	26	07:26_26/08/2015
1H	20.5	07:30_26/08/2015
2H	15	18:34_24/08/2015
3H	15.2	18:34_24/08/2015
6H	11.9	17:58_24/08/2015
12H	9.6	13:50_24/08/2015
24H	9	11:44_24/08/2015
48H	6.8	11:38_24/08/2015
72H	4.7	20:36_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

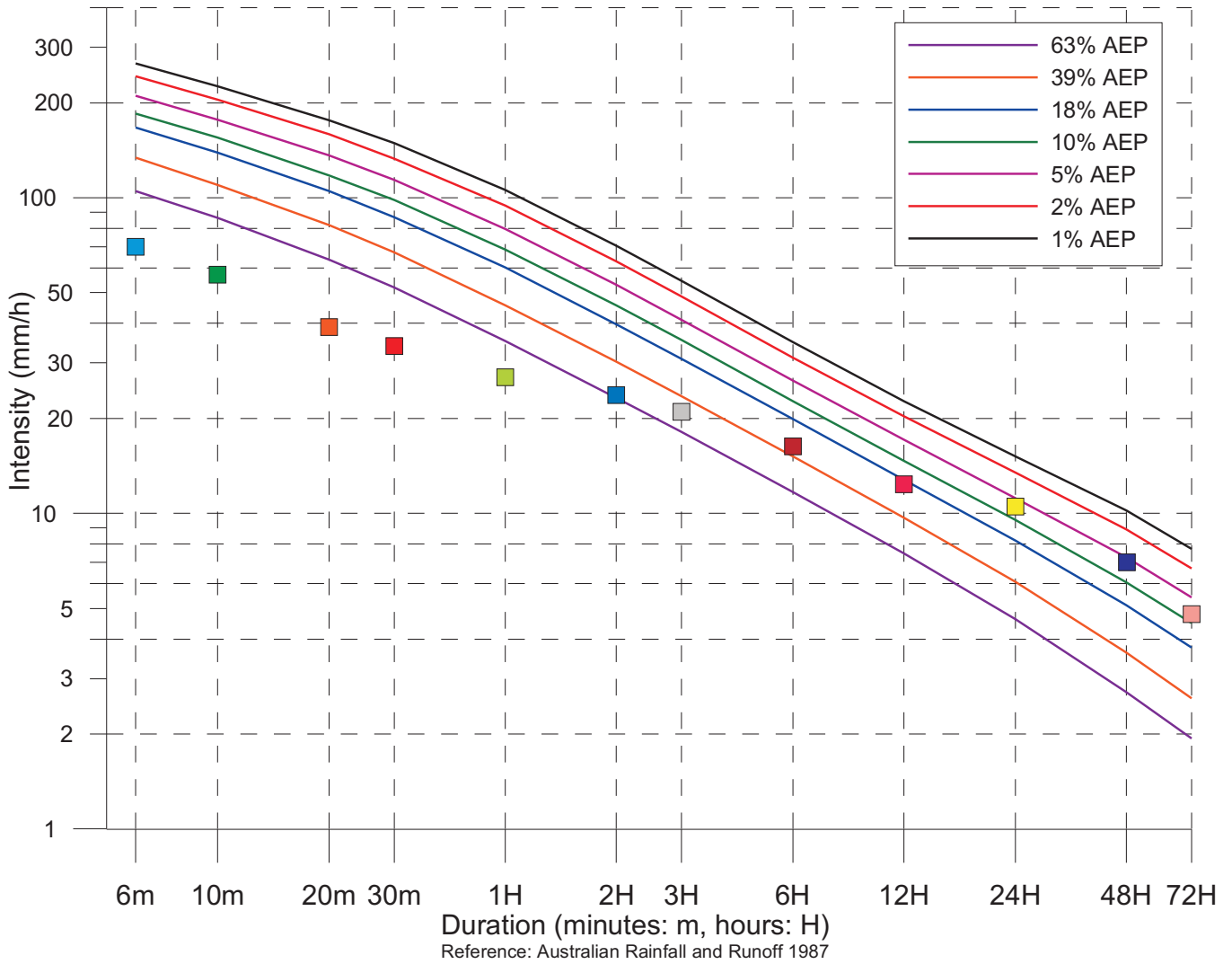




Bombo Rainfall Intensity		
01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	55	07:58_25/08/2015
10m	51	07:54_25/08/2015
20m	43.5	07:56_25/08/2015
30m	41	07:48_25/08/2015
1H	31.5	07:20_25/08/2015
2H	27.7	06:32_25/08/2015
3H	23.8	06:30_25/08/2015
6H	18.7	03:22_25/08/2015
12H	13.7	23:18_24/08/2015
24H	9.4	12:18_24/08/2015
48H	6.2	11:24_24/08/2015
72H	4.3	11:24_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*





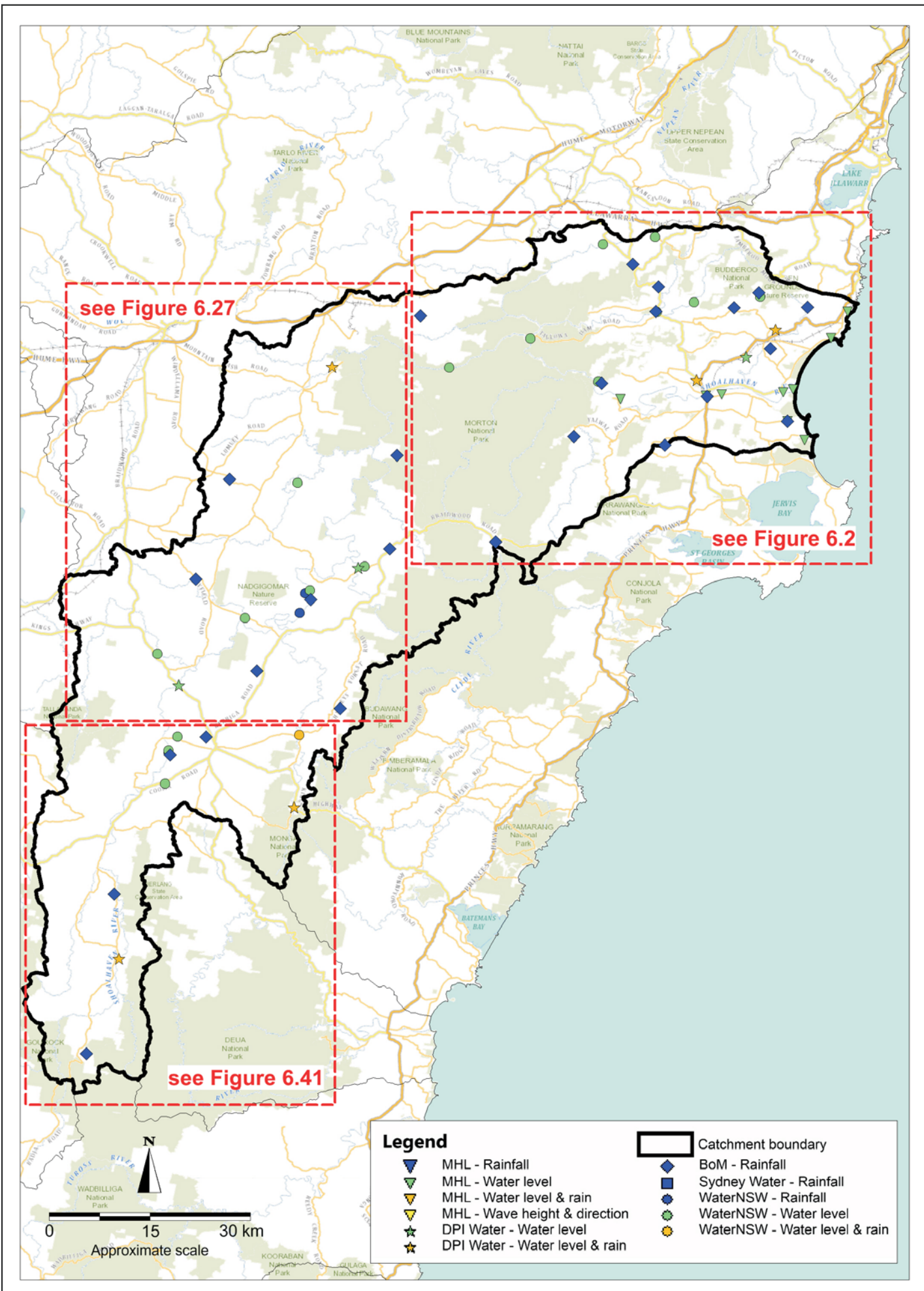
Kiama Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	70	06:26_26/08/2015
10m	57	06:22_26/08/2015
20m	39	06:14_26/08/2015
30m	34	07:50_25/08/2015
1H	27	07:16_25/08/2015
2H	23.7	06:28_25/08/2015
3H	21	06:30_25/08/2015
6H	16.3	03:50_25/08/2015
12H	12.4	01:00_25/08/2015
24H	10.5	12:10_24/08/2015
48H	7	11:28_24/08/2015
72H	4.8	11:28_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*



6. Shoalhaven river region

Figure 6.1 provides an overview of the Shoalhaven river region. This region has been divided into sub-regions of north east Shoalhaven; central Shoalhaven and south Shoalhaven as shown in section 6.1, 6.2 and 6.3 respectively.



see Figure 6.27

see Figure 6.2

see Figure 6.41

Legend

- MHL - Rainfall
- MHL - Water level
- MHL - Water level & rain
- MHL - Wave height & direction
- DPI Water - Water level
- DPI Water - Water level & rain

- Catchment boundary
- BOM - Rainfall
- Sydney Water - Rainfall
- WaterNSW - Rainfall
- WaterNSW - Water level
- WaterNSW - Water level & rain

0 15 30 km
Approximate scale



Public Works
Manly Hydraulics Laboratory

**STATION LOCATIONS
SHOALHAVEN REGION OVERVIEW**

MHL
Report 2397

Figure
6.1

DRAWING 2397-06-01.cdr

6.1 Shoalhaven north east water - level

The locations of water level stations within the north east Shoalhaven river region are shown in Figure 6.2. The water level data for the period 20th to 31st August 2015 are displayed graphically in Figures 6.3 to 6.7. The peak observed water levels are listed in Table 6.1.

Table 6.2 lists the SES flood classifications for Nowra Bridge. The SES classification scheme indicates the flood peak for Nowra Bridge was classified as a moderate flood during the August 2015 event.

Table 6.1 Shoalhaven river region – north east flood peaks

Station Name	Station No.	Site Owner	Datum	Peak level (m)
Yarrunga Creek at Wildes Meadow	215233	WaterNSW	Local Datum	1.71
Bundanoon Creek at The Rocks	2152131	WaterNSW	Local Datum	5.85
Kangaroo River at Oakdale	2152201	WaterNSW	Local Datum	4.72
Brogers Creek at Clinton Park	215223	WaterNSW	Local Datum	3.25
Kangaroo River at Hampden Bridge	215220	WaterNSW	Local Datum	3.86*
Werri Lagoon	214445	MHL	AHD	1.88
Broughton Creek at Broughton Vale	215018	DPI Water	Local Datum	2.22
Gerroa	215410	MHL	AHD	1.32
Jaspers Brush at Jaspers Brush	215019	DPI Water	Local Datum	2.98
Bomaderry Creek at Bomaderry	215016	DPI Water	Local Datum	3.79
Shoalhaven River Downstream Tallowa Dam	215215	WaterNSW	Local Datum	9.57*
Shoalhaven River at Fossickers Flat	215207	WaterNSW	Local Datum	7.81
Shoalhaven River at Grassy Gully No. 2	215216	WaterNSW	Local Datum	14.89
Gradys Caravan Park	215430	MHL	AHD	11.90
Nowra Bridge	215411	MHL	AHD	3.89
Terrara	215420	MHL	AHD	3.63
Shoalhaven Heads	215470	MHL	AHD	2.26
Hay Street	215415	MHL	AHD	2.22
Greenwell Point	215417	MHL	AHD	1.30
Lake Wollumboola	215454	MHL	AHD	2.69**

* Sensor over ranged and missed flood peak.

**Surveyed debris height post flood event. Data loss due to battery failure.

Table 6.2 SES flood classification for Nowra Bridge

Station	Classification			Peak (m)	Classification
	Minor	Moderate	Major		
	Water Level (m AHD)				
Nowra Bridge	2.3	3.3	4.3	3.89	Moderate

6.2 Shoalhaven river region – north east - rainfall

24 hour rainfall totals up until 9.00 a.m. are displayed in Table 6.3 and 6.4 and Figures 6.8 to 6.10 for the period 20th to 31st August 2015. The rainfall data and intensities are displayed graphically in Figures 6.11 to 6.26.

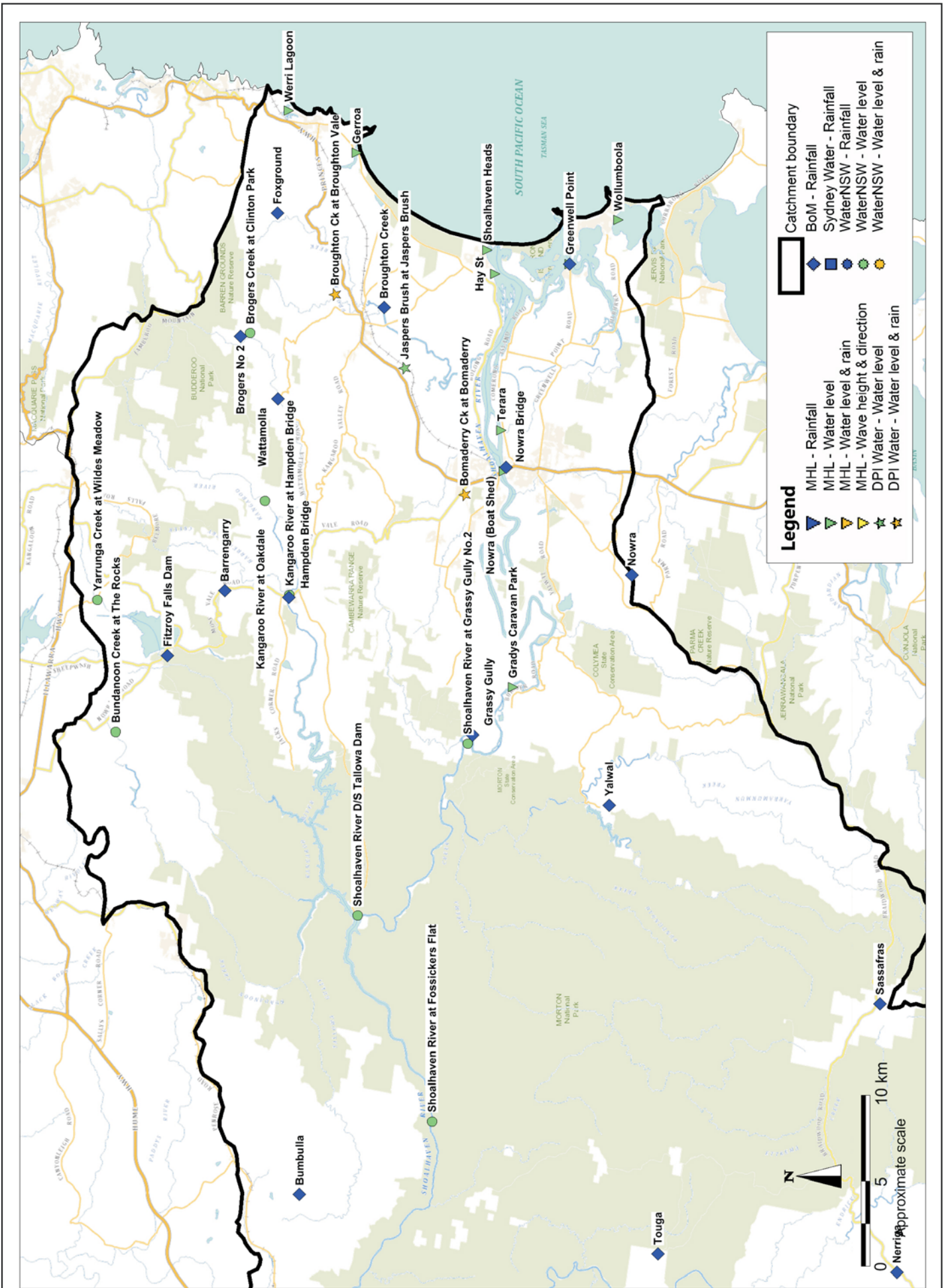
Table 6.3 Shoalhaven river region – north east daily rainfall totals

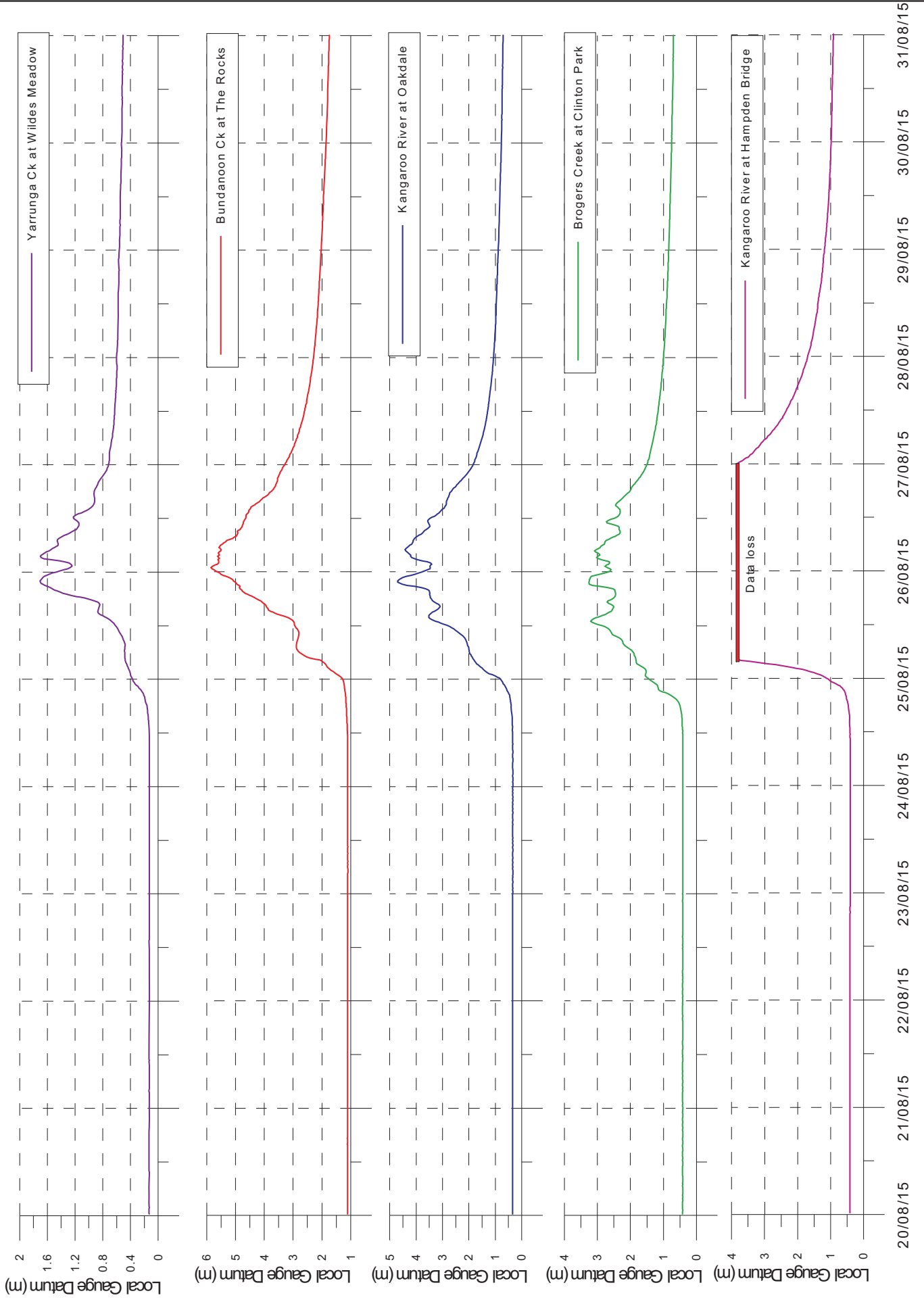
Date	Fitzroy Falls Dam (mm)	Barrengarry (mm)	Hampden Bridge (mm)	Wattamolla (mm)	Brogers No. 2 (mm)	Foxground (mm)	Broughton Creek at Broughton Vale (mm)	Broughton Creek (mm)	Bomaderry Creek (mm)	Grassy Gully (mm)	Nowra Boat Shed (mm)	Nowra (mm)
	BoM	BoM	BoM	BOM	BoM	BoM	DPI Water	BoM	DPI Water	BoM	BoM	BoM
20/08/2015	^	0.0	0.0	0.0	^	1.0	0.0	0.0	0.0	0.0	0.0	0.0
21/08/2015	^	0.0	0.0	0.0	^	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22/08/2015	^	0.0	0.0	0.0	^	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23/08/2015	^	0.0	0.0	0.0	^	0.0	0.0	1.0	0.0	0.0	1.0	0.8
24/08/2015	^	1.0	0.0	1.0	^	2.0	5.2	2.0	1.0	2.0	1.0	3.0
25/08/2015	^	103.0	112.0	151.0	^	220.0	147.0	154.0	163.0	121.0	161.0	176.2
26/08/2015	264.0	216.0	238.0	226.0	235.5	138.0	140.8	146.0	188.0	131.0	199.0	205.0
27/08/2015	35.0	19.0	34.0	49.0	48.0	30.0	17.6	21.0	26.5	9.0	20.0	23.2
28/08/2015	2.0	2.0	0.0	3.0	1.0	1.0	1.6	2.0	1.5	0.0	2.0	1.8
29/08/2015	2.0	3.0	0.0	3.0	3.0	5.0	5.2	4.0	5.5	1.0	5.0	4.8
30/08/2015	0.0	0.0	1.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
31/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.2
Total	303.0	240.0	273.0	281.0	287.5	174.0	318.0	173.0	385.5	141.0	226.0	235.0

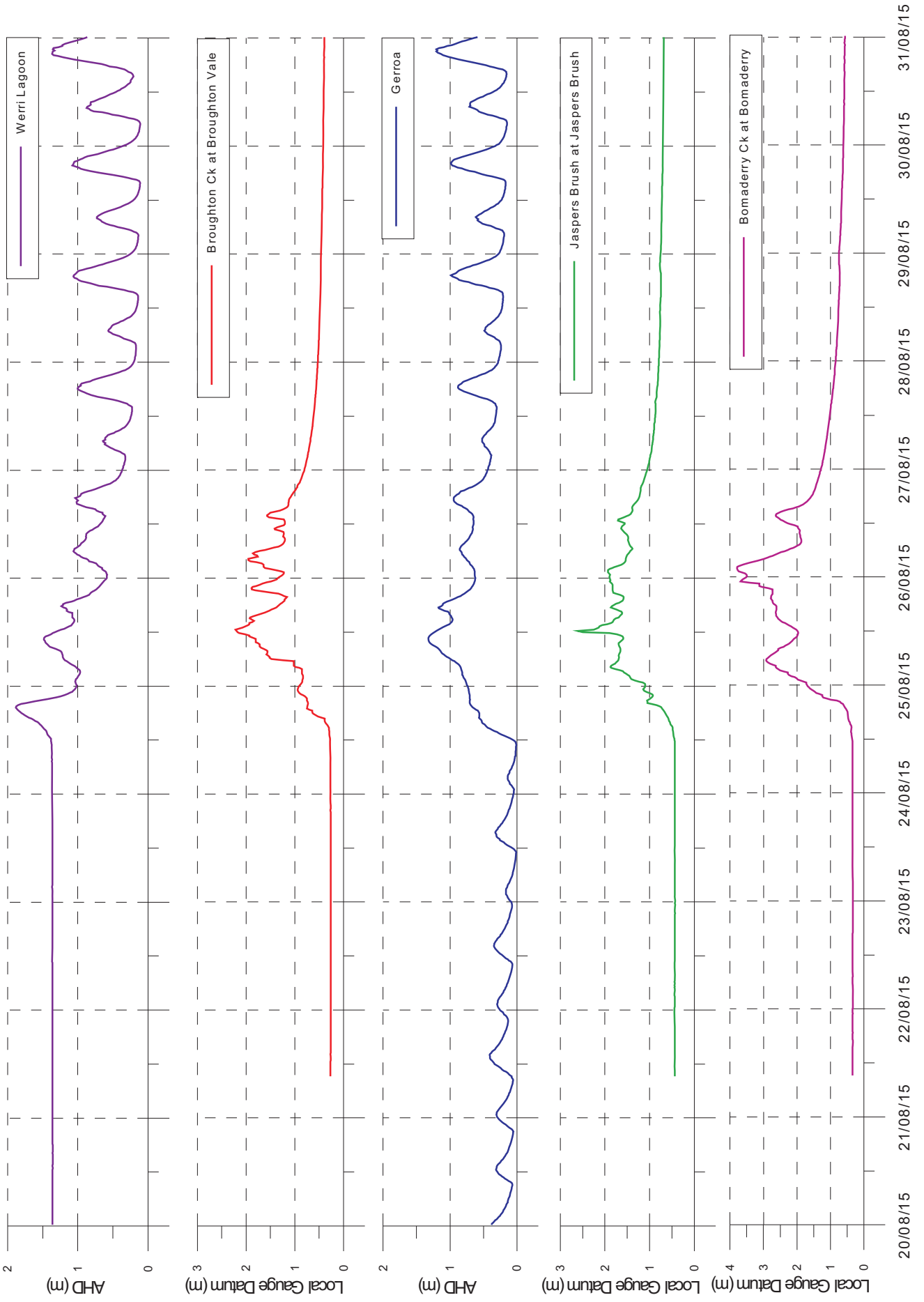
^ Data not provided.

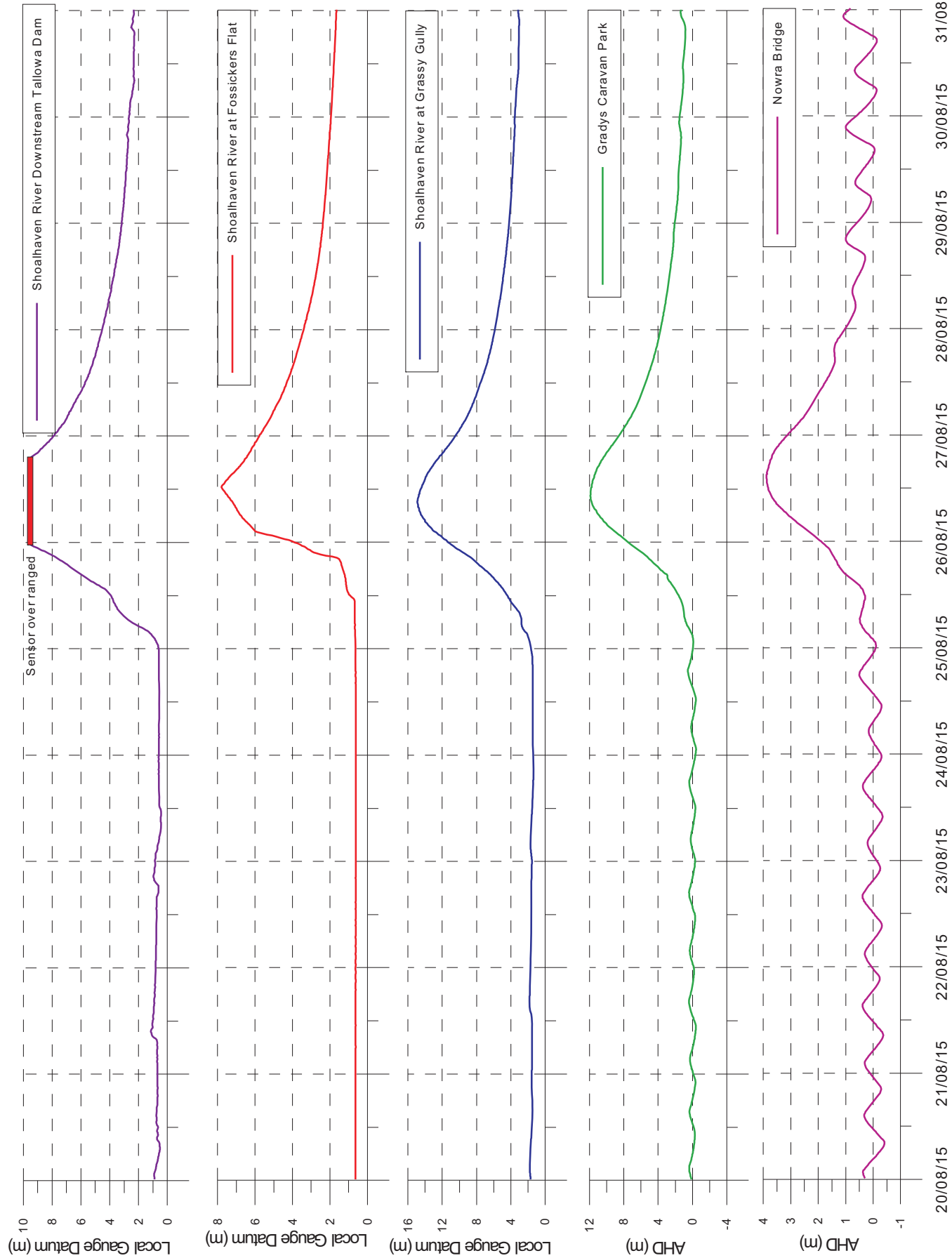
Table 6.4 Shoalhaven river region – north east daily rainfall totals

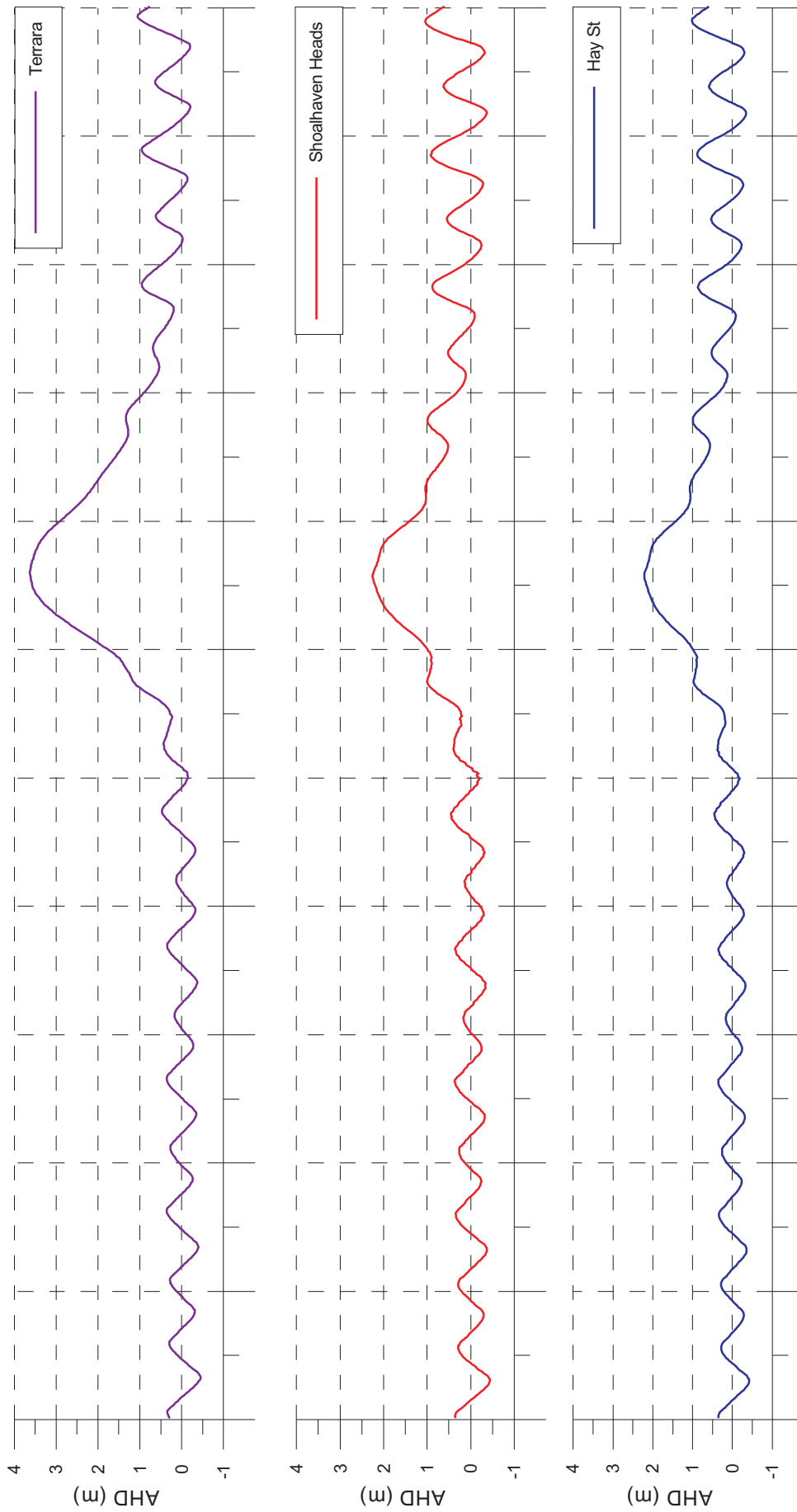
Date	Greenwell Point (mm)	Bumbulla (mm)	Yalwal (mm)	Touga (mm)
	BoM	BoM	BoM	BoM
20/08/2015	0.0	0.2	0.0	0.0
21/08/2015	0.0	0.0	0.0	0.0
22/08/2015	0.0	0.0	0.0	0.0
23/08/2015	3.0	0.0	1.0	0.0
24/08/2015	2.0	1.0	1.0	2.6
25/08/2015	100.0	54.6	106.0	34.4
26/08/2015	175.0	114.8	202.0	99.2
27/08/2015	21.0	2.6	17.0	2.6
28/08/2015	1.0	0.8	0.0	2.0
29/08/2015	3.0	0.2	8.0	1.4
30/08/2015	0.0	0.0	0.0	0.0
31/08/2015	0.0	0.0	1.0	0.2
Total	200.0	118.4	228.0	105.4

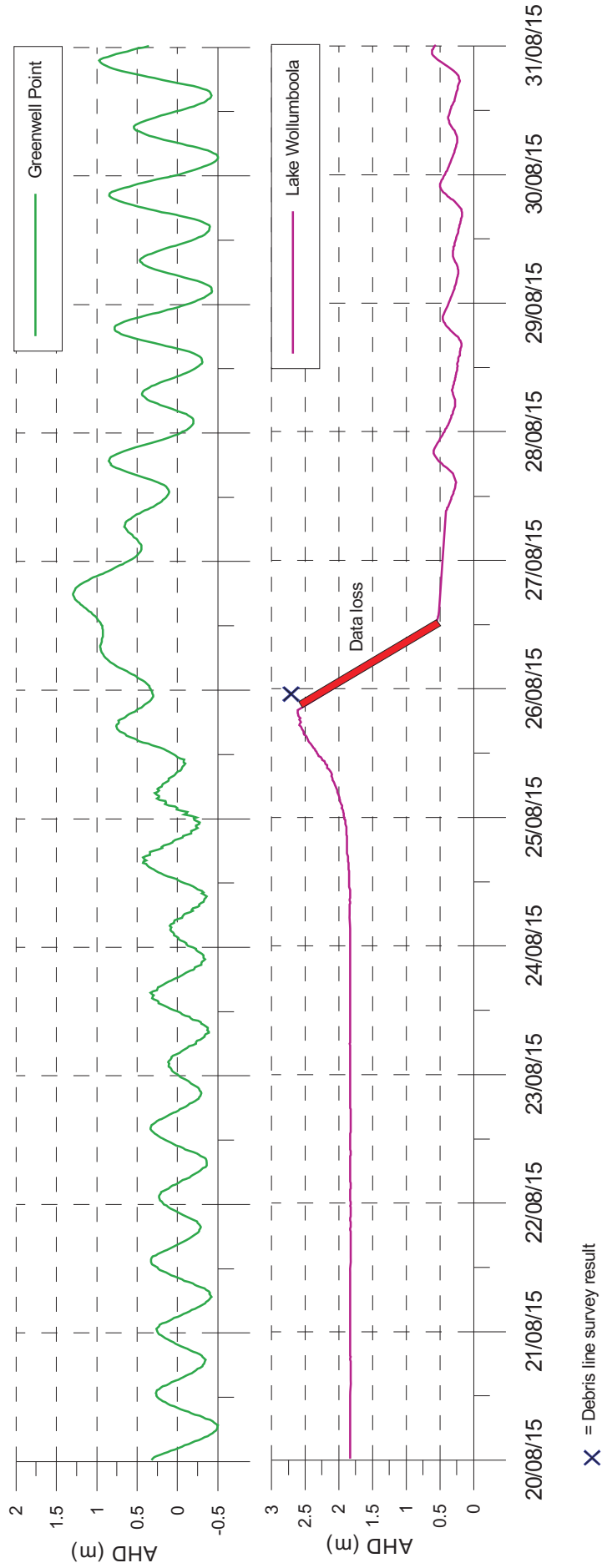


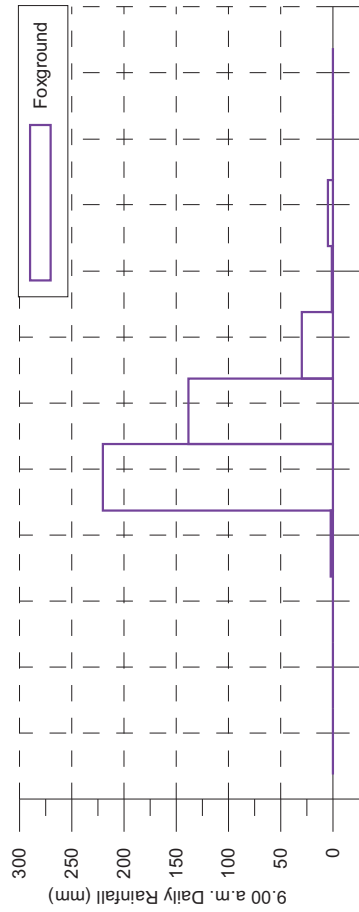
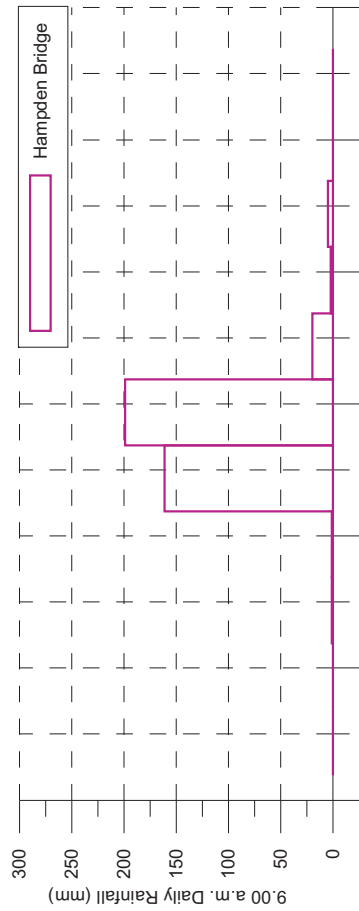
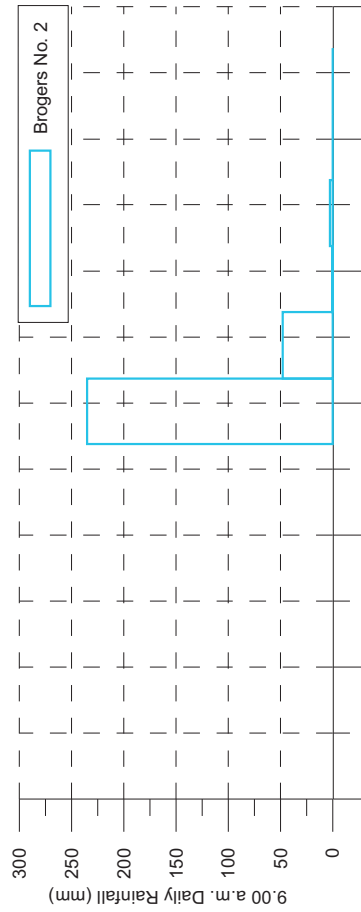
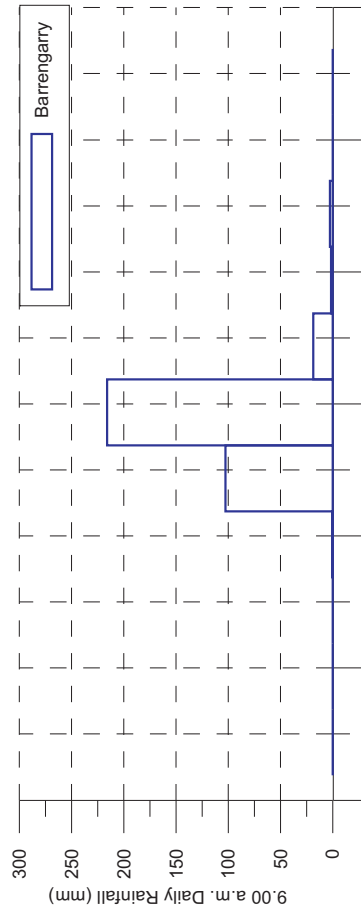
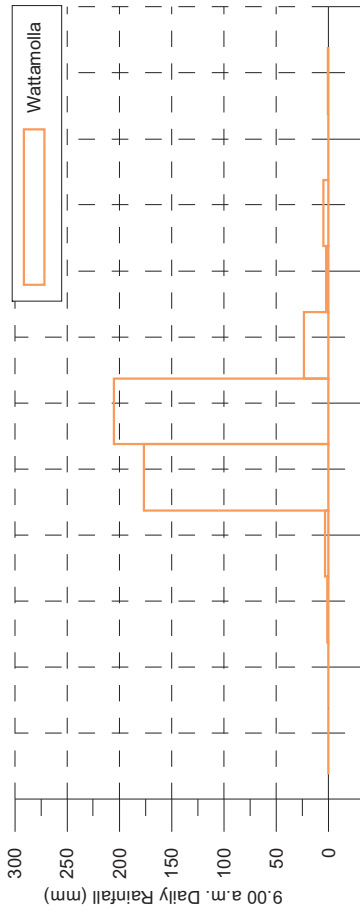
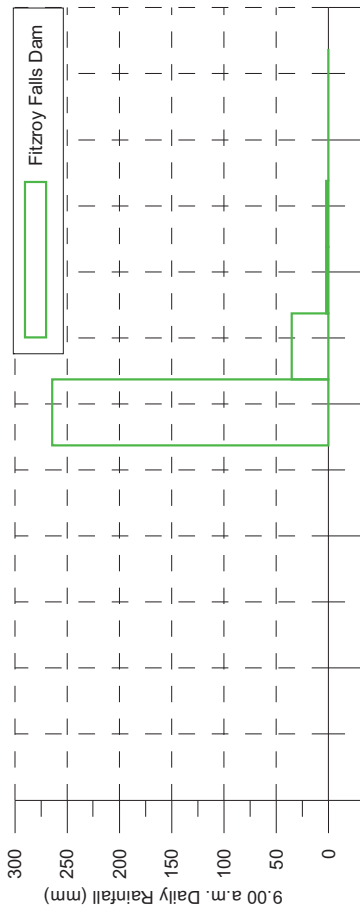






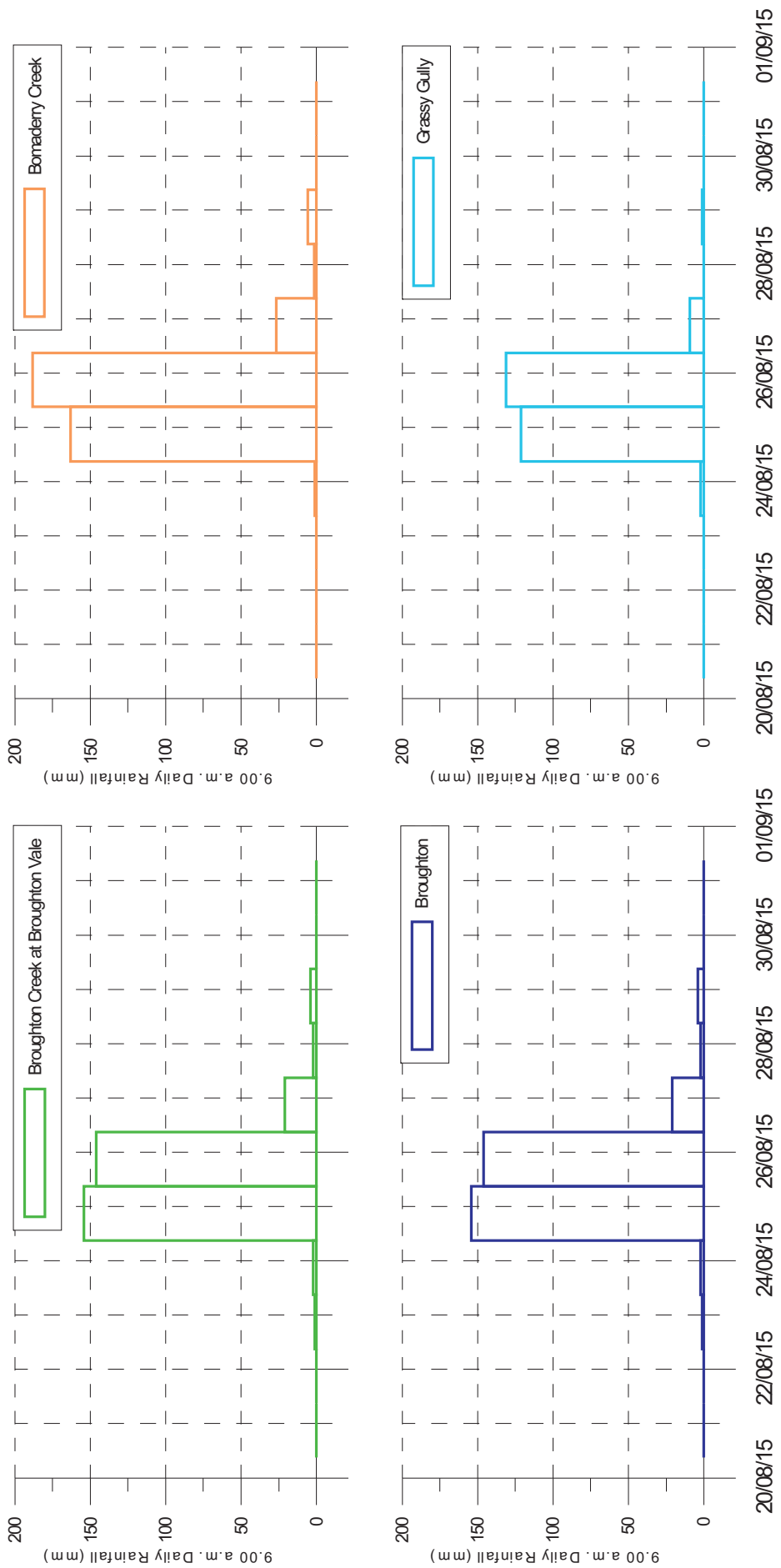


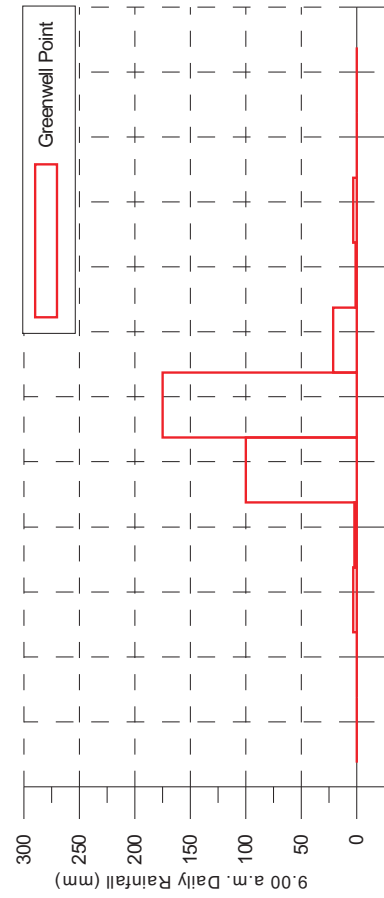
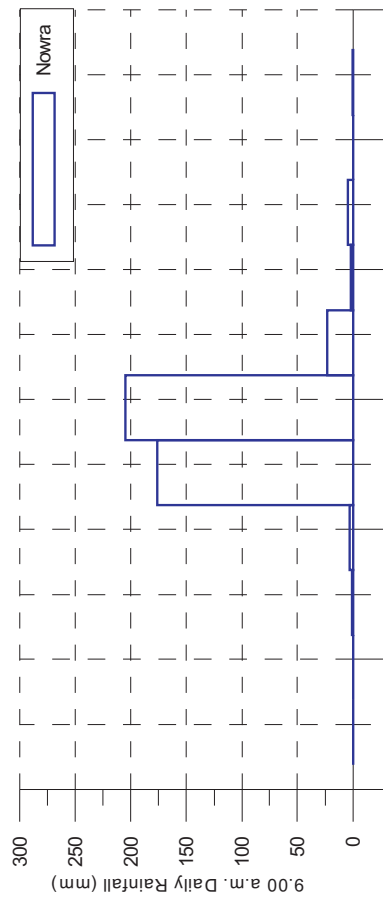
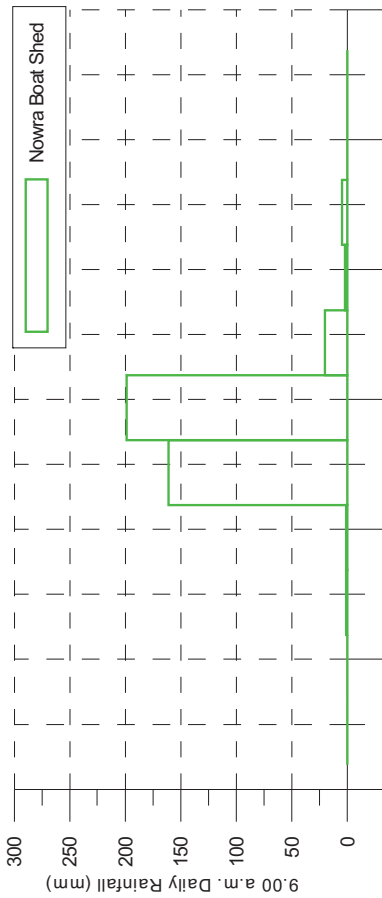
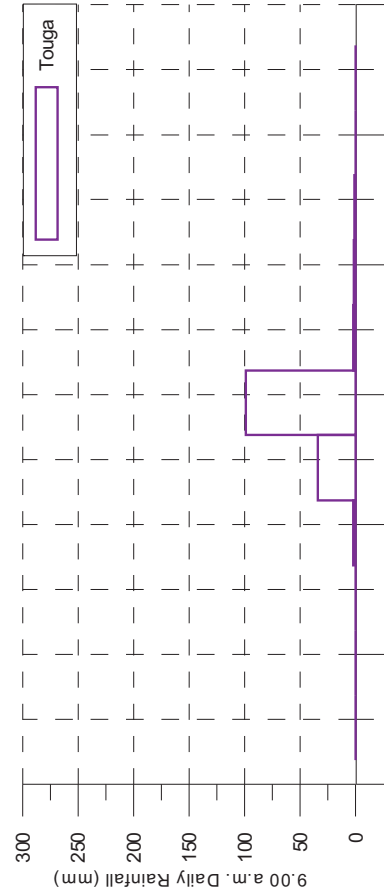
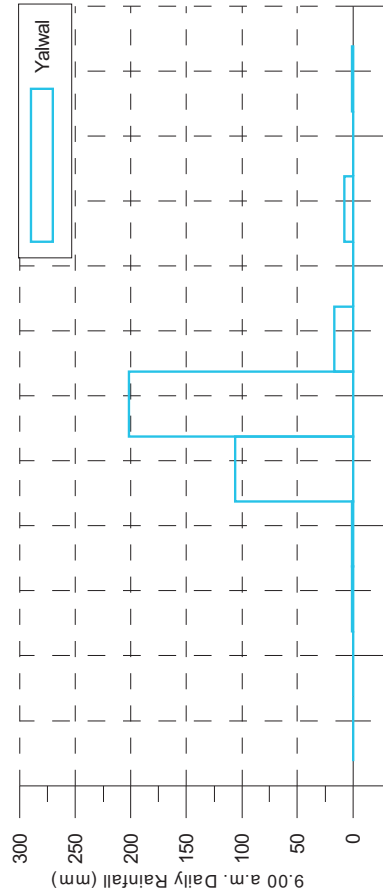
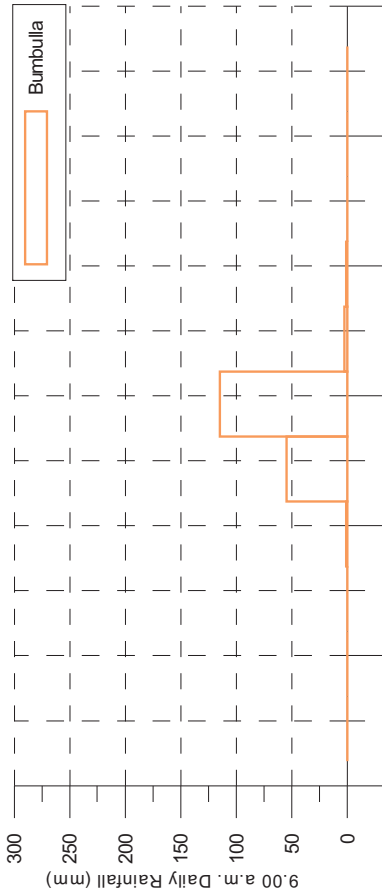


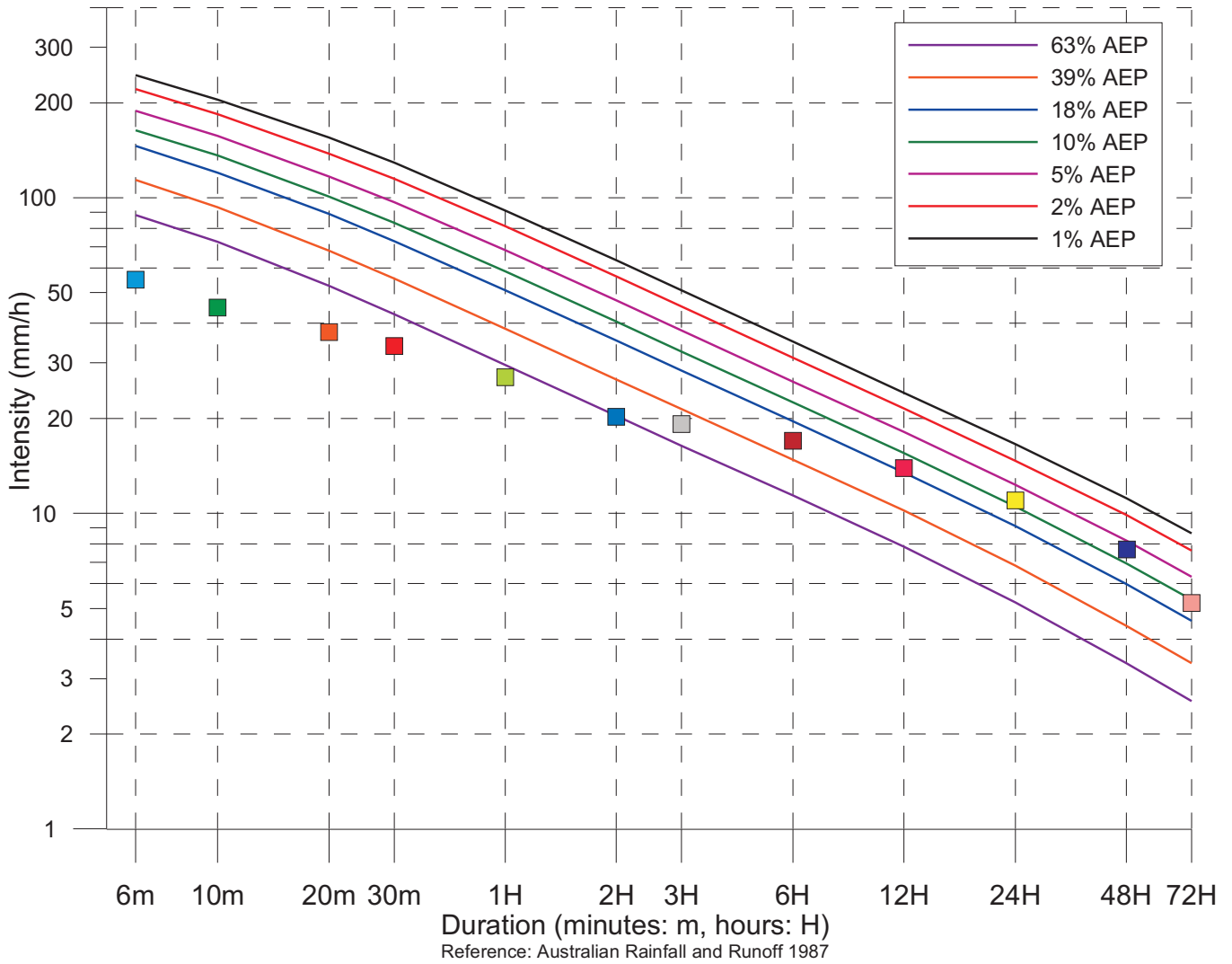


20/08/15 22/08/15 24/08/15 26/08/15 28/08/15 30/08/15 01/09/15





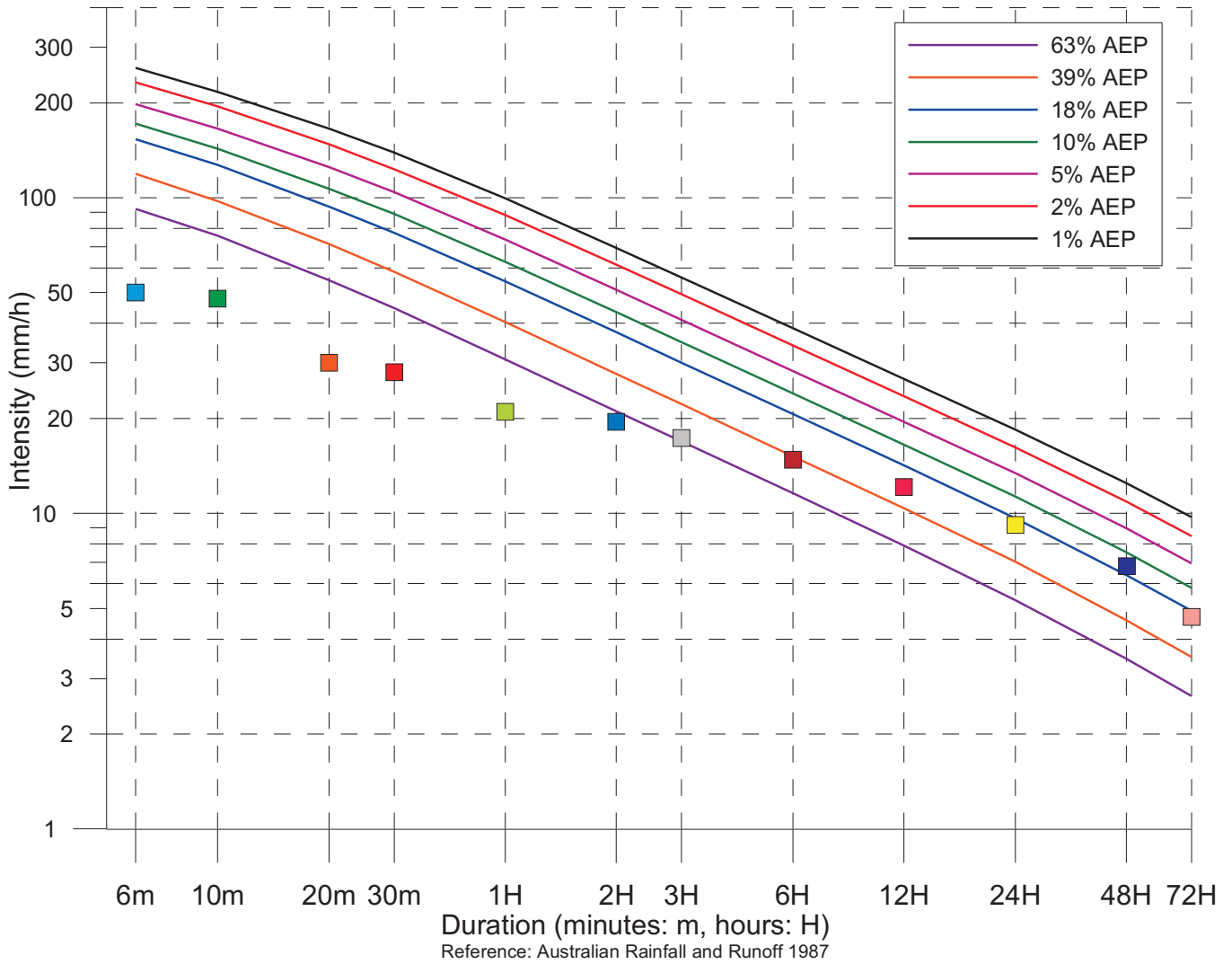




Fitzroy Falls Dam Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	55	00:42_26/08/2015
10m	45	00:42_26/08/2015
20m	37.5	00:42_26/08/2015
30m	34	00:32_26/08/2015
1H	27	00:18_26/08/2015
2H	20.2	20:38_25/08/2015
3H	19.2	19:30_25/08/2015
6H	17	19:26_25/08/2015
12H	13.9	15:12_25/08/2015
24H	11	09:04_25/08/2015
48H	7.7	20:52_24/08/2015
72H	5.2	20:52_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

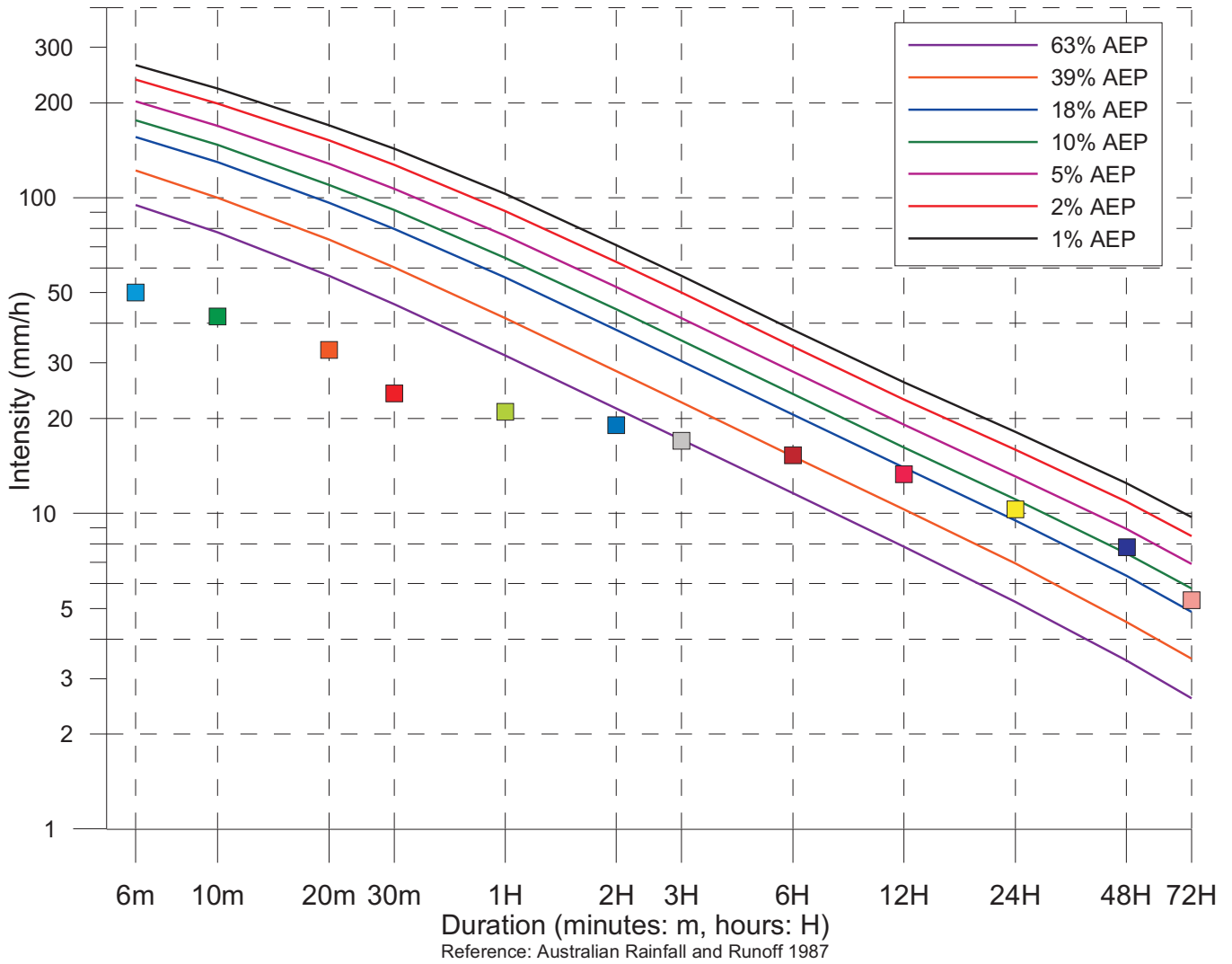




Barrengarry Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	00:16_26/08/2015
10m	48	00:12_26/08/2015
20m	30	20:46_25/08/2015
30m	28	00:14_26/08/2015
1H	21	20:06_25/08/2015
2H	19.5	19:08_25/08/2015
3H	17.3	19:28_25/08/2015
6H	14.8	15:48_25/08/2015
12H	12.1	15:06_25/08/2015
24H	9.2	07:42_25/08/2015
48H	6.8	13:20_24/08/2015
72H	4.7	10:48_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

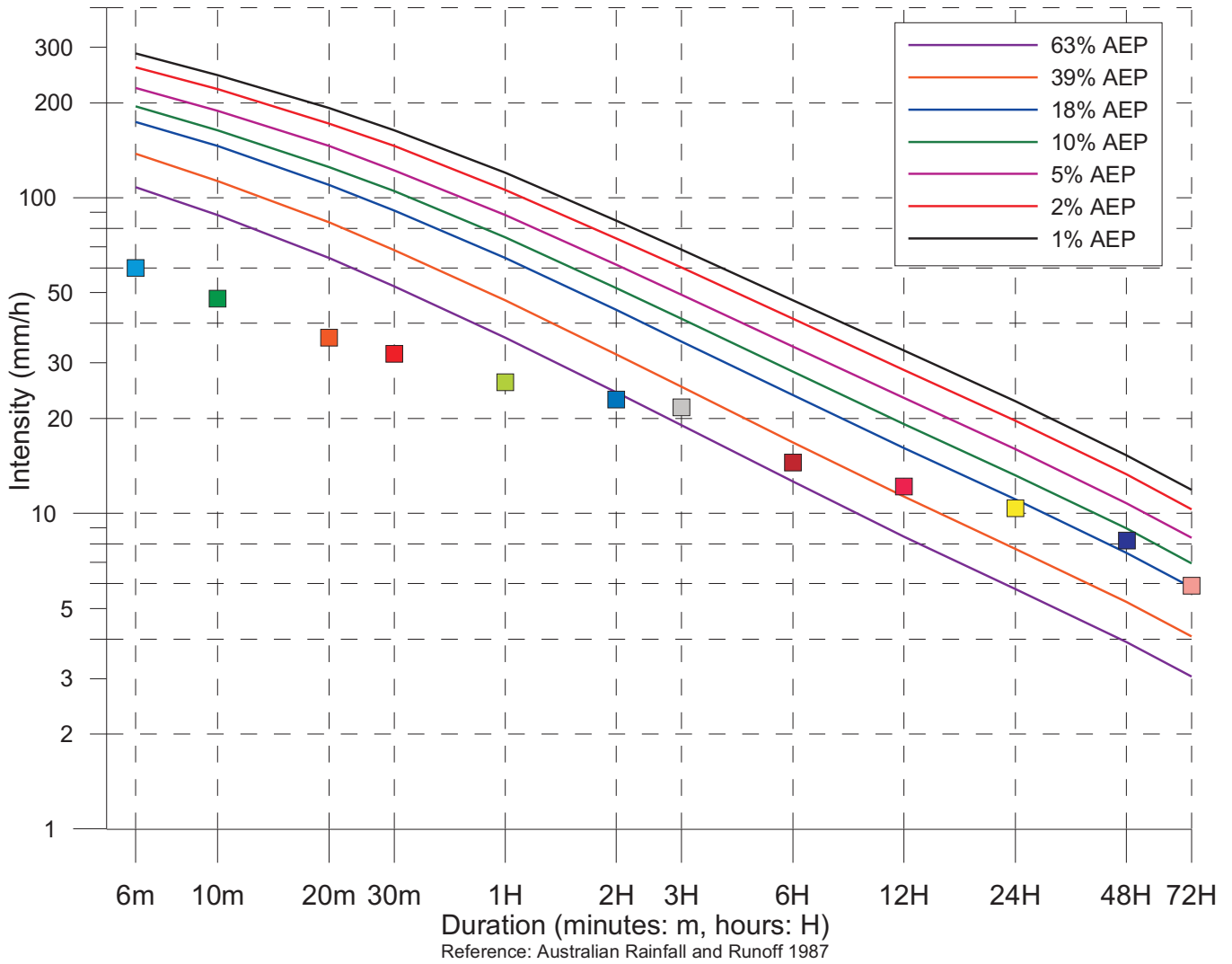




Hampden Bridge Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	00:16_26/08/2015
10m	42	20:46_25/08/2015
20m	33	00:06_26/08/2015
30m	24	19:40_25/08/2015
1H	21	20:04_25/08/2015
2H	19	19:40_25/08/2015
3H	17	19:40_25/08/2015
6H	15.3	18:28_25/08/2015
12H	13.3	15:40_25/08/2015
24H	10.3	10:58_25/08/2015
48H	7.8	12:10_24/08/2015
72H	5.3	11:52_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

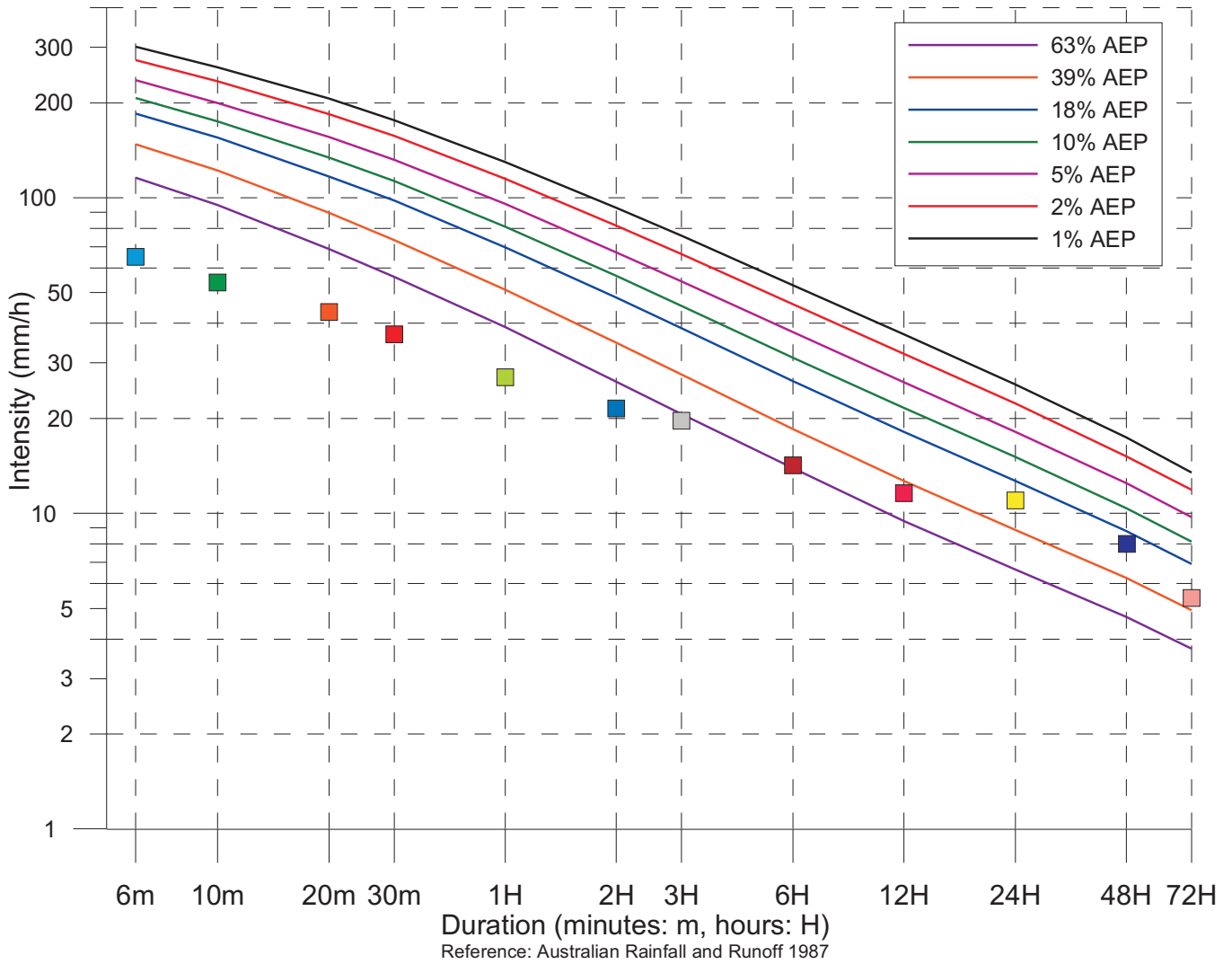




Wattamolla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	60	20:38_25/08/2015
10m	48	21:52_25/08/2015
20m	36	20:38_25/08/2015
30m	32	20:30_25/08/2015
1H	26	19:06_25/08/2015
2H	23	19:12_25/08/2015
3H	21.7	19:06_25/08/2015
6H	14.5	16:34_25/08/2015
12H	12.2	10:52_25/08/2015
24H	10.4	01:38_25/08/2015
48H	8.2	11:40_24/08/2015
72H	5.9	09:12_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

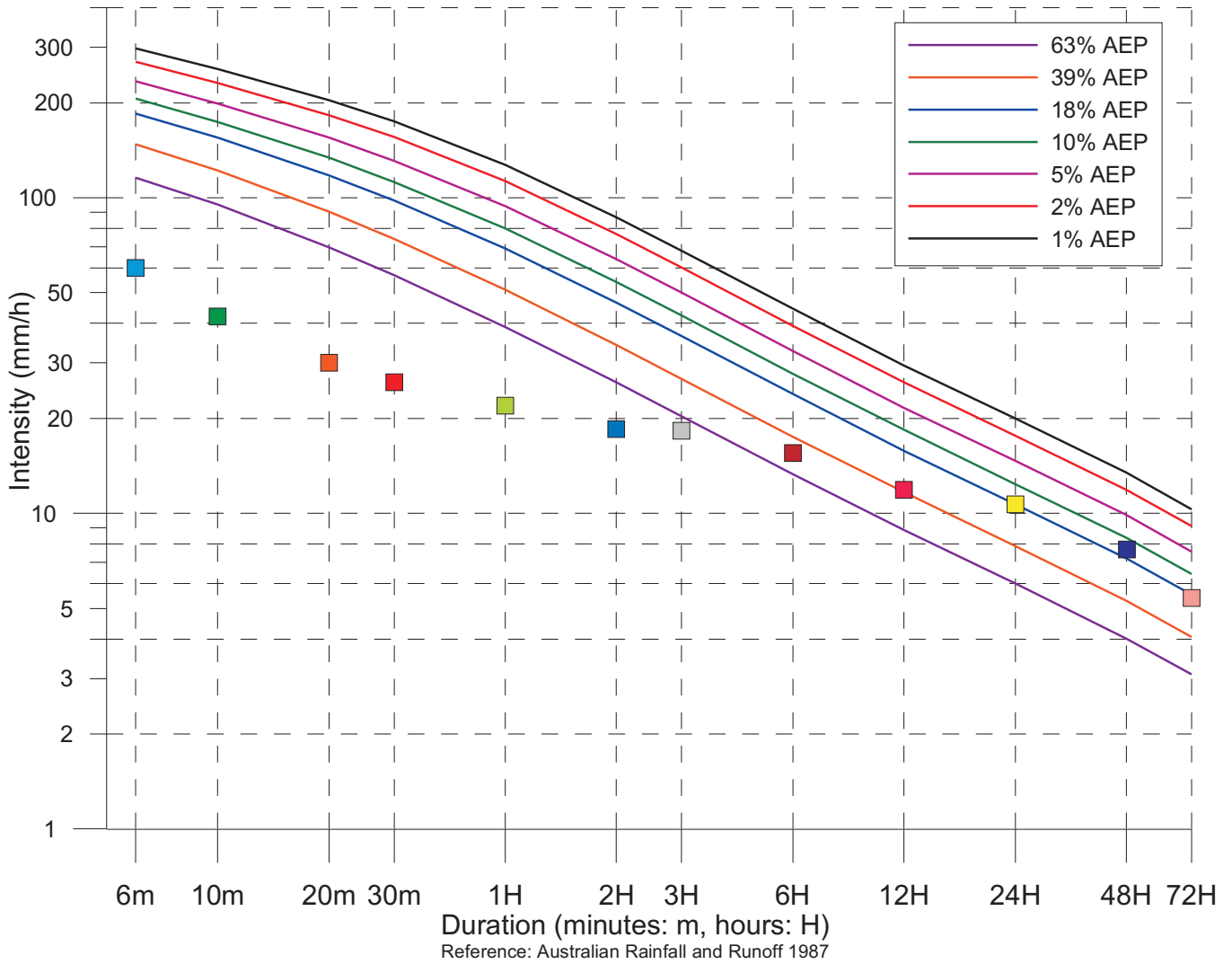




Brogers Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	65	00:28_26/08/2015
10m	54	00:24_26/08/2015
20m	43.5	02:34_26/08/2015
30m	37	02:30_26/08/2015
1H	27	23:50_25/08/2015
2H	21.5	23:44_25/08/2015
3H	19.7	23:52_25/08/2015
6H	14.2	23:44_25/08/2015
12H	11.6	16:28_25/08/2015
24H	11	04:34_25/08/2015
48H	8	20:50_24/08/2015
72H	5.4	20:50_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

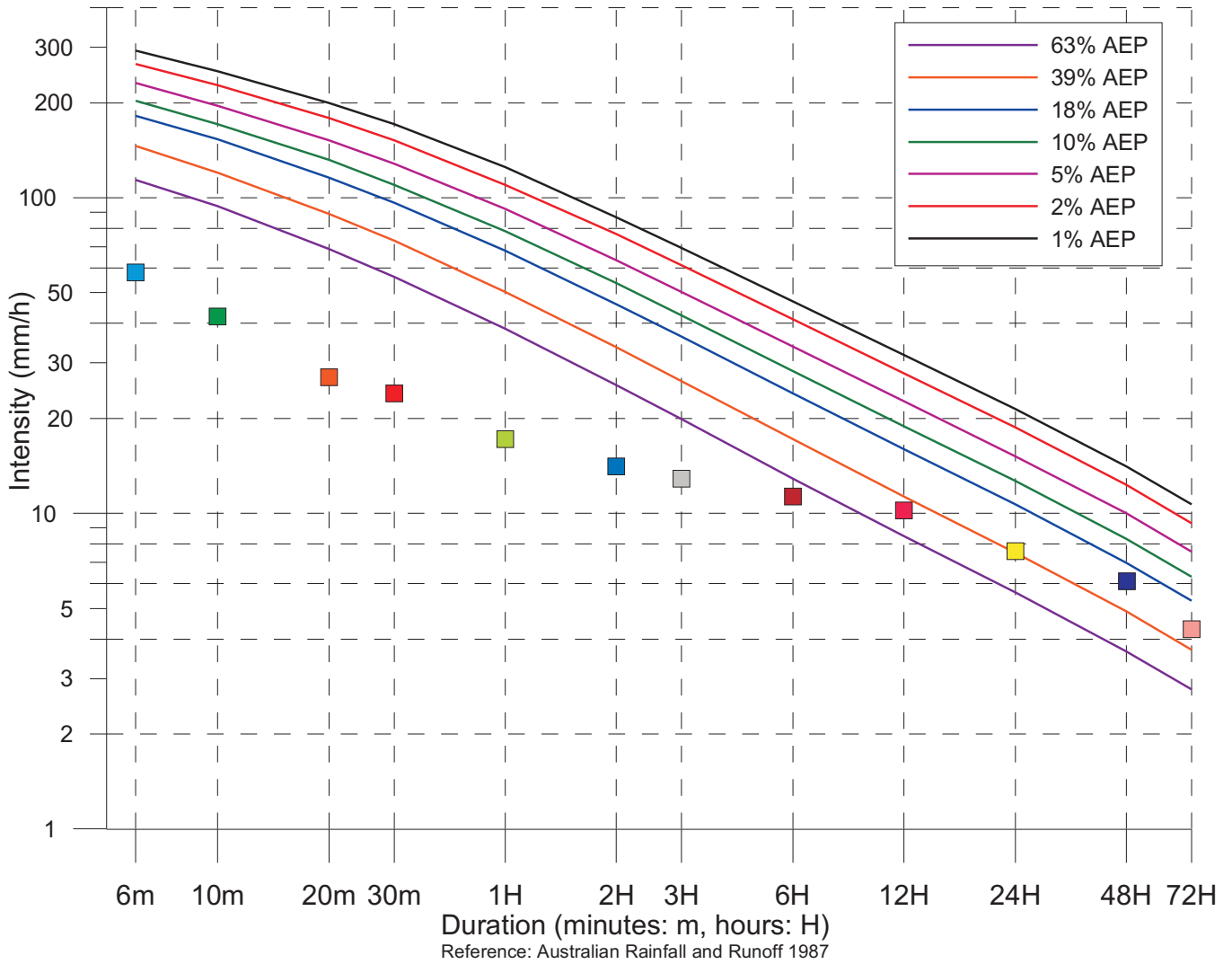




Foxground Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	60	02:18_26/08/2015
10m	42	02:18_26/08/2015
20m	30	12:00_24/08/2015
30m	26	11:58_24/08/2015
1H	22	08:28_25/08/2015
2H	18.5	07:08_25/08/2015
3H	18.3	06:44_25/08/2015
6H	15.5	04:36_25/08/2015
12H	11.9	02:58_25/08/2015
24H	10.7	11:30_24/08/2015
48H	7.7	11:30_24/08/2015
72H	5.4	19:34_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

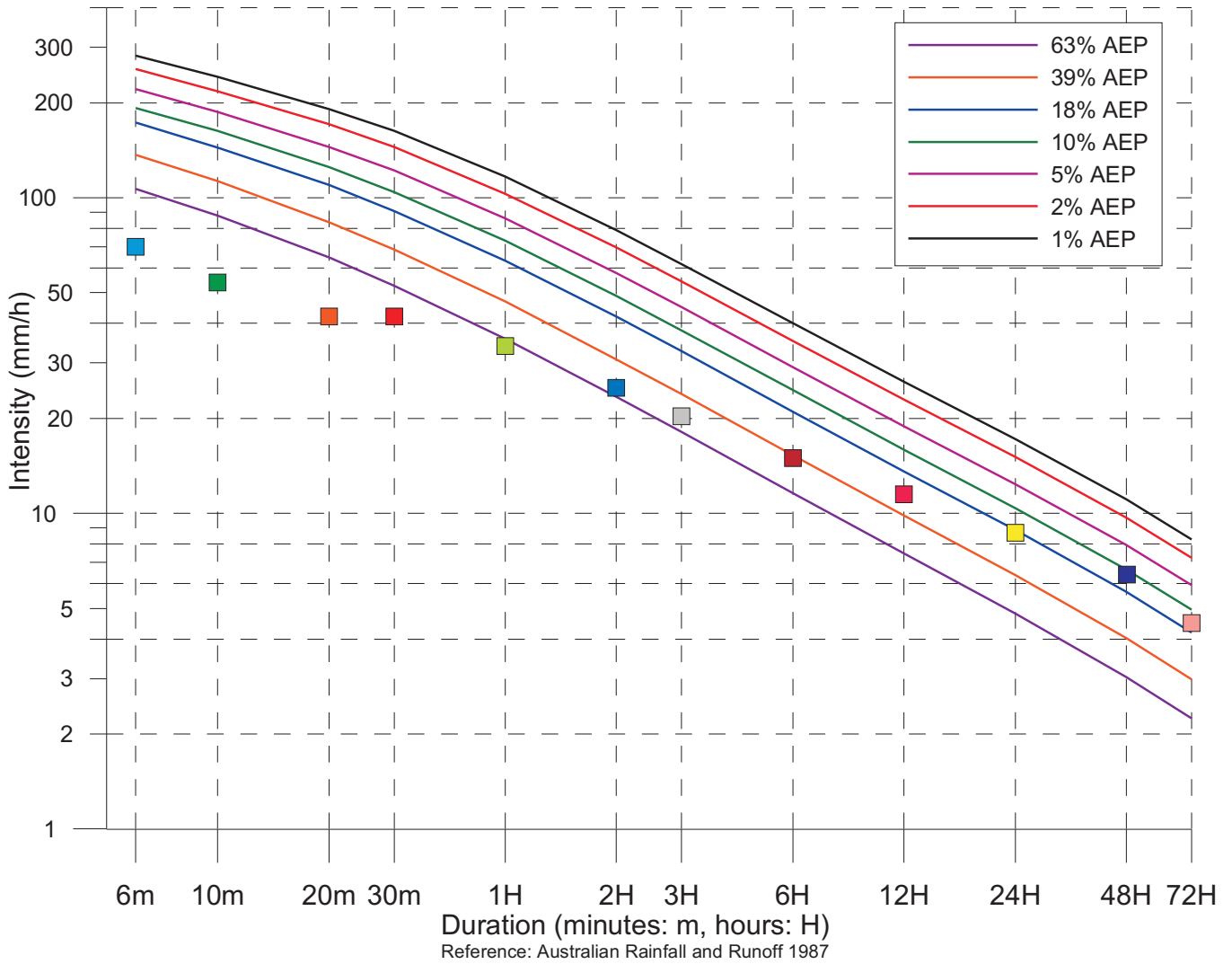




Broughton Creek at Broughton Vale Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	58	02:30_26/08/2015
10m	42	02:30_26/08/2015
20m	27	10:56_25/08/2015
30m	24	10:54_25/08/2015
1H	17.2	10:28_25/08/2015
2H	14.1	09:52_25/08/2015
3H	12.9	09:52_25/08/2015
6H	11.3	06:40_25/08/2015
12H	10.2	02:52_25/08/2015
24H	7.6	14:06_24/08/2015
48H	6.1	11:08_24/08/2015
72H	4.3	00:28_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

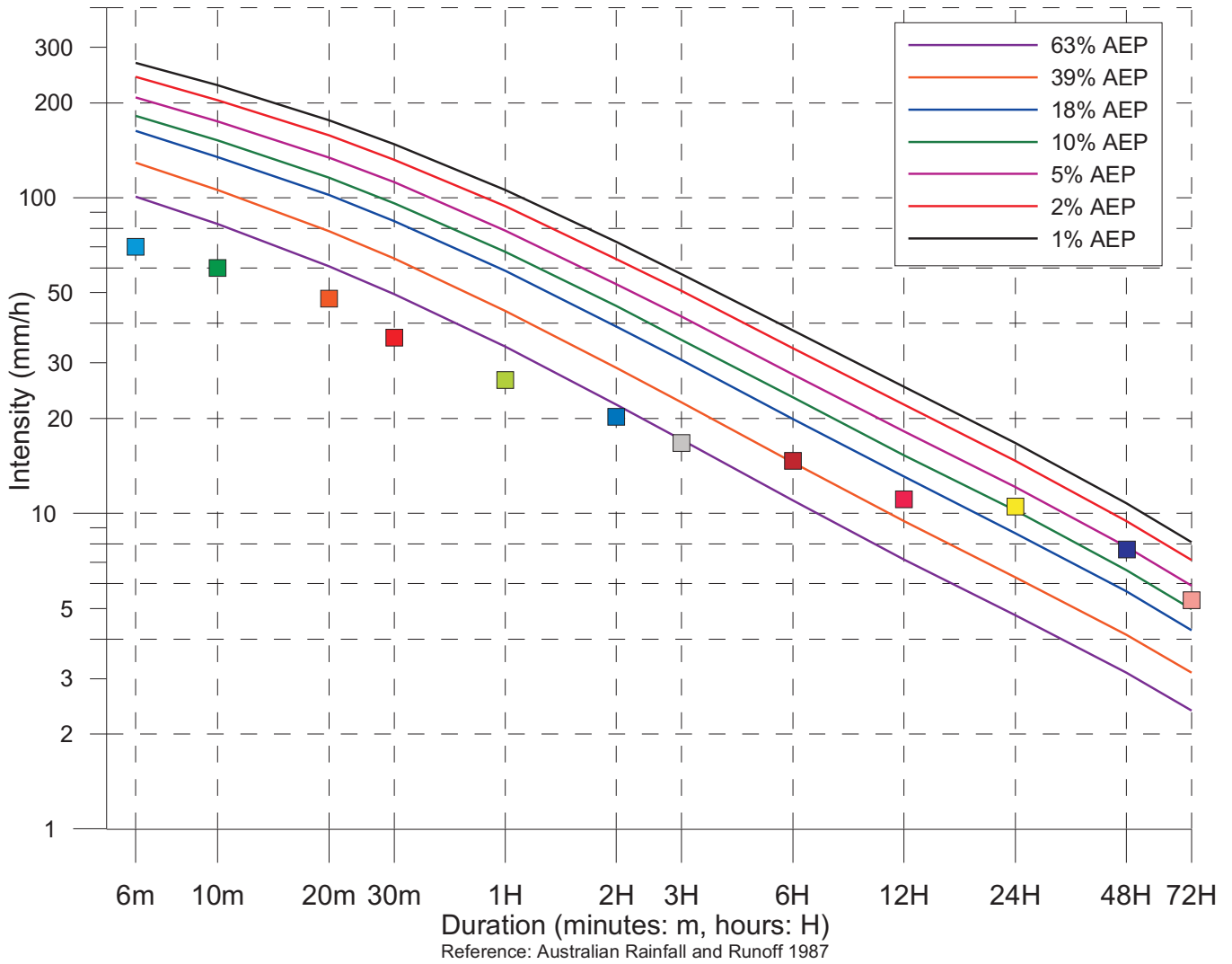




Broughton Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	70	10:56_25/08/2015
10m	54	10:56_25/08/2015
20m	42	10:54_25/08/2015
30m	42	10:54_25/08/2015
1H	34	10:50_25/08/2015
2H	25	10:20_25/08/2015
3H	20.3	09:42_25/08/2015
6H	15	07:46_25/08/2015
12H	11.5	03:04_25/08/2015
24H	8.7	13:54_24/08/2015
48H	6.4	11:32_24/08/2015
72H	4.5	08:52_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

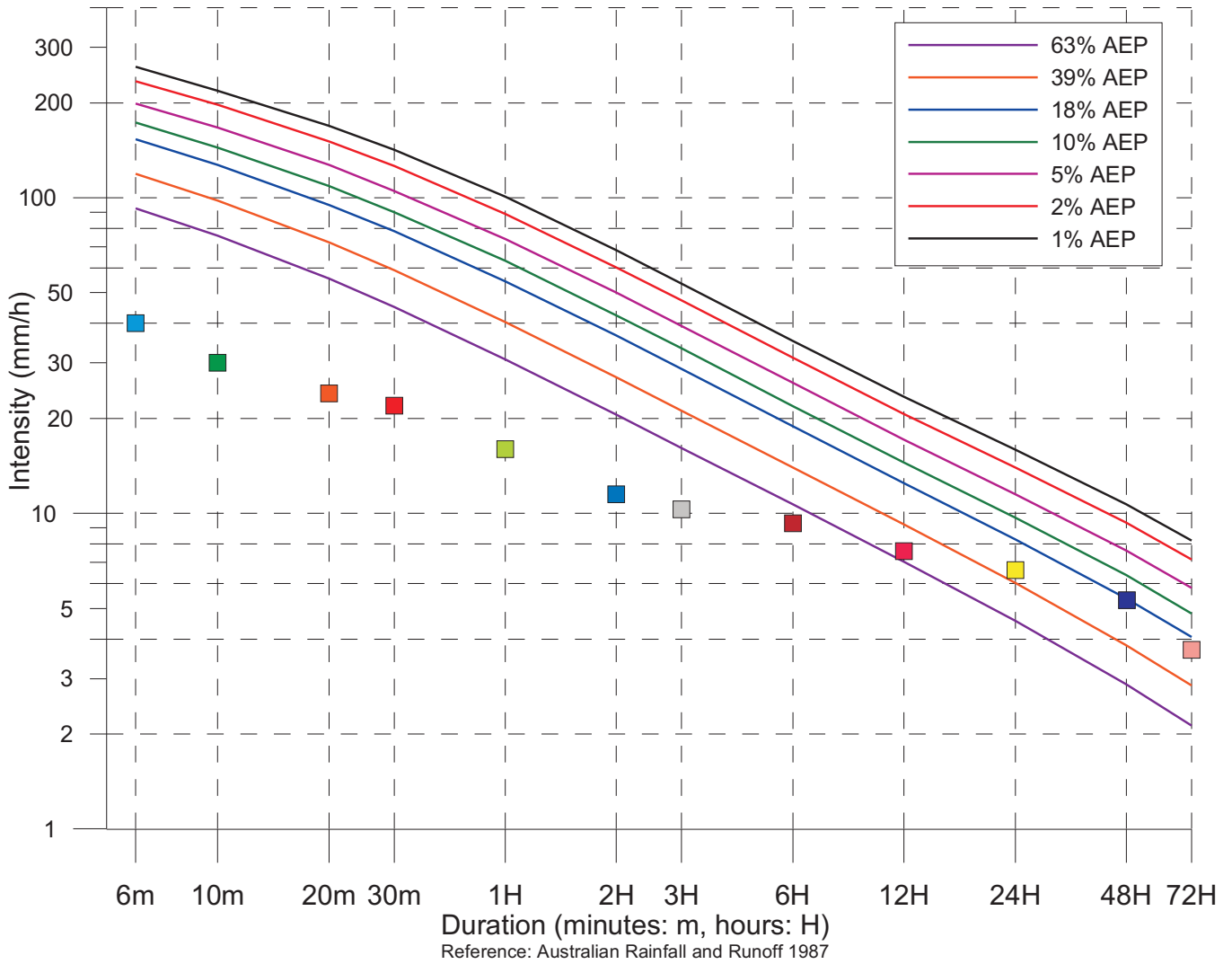




Bomaderry Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	70	19:42_25/08/2015
10m	60	22:54_25/08/2015
20m	48	22:50_25/08/2015
30m	36	22:46_25/08/2015
1H	26.5	22:48_25/08/2015
2H	20.2	22:20_25/08/2015
3H	16.7	21:20_25/08/2015
6H	14.7	18:18_25/08/2015
12H	11.1	11:10_25/08/2015
24H	10.5	00:18_25/08/2015
48H	7.7	11:52_24/08/2015
72H	5.3	19:26_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

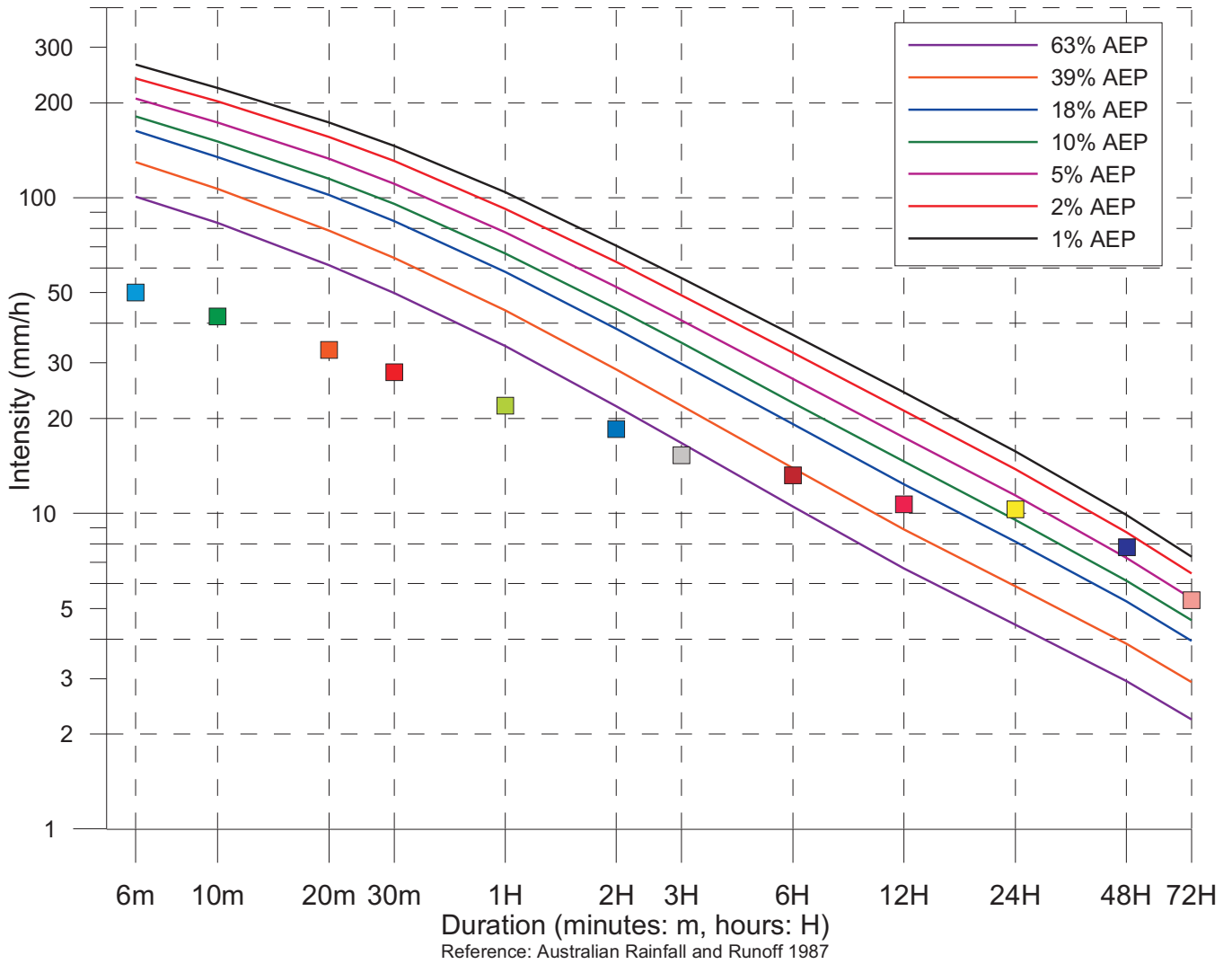




Grassy Gully Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	40	04:26_26/08/2015
10m	30	18:40_25/08/2015
20m	24	00:46_25/08/2015
30m	22	00:46_25/08/2015
1H	16	00:46_25/08/2015
2H	11.5	00:46_25/08/2015
3H	10.3	00:46_25/08/2015
6H	9.3	21:34_24/08/2015
12H	7.6	17:52_24/08/2015
24H	6.6	21:34_24/08/2015
48H	5.3	11:18_24/08/2015
72H	3.7	08:42_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

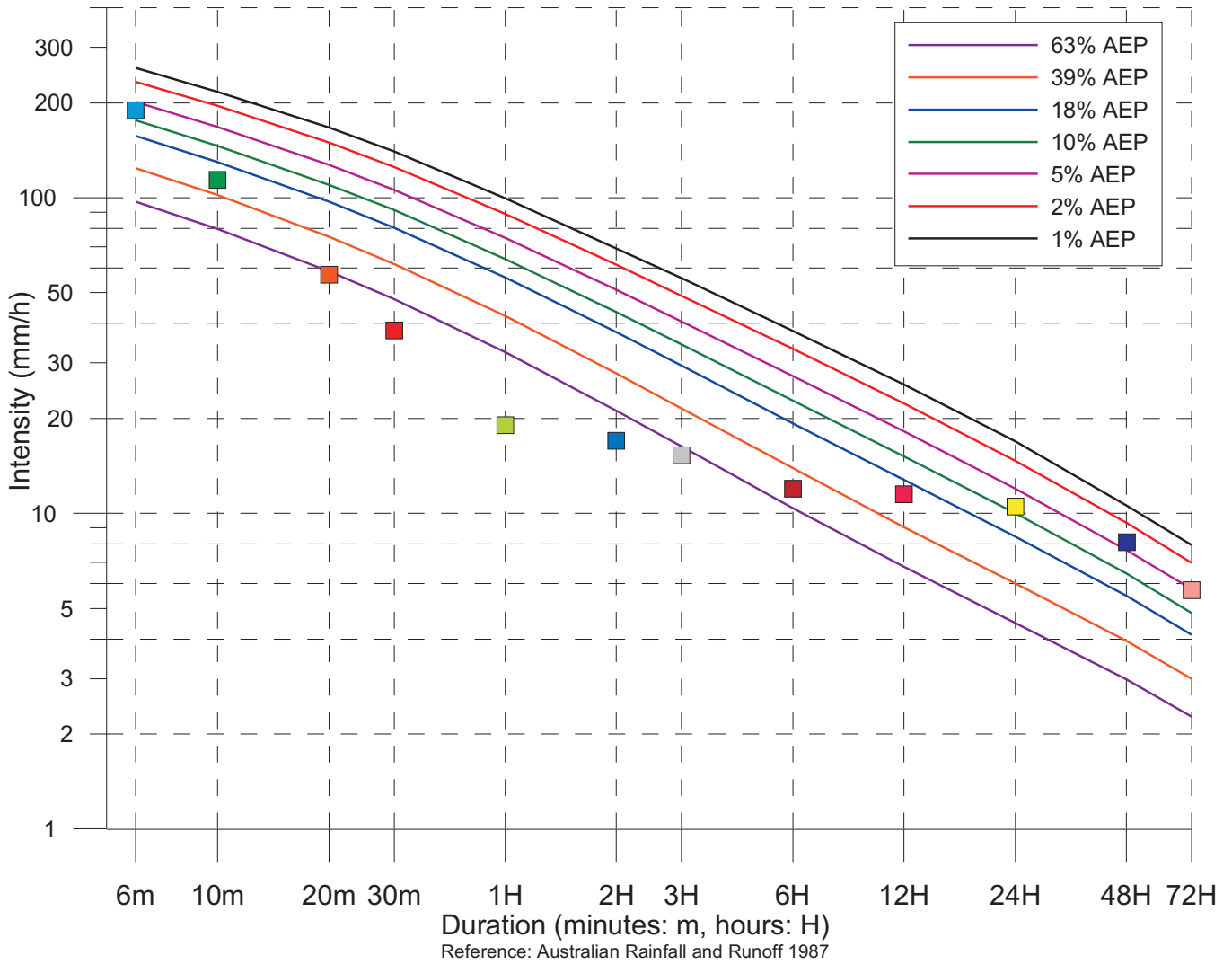




Nowra (Boat Shed) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	06:24_26/08/2015
10m	42	06:20_26/08/2015
20m	33	19:28_25/08/2015
30m	28	23:40_25/08/2015
1H	22	22:56_25/08/2015
2H	18.5	22:16_25/08/2015
3H	15.3	21:34_25/08/2015
6H	13.2	18:18_25/08/2015
12H	10.7	11:06_25/08/2015
24H	10.3	00:14_25/08/2015
48H	7.8	11:36_24/08/2015
72H	5.3	19:28_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

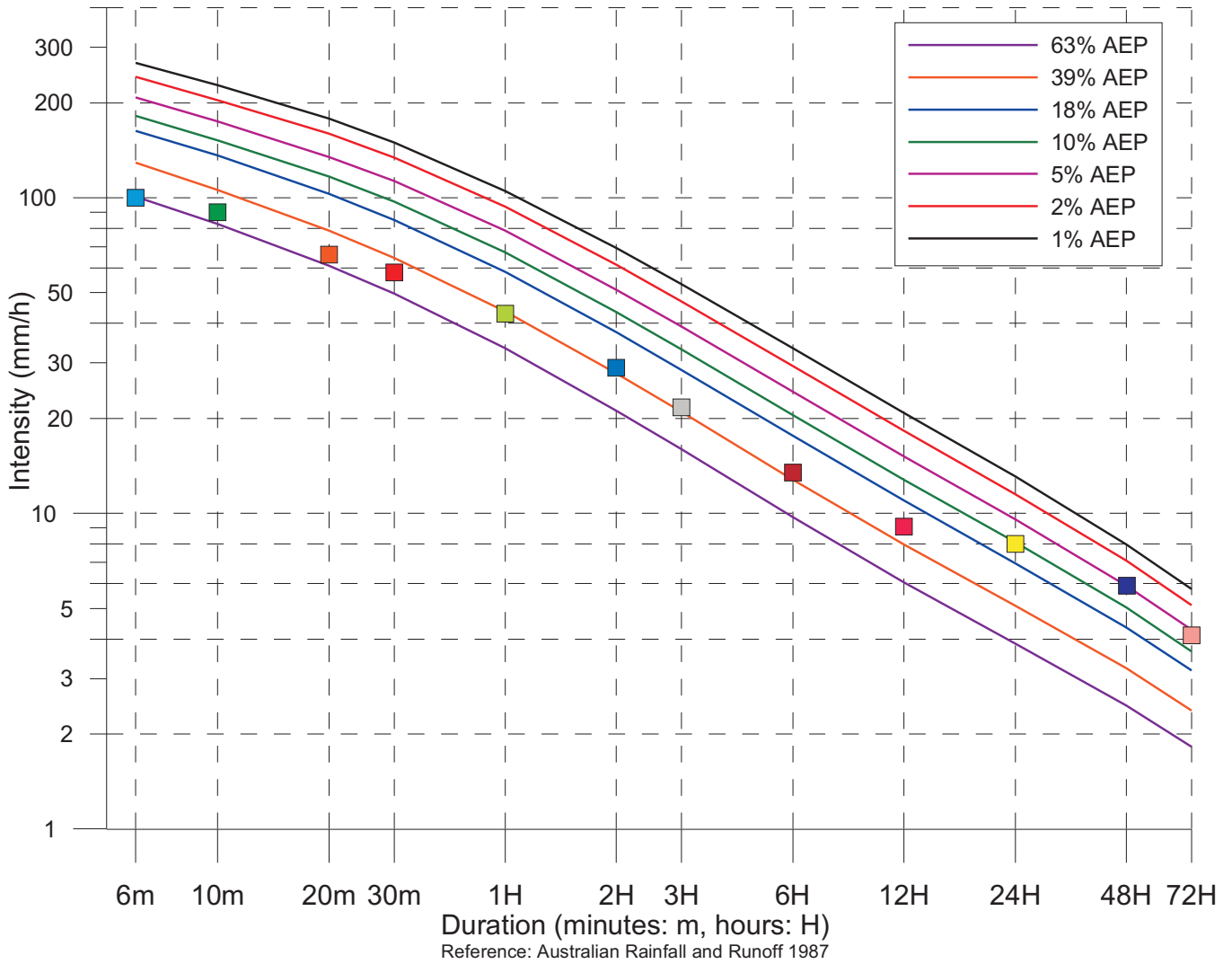




Nowra Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	190	19:58_25/08/2015
10m	114	19:58_25/08/2015
20m	57	19:58_25/08/2015
30m	38	19:58_25/08/2015
1H	19	19:58_25/08/2015
2H	17	18:58_25/08/2015
3H	15.3	18:58_25/08/2015
6H	12	22:58_24/08/2015
12H	11.5	10:58_25/08/2015
24H	10.5	22:58_24/08/2015
48H	8.1	14:58_24/08/2015
72H	5.7	19:58_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

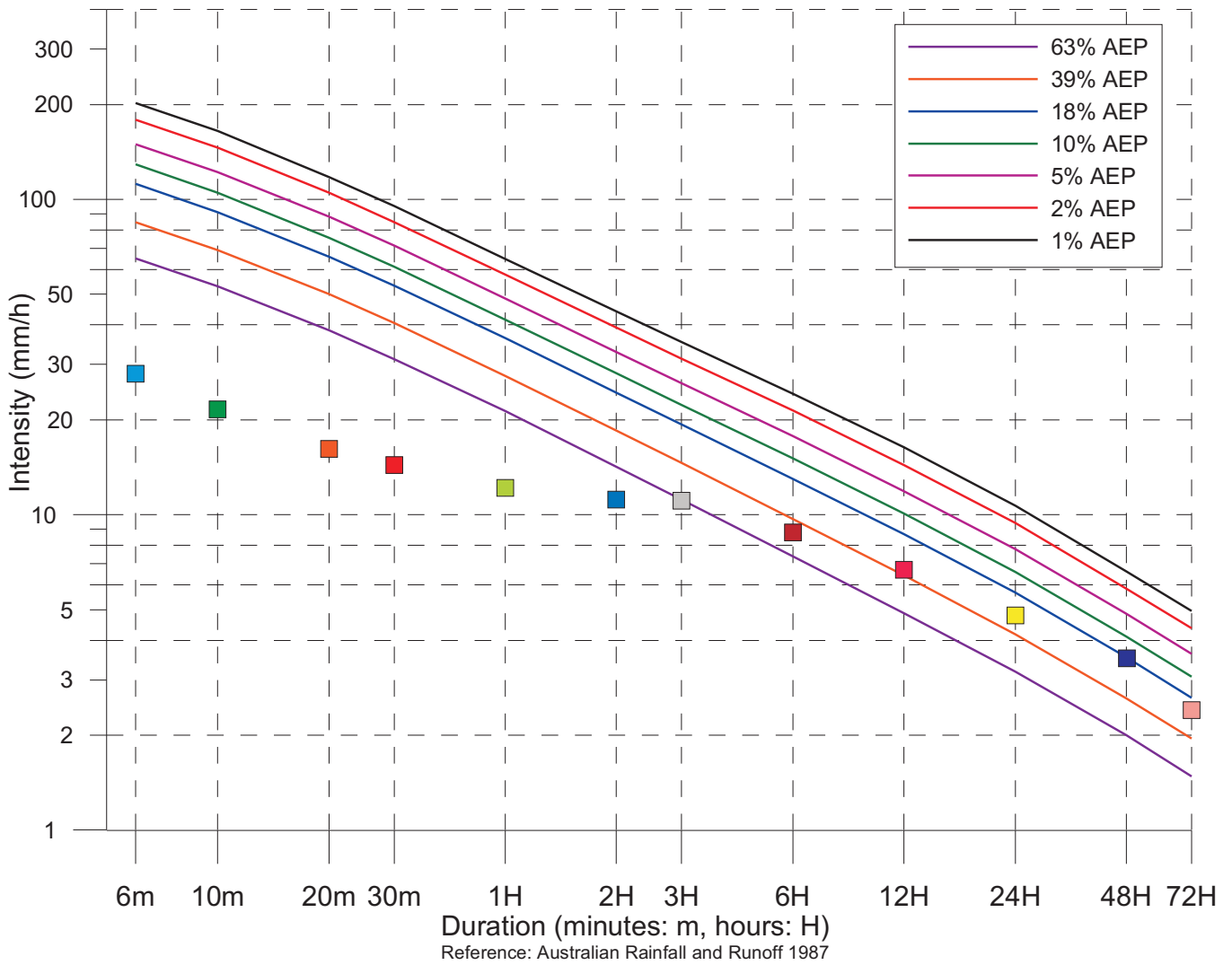




Greenwell Point Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	100	11:06_25/08/2015
10m	90	11:02_25/08/2015
20m	66	10:52_25/08/2015
30m	58	10:48_25/08/2015
1H	43	10:28_25/08/2015
2H	29	10:06_25/08/2015
3H	21.7	10:28_25/08/2015
6H	13.5	09:32_25/08/2015
12H	9.1	10:52_25/08/2015
24H	8	23:46_24/08/2015
48H	5.9	10:48_24/08/2015
72H	4.1	19:10_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

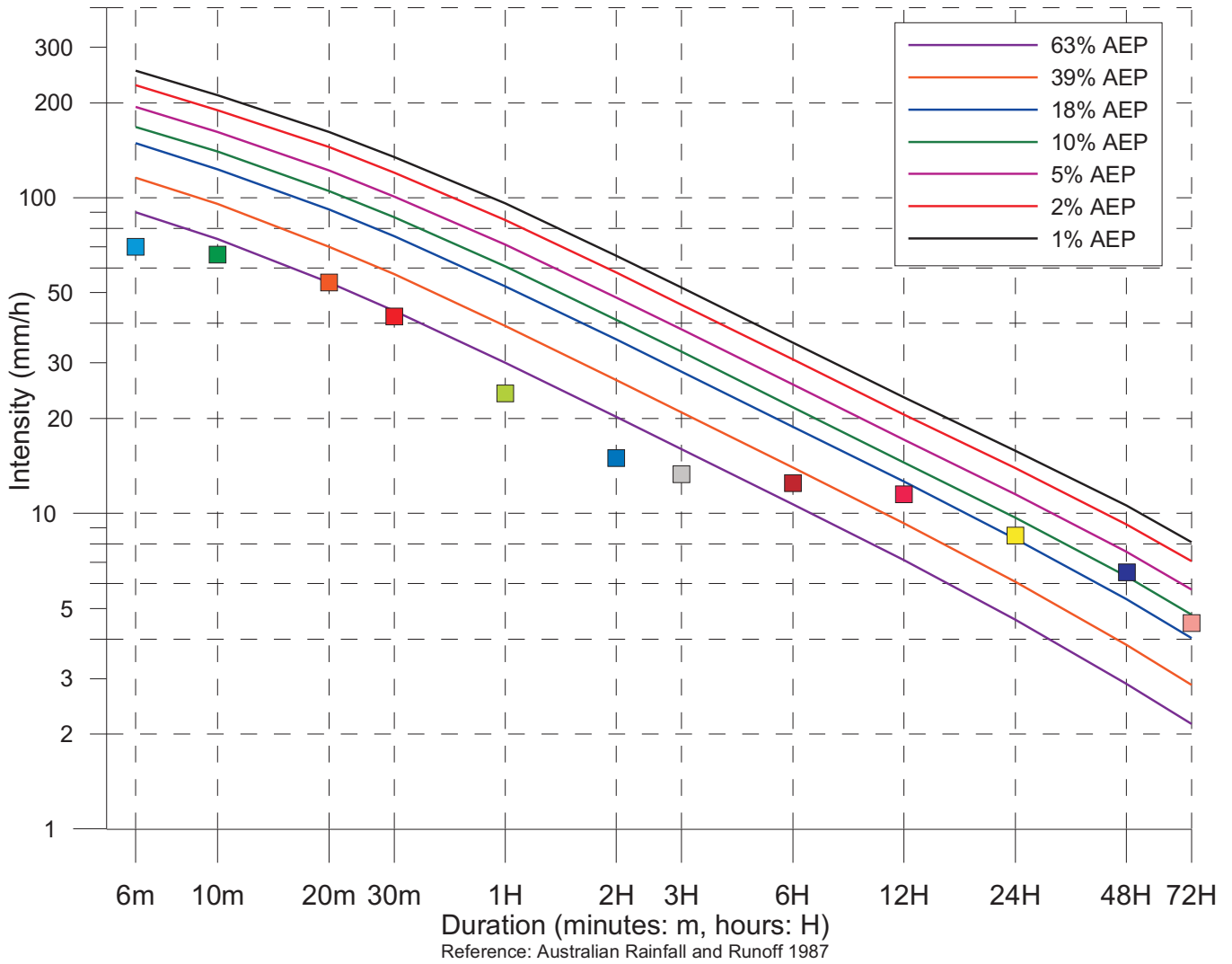




Bumbulla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	28	01:12_26/08/2015
10m	21.6	01:08_26/08/2015
20m	16.2	01:02_26/08/2015
30m	14.4	23:52_25/08/2015
1H	12.2	22:12_25/08/2015
2H	11.2	22:28_25/08/2015
3H	11.1	22:22_25/08/2015
6H	8.8	21:54_25/08/2015
12H	6.7	16:38_25/08/2015
24H	4.8	08:48_25/08/2015
48H	3.5	08:58_24/08/2015
72H	2.4	05:36_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

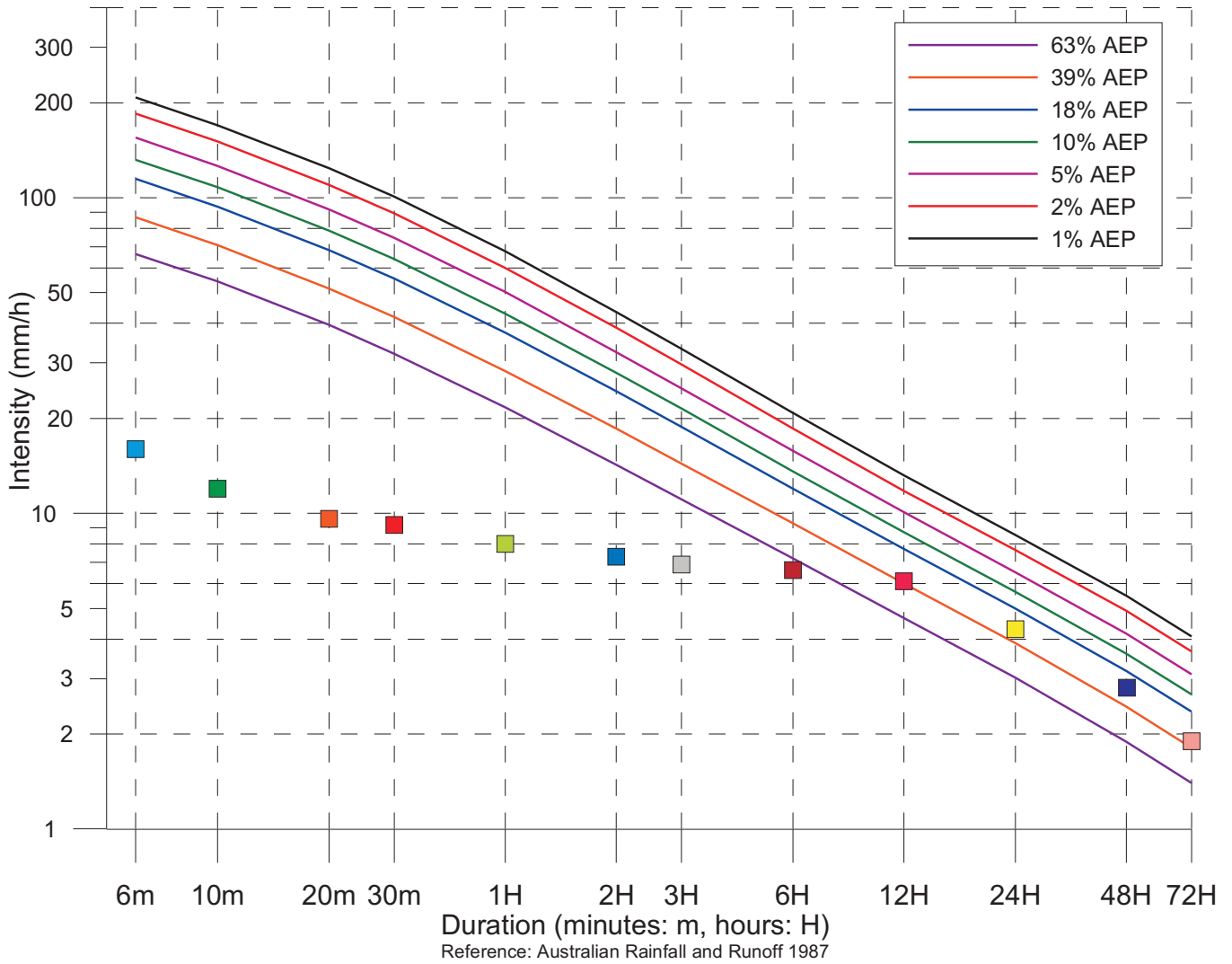




Yalwal Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	70	02:56_26/08/2015
10m	66	02:48_26/08/2015
20m	54	02:48_26/08/2015
30m	42	02:48_26/08/2015
1H	24	02:22_26/08/2015
2H	15	20:20_25/08/2015
3H	13.3	19:56_25/08/2015
6H	12.5	16:14_25/08/2015
12H	11.5	15:18_25/08/2015
24H	8.5	10:28_25/08/2015
48H	6.5	12:10_24/08/2015
72H	4.5	08:22_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*





Touga Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	16	13:54_25/08/2015
10m	12	13:54_25/08/2015
20m	9.6	17:34_25/08/2015
30m	9.2	13:30_25/08/2015
1H	8	13:30_25/08/2015
2H	7.3	16:52_25/08/2015
3H	6.9	15:58_25/08/2015
6H	6.6	13:10_25/08/2015
12H	6.1	13:12_25/08/2015
24H	4.3	04:02_25/08/2015
48H	2.8	11:34_24/08/2015
72H	1.9	21:24_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*



6.3 Shoalhaven river region - central - water level

The locations of water level stations within the central Shoalhaven river region are shown in Figure 6.27. The water level data for the period 20th to 31st August 2015 are displayed graphically in Figures 6.28 to 6.29. The peak observed water levels are listed in Table 6.4.

There are no current SES flood classifications for the central Shoalhaven river region.

Table 6.4 Central Shoalhaven river region flood peaks

Station Name	Station No.	Site Owner	Datum	Peak level (m)
Bungonia at Bungonia	215014	DPI Water	Local Datum	3.41
Nerrimunga Creek at Minshull Trig	215240	WaterNSW	Local Datum	3.23
Corang River at Meangora	215242	WaterNSW	Local Datum	4.79
Corang River at Hockeys	215004	DPI Water	Local Datum	5.79
Shoalhaven River at Hillview	215208	WaterNSW	Local Datum	5.32
Boro Creek at Marlowe	215239	WaterNSW	Local Datum	1.84
Reedy Creek at Manar	215238	WaterNSW	Local Datum	0.94
Shoalhaven at Warri Bridge	215002	DPI Water	Local Datum	3.64

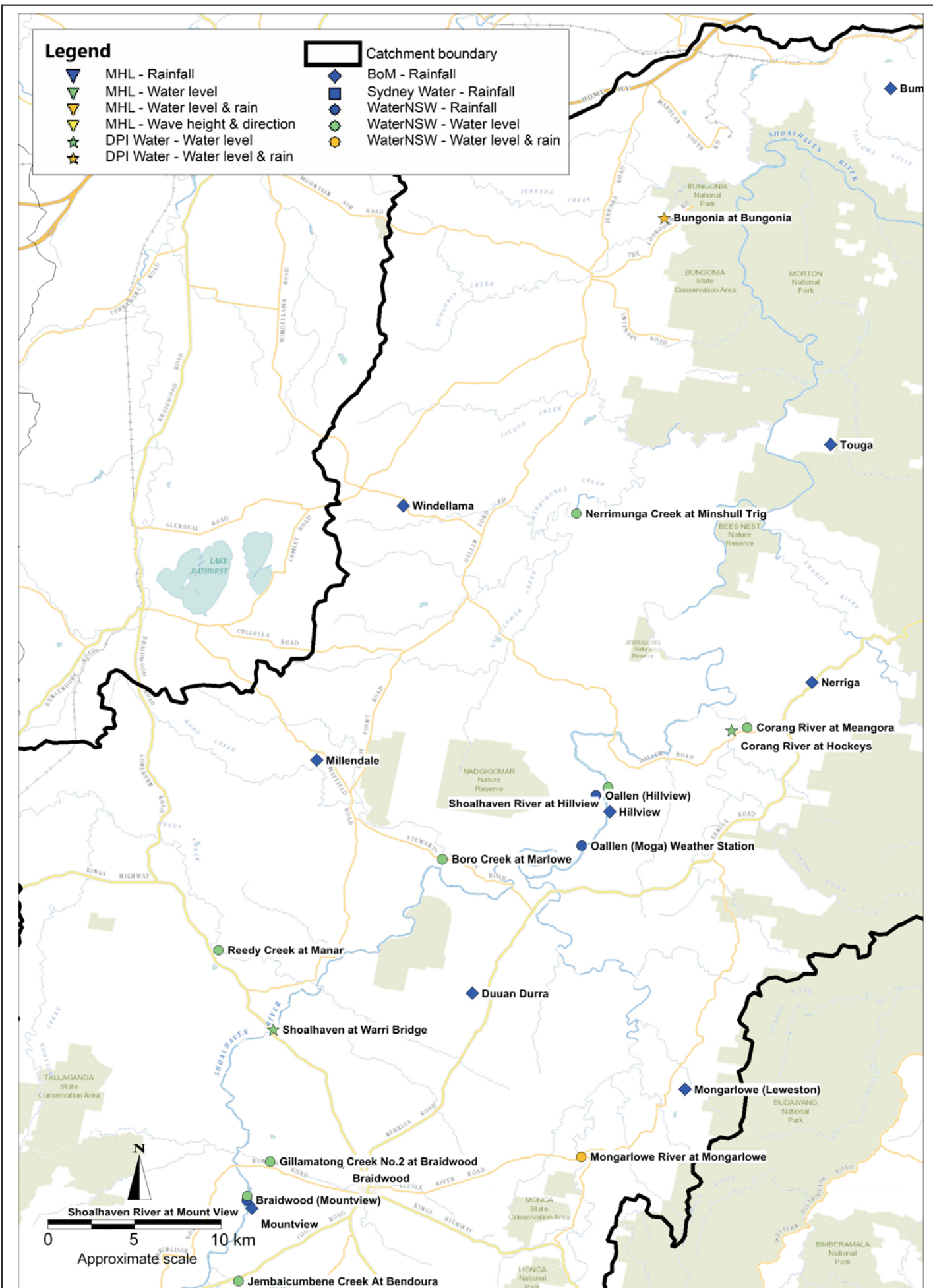
6.4 Shoalhaven river region – central - rainfall

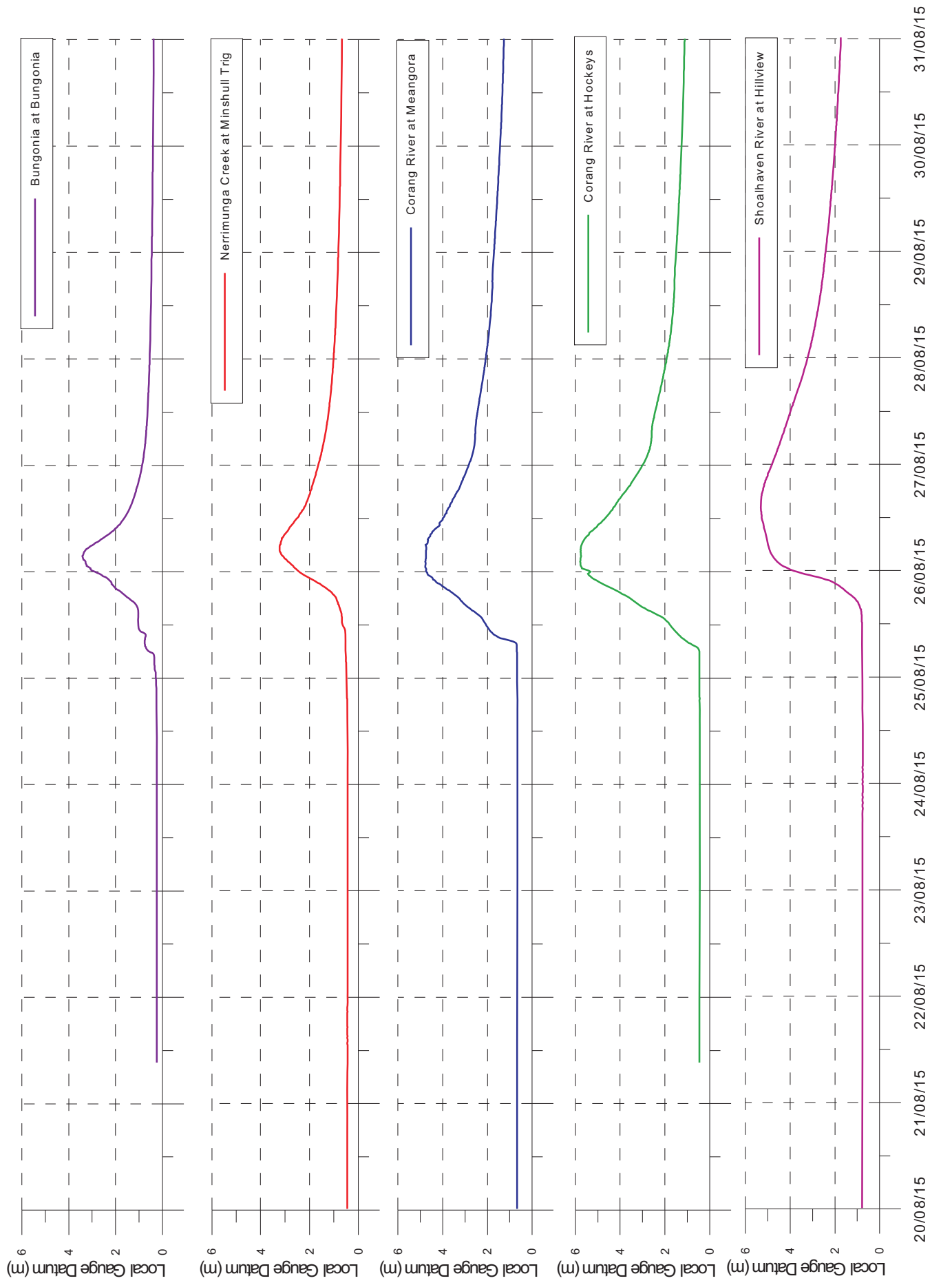
24 hour rainfall totals up until 9.00 a.m. are displayed in Tables 6.5 and in Figures 6.30 to 6.31 for the period 20th to 31st August 2015. The rainfall data and intensities are displayed graphically in Figures 6.32 to 6.40.

Table 6.5 Central Shoalhaven river region daily rainfall totals

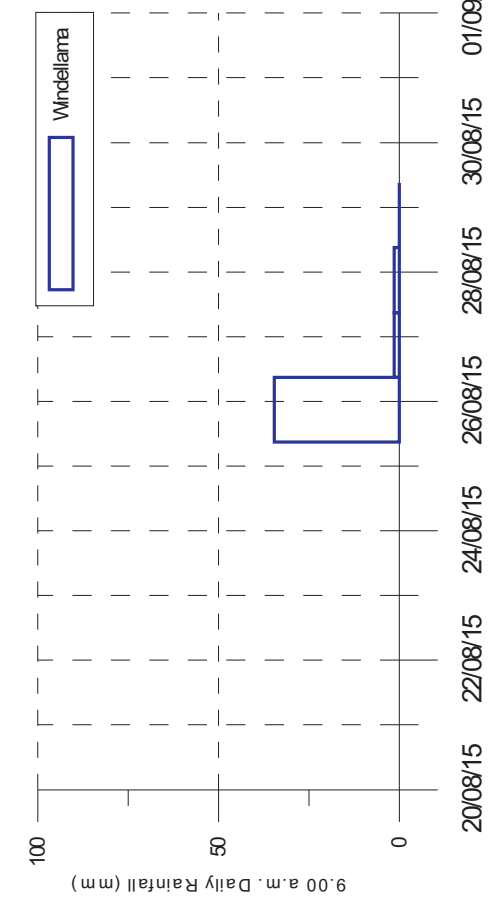
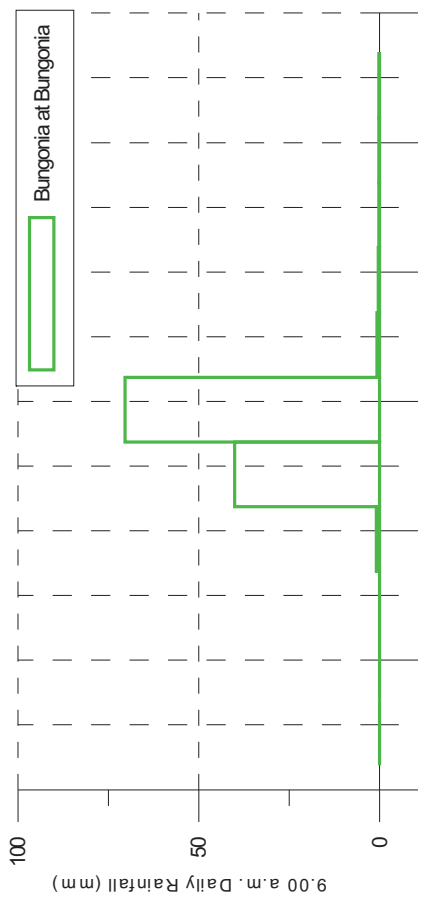
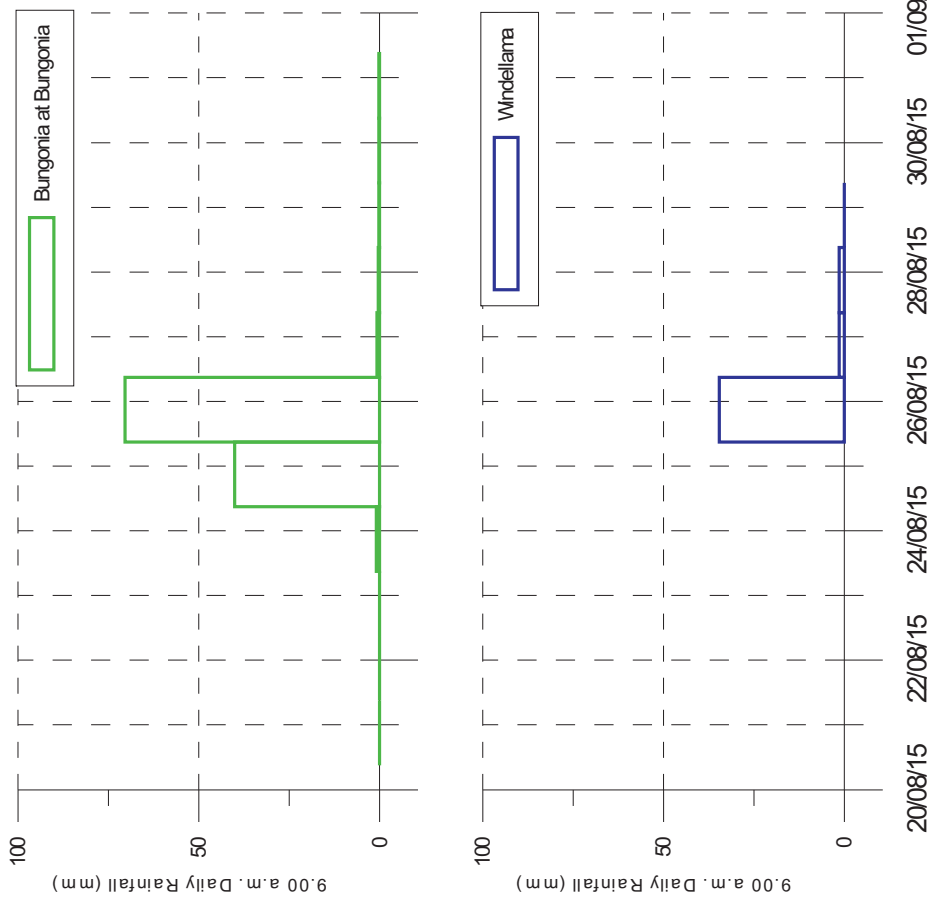
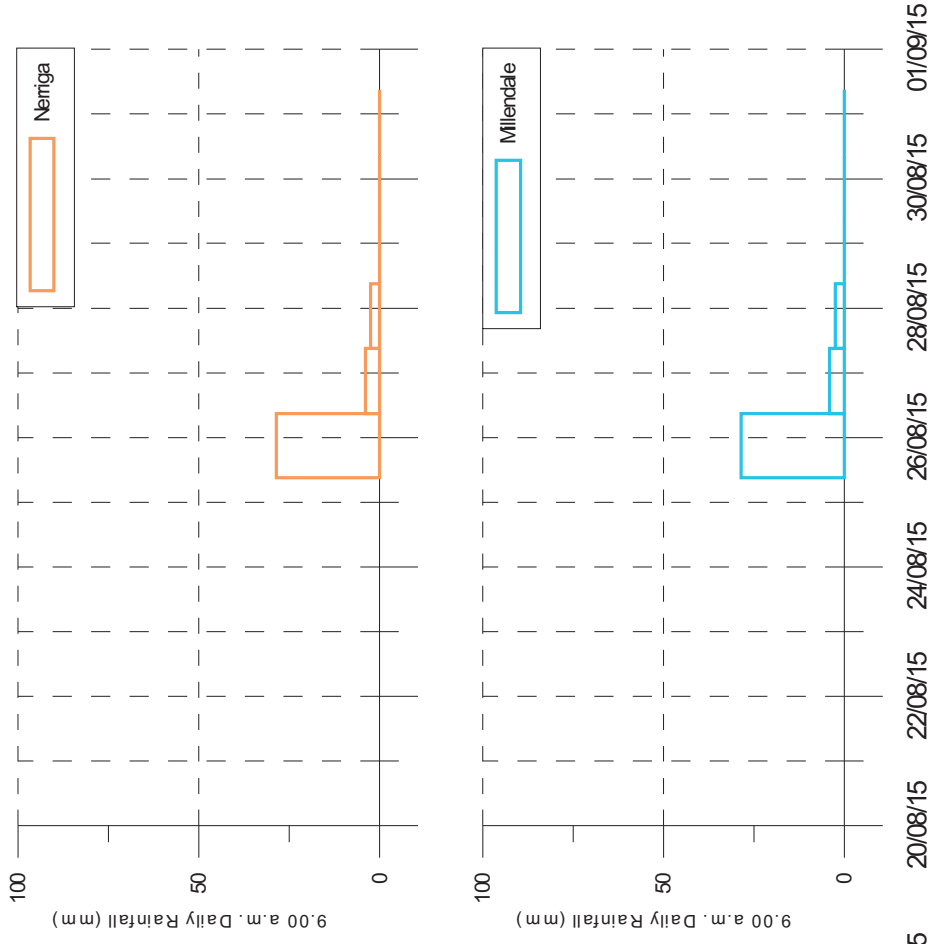
Date	Bungonia at Bungonia (mm)	Windellama (mm)	Nerriga (mm)	Millendale (mm)	Oallen (Hillview) (mm)	Hillview (mm)	Oallen (Moga) (mm)	Duan Durra (mm)	Mongarlowe (Leweston) (mm)
	DPI Water	BoM	BoM	BoM	WaterNSW	BoM	WaterNSW	BoM	BoM
20/08/2015	0.0	^	0.0	^	0.0	0.0	0.0	^	0.2
21/08/2015	0.0	^	0.0	^	0.0	0.0	0.0	^	0.0
22/08/2015	0.0	^	0.0	^	0.5	0.0	0.0	^	0.0
23/08/2015	0.0	^	0.0	^	0.0	0.0	0.0	^	0.0
24/08/2015	0.9	^	0.0	^	0.0	0.0	0.0	^	4.6
25/08/2015	40.1	^	16.0	^	15.5	14.0	16.0	^	78.0
26/08/2015	70.4	34.5	84.0	28.5	78.5	77.0	71.0	69.0	178.4
27/08/2015	0.7	1.5	8.0	4.0	4.5	4.0	6.5	4.5	23.4
28/08/2015	0.3	1.5	3.0	2.5	2.0	2.0	2.0	4.0	3.6
29/08/2015	0.2	0.0	1.0	0.0	4.0	3.0	2.5	0.0	1.0
30/08/2015	0.2	^	0.0	0.0	0.5	0.0	0.0	0.0	0.0
31/08/2015	0.2	^	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	113.0	37.5	113.0	35.0	105.5	100.0	98.0	77.5	289.2

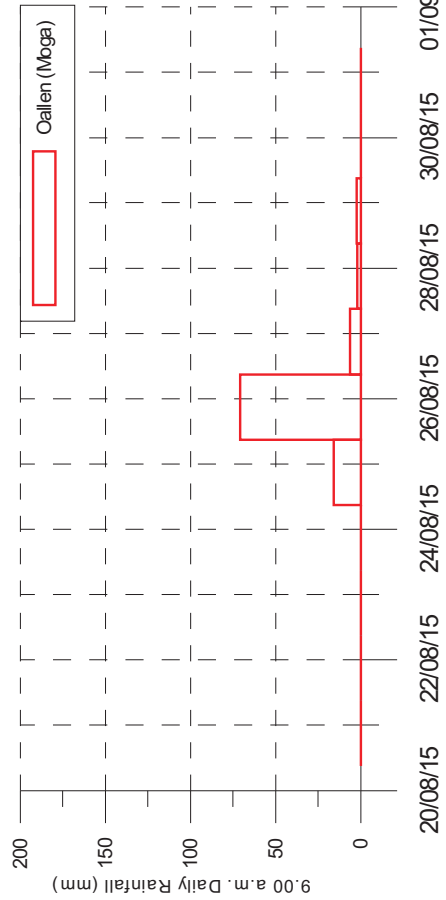
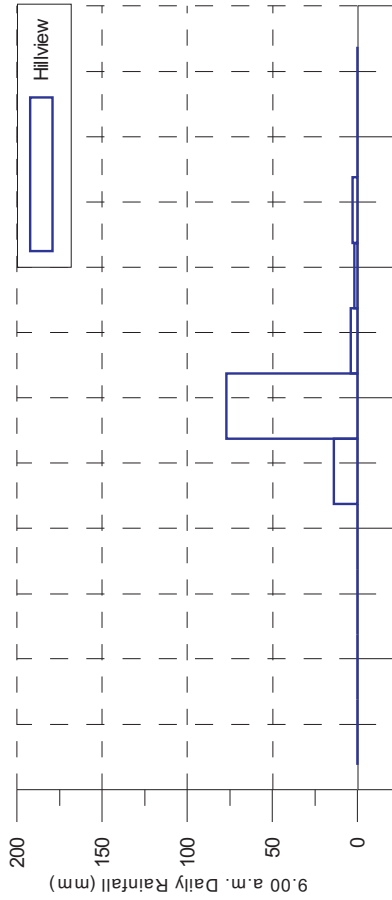
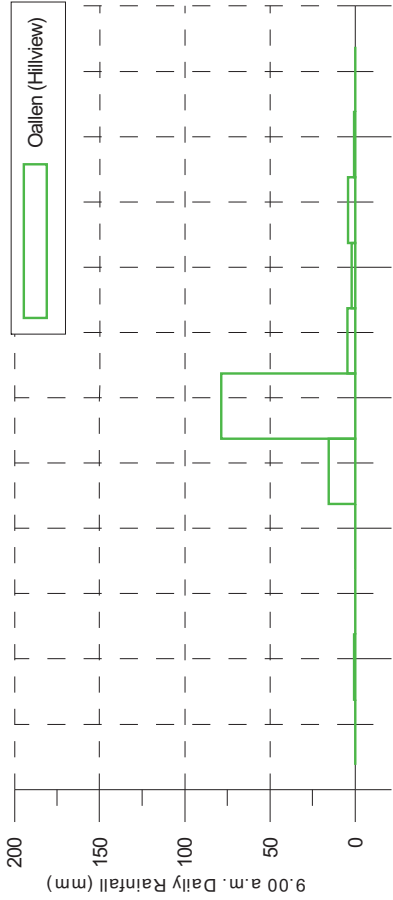
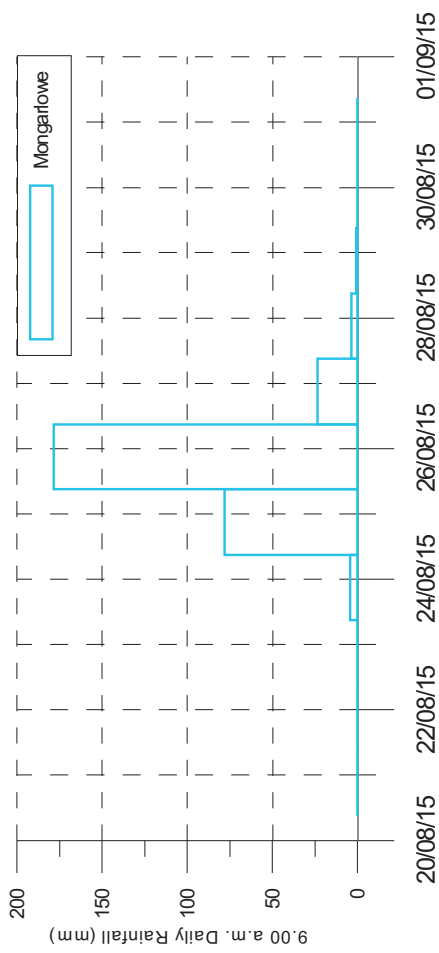
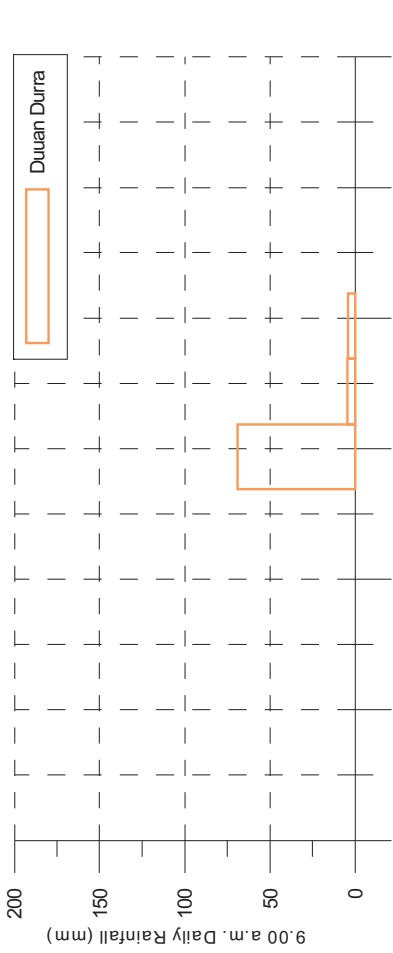
^ Data not provided.

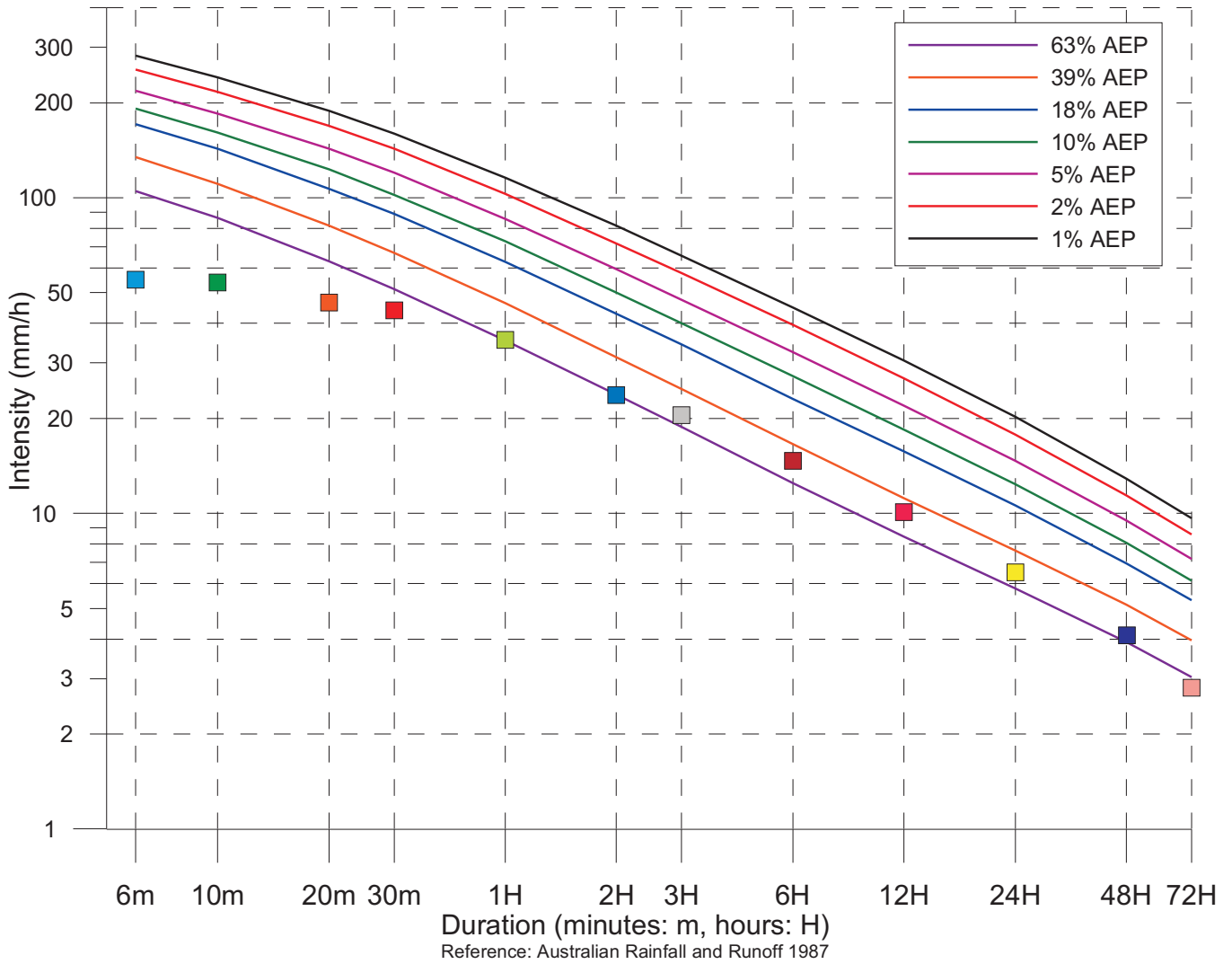








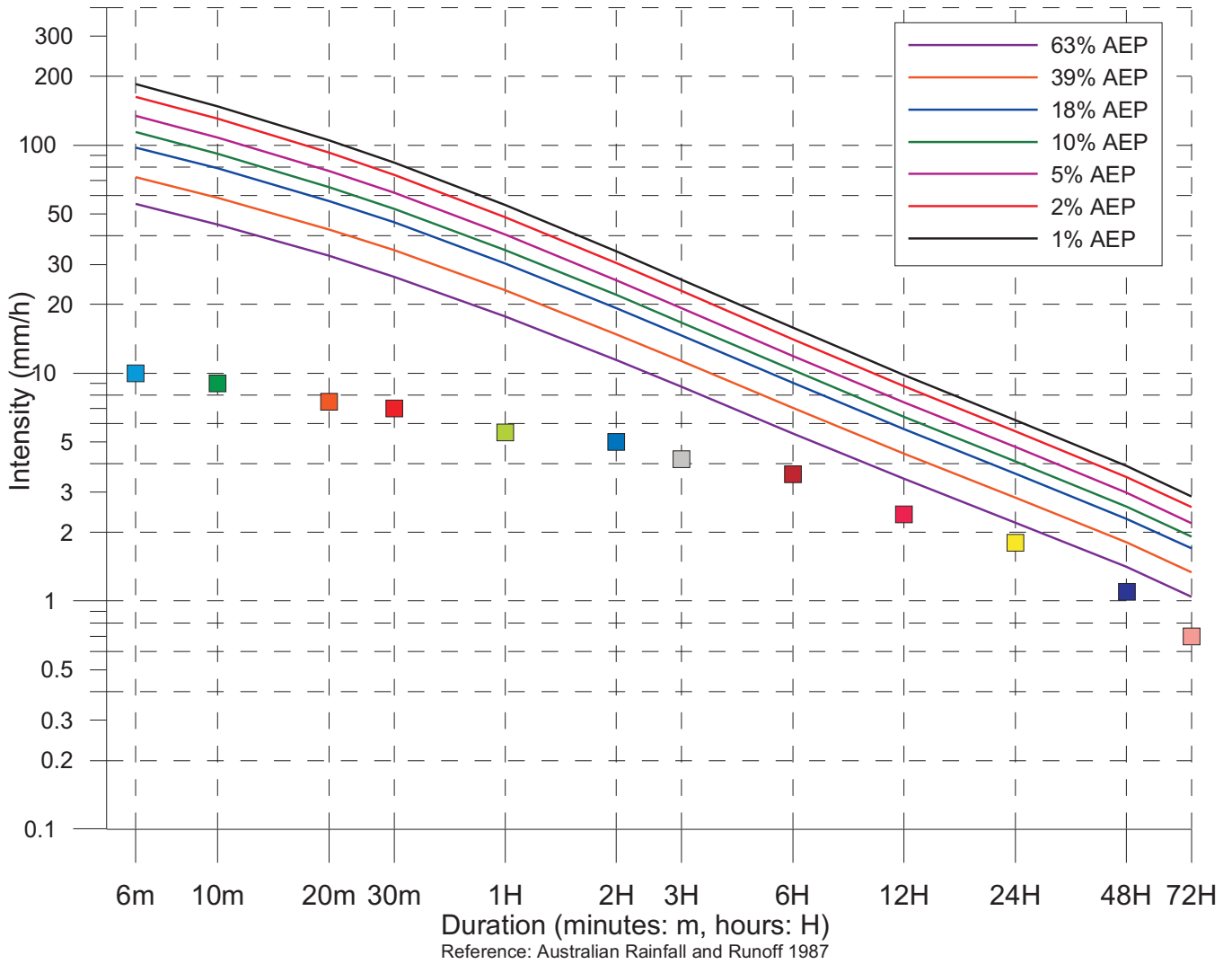




Bungonia Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	12.7	00:04_26/08/2015
10m	11.6	00:04_26/08/2015
20m	9.4	00:00_26/08/2015
30m	8.4	23:50_25/08/2015
1H	7.7	23:50_25/08/2015
2H	6.9	23:38_25/08/2015
3H	6.3	23:08_25/08/2015
6H	5.7	20:50_25/08/2015
12H	4.4	14:24_25/08/2015
24H	3.1	05:40_25/08/2015
48H	2.3	09:08_24/08/2015
72H	1.5	20:38_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

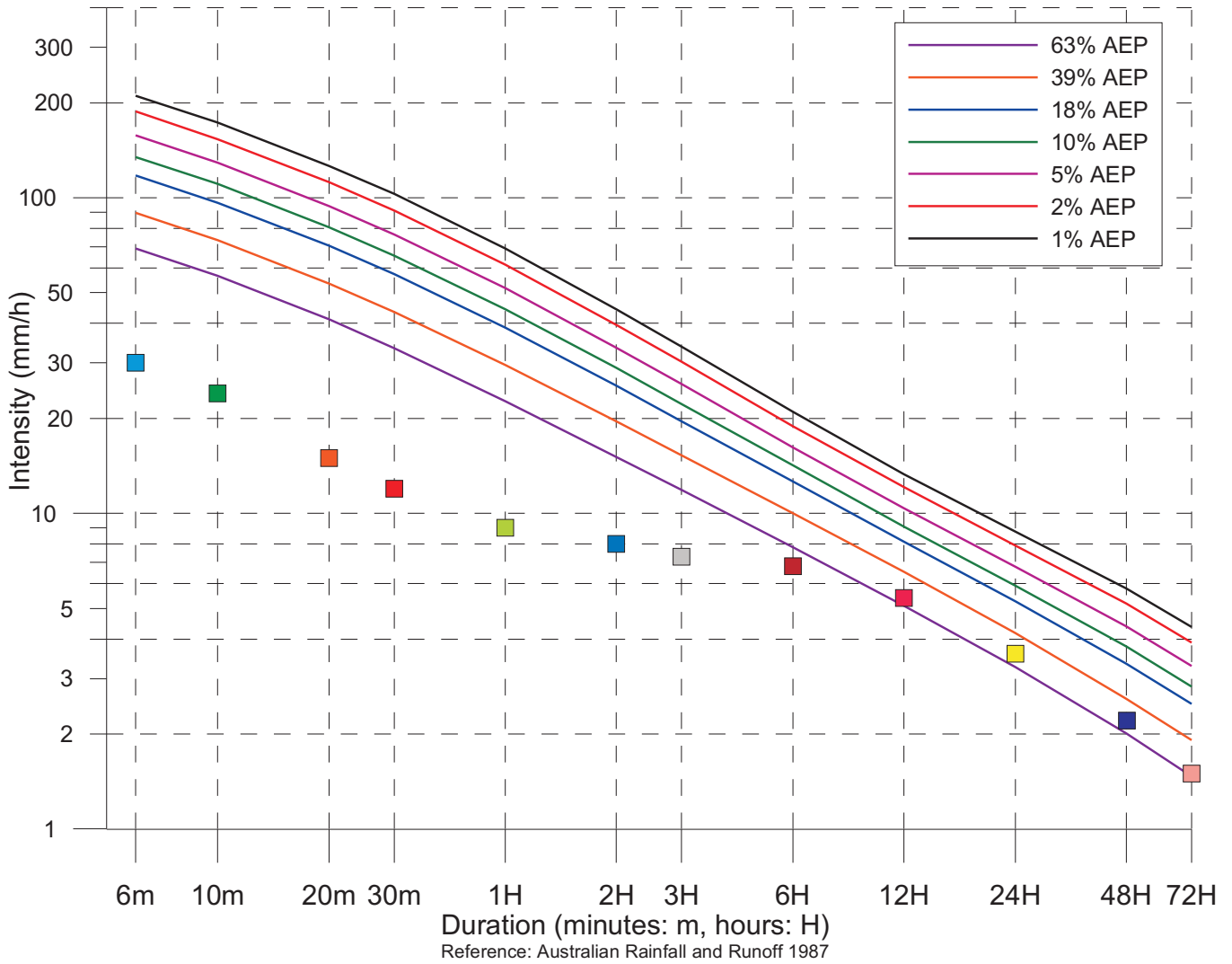




Windellama Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	10	20:58_24/08/2015
10m	9	19:32_25/08/2015
20m	7.5	19:24_25/08/2015
30m	7	19:24_25/08/2015
1H	5.5	19:08_25/08/2015
2H	5	17:54_25/08/2015
3H	4.2	17:16_25/08/2015
6H	3.6	14:18_25/08/2015
12H	2.4	11:34_25/08/2015
24H	1.8	22:44_24/08/2015
48H	1.1	20:54_24/08/2015
72H	0.7	20:54_24/08/2015

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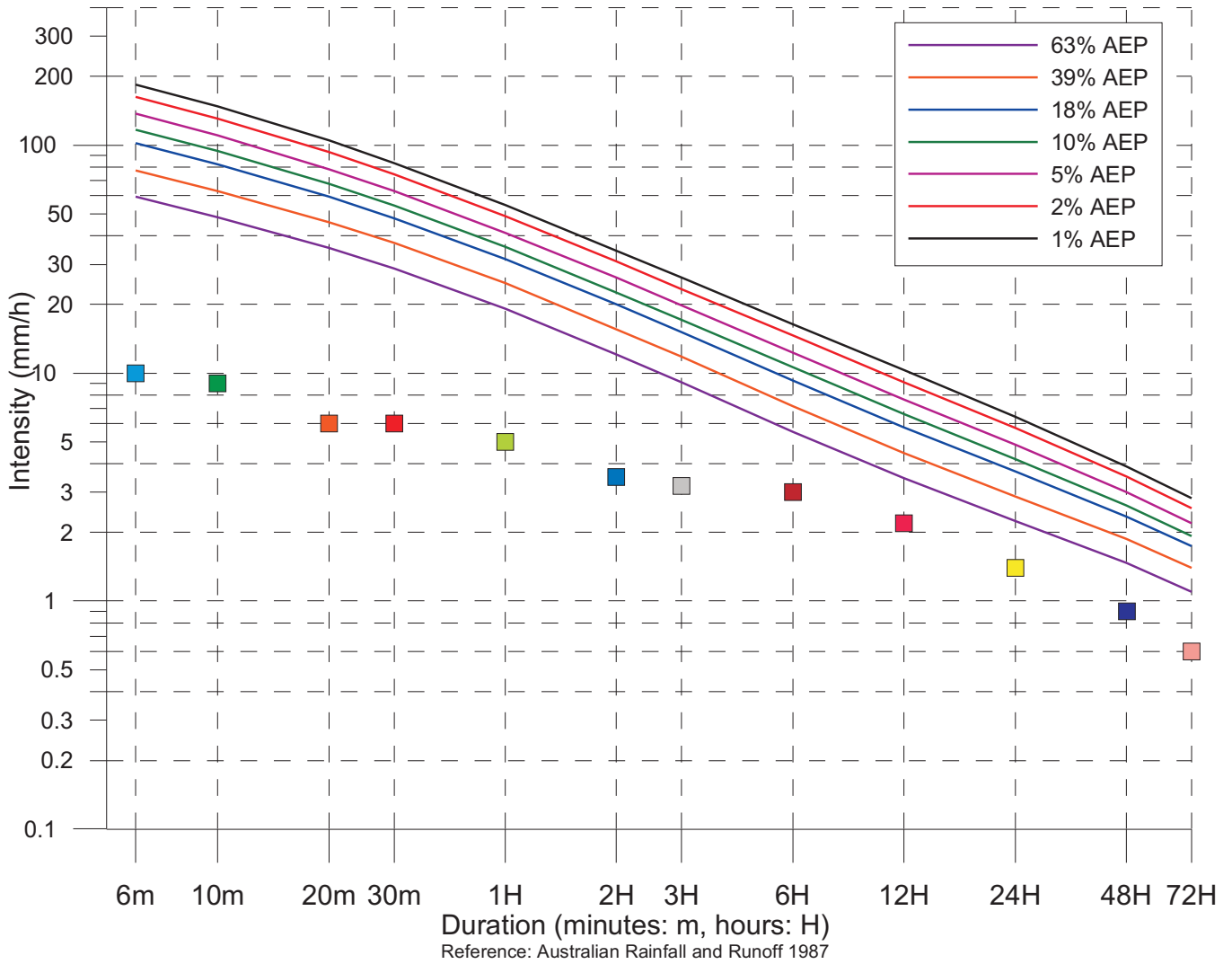




Nerriga Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	30	21:52_25/08/2015
10m	24	13:32_25/08/2015
20m	15	13:32_25/08/2015
30m	12	13:32_25/08/2015
1H	9	13:32_25/08/2015
2H	8	16:10_25/08/2015
3H	7.3	16:26_25/08/2015
6H	6.8	13:32_25/08/2015
12H	5.4	13:32_25/08/2015
24H	3.6	07:50_25/08/2015
48H	2.2	14:08_24/08/2015
72H	1.5	14:08_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

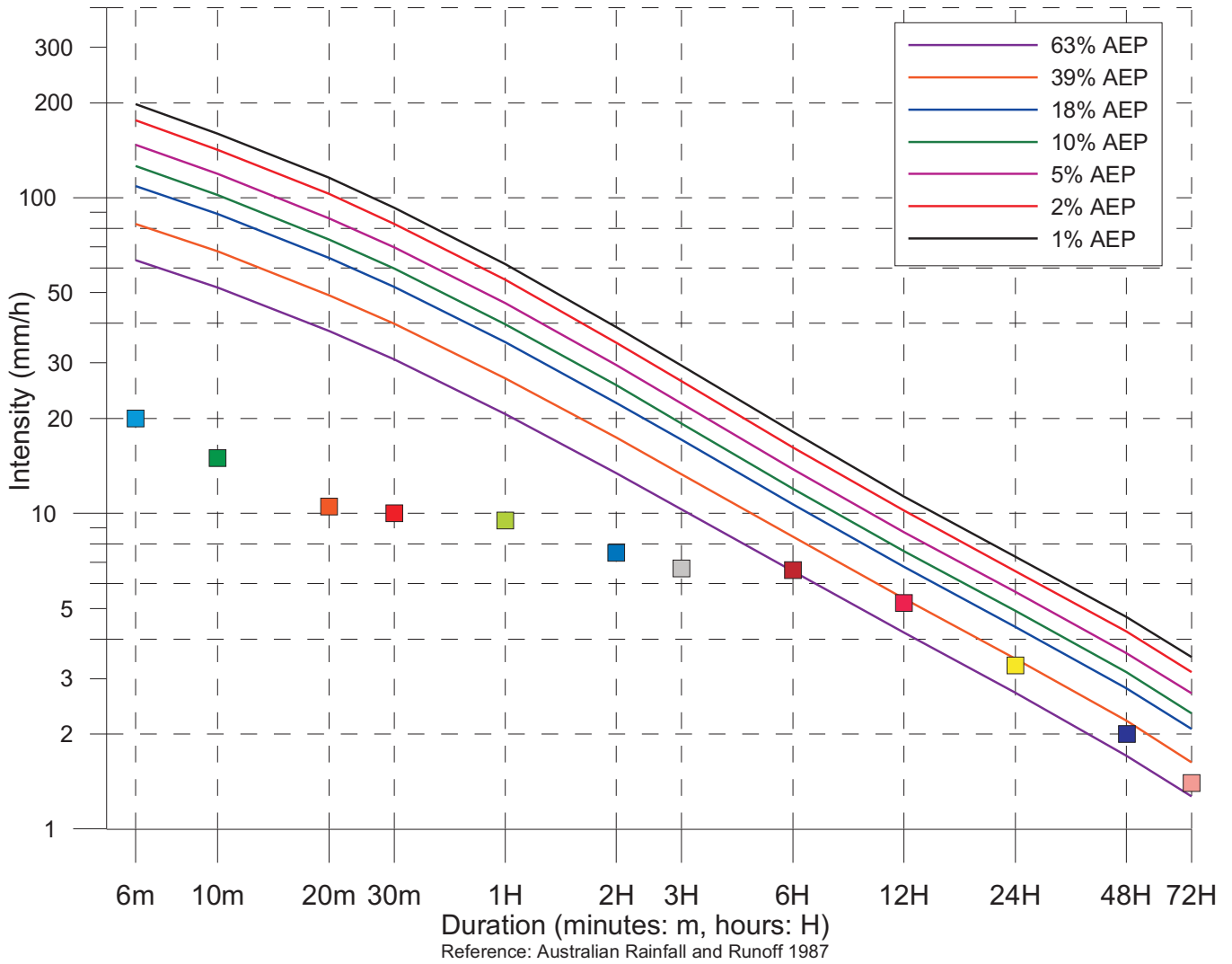




Millendale Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	10	19:44_25/08/2015
10m	9	21:10_24/08/2015
20m	6	14:36_25/08/2015
30m	6	14:26_25/08/2015
1H	5	14:10_25/08/2015
2H	3.5	14:06_25/08/2015
3H	3.2	13:54_25/08/2015
6H	3	14:06_25/08/2015
12H	2.2	13:54_25/08/2015
24H	1.4	23:14_24/08/2015
48H	0.9	21:10_24/08/2015
72H	0.6	21:10_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

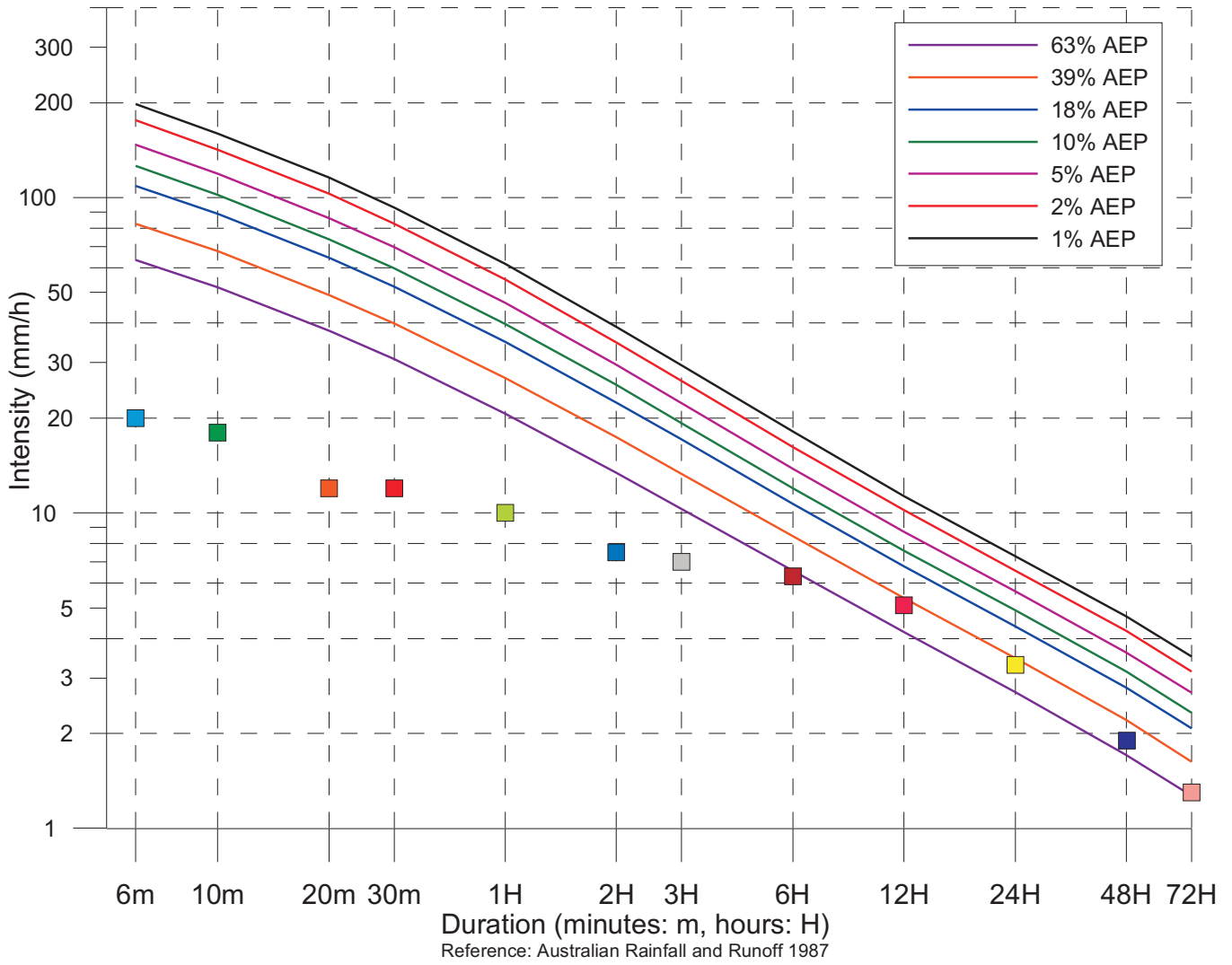




Oallen (Hillview) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	20	15:56_28/08/2015
10m	15	15:54_28/08/2015
20m	10.5	15:54_28/08/2015
30m	10	17:46_25/08/2015
1H	9.5	13:44_25/08/2015
2H	7.5	16:16_25/08/2015
3H	6.7	16:46_25/08/2015
6H	6.6	13:50_25/08/2015
12H	5.2	13:16_25/08/2015
24H	3.3	11:08_25/08/2015
48H	2	13:38_24/08/2015
72H	1.4	13:38_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

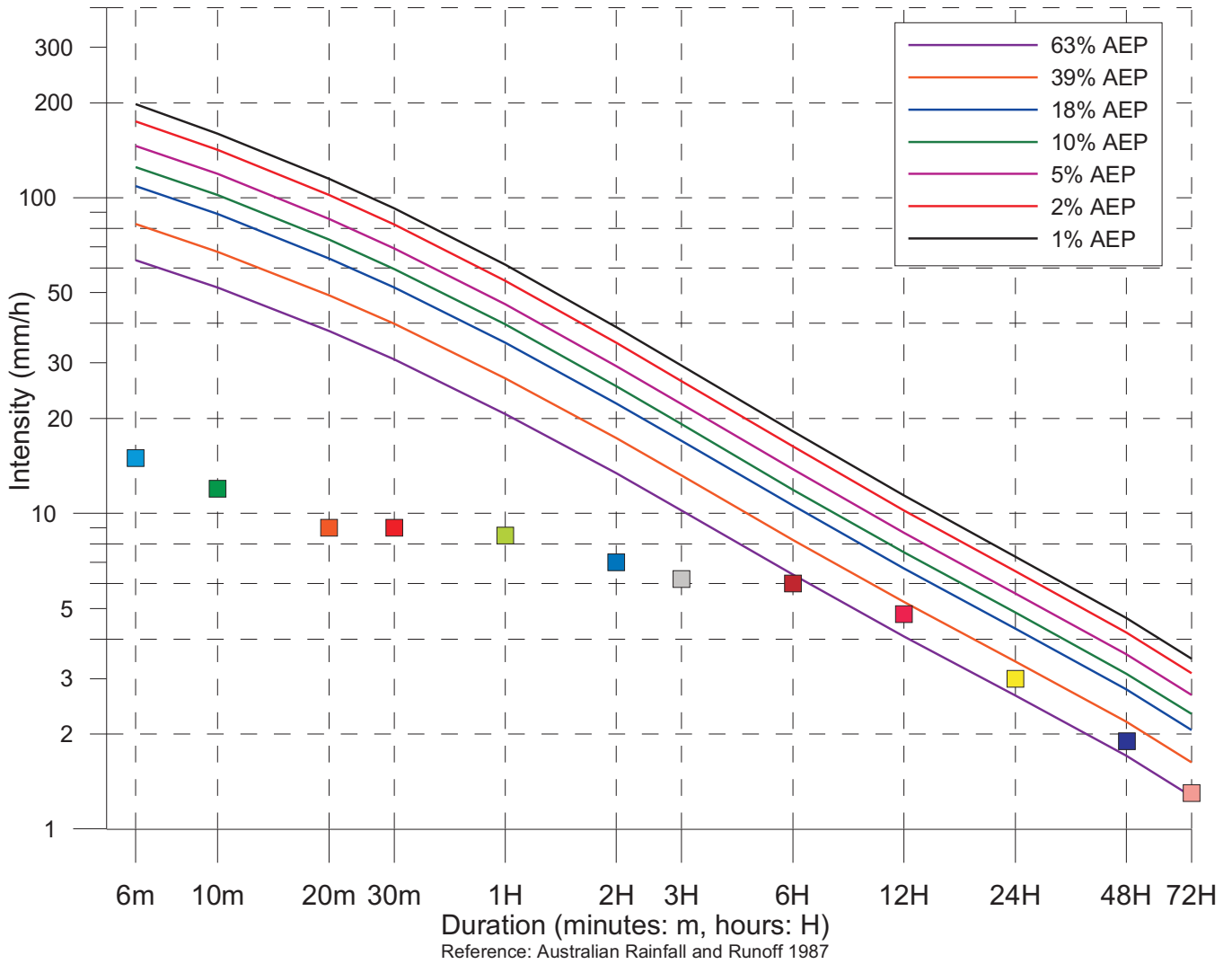




Hillview Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	20	10:20_26/08/2015
10m	18	19:42_25/08/2015
20m	12	14:22_25/08/2015
30m	12	14:22_25/08/2015
1H	10	13:44_25/08/2015
2H	7.5	13:38_25/08/2015
3H	7	13:30_25/08/2015
6H	6.3	13:44_25/08/2015
12H	5.1	13:30_25/08/2015
24H	3.3	11:04_25/08/2015
48H	1.9	14:10_24/08/2015
72H	1.3	13:44_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

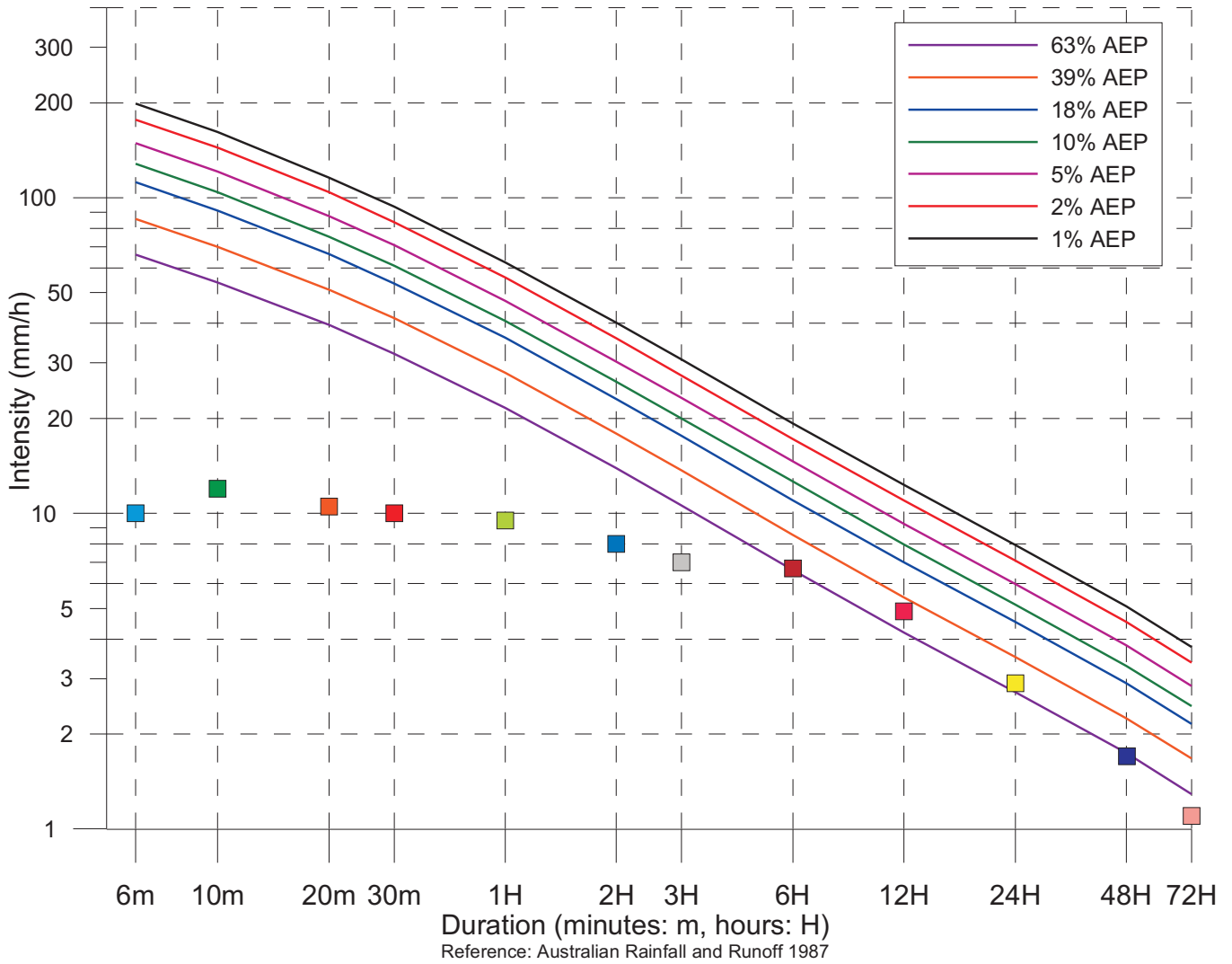




Oallen (Moga) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	15	16:00_28/08/2015
10m	12	17:54_25/08/2015
20m	9	17:54_25/08/2015
30m	9	14:02_25/08/2015
1H	8.5	13:44_25/08/2015
2H	7	13:36_25/08/2015
3H	6.2	13:46_25/08/2015
6H	6	13:44_25/08/2015
12H	4.8	12:56_25/08/2015
24H	3	12:14_25/08/2015
48H	1.9	15:48_24/08/2015
72H	1.3	13:32_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

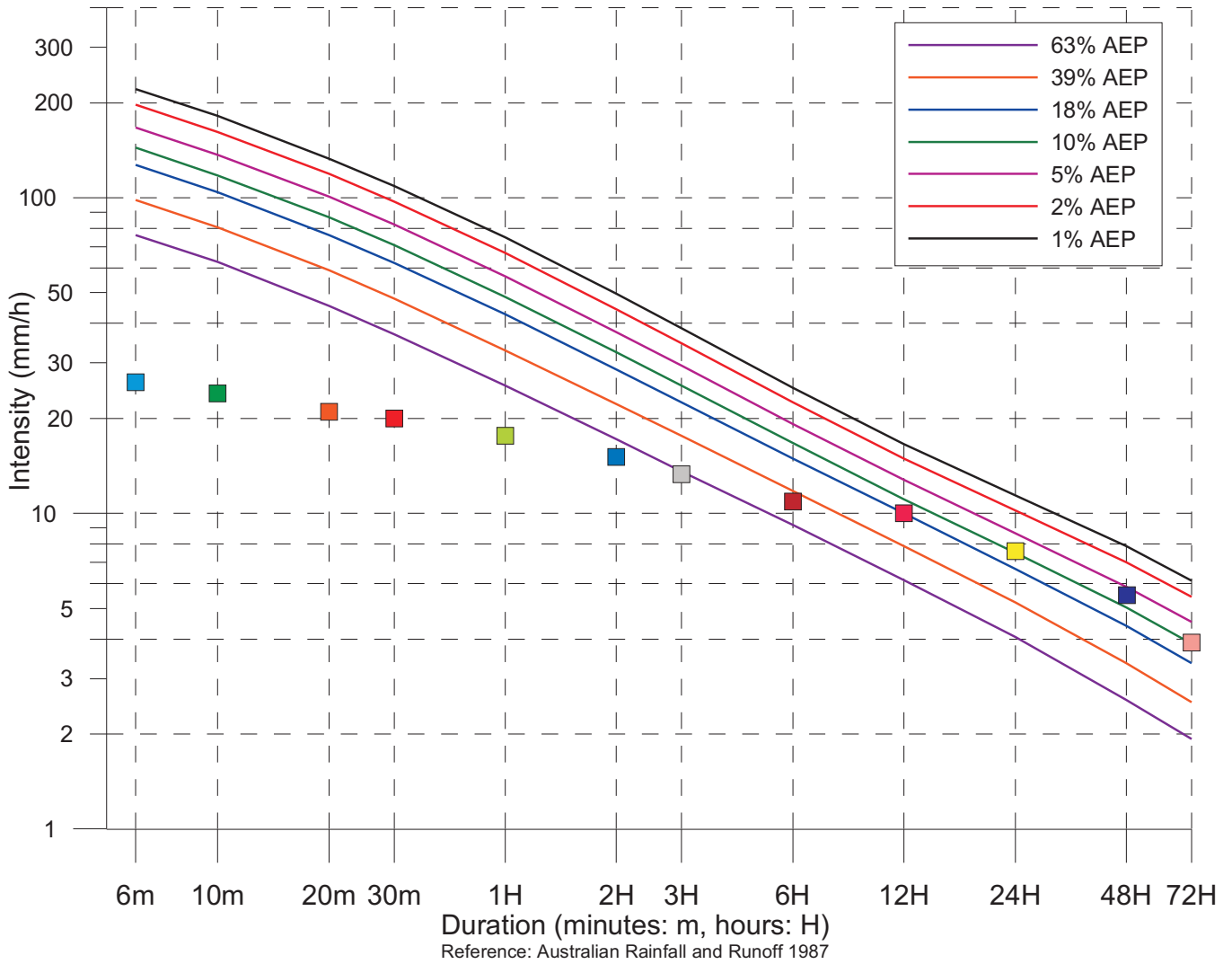




Duan Durra Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	10	17:42_25/08/2015
10m	12	17:22_25/08/2015
20m	10.5	17:12_25/08/2015
30m	10	17:10_25/08/2015
1H	9.5	13:44_25/08/2015
2H	8	13:42_25/08/2015
3H	7	13:48_25/08/2015
6H	6.7	13:42_25/08/2015
12H	4.9	13:00_25/08/2015
24H	2.9	09:40_25/08/2015
48H	1.7	21:48_24/08/2015
72H	1.1	21:48_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*





Mongarlowe (Leweston) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	26	18:08_25/08/2015
10m	24	18:06_25/08/2015
20m	21	17:56_25/08/2015
30m	20	17:48_25/08/2015
1H	17.6	17:18_25/08/2015
2H	15.1	16:24_25/08/2015
3H	13.3	16:12_25/08/2015
6H	10.9	13:40_25/08/2015
12H	10	13:30_25/08/2015
24H	7.6	05:42_25/08/2015
48H	5.5	12:12_24/08/2015
72H	3.9	05:36_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*



6.5 Shoalhaven river region - south - water level

The locations of water level stations within the south Shoalhaven river region are shown in Figure 6.41. The water level data for the period 20th to 31st August 2015 are displayed graphically in Figures 6.42 and 6.43. The peak observed water levels are listed in Table 6.6.

There are no current SES flood classifications for the south Shoalhaven river region.

Table 6.6 South Shoalhaven river region flood peaks

Station Name	Station No.	Site Owner	Datum	Peak level (m)
Mongarlowe River at Mongarlowe	215210	WaterNSW	Local Datum	3.23
Gillamatong Creek No. 2	215237B	WaterNSW	Local Datum	2.73
Shoalhaven River at Mountview	215209	WaterNSW	Local Datum	3.16
Jembaicumbene Creek at Bendoura	215241	WaterNSW	Local Datum	3.22
Mongarlowe River at Monga	215007	DPI Water	Local Datum	2.08
Shoalhaven at Kadoona	215008	DPI Water	Local Datum	1.38

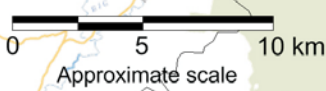
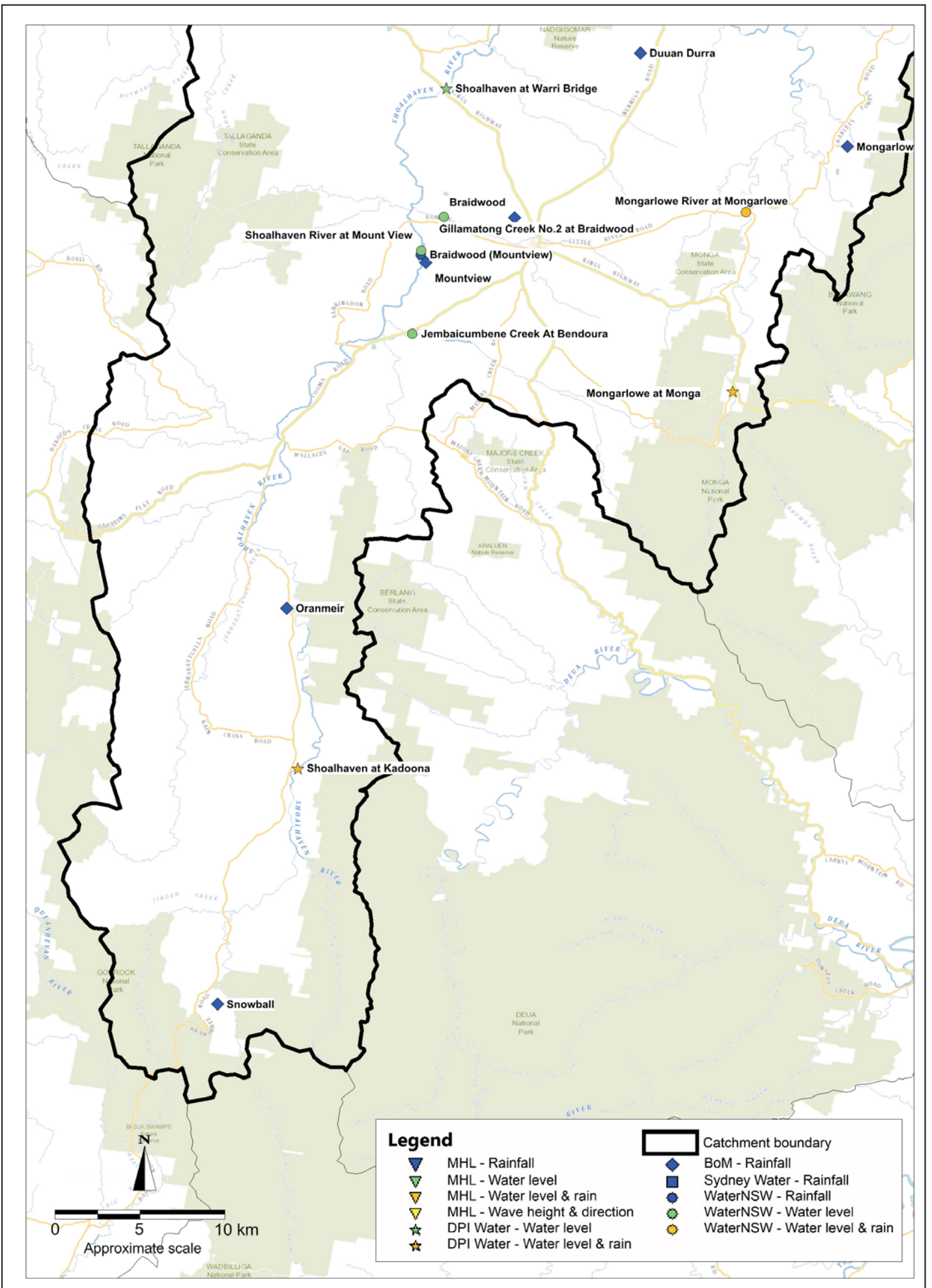
6.6 Shoalhaven river region – south - rainfall

24 hour rainfall totals up until 9.00 a.m. are displayed in Tables 6.7 and in Figures 6.44 to 6.45 for the period 20th to 31st August 2015. The rainfall data and intensities are displayed graphically in Figures 6.46 to 6.53.

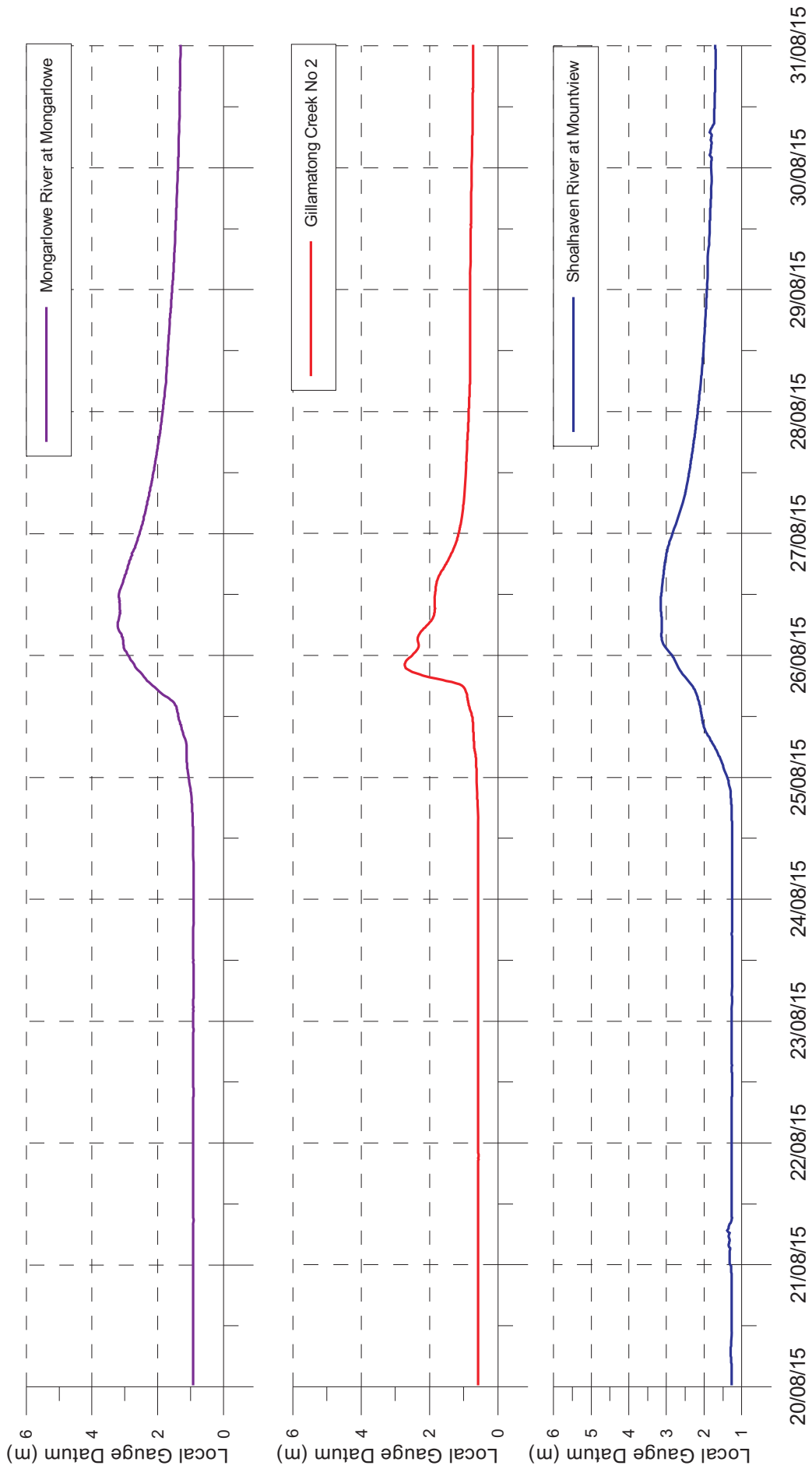
Table 6.7 South Shoalhaven river region daily rainfall totals

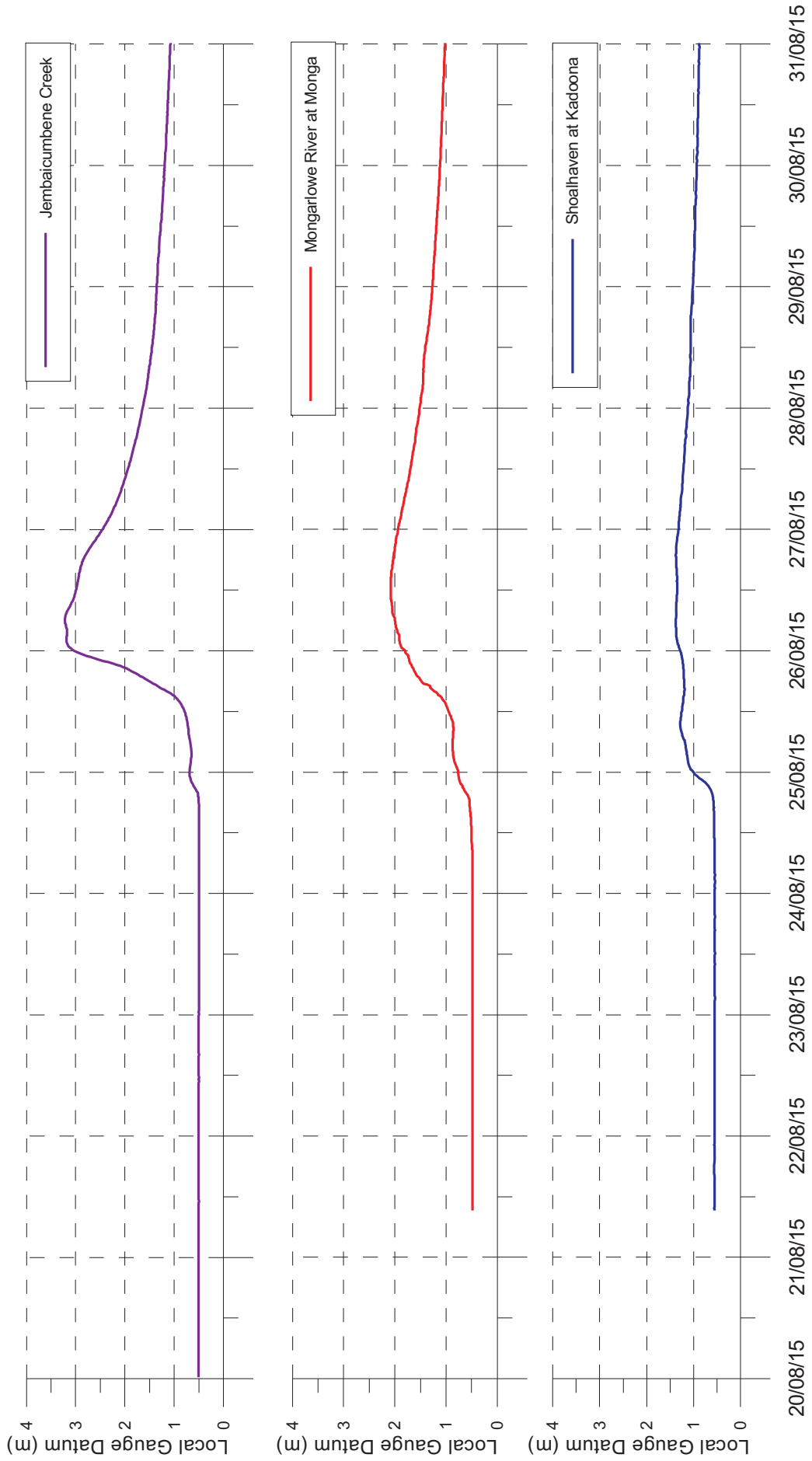
Date	Mongarlowe (mm)	Braidwood (mm)	Braidwood (Mountview) (mm)	Mountview (mm)	Mongarlowe River at Monga	Oranmeir (mm)	Kadoona	Snowball (mm)
	WaterNSW	BoM	WaterNSW	BoM	DPI Water	BoM	DPI Water	BoM
20/08/2015	0.0	0.0	0.0	0.0	0.0	^	0.0	0.0
21/08/2015	0.0	0.2	0.0	0.0	0.0	^	0.0	0.0
22/08/2015	0.0	0.0	1.0	1.0	0.0	^	0.0	0.0
23/08/2015	0.0	0.2	0.0	0.0	0.0	^	0.0	0.0
24/08/2015	1.0	0.2	0.5	0.0	0.0	^	2.0	3.0
25/08/2015	58.0	28.2	32.0	30.0	64.0	^	49.5	43.0
26/08/2015	164.0	53.8	31.0	29.0	123.5	16.5	13.5	39.0
27/08/2015	18.0	3.0	2.0	2.0	23.5	2.0	1.0	3.0
28/08/2015	4.5	3.4	2.0	2.0	8.5	5.0	2.0	5.0
29/08/2015	2.5	2.2	2.0	2.0	1.0	0.5	0.5	0.0
30/08/2015	0.0	0.2	0.0	0.0	0.5	0.0	0.0	0.0
31/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	248.0	91.4	70.5	66.0	221.0	24.0	68.5	93.0

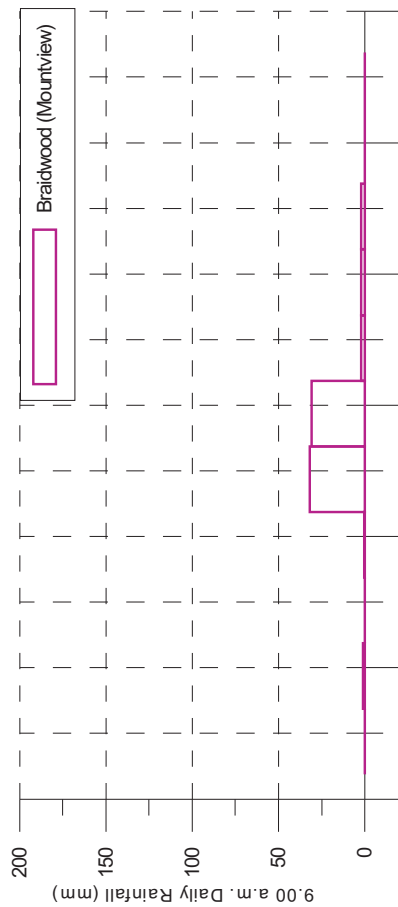
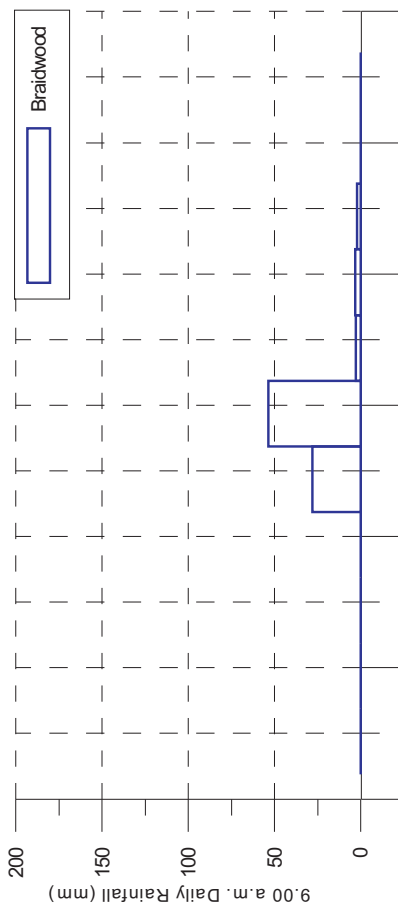
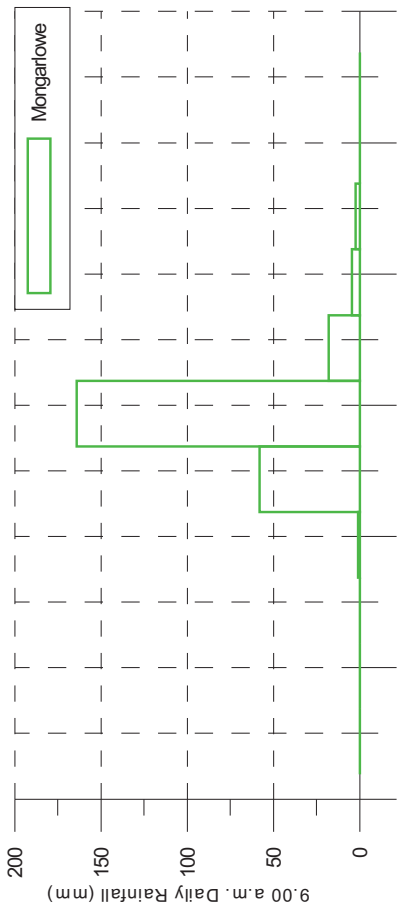
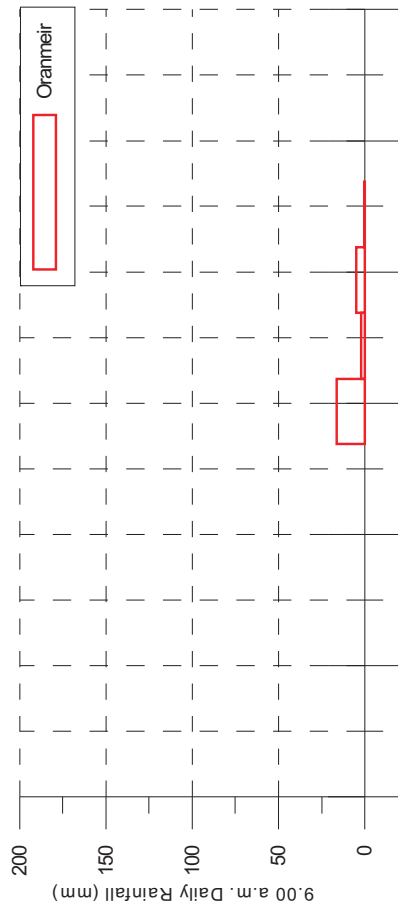
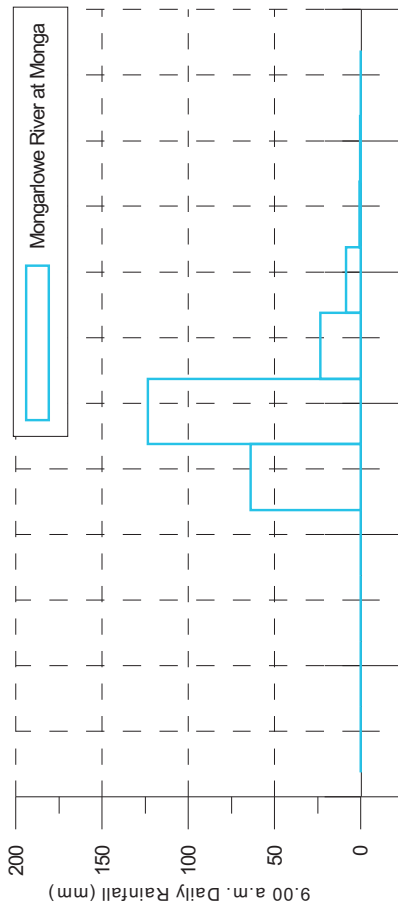
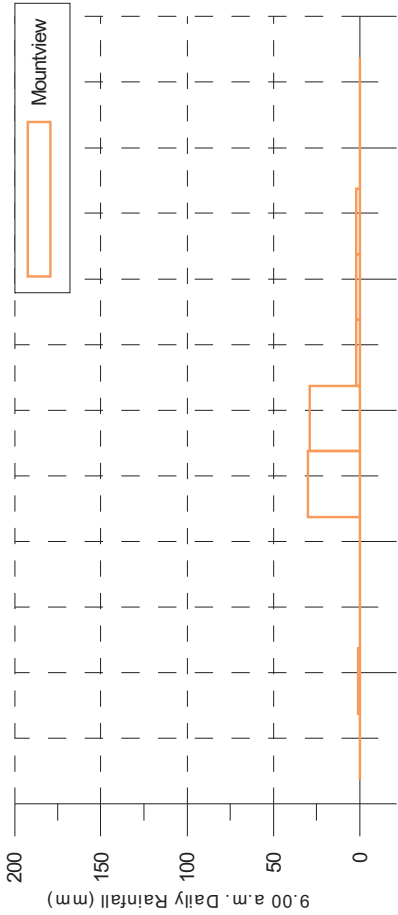
^ Data not provided.

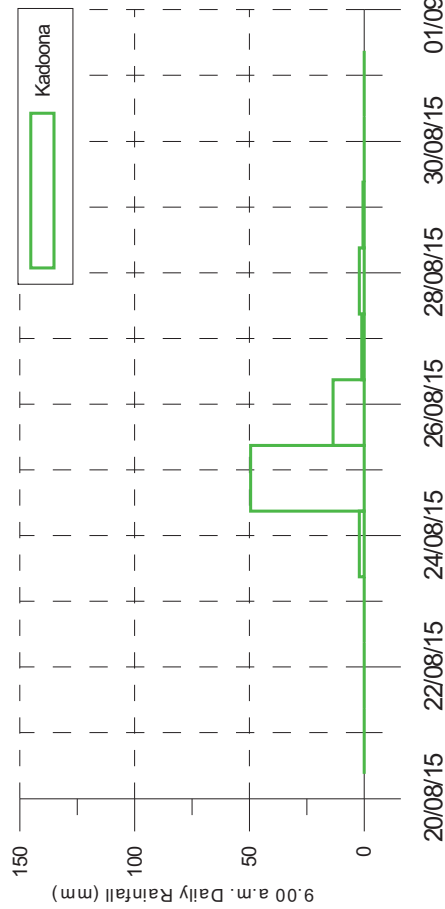
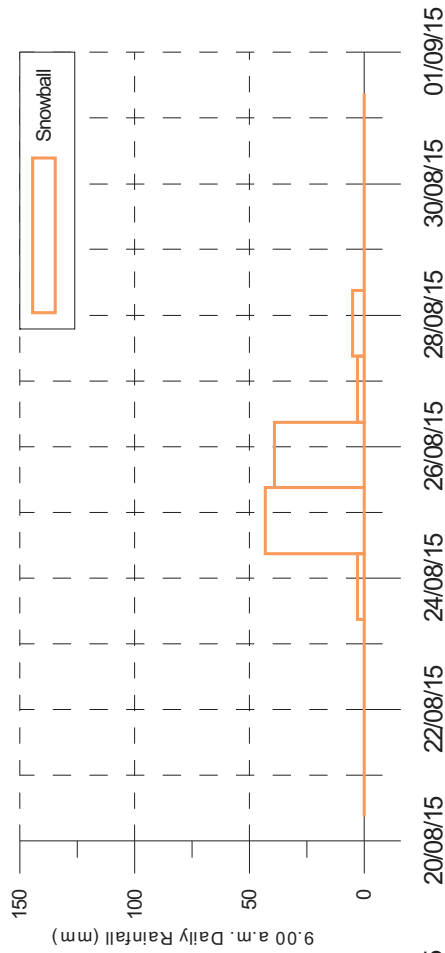


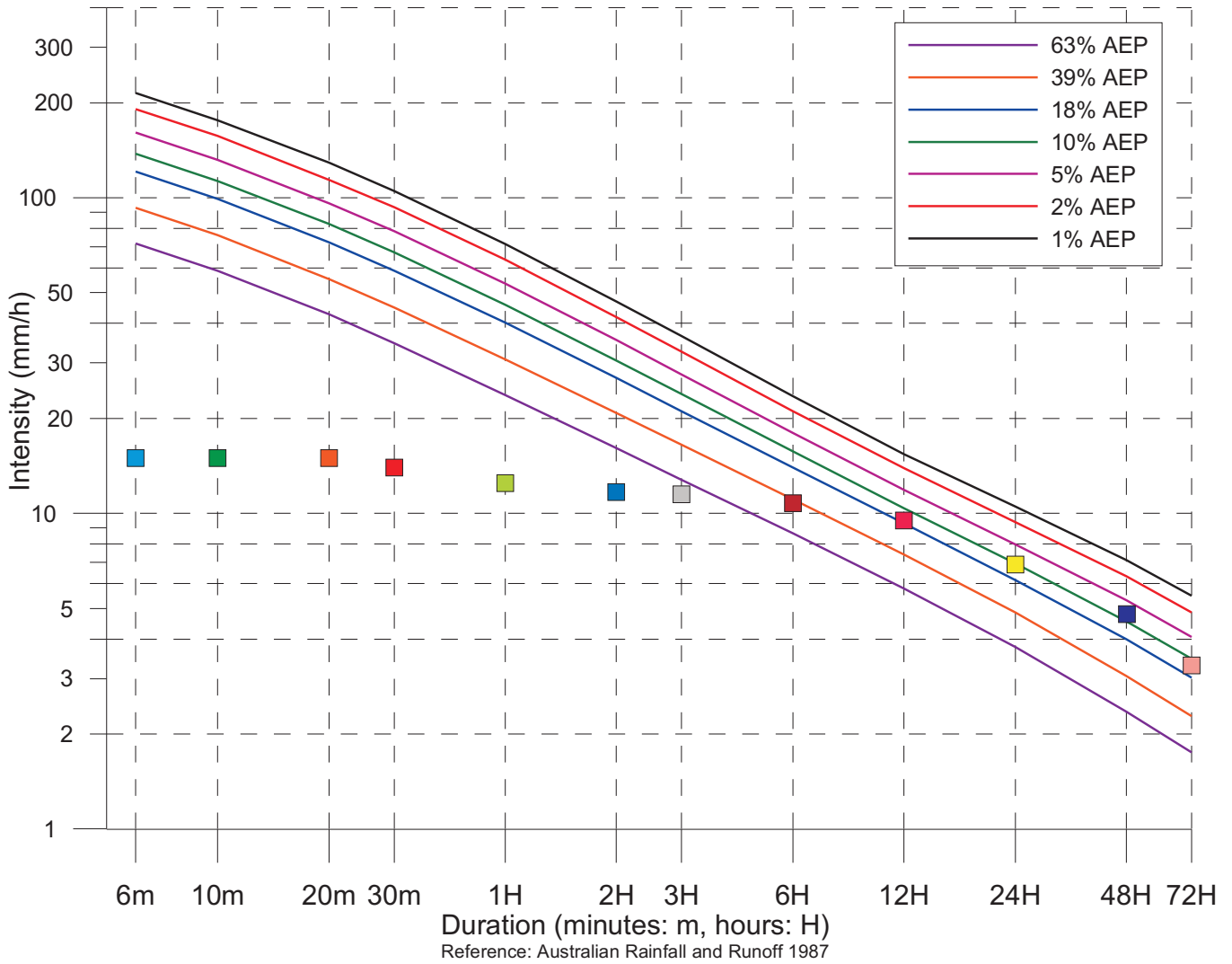
Legend	
	MHL - Rainfall
	MHL - Water level
	MHL - Water level & rain
	MHL - Wave height & direction
	DPI Water - Water level
	DPI Water - Water level & rain
	Catchment boundary
	BoM - Rainfall
	Sydney Water - Rainfall
	WaterNSW - Rainfall
	WaterNSW - Water level
	WaterNSW - Water level & rain







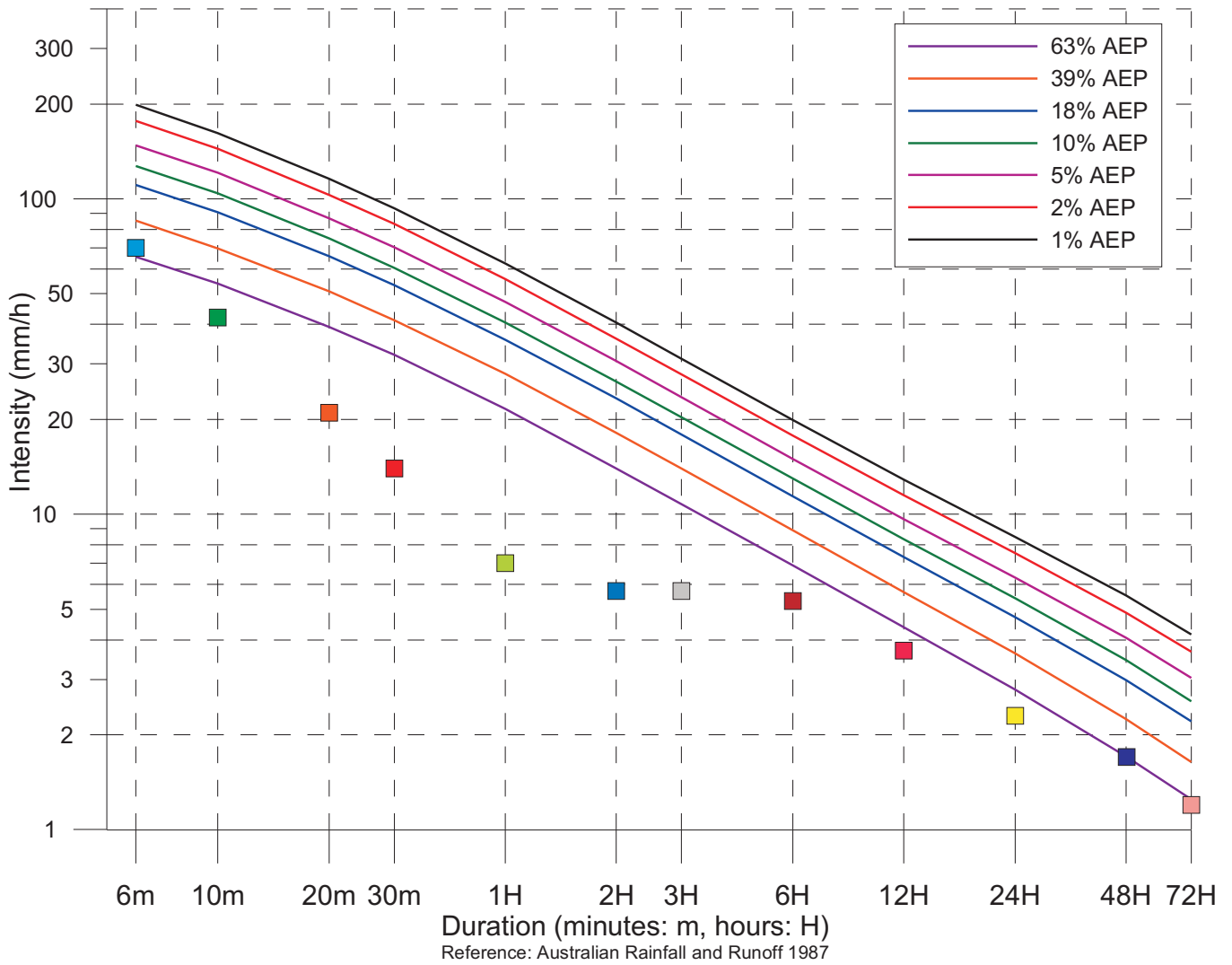




Mongarlowe Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	15	17:04_25/08/2015
10m	15	17:38_25/08/2015
20m	15	17:14_25/08/2015
30m	14	17:18_25/08/2015
1H	12.5	17:04_25/08/2015
2H	11.7	15:46_25/08/2015
3H	11.5	15:00_25/08/2015
6H	10.8	13:26_25/08/2015
12H	9.5	13:00_25/08/2015
24H	6.9	08:34_25/08/2015
48H	4.8	17:16_24/08/2015
72H	3.3	07:26_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

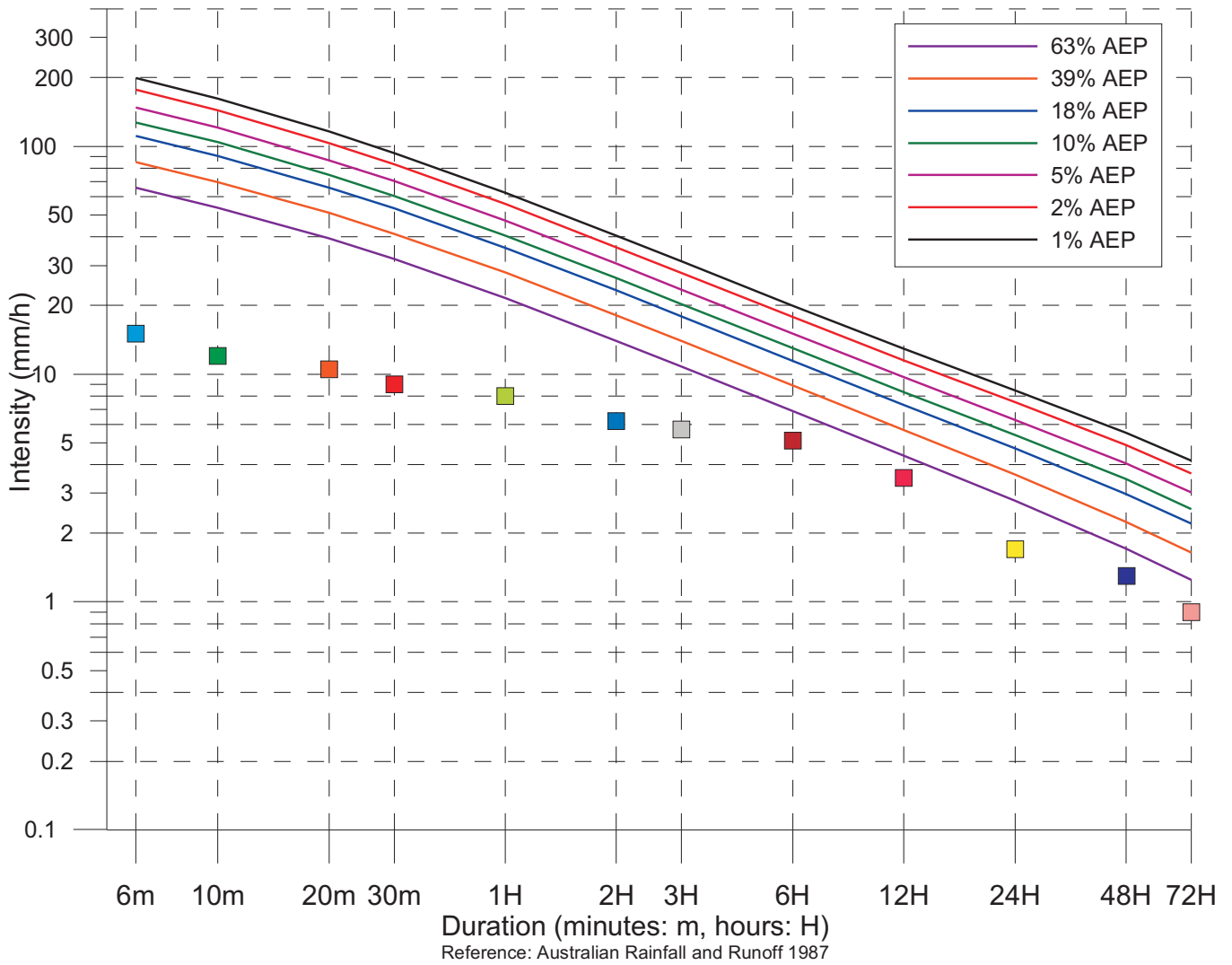




Braidwood Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	70	14:58_25/08/2015
10m	42	14:58_25/08/2015
20m	21	14:58_25/08/2015
30m	14	14:58_25/08/2015
1H	7	14:58_25/08/2015
2H	5.7	17:58_25/08/2015
3H	5.7	16:58_25/08/2015
6H	5.3	14:58_25/08/2015
12H	3.7	13:58_25/08/2015
24H	2.3	01:58_25/08/2015
48H	1.7	13:58_24/08/2015
72H	1.2	06:58_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

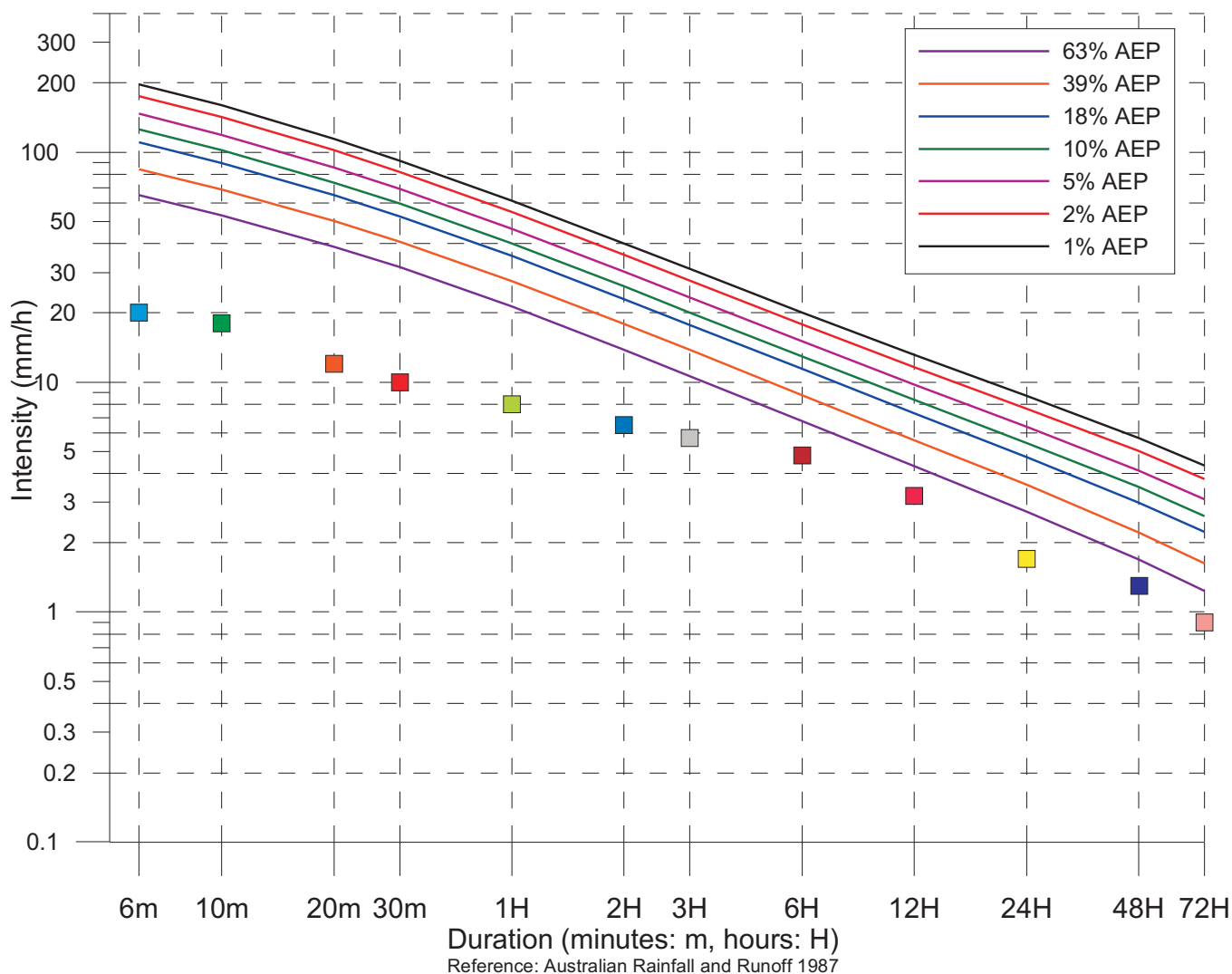




Braidwood (Mountview) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	15	17:32_24/08/2015
10m	12	17:32_24/08/2015
20m	10.5	07:34_02/08/2015
30m	9	17:34_24/08/2015
1H	8	07:04_02/08/2015
2H	6.2	17:18_24/08/2015
3H	5.7	02:04_02/08/2015
6H	5.1	02:26_02/08/2015
12H	3.5	23:18_01/08/2015
24H	1.7	23:18_01/08/2015
48H	1.3	13:38_24/08/2015
72H	0.9	11:10_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

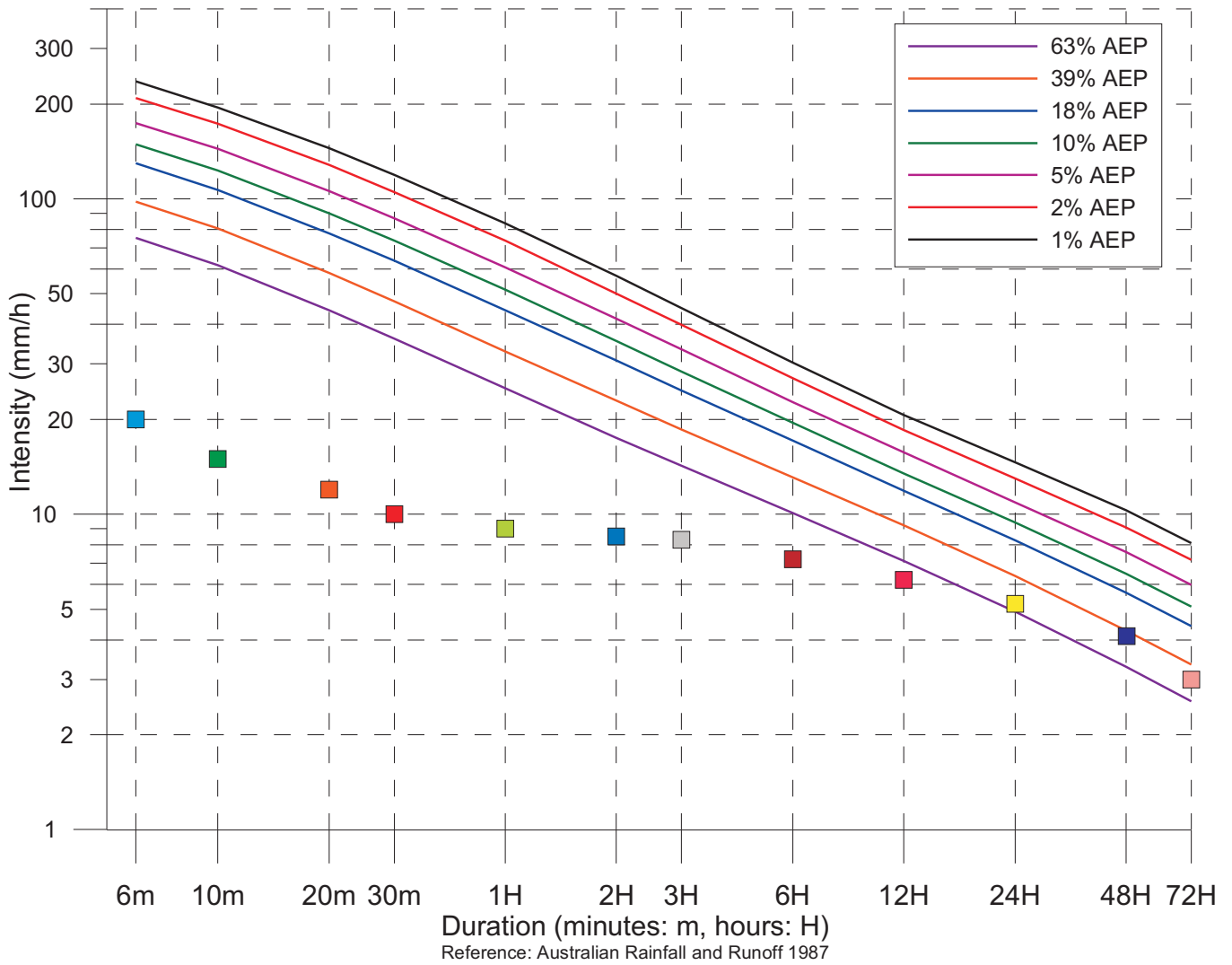




Mountview Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	20	16:12_25/08/2015
10m	18	17:28_24/08/2015
20m	12	17:28_24/08/2015
30m	10	17:36_24/08/2015
1H	8	17:28_24/08/2015
2H	6.5	17:28_24/08/2015
3H	5.7	02:02_02/08/2015
6H	4.8	02:02_02/08/2015
12H	3.2	00:14_02/08/2015
24H	1.7	17:28_24/08/2015
48H	1.3	13:24_24/08/2015
72H	0.9	13:24_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

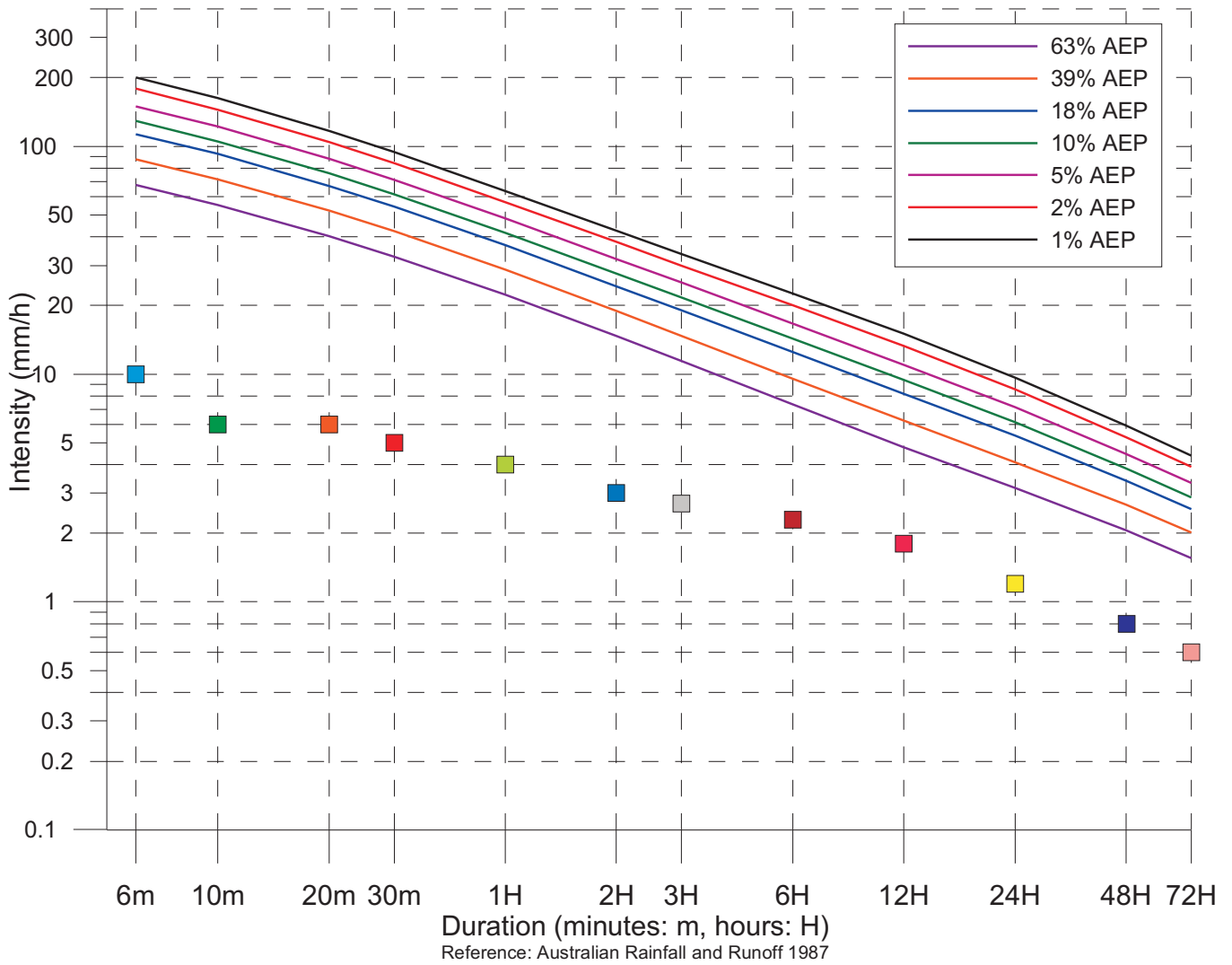




Mongarlowe at Monga Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	20	20:06_24/08/2015
10m	15	20:06_24/08/2015
20m	12	19:54_24/08/2015
30m	10	16:14_25/08/2015
1H	9	15:56_25/08/2015
2H	8.5	15:02_25/08/2015
3H	8.3	14:38_25/08/2015
6H	7.2	13:18_25/08/2015
12H	6.2	13:18_25/08/2015
24H	5.2	10:36_25/08/2015
48H	4.1	17:34_24/08/2015
72H	3	05:12_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

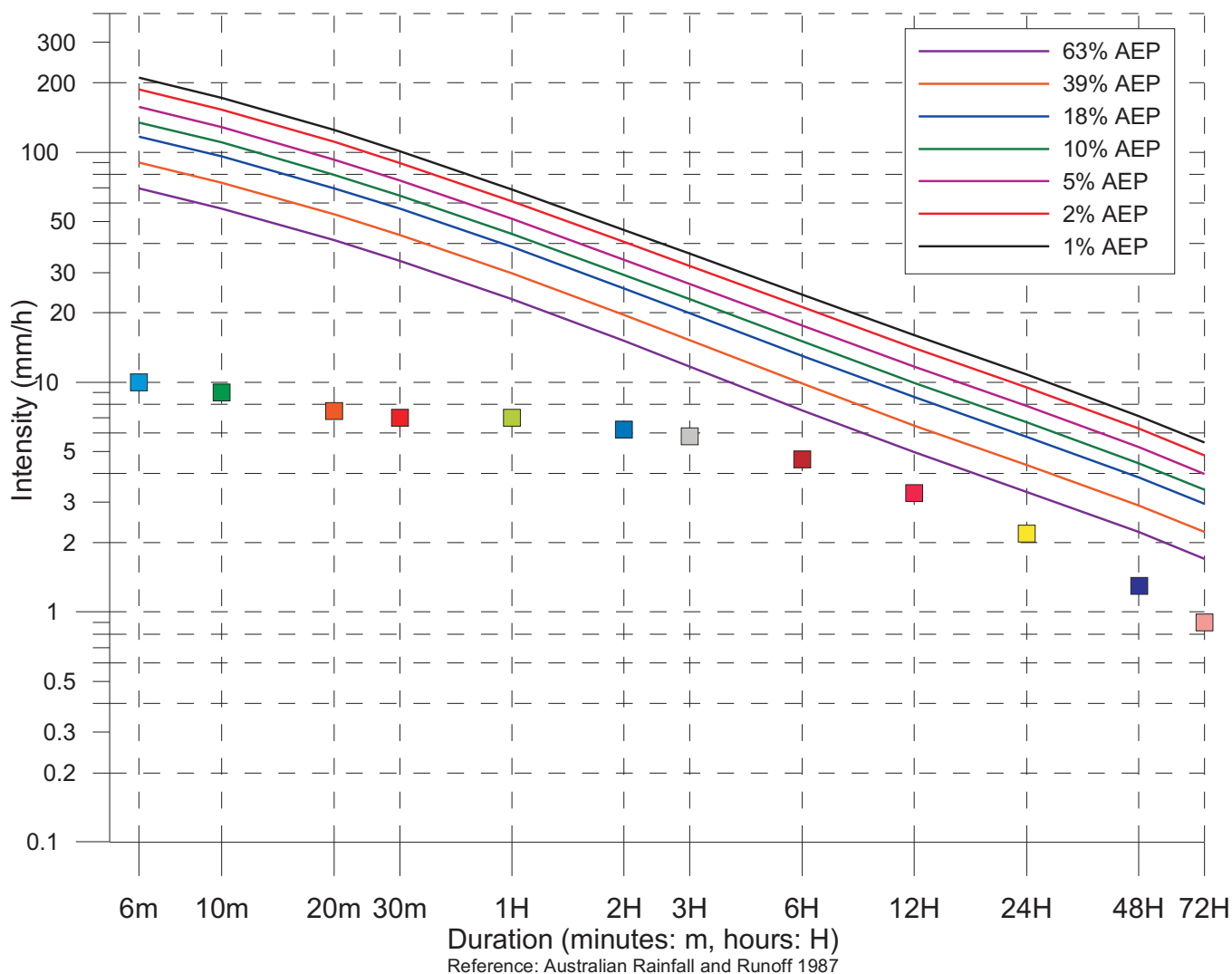




Oranmeir Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	10	04:04_25/08/2015
10m	6	22:40_24/08/2015
20m	6	22:24_24/08/2015
30m	5	22:16_24/08/2015
1H	4	21:58_24/08/2015
2H	3	21:06_24/08/2015
3H	2.7	21:20_24/08/2015
6H	2.3	22:10_24/08/2015
12H	1.8	21:06_24/08/2015
24H	1.2	21:06_24/08/2015
48H	0.8	21:06_24/08/2015
72H	0.6	21:06_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

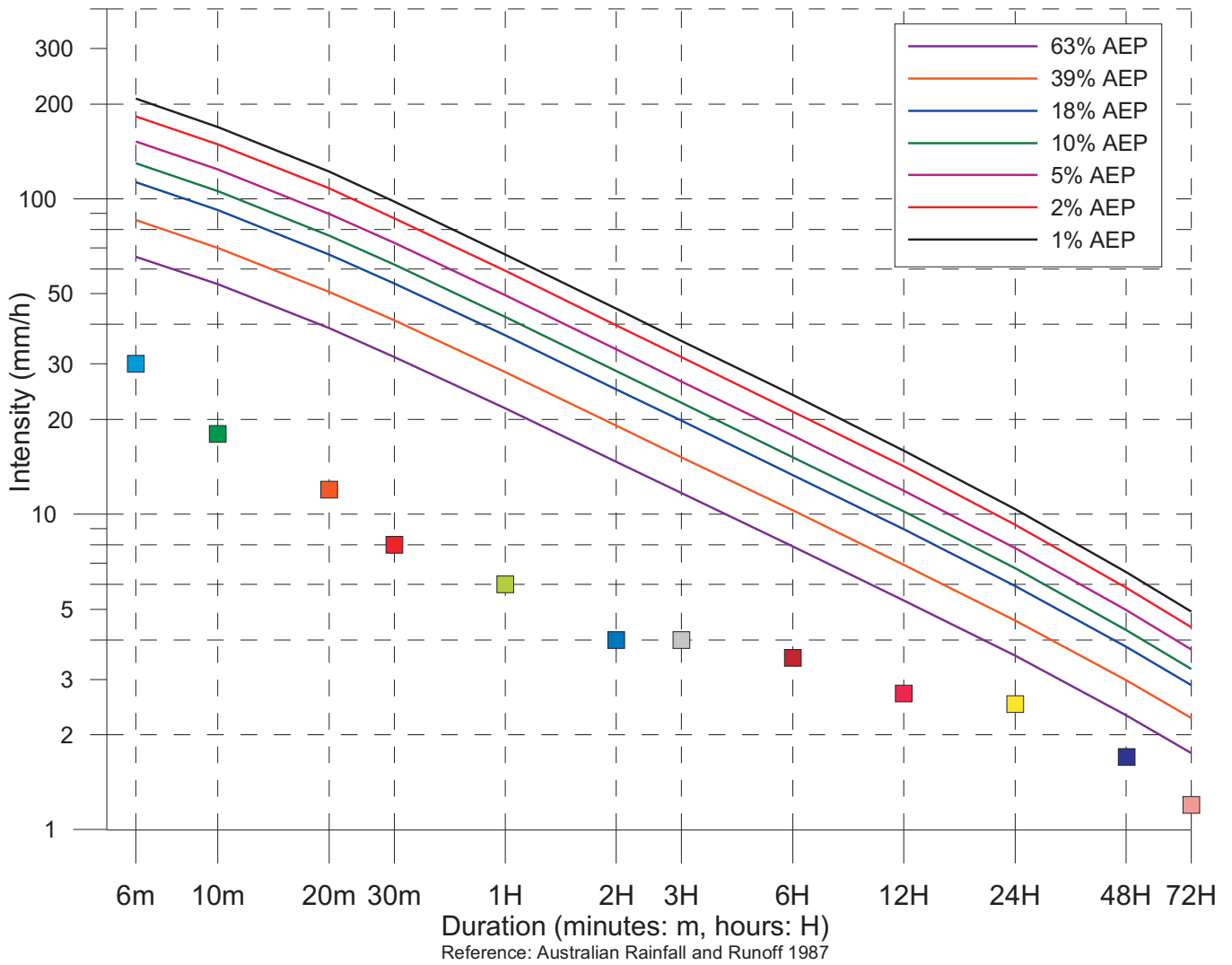




Shoalhaven at Kadoona Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	10	22:14_24/08/2015
10m	9	19:42_24/08/2015
20m	7.5	19:42_24/08/2015
30m	7	19:32_24/08/2015
1H	7	19:02_24/08/2015
2H	6.2	18:28_24/08/2015
3H	5.8	17:38_24/08/2015
6H	4.6	17:26_24/08/2015
12H	3.3	16:36_24/08/2015
24H	2.2	14:46_24/08/2015
48H	1.3	11:00_24/08/2015
72H	0.9	03:00_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*





Snowball Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	30	03:20_26/08/2015
10m	18	03:20_26/08/2015
20m	12	23:24_24/08/2015
30m	8	23:24_24/08/2015
1H	6	22:42_24/08/2015
2H	4	14:34_25/08/2015
3H	4	17:54_24/08/2015
6H	3.5	17:54_24/08/2015
12H	2.7	15:44_24/08/2015
24H	2.5	17:54_24/08/2015
48H	1.7	15:10_24/08/2015
72H	1.2	01:58_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*



7. Jervis Bay to Ulladulla region

7.1 Jervis Bay to Ulladulla region - water level

The locations of water level stations within the Jervis Bay to Ulladulla region are shown in Figure 7.1. The water level data for the period 20th to 31st August 2015 are displayed graphically in Figure 7.2 and 7.3. The peak observed water levels are listed in Table 7.1.

There are no current SES flood classifications for the Jervis Bay to Ulladulla region.

Table 7.1 Jervis Bay to Ulladulla region flood peaks

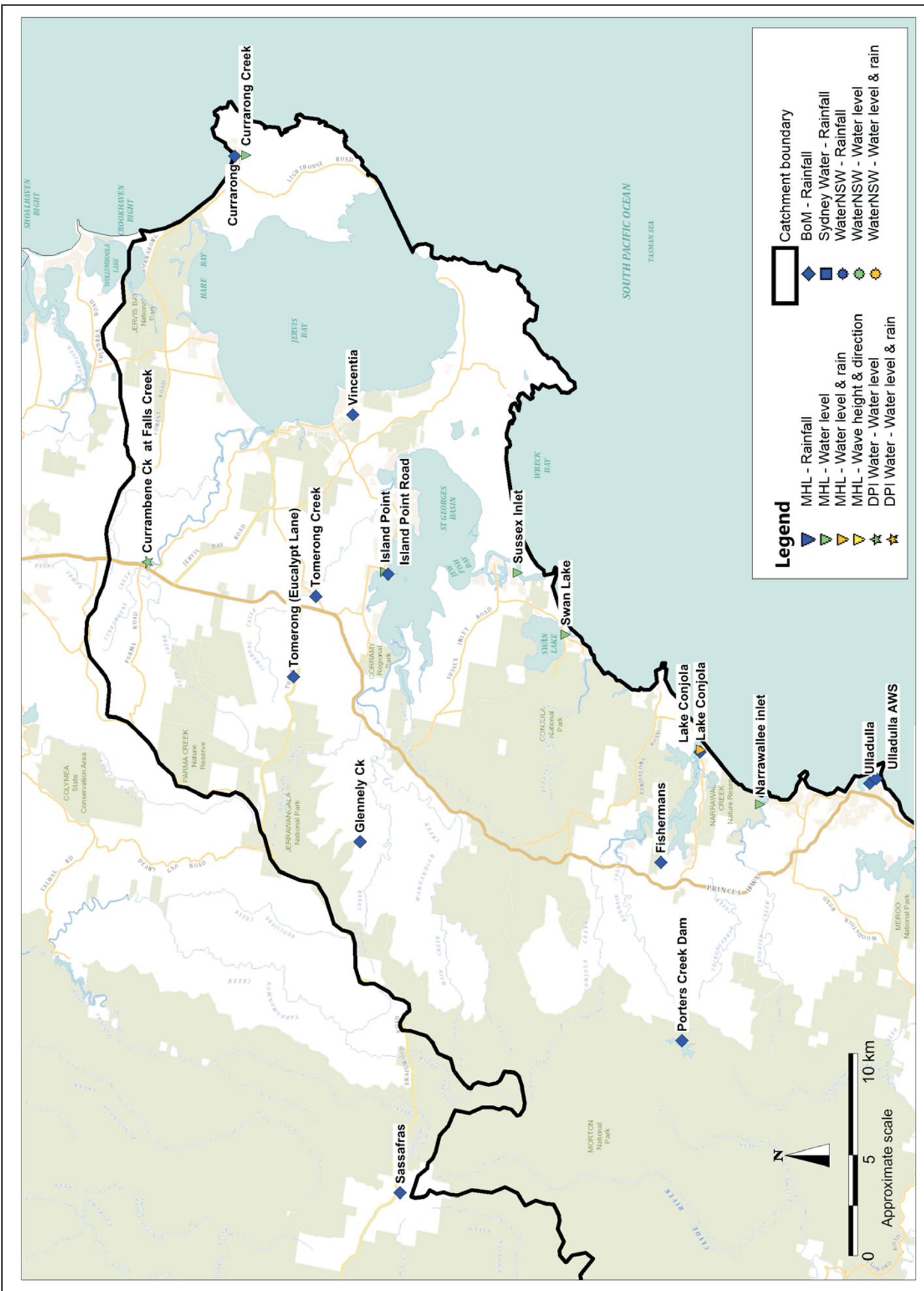
Station Name	Station No.	Site Owner	Datum	Peak level (m)
Currambene Creek at Falls Creek	216004	DPI Water	Local Datum	4.11
Currarong Creek	216405	MHL	AHD	0.79
Island Point	216415	MHL	AHD	1.86
Sussex Inlet	216412	MHL	AHD	1.46
Swan Lake	216425	MHL	AHD	2.01
Lake Conjola	216420	MHL	AHD	1.94
Narrawallee Inlet	216430	MHL	AHD	1.26

7.2 Jervis Bay to Ulladulla region - rainfall

24 hour rainfall totals up until 9.00 a.m. are displayed in Table 7.2 and in Figures 7.4 and 7.5 for the period 20th to 31st August 2015. The rainfall data and intensities are displayed graphically in Figures 7.6 to 7.17.

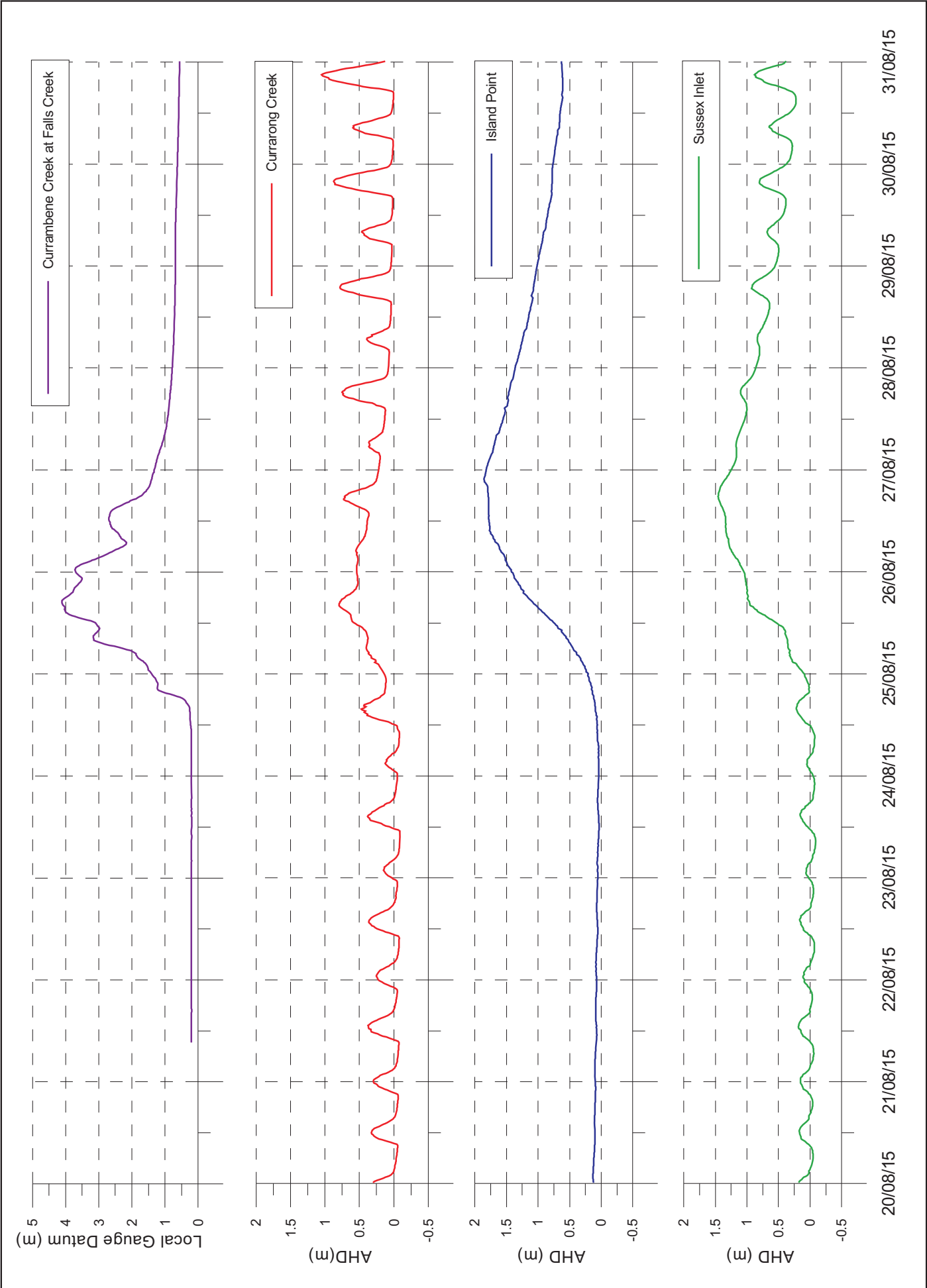
Table 7.2 Jervis Bay to Ulladulla region daily rainfall totals

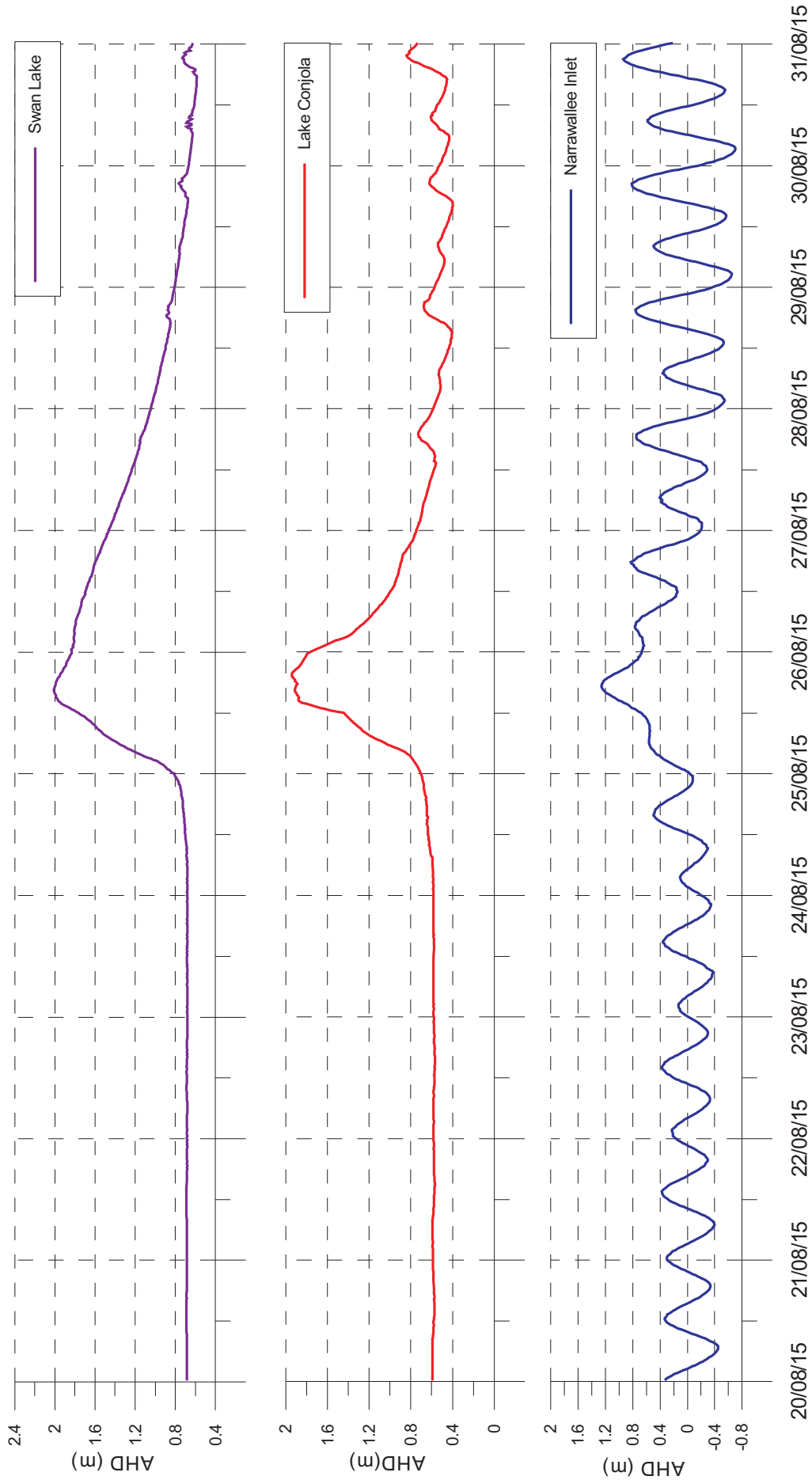
Date	Currarong (mm)	Tomerong (Eucalypt Lane) (mm)	Tomerong Creek (mm)	Glennely Creek	Vincentia	Sassafras	Island Point Rd (mm)	Fishermans (mm)	Porters Creek Dam (mm)	Lake Conjola (mm)	Ulladulla (mm)	Ulladulla AWS (mm)
	BoM	BoM	BoM	BoM	BoM	BoM	BoM	BoM	BoM	Shoalhaven Council	BoM	BoM
20/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23/08/2015	6.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24/08/2015	1.0	16.0	15.0	5.0	3.0	0.0	19.0	23.0	12.0	12.5	26.0	26.4
25/08/2015	129.0	213.0	197.0	177.0	190.0	85.0	161.0	232.0	133.0	202.0	206.0	167.6
26/08/2015	137.0	226.0	211.0	211.0	148.0	201.0	185.0	167.0	194.0	97.0	139.0	112.0
27/08/2015	16.0	22.0	27.0	22.0	19.0	16.0	16.0	0.0	28.0	18.0	18.0	14.0
28/08/2015	2.0	2.0	3.0	2.0	2.0	3.0	3.0	0.0	3.0	4.0	5.0	4.8
29/08/2015	3.0	4.0	5.0	4.0	4.0	6.0	3.0	0.0	9.0	5.0	6.0	4.8
30/08/2015	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
31/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	0.0	0.0
Total	294.0	483.0	458.0	421.0	369.0	312.0	387.0	446.0	379.0	338.5	400.0	329.6

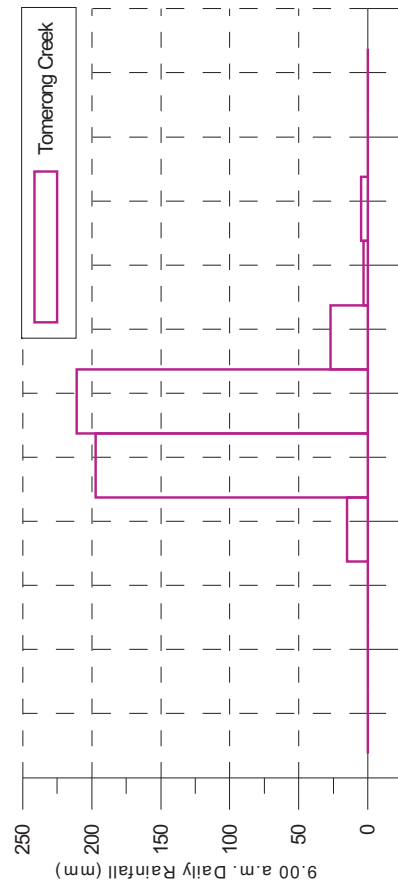
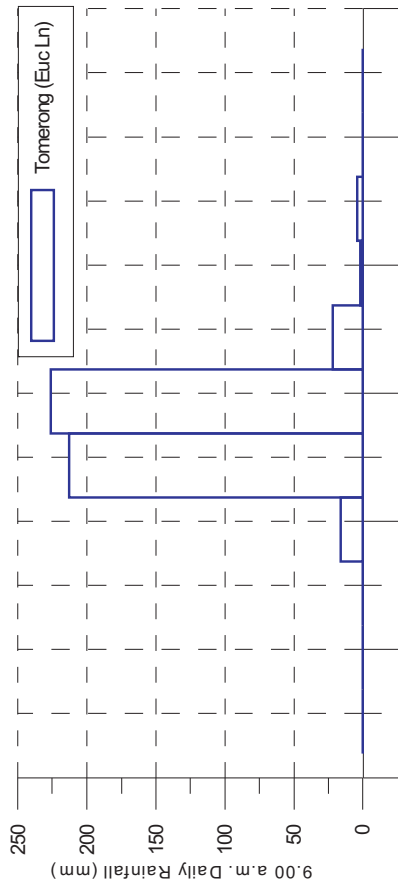
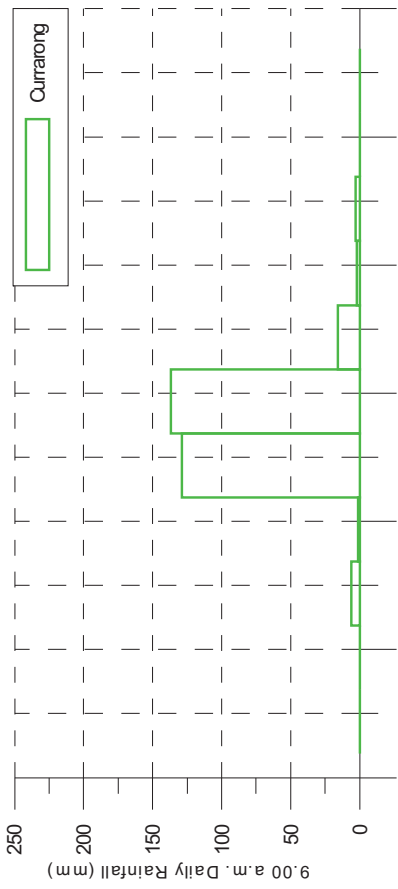
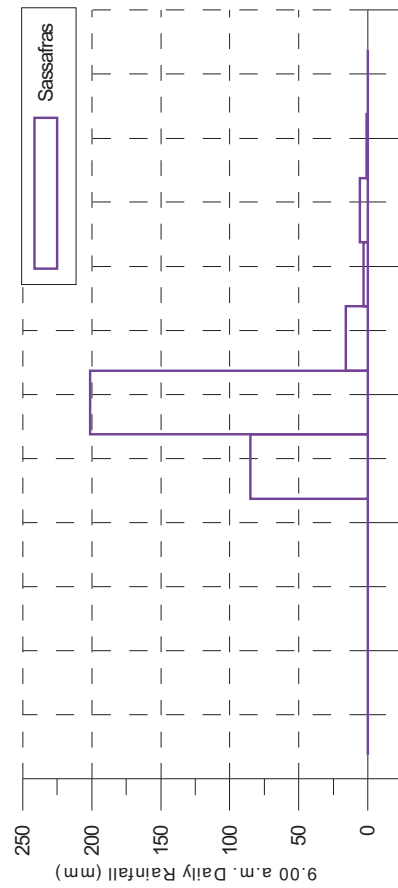
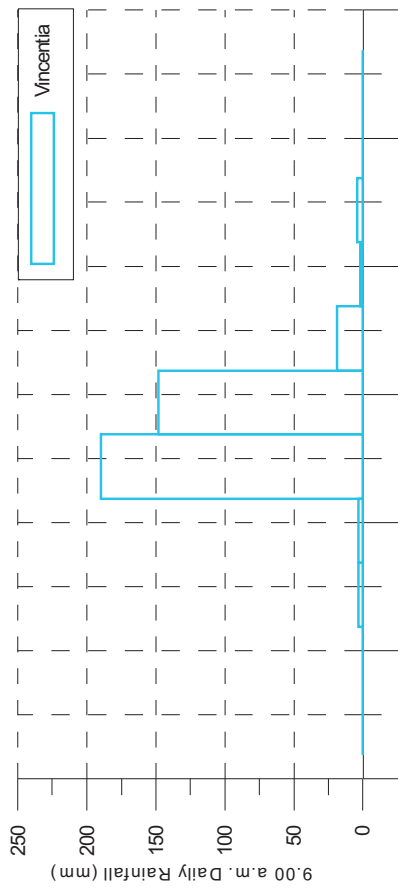
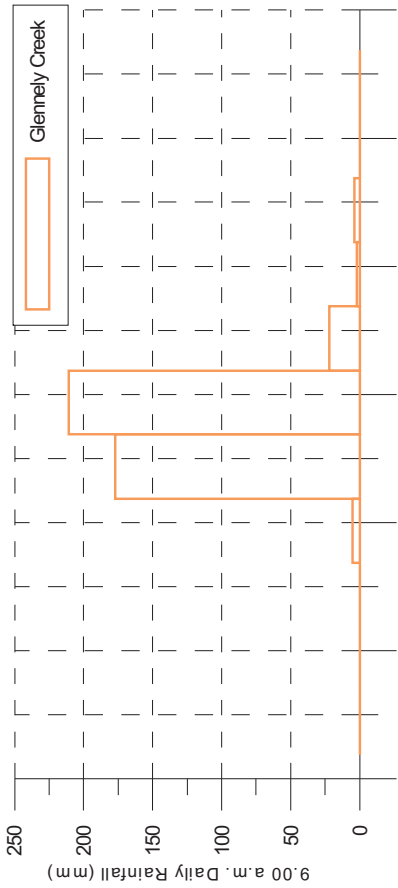


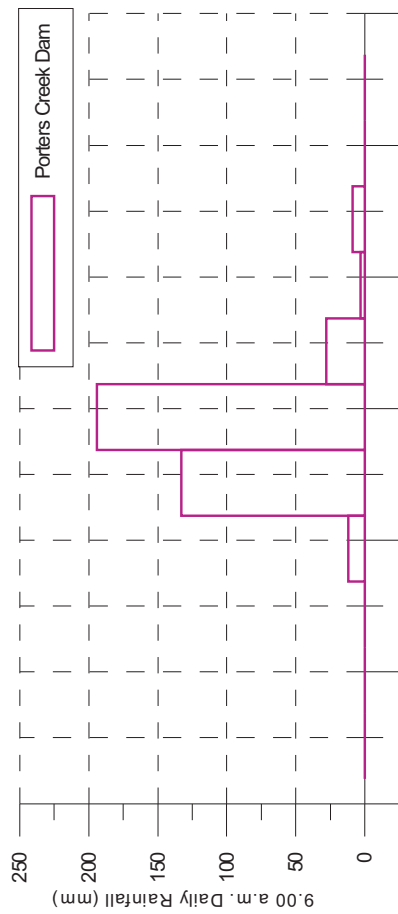
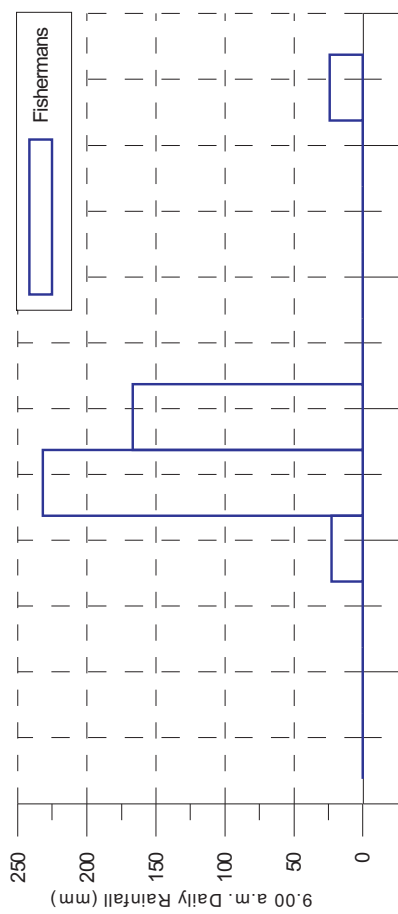
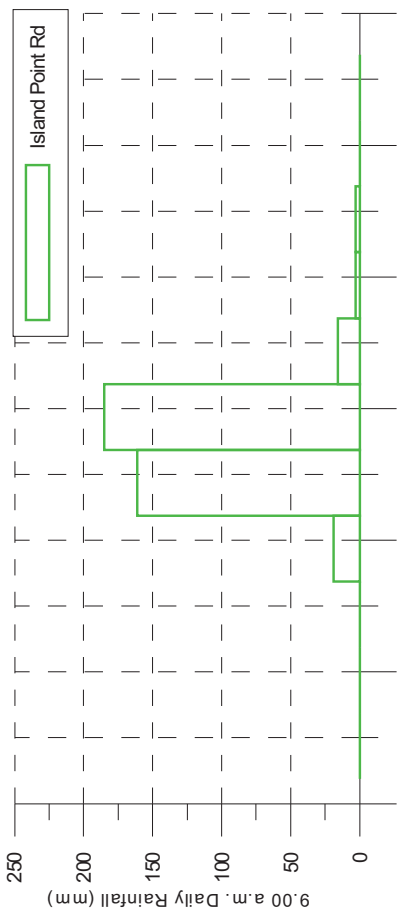
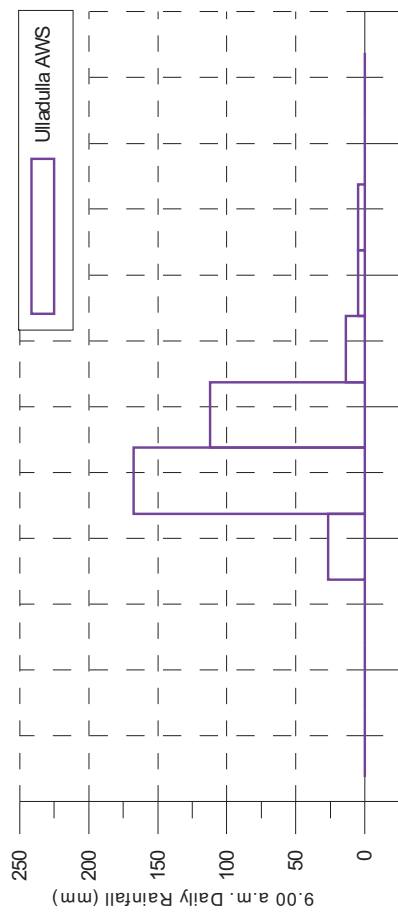
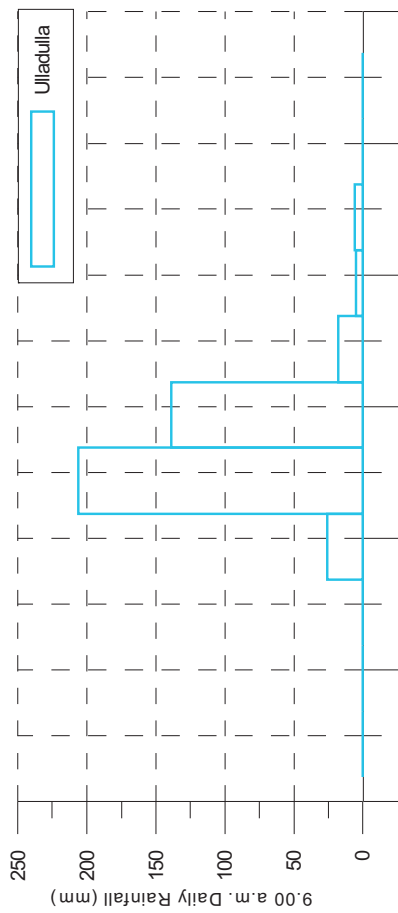
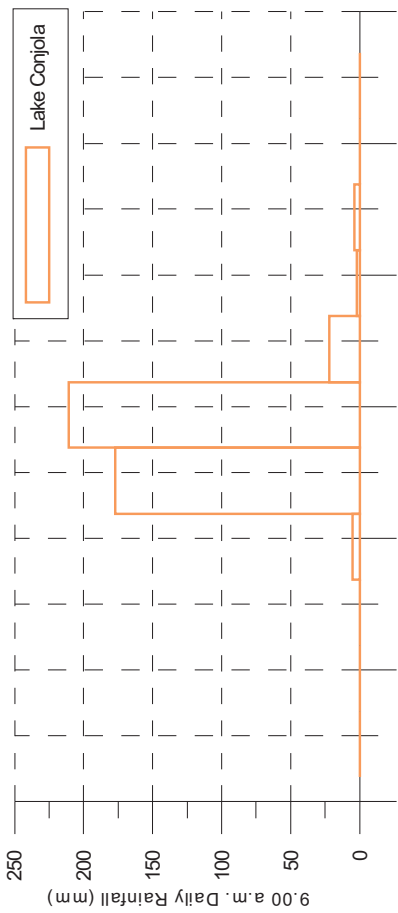
Legend

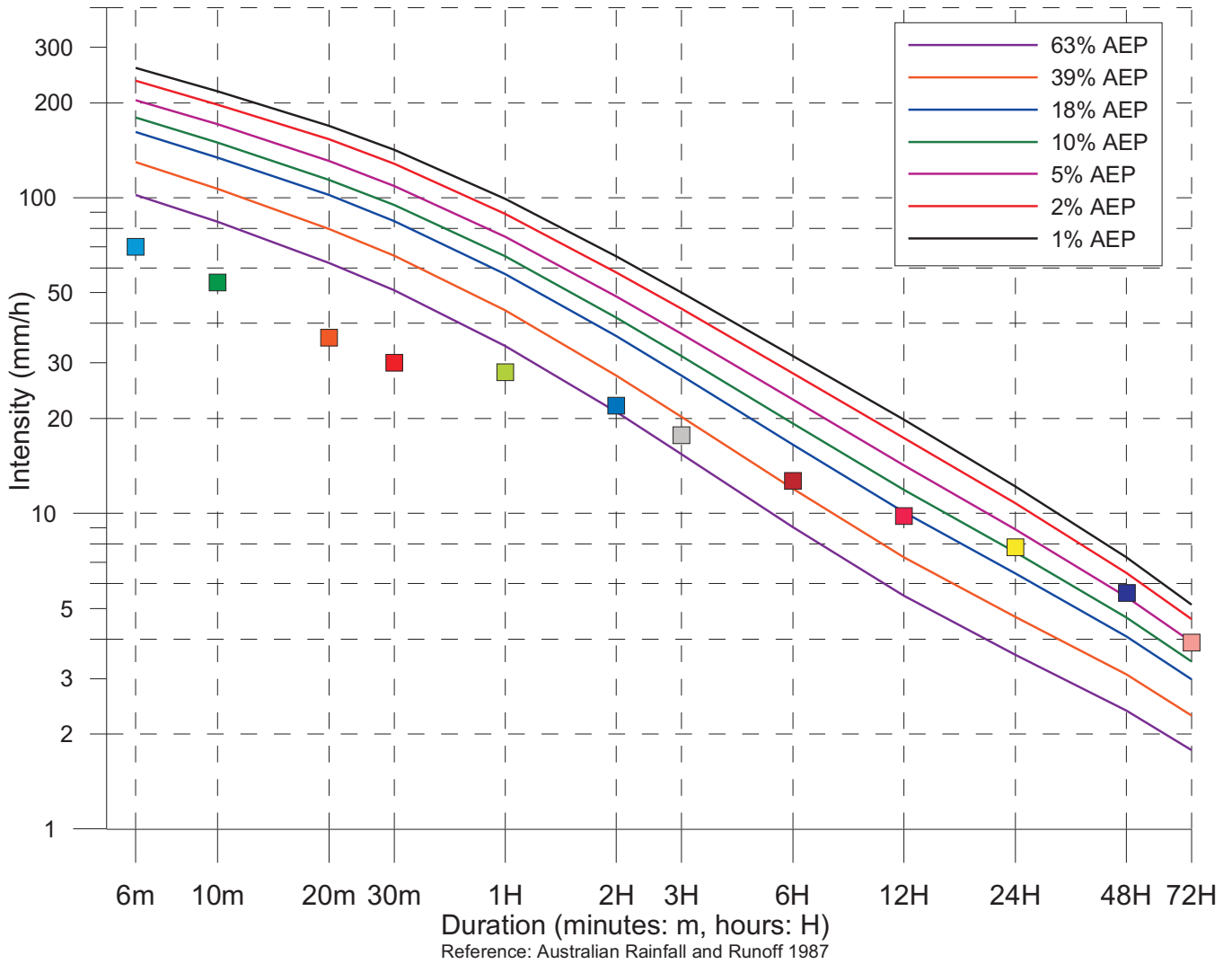
- Catchment boundary
- MHL - Rainfall
- MHL - Water level
- MHL - Wave height & direction
- DPI Water - Water level
- DPI Water - Water level & rain
- BoM - Rainfall
- Sydney Water - Rainfall
- WaterNSW - Rainfall
- WaterNSW - Water level
- WaterNSW - Water level & rain







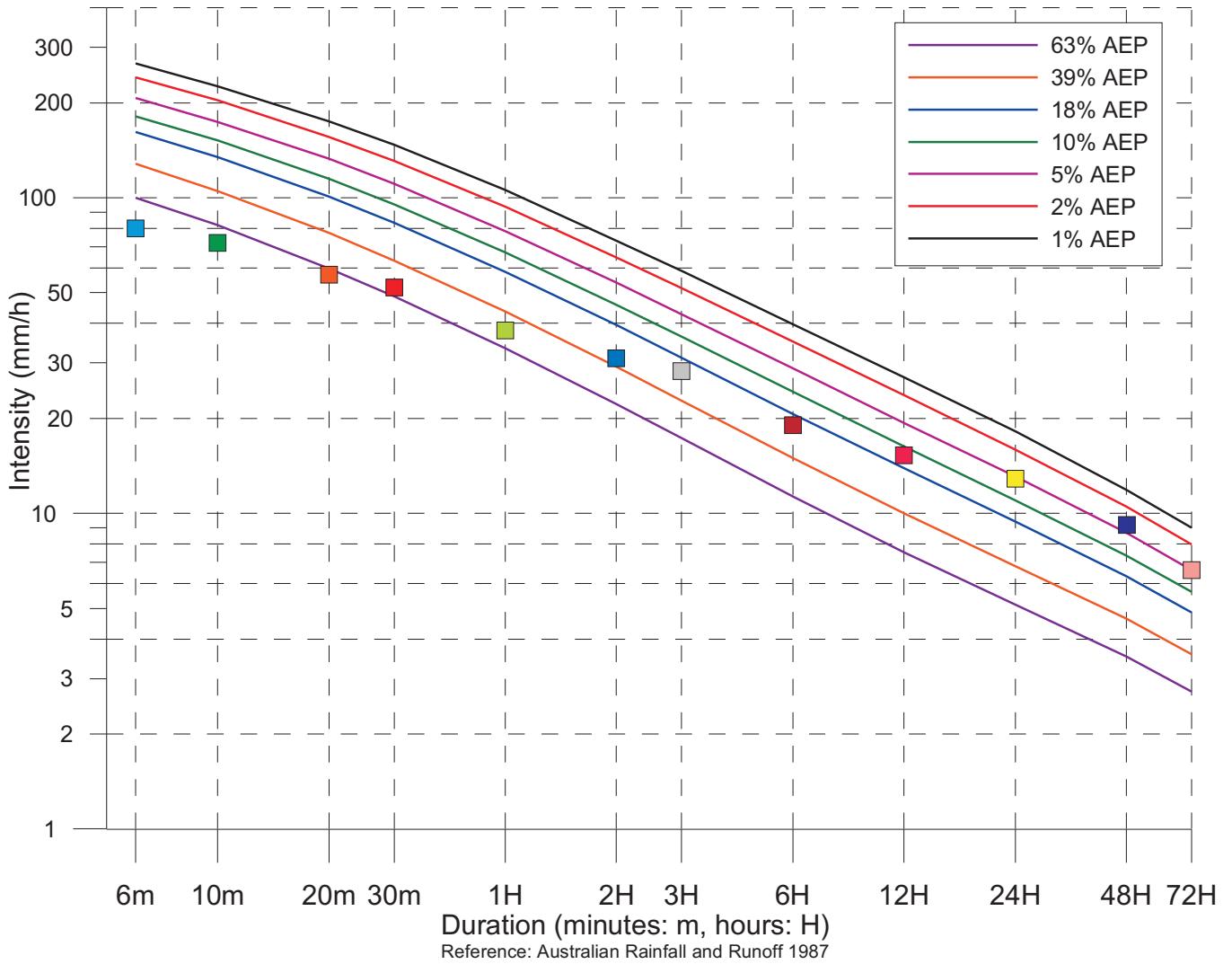




Currarong Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	70	21:20_25/08/2015
10m	54	11:24_25/08/2015
20m	36	11:16_25/08/2015
30m	30	11:04_25/08/2015
1H	28	10:34_25/08/2015
2H	22	09:44_25/08/2015
3H	17.7	08:40_25/08/2015
6H	12.7	05:42_25/08/2015
12H	9.8	02:34_25/08/2015
24H	7.8	01:26_25/08/2015
48H	5.6	10:26_24/08/2015
72H	3.9	21:38_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

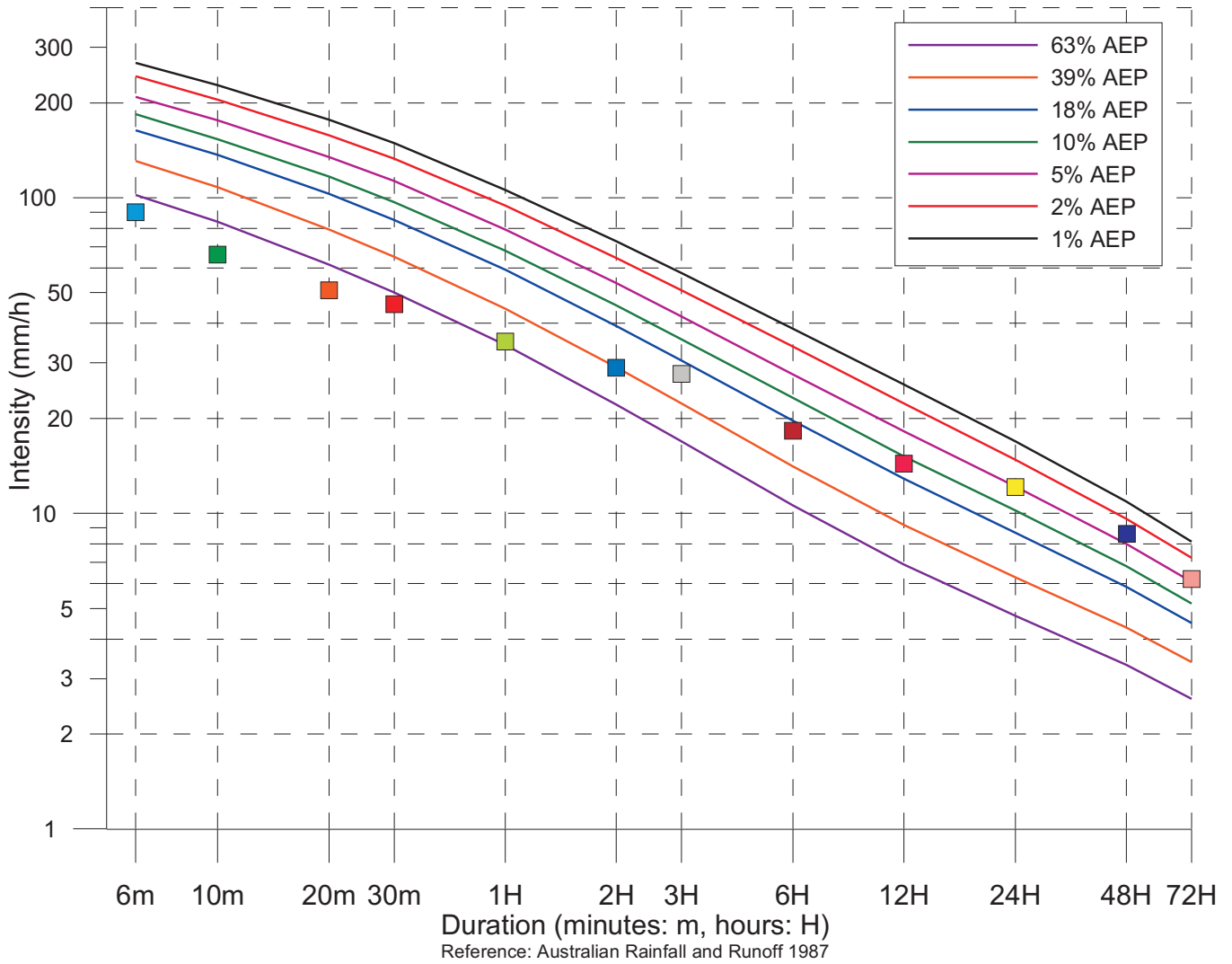




Tomerong (Eucalypt Lane) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	80	13:10_25/08/2015
10m	72	13:06_25/08/2015
20m	57	13:04_25/08/2015
30m	52	12:50_25/08/2015
1H	38	12:28_25/08/2015
2H	31	11:30_25/08/2015
3H	28.3	10:26_25/08/2015
6H	19	09:10_25/08/2015
12H	15.3	01:32_25/08/2015
24H	12.9	18:26_24/08/2015
48H	9.2	08:04_24/08/2015
72H	6.6	19:50_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

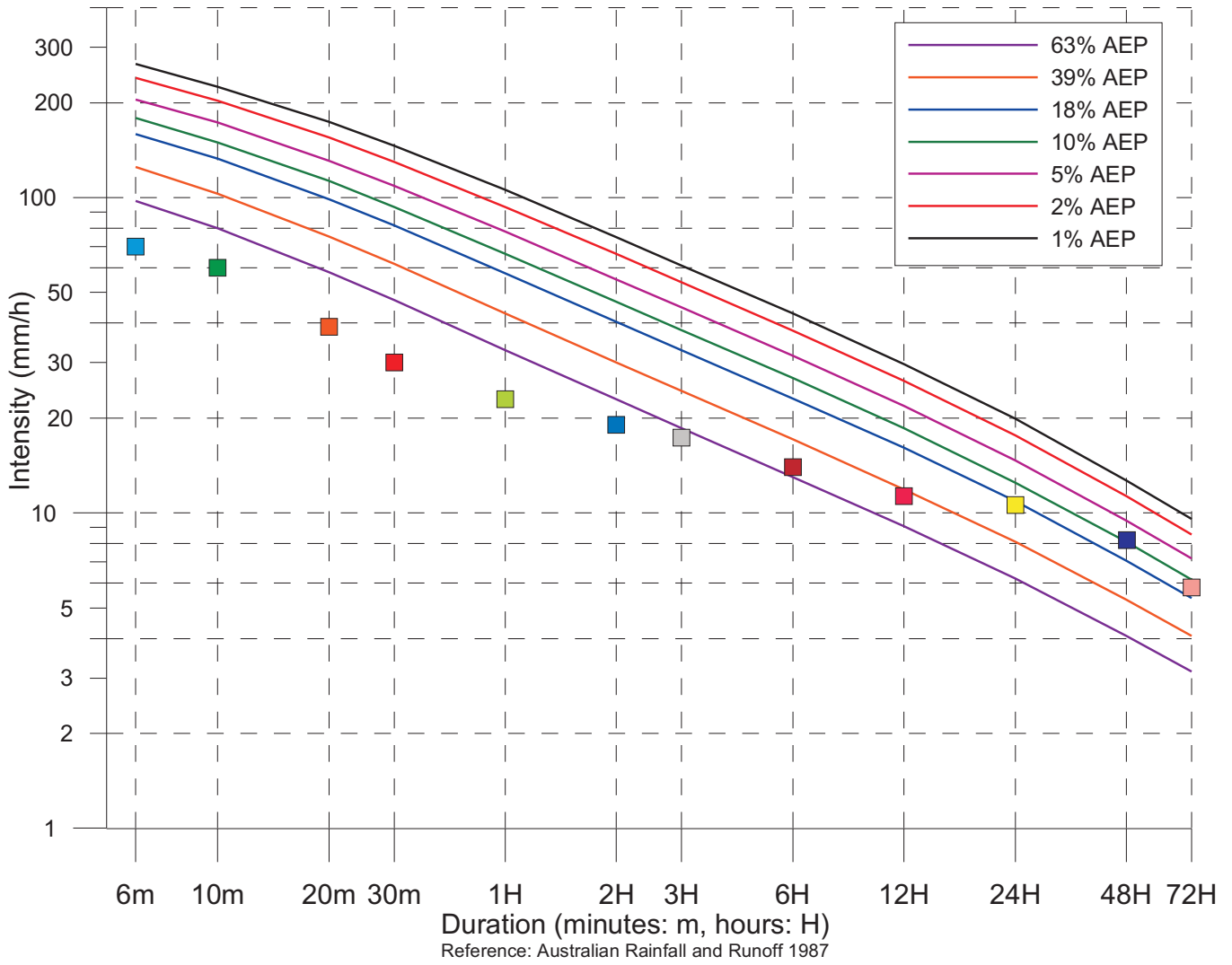




Tomerong Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	90	12:48_25/08/2015
10m	66	12:48_25/08/2015
20m	51	12:48_25/08/2015
30m	46	12:36_25/08/2015
1H	35	12:06_25/08/2015
2H	29	11:06_25/08/2015
3H	27.7	10:14_25/08/2015
6H	18.3	09:12_25/08/2015
12H	14.4	01:12_25/08/2015
24H	12.1	18:32_24/08/2015
48H	8.6	12:10_24/08/2015
72H	6.2	19:32_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

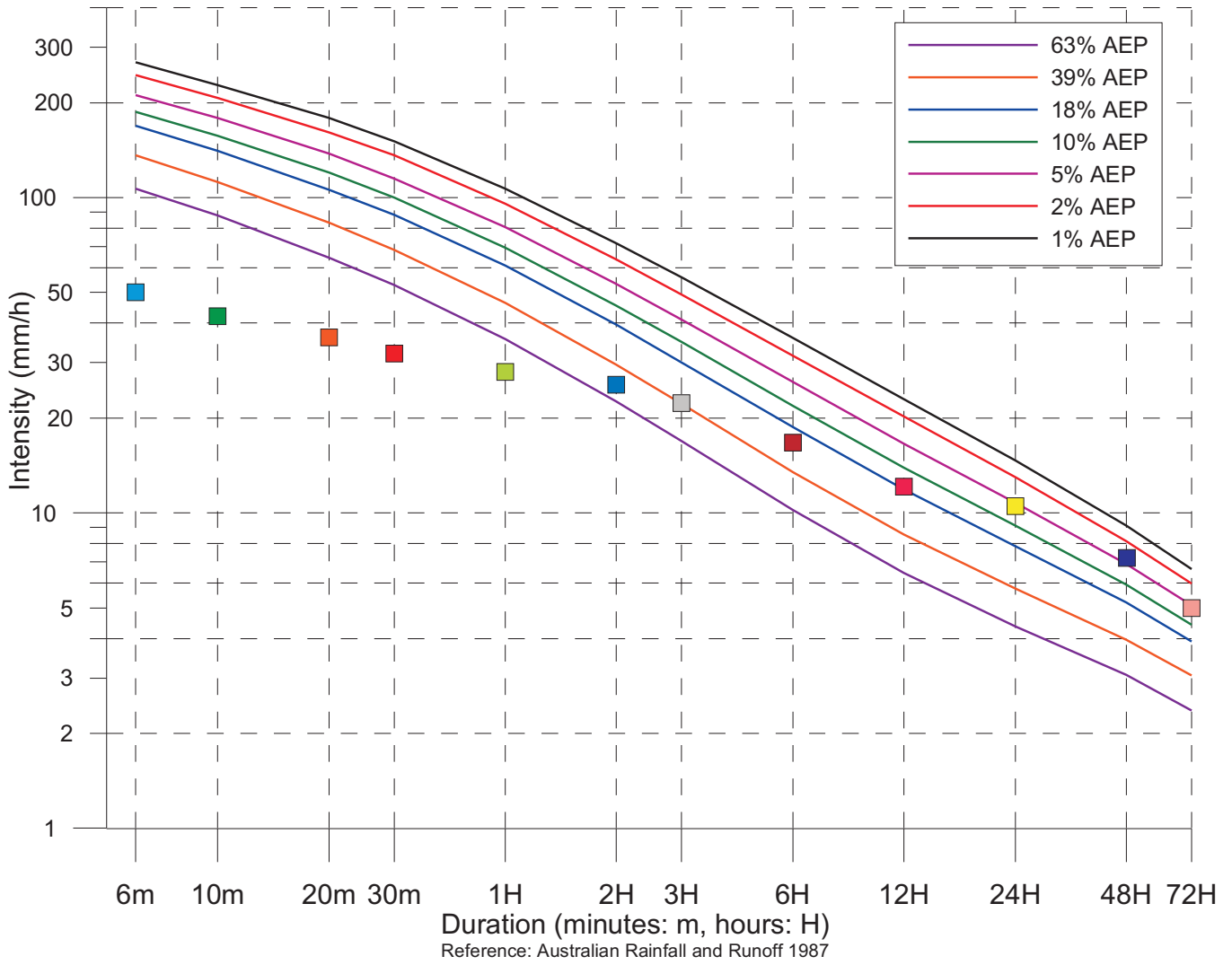




Glennely Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	70	01:18_25/08/2015
10m	60	01:18_25/08/2015
20m	39	01:18_25/08/2015
30m	30	01:18_25/08/2015
1H	23	00:26_25/08/2015
2H	19	23:52_24/08/2015
3H	17.3	22:56_24/08/2015
6H	14	22:56_24/08/2015
12H	11.3	19:22_24/08/2015
24H	10.6	21:50_24/08/2015
48H	8.2	13:50_24/08/2015
72H	5.8	01:20_24/08/2015

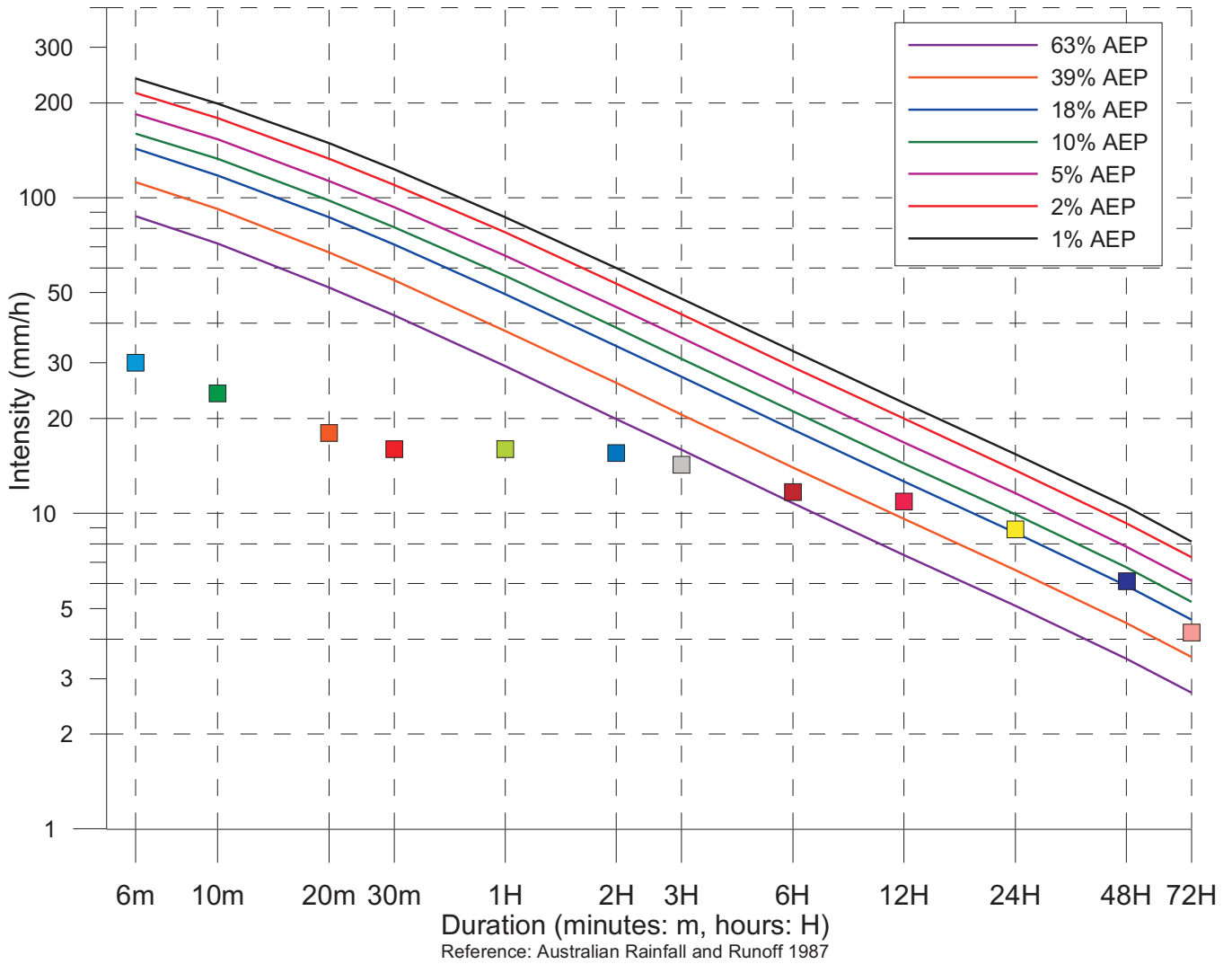
Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*





Vincentia Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	10:20_25/08/2015
10m	42	10:16_25/08/2015
20m	36	10:20_25/08/2015
30m	32	10:16_25/08/2015
1H	28	19:22_24/08/2015
2H	25.5	19:06_24/08/2015
3H	22.3	18:20_24/08/2015
6H	16.7	18:20_24/08/2015
12H	12.1	18:00_24/08/2015
24H	10.5	18:16_24/08/2015
48H	7.2	12:06_24/08/2015
72H	5	06:30_24/08/2015

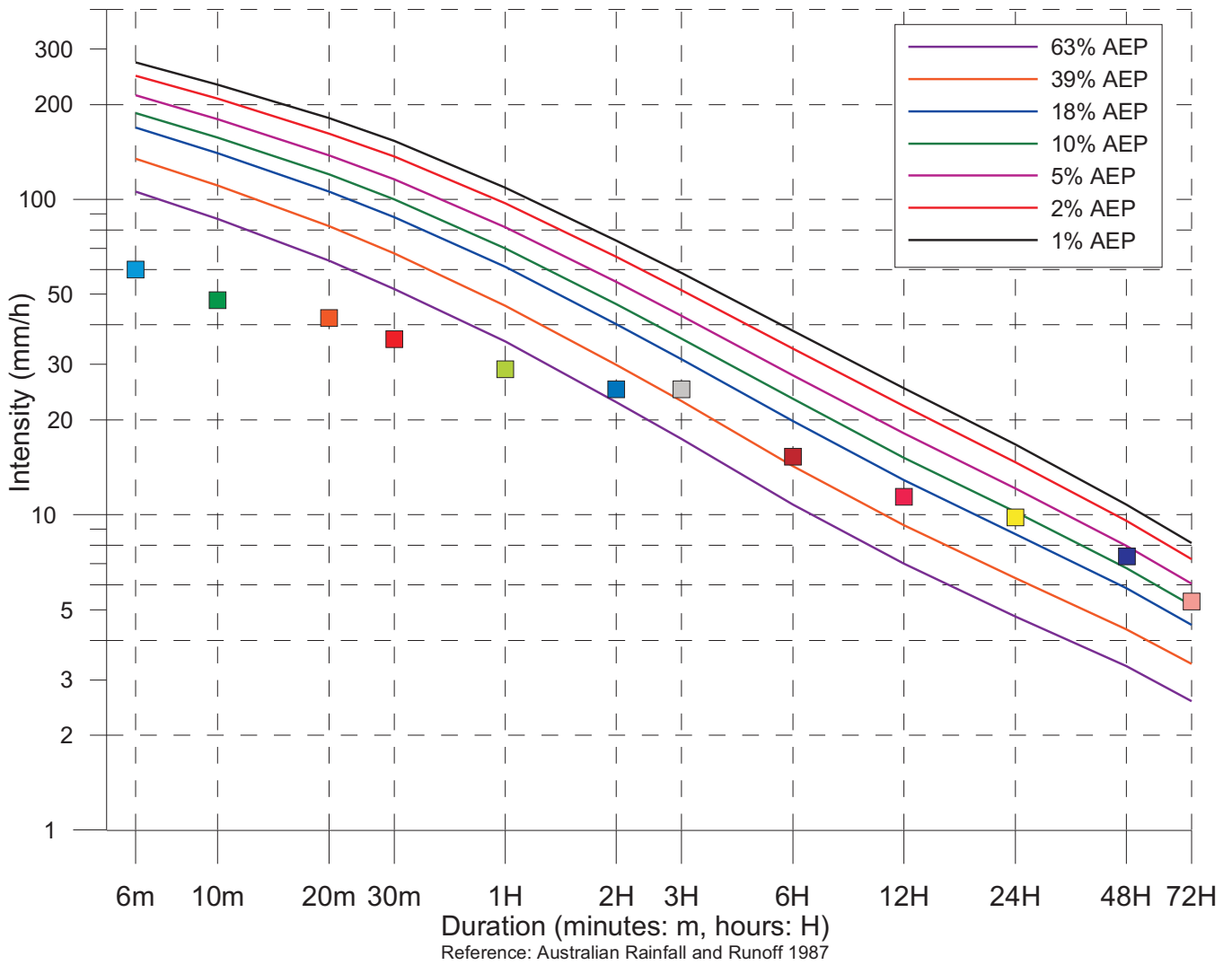
Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*



Sassafras Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	30	14:10_25/08/2015
10m	24	14:10_25/08/2015
20m	18	21:44_25/08/2015
30m	16	22:14_25/08/2015
1H	16	14:10_25/08/2015
2H	15.5	14:10_25/08/2015
3H	14.3	13:40_25/08/2015
6H	11.7	13:10_25/08/2015
12H	10.9	12:14_25/08/2015
24H	8.9	05:06_25/08/2015
48H	6.1	13:34_24/08/2015
72H	4.2	09:48_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

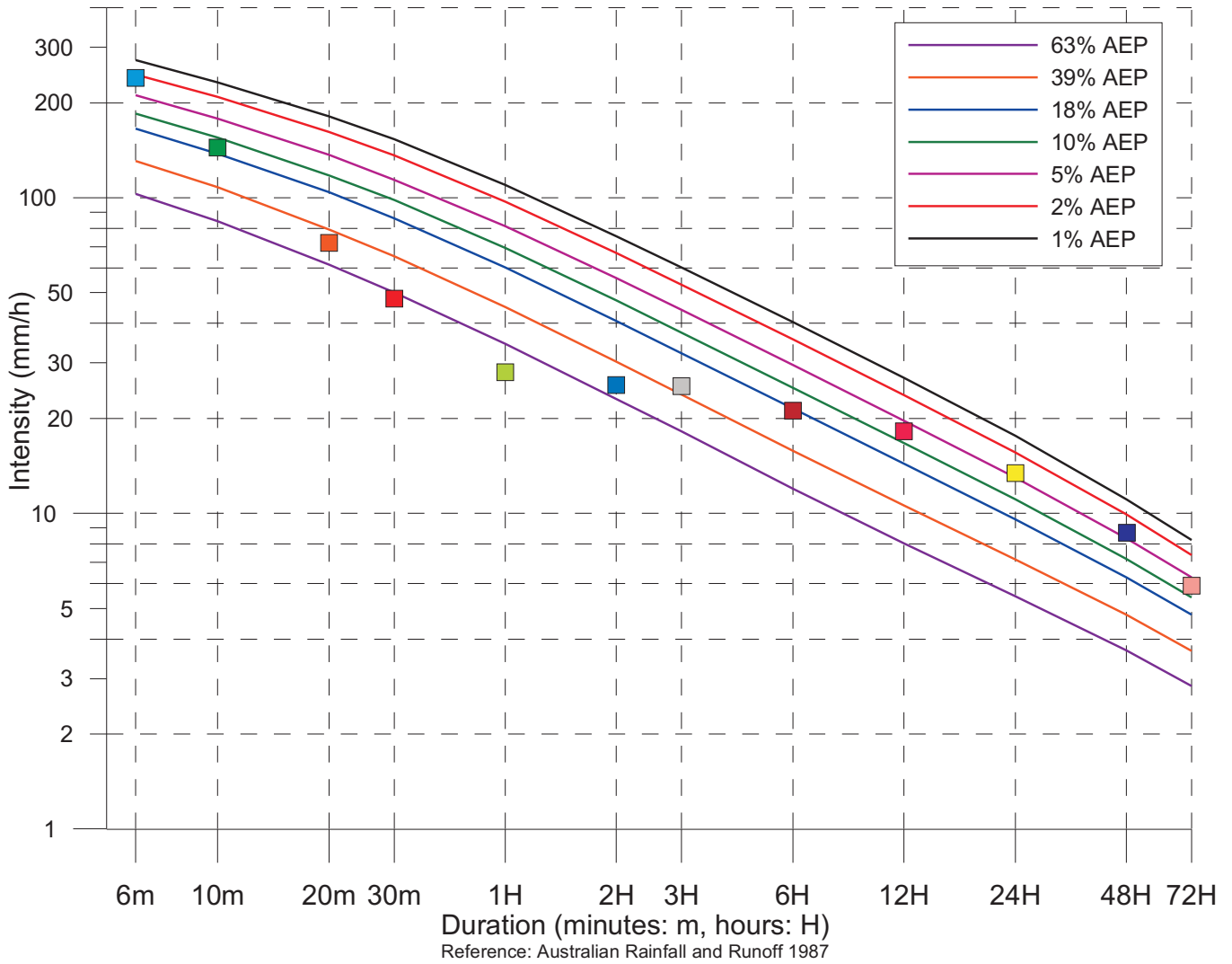




Island Point Road Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	60	12:58_25/08/2015
10m	48	12:50_25/08/2015
20m	42	12:40_25/08/2015
30m	36	12:30_25/08/2015
1H	29	10:30_25/08/2015
2H	25	11:00_25/08/2015
3H	25	10:02_25/08/2015
6H	15.3	09:10_25/08/2015
12H	11.4	01:02_25/08/2015
24H	9.8	18:30_24/08/2015
48H	7.4	07:50_24/08/2015
72H	5.3	00:18_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

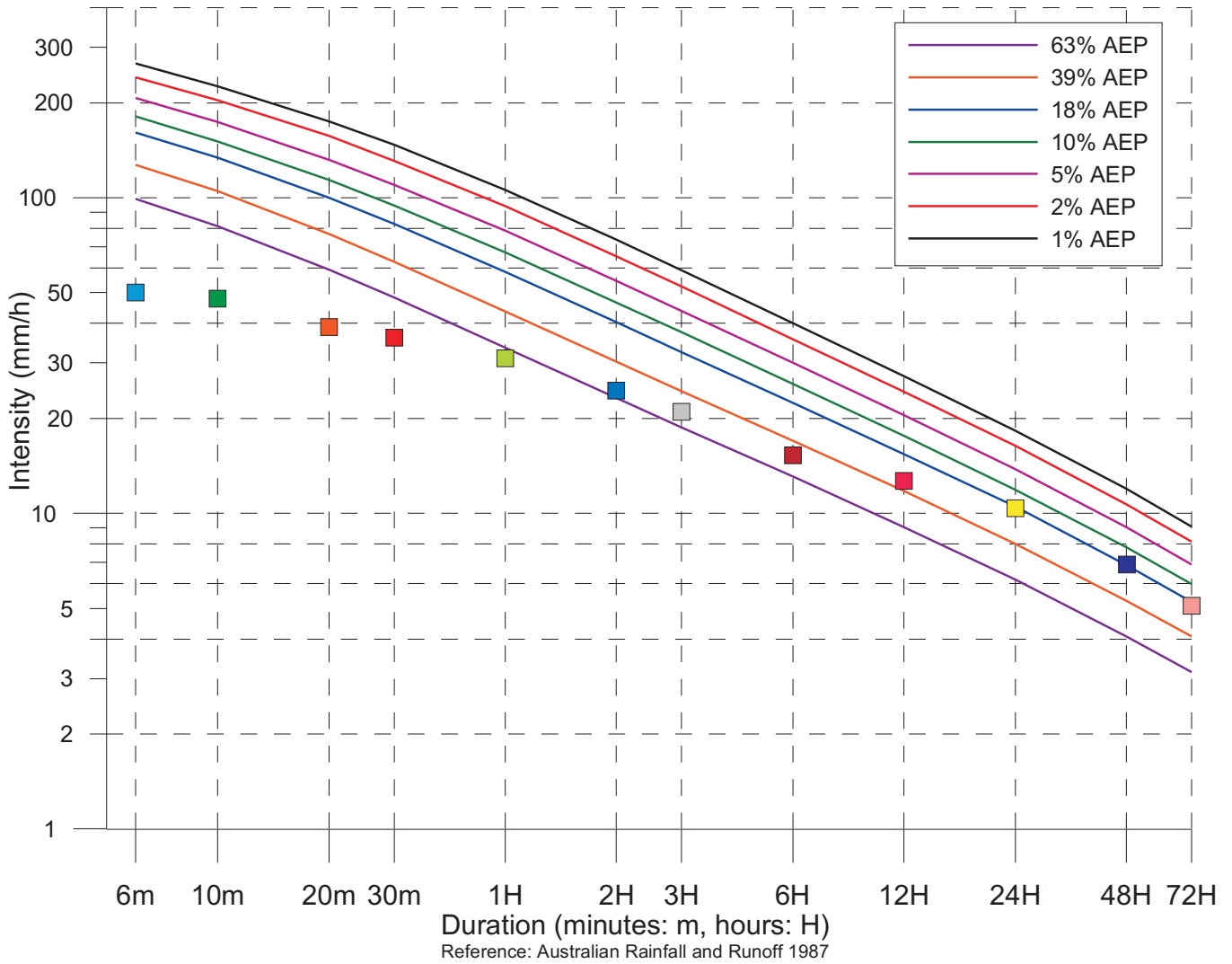




Fishermans Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	240	08:42_31/08/2015
10m	144	08:42_31/08/2015
20m	72	08:42_31/08/2015
30m	48	08:42_31/08/2015
1H	28	12:46_25/08/2015
2H	25.5	04:14_25/08/2015
3H	25.3	03:20_25/08/2015
6H	21.2	01:50_25/08/2015
12H	18.2	02:10_25/08/2015
24H	13.4	22:24_24/08/2015
48H	8.7	07:22_24/08/2015
72H	5.9	05:36_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

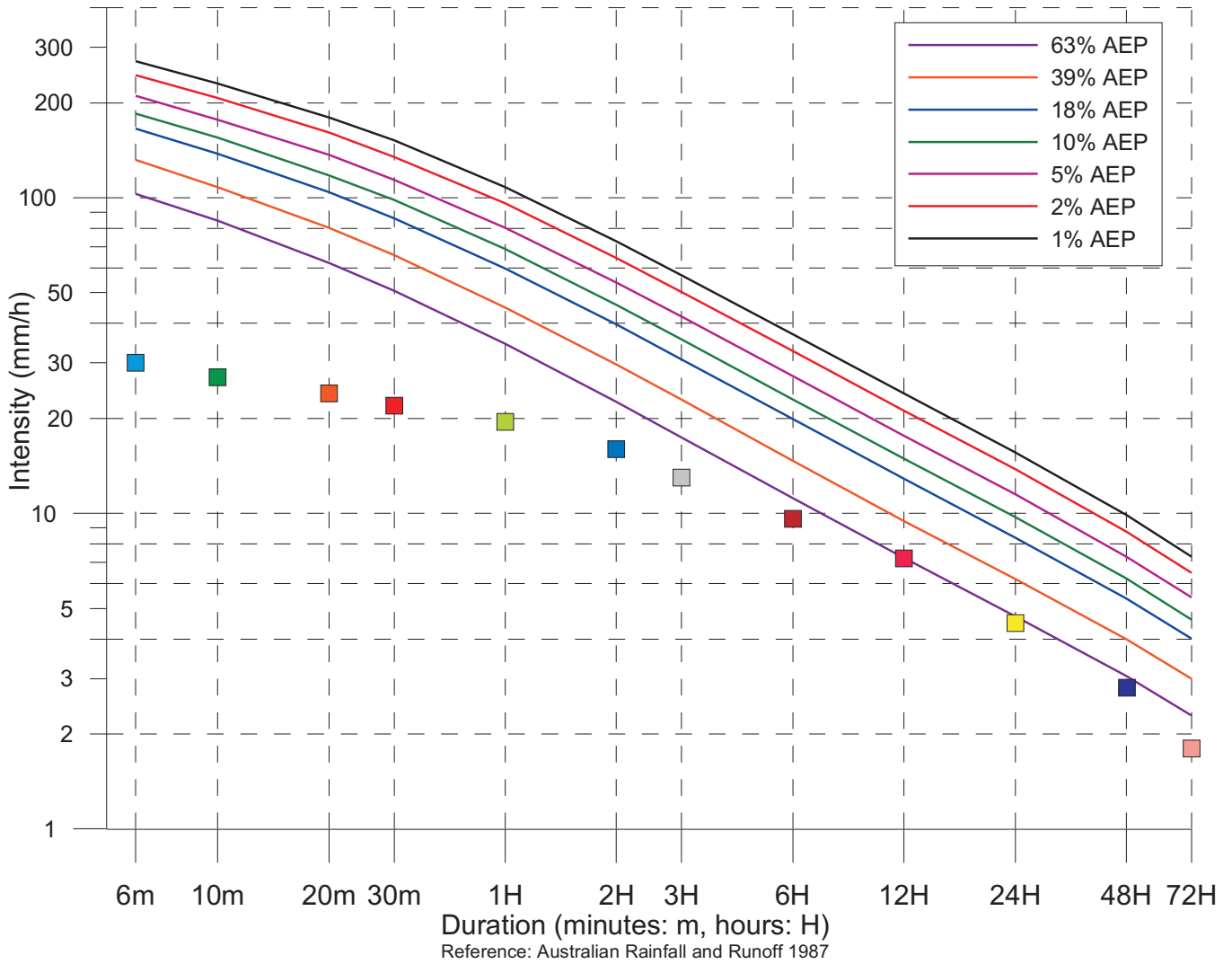




Porters Creek Dam Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	13:48_25/08/2015
10m	48	13:46_25/08/2015
20m	39	13:46_25/08/2015
30m	36	13:38_25/08/2015
1H	31	13:32_25/08/2015
2H	24.5	13:08_25/08/2015
3H	21	12:54_25/08/2015
6H	15.3	12:10_25/08/2015
12H	12.7	10:30_25/08/2015
24H	10.4	23:34_24/08/2015
48H	6.9	08:36_24/08/2015
72H	5.1	05:32_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

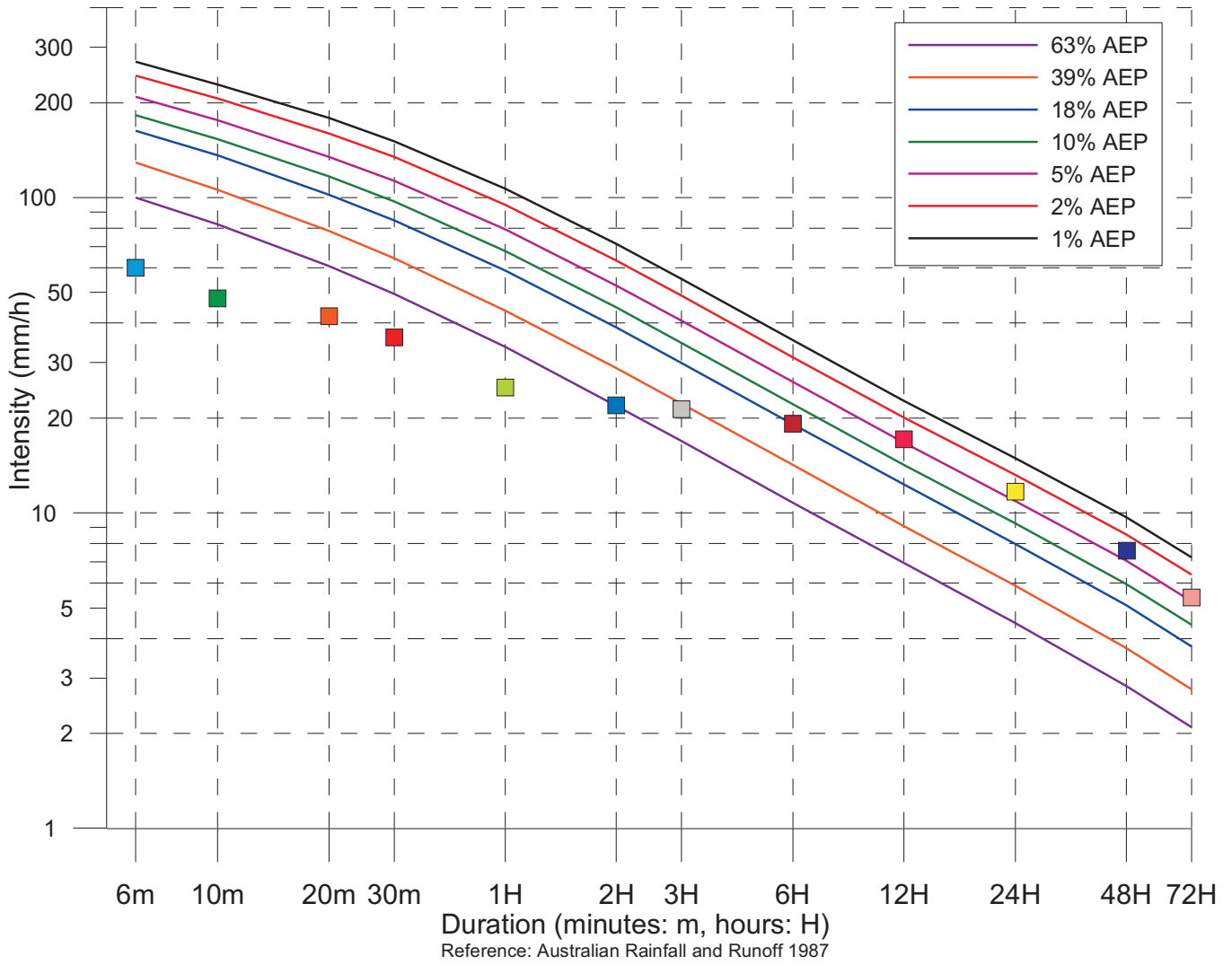




Lake Conjola Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	30	05:10_25/08/2015
10m	27	05:06_25/08/2015
20m	24	04:54_25/08/2015
30m	22	04:46_25/08/2015
1H	19.5	04:16_25/08/2015
2H	16	03:32_25/08/2015
3H	13	03:32_25/08/2015
6H	9.6	00:44_25/08/2015
12H	7.2	00:08_25/08/2015
24H	4.5	12:02_24/08/2015
48H	2.8	05:38_24/08/2015
72H	1.8	05:38_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

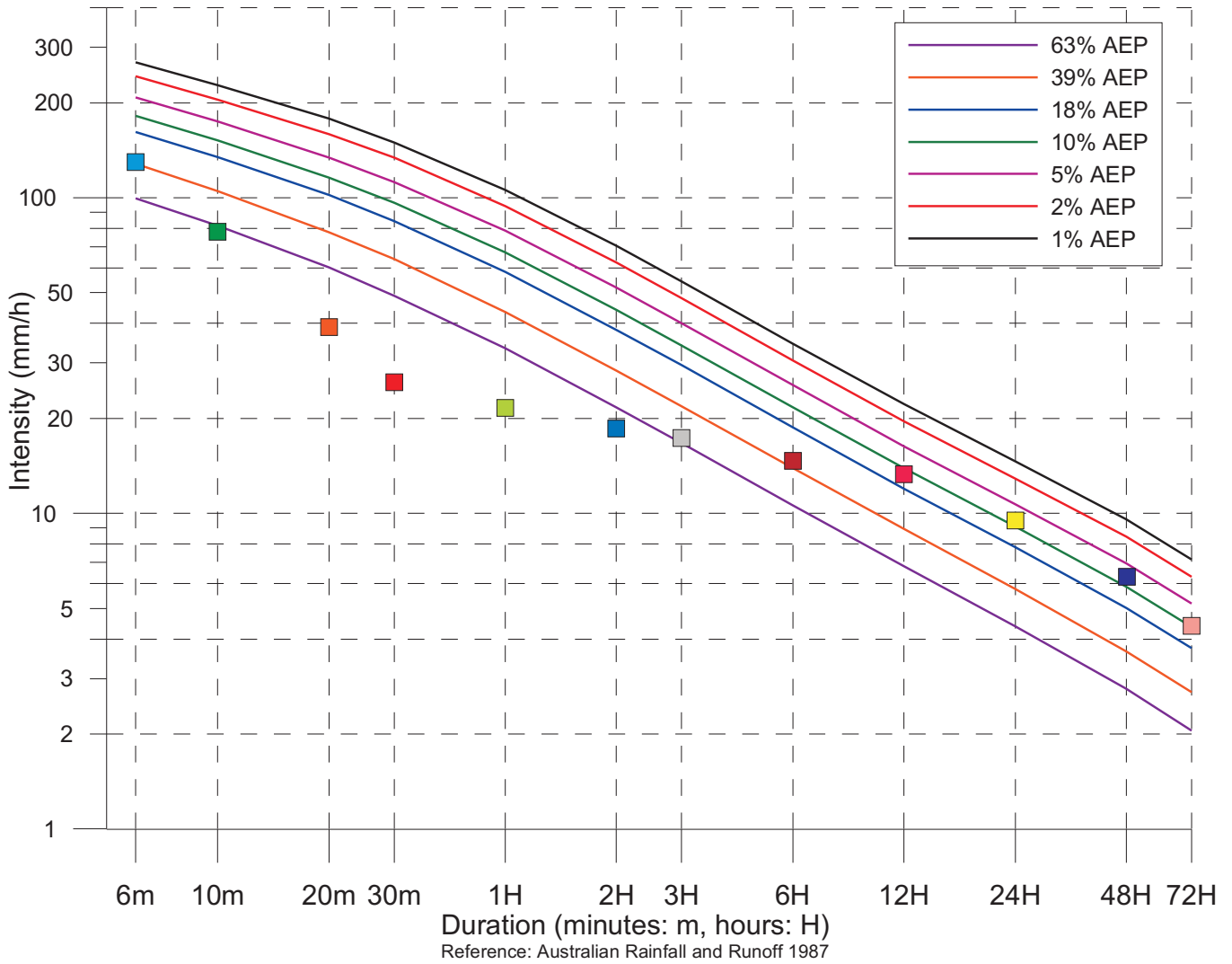




Ulladulla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	60	13:26_25/08/2015
10m	48	05:52_25/08/2015
20m	42	13:26_25/08/2015
30m	36	13:20_25/08/2015
1H	25	13:04_25/08/2015
2H	22	05:38_25/08/2015
3H	21.3	04:36_25/08/2015
6H	19.2	02:26_25/08/2015
12H	17.1	02:06_25/08/2015
24H	11.7	21:50_24/08/2015
48H	7.6	04:24_24/08/2015
72H	5.4	04:24_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*





Ulladulla AWS Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	130	07:28_25/08/2015
10m	78	07:28_25/08/2015
20m	39	07:28_25/08/2015
30m	26	07:28_25/08/2015
1H	21.6	06:58_25/08/2015
2H	18.6	05:58_25/08/2015
3H	17.3	04:58_25/08/2015
6H	14.7	01:58_25/08/2015
12H	13.3	02:28_25/08/2015
24H	9.5	21:58_24/08/2015
48H	6.3	02:28_24/08/2015
72H	4.4	02:58_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*



8. Clyde river region

8.1 Clyde river region - water level

The locations of water level stations within the Clyde river region are shown in Figure 8.1. The water level data for the period 20th to 31st August 2015 are displayed graphically in Figures 8.2 and 8.3. The peak observed water levels are listed in Table 8.1.

Currently there are no SES flood classifications for the Clyde river.

Table 8.1 Clyde river region flood peaks

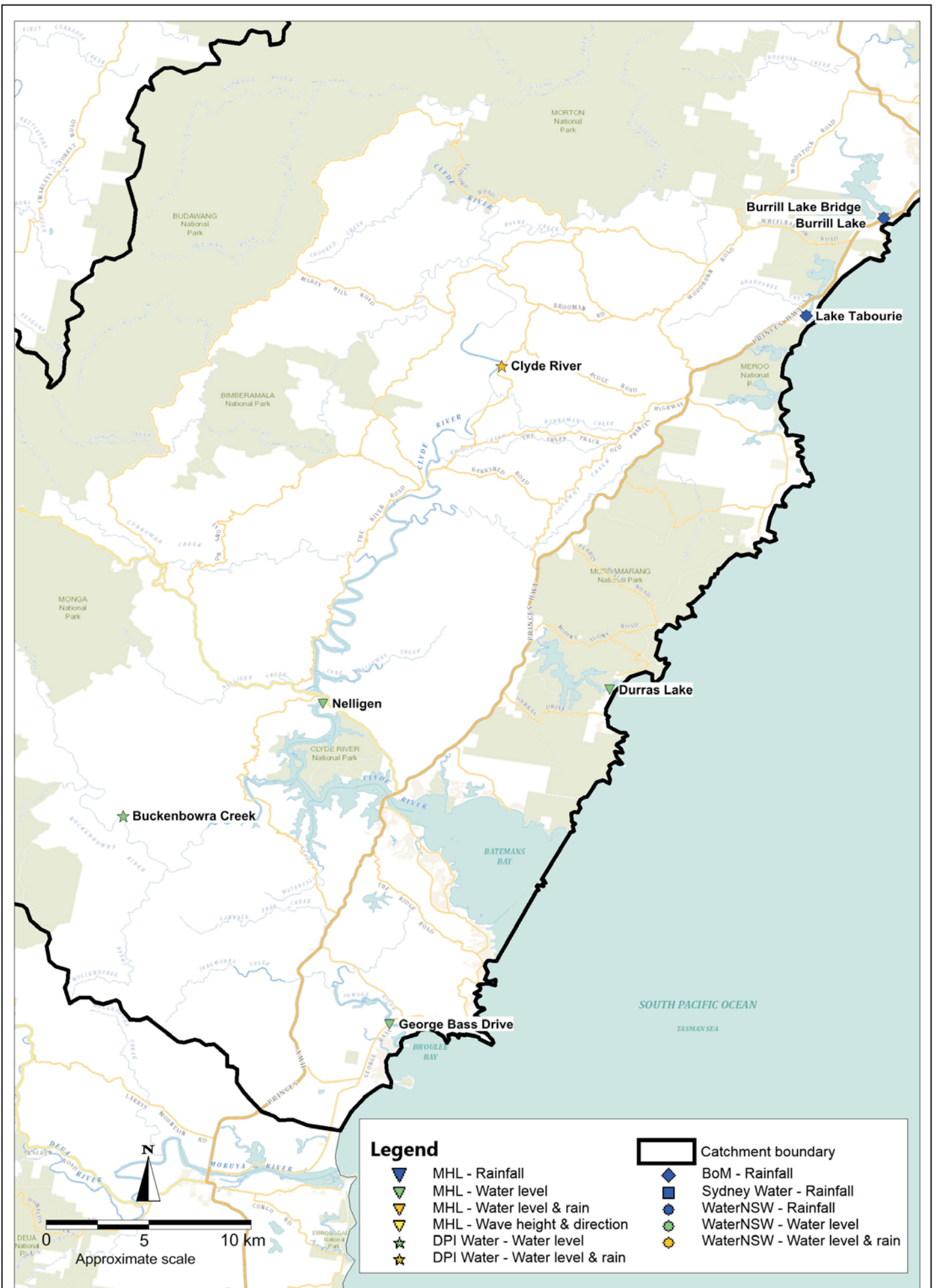
Station Name	Station No.	Site Owner	Datum	Peak level (m)
Burrill Lake Bridge	216435	MHL	AHD	1.44
Lake Tabourie	216440	MHL	AHD	1.22
Clyde River at Brooman	216002	DPI Water	Local Datum	10.36
Durras Lake	216445	MHL	AHD	2.30
Nelligen	216453	MHL	AHD	1.23
Buckenbowra Ck at Buckendowra No 3	216009	DPI Water	Local Datum	2.33
George Bass Drive	216455	MHL	AHD	1.03

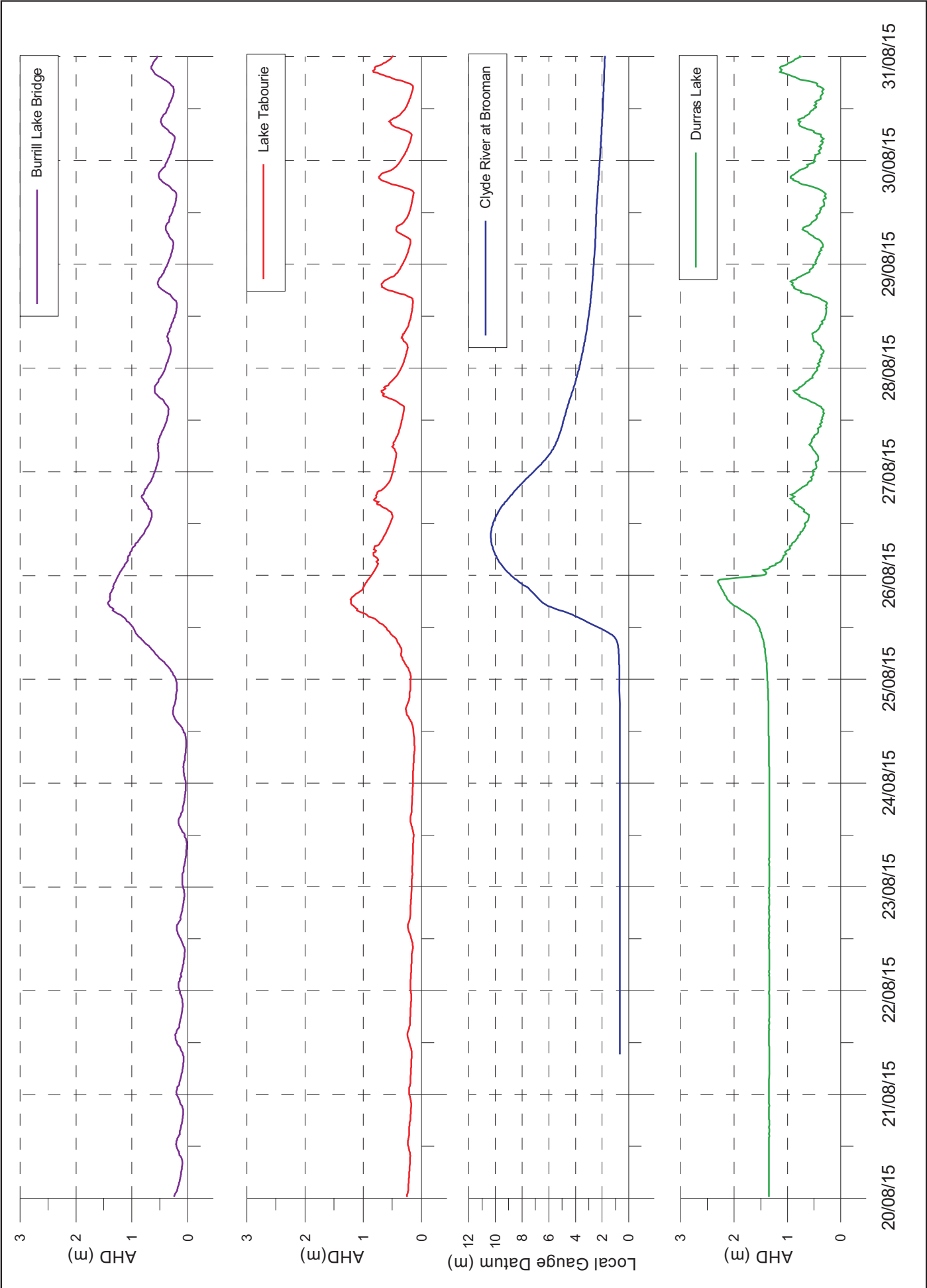
8.2 Clyde river region - rainfall

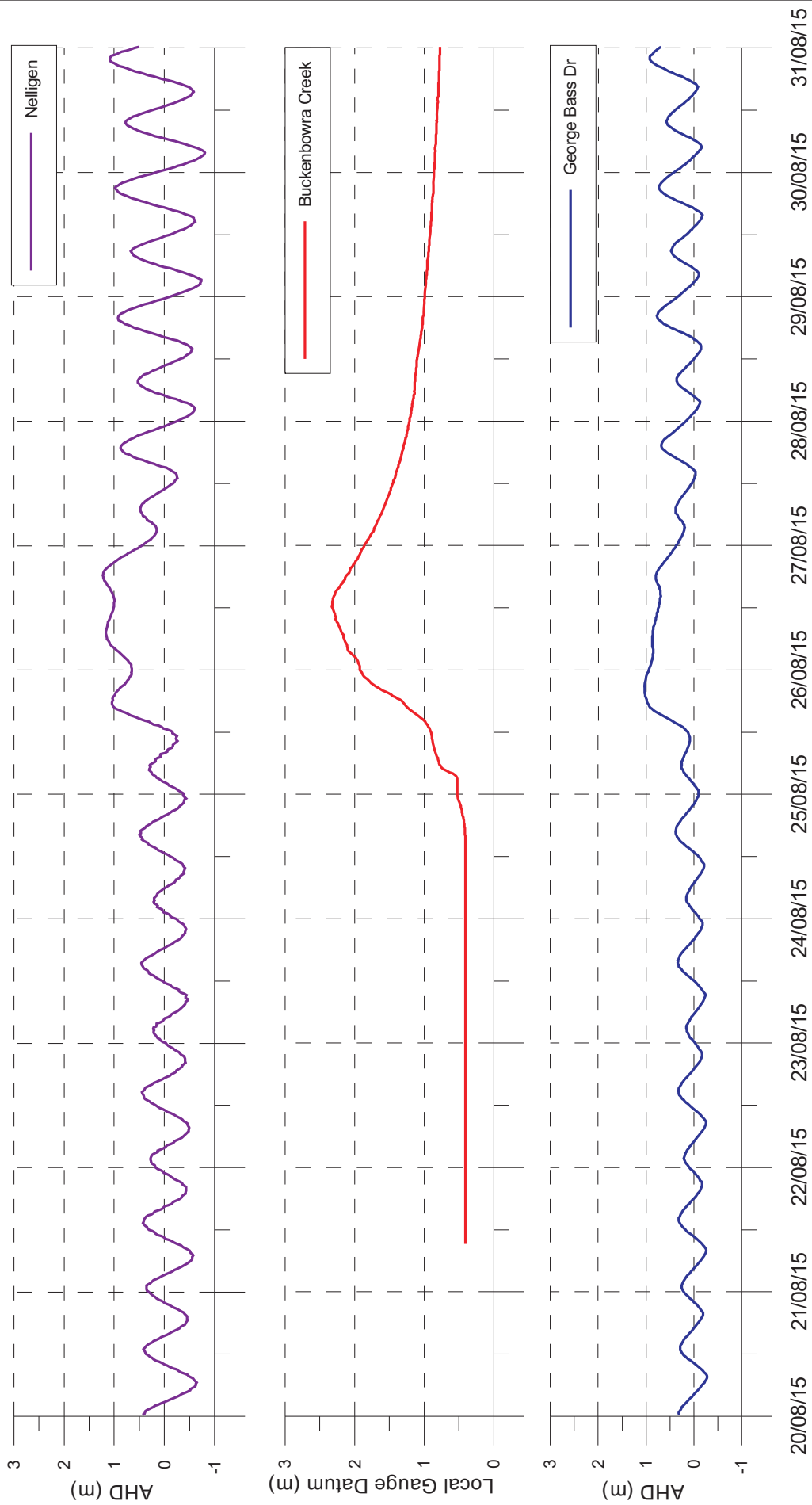
24 hour rainfall totals up until 9.00 a.m. are displayed in Figure 8.4 and Table 8.2 for the period 20th to 31st August 2015. The rainfall data and intensities are displayed graphically in Figures 8.5 and 8.6.

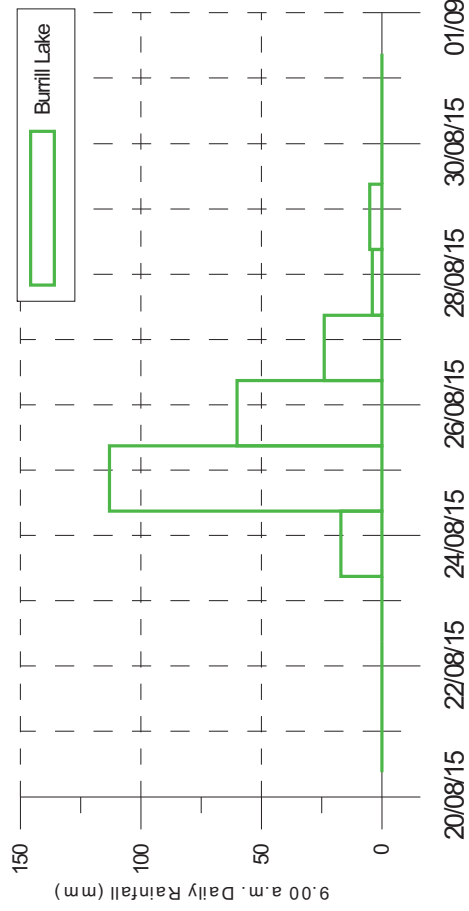
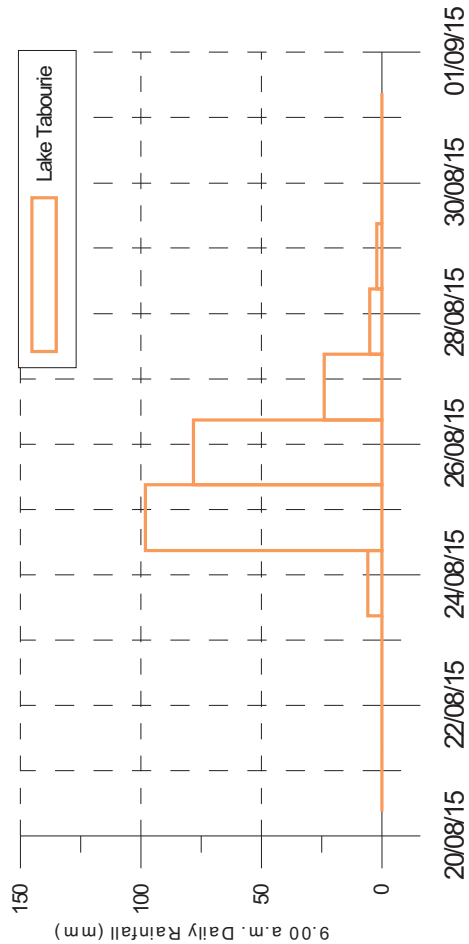
Table 8.2 Clyde river region daily rainfall totals

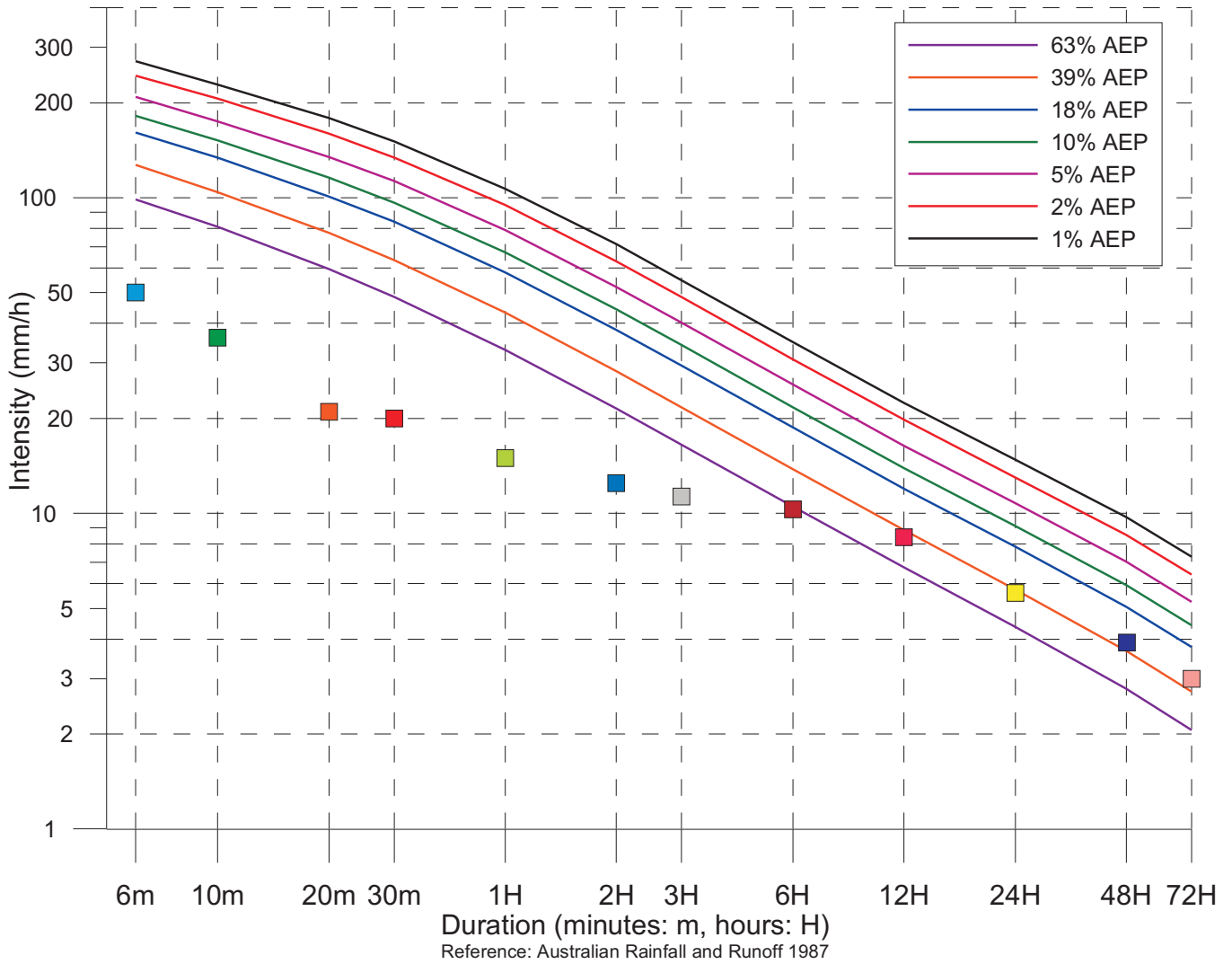
Date	Burrill Lake (mm)	Lake Tabourie (mm)
	BoM	BoM
20/08/2015	0.0	0.0
21/08/2015	0.0	0.0
22/08/2015	0.0	0.0
23/08/2015	0.0	0.0
24/08/2015	17.0	6.0
25/08/2015	113.0	98.0
26/08/2015	60.0	78.0
27/08/2015	24.0	24.0
28/08/2015	4.0	5.0
29/08/2015	5.0	2.0
30/08/2015	0.0	0.0
31/08/2015	0.0	0.0
Total	223.0	213.0







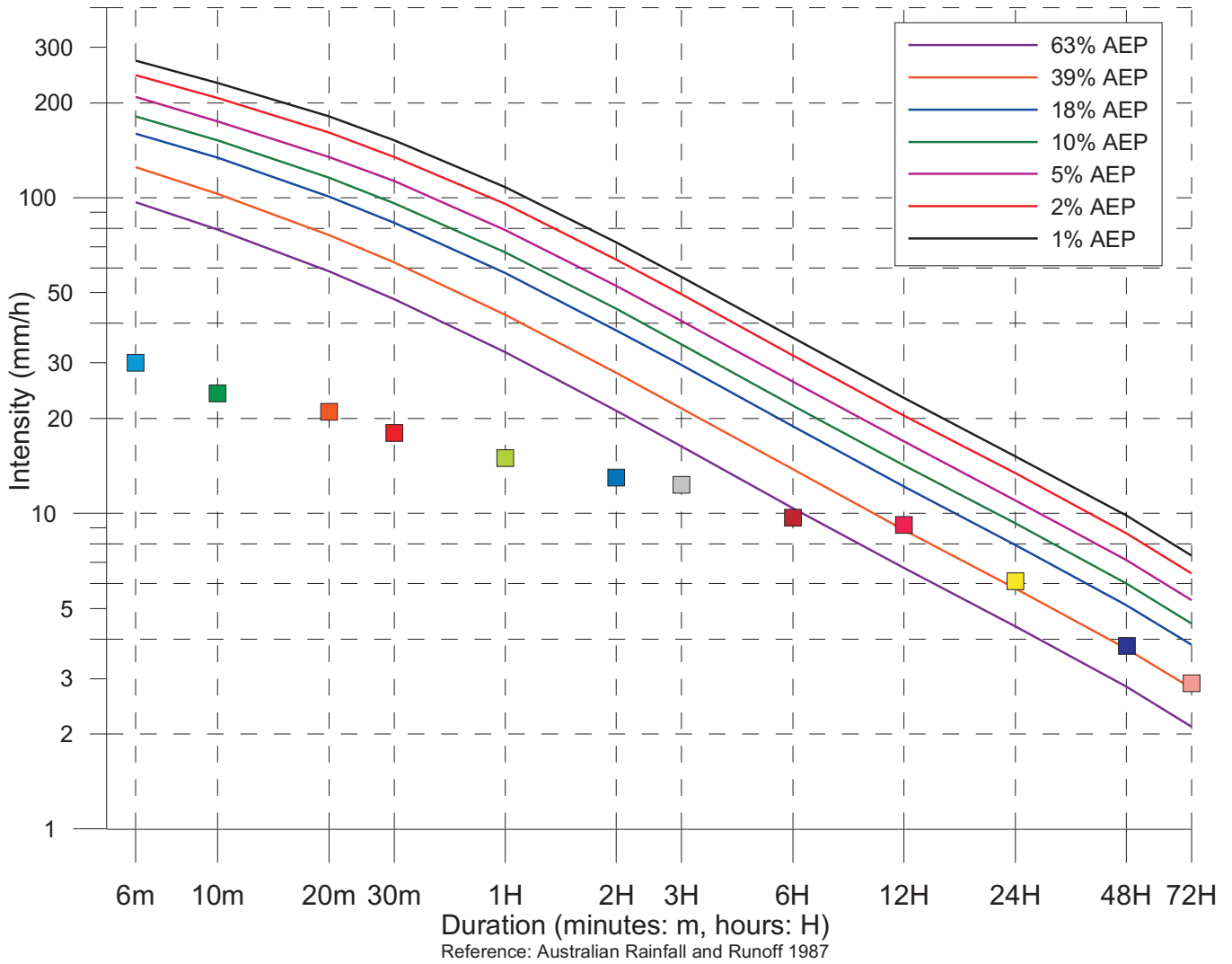




Burrill Lake Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	21:00_26/08/2015
10m	36	21:00_26/08/2015
20m	21	04:38_25/08/2015
30m	20	04:24_25/08/2015
1H	15	04:18_25/08/2015
2H	12.5	04:18_25/08/2015
3H	11.3	03:20_25/08/2015
6H	10.3	02:38_25/08/2015
12H	8.4	02:20_25/08/2015
24H	5.6	22:20_24/08/2015
48H	3.9	02:20_24/08/2015
72H	3	02:20_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*





Lake Tabourie Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	30	20:12_25/08/2015
10m	24	12:46_25/08/2015
20m	21	12:46_25/08/2015
30m	18	12:46_25/08/2015
1H	15	12:46_25/08/2015
2H	13	12:08_25/08/2015
3H	12.3	11:04_25/08/2015
6H	9.7	08:02_25/08/2015
12H	9.2	02:12_25/08/2015
24H	6.1	21:34_24/08/2015
48H	3.8	06:24_24/08/2015
72H	2.9	06:24_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*



9. Moruya river region

9.1 Moruya river region - water level

The locations of water level stations within the Moruya river region are shown in Figure 9.1. The water level data for the period 20th to 31st August 2015 are displayed graphically in Figure 9.2. The peak observed water levels are listed in Table 9.1.

Table 9.2 lists the SES flood classifications for Moruya Bridge. The SES classification scheme indicates the flood peak for Moruya Bridge was classified as a less than minor flood during the August 2015 event.

Table 9.1 Moruya river region flood peaks

Station Name	Station No.	Site Owner	Datum	Peak level (m)
Araluen at Neringla Road	217006	DPI Water	Local Datum	2.14
Deua at Riverview	217007	DPI Water	Local Datum	4.23
Moruya Hospital	217402	MHL	AHD	0.90
Moruya Bridge	217410	MHL	AHD	0.86

Table 9.2 SES flood classification for Moruya Bridge

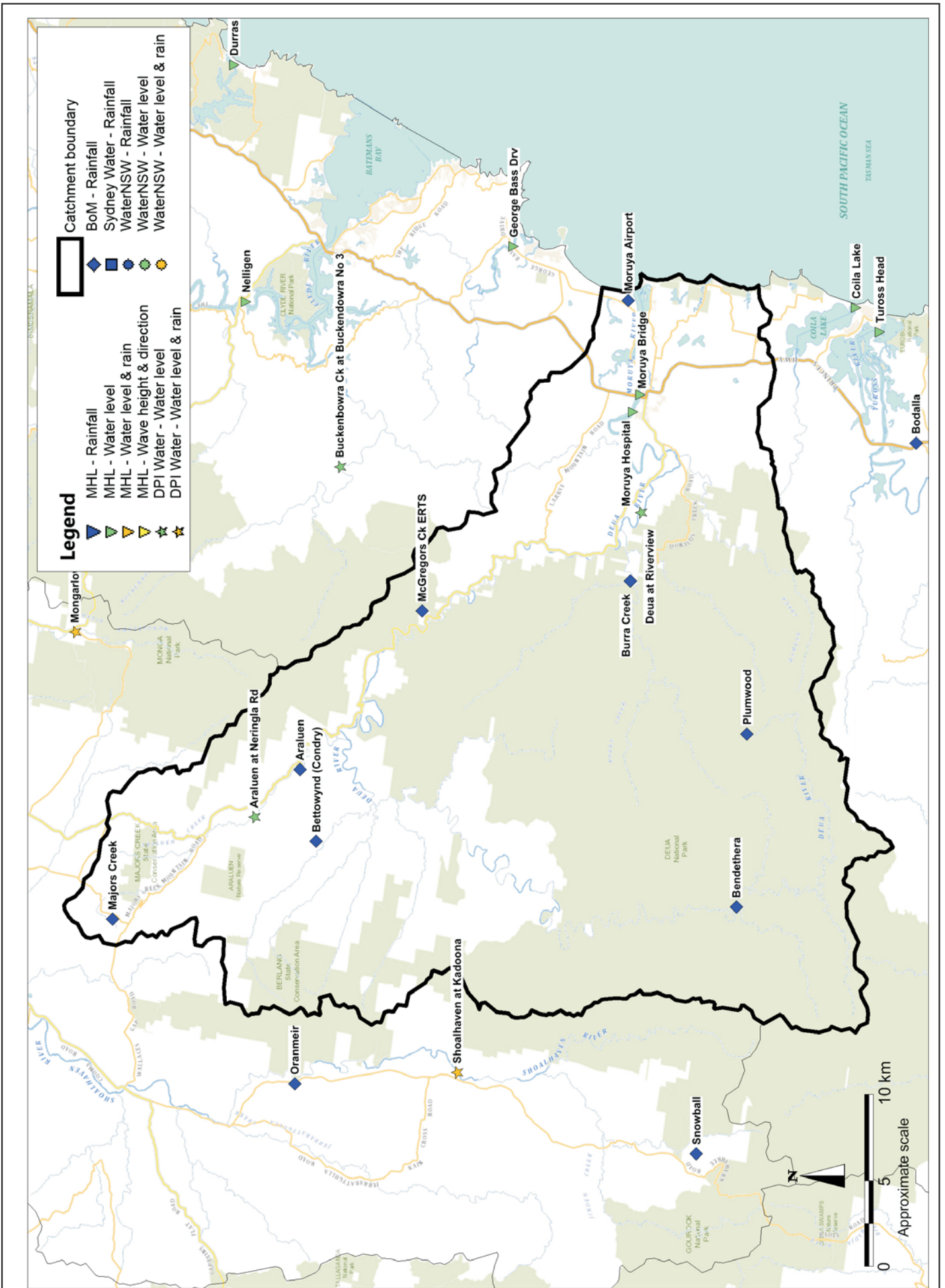
Station	Classification			Peak (m)	Classification
	Minor	Moderate	Major		
	Water Level (m AHD)				
Moruya Bridge	2.0	2.6	3.2	0.86	<Minor

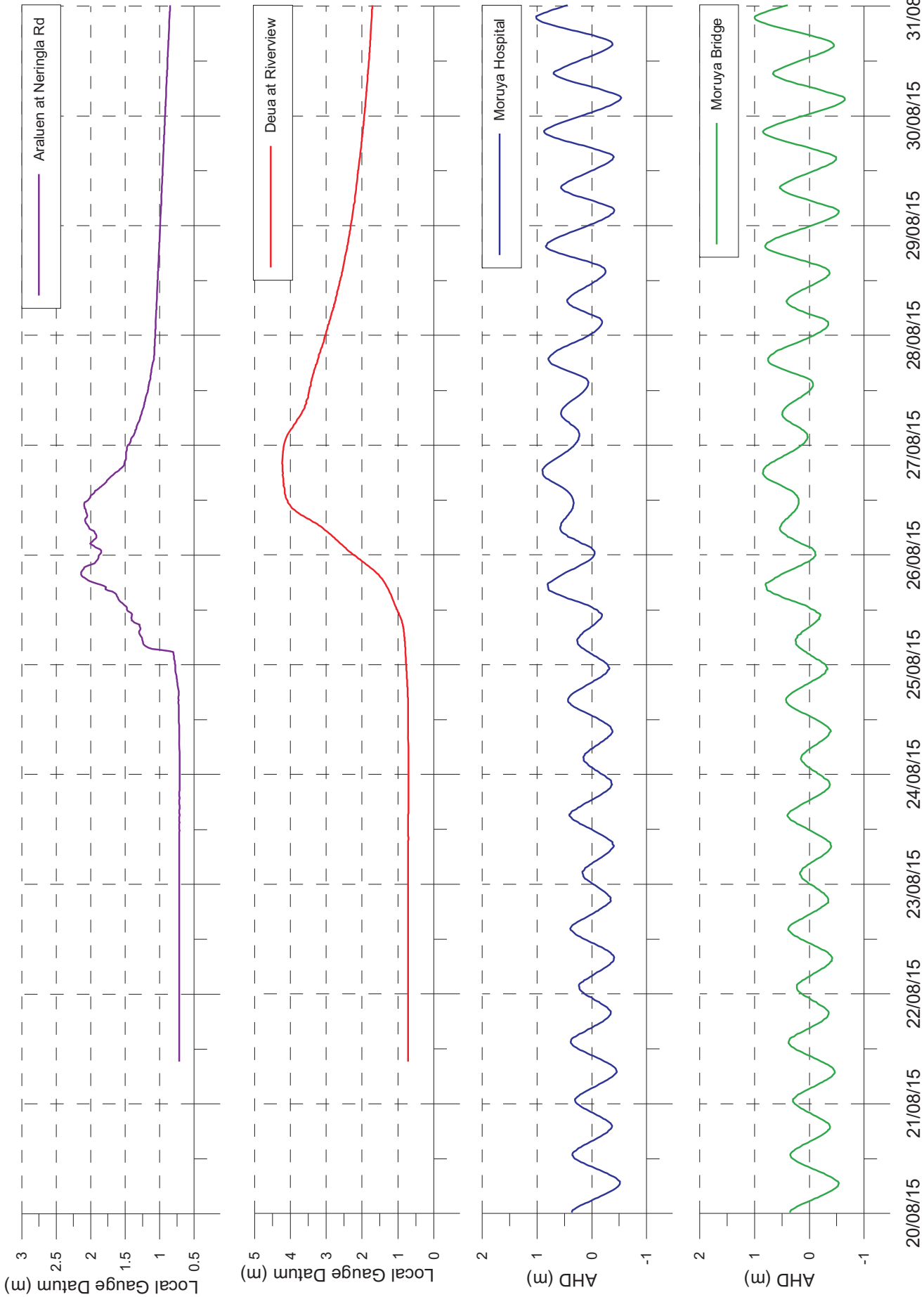
9.2 Moruya river region - rainfall

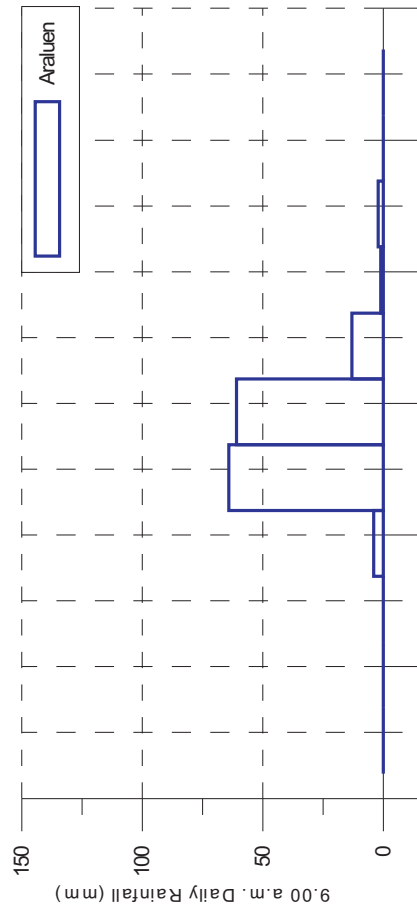
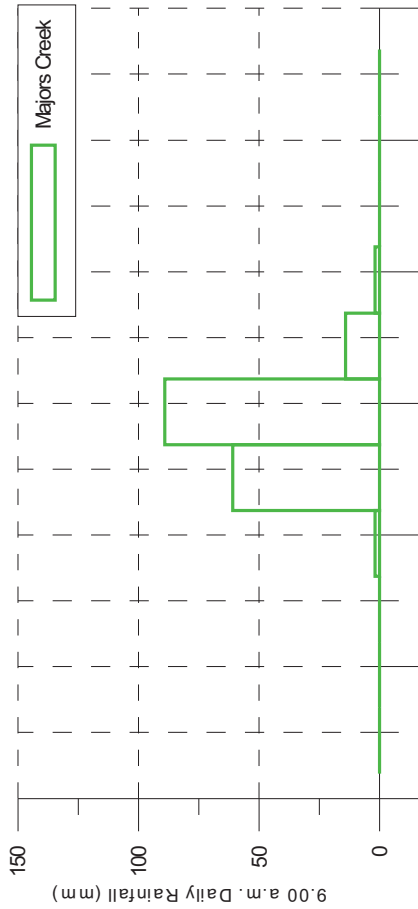
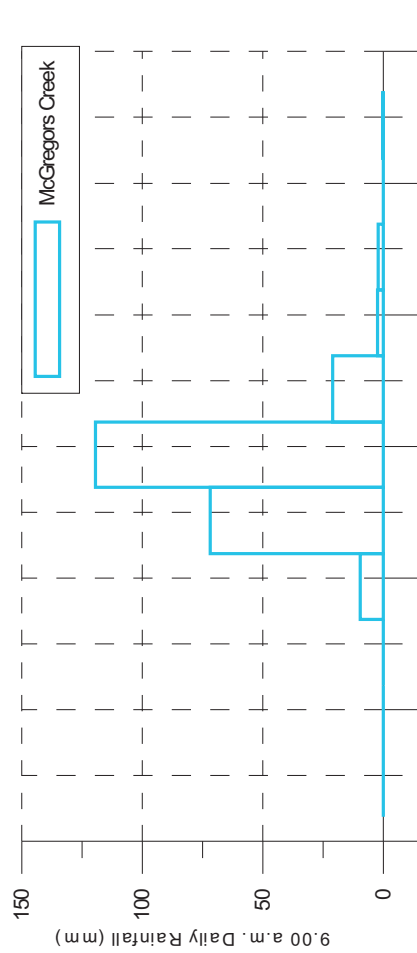
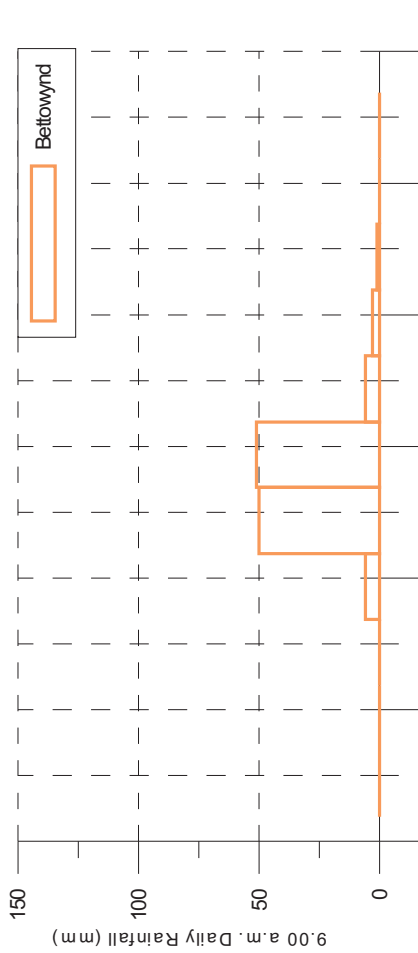
24 hour rainfall totals up until 9.00 a.m. are displayed in Table 9.3 and Figures 9.3 and 9.4 for the period 20th to 31st August 2015. The rainfall data and intensities are displayed graphically in Figures 9.5 to 9.12.

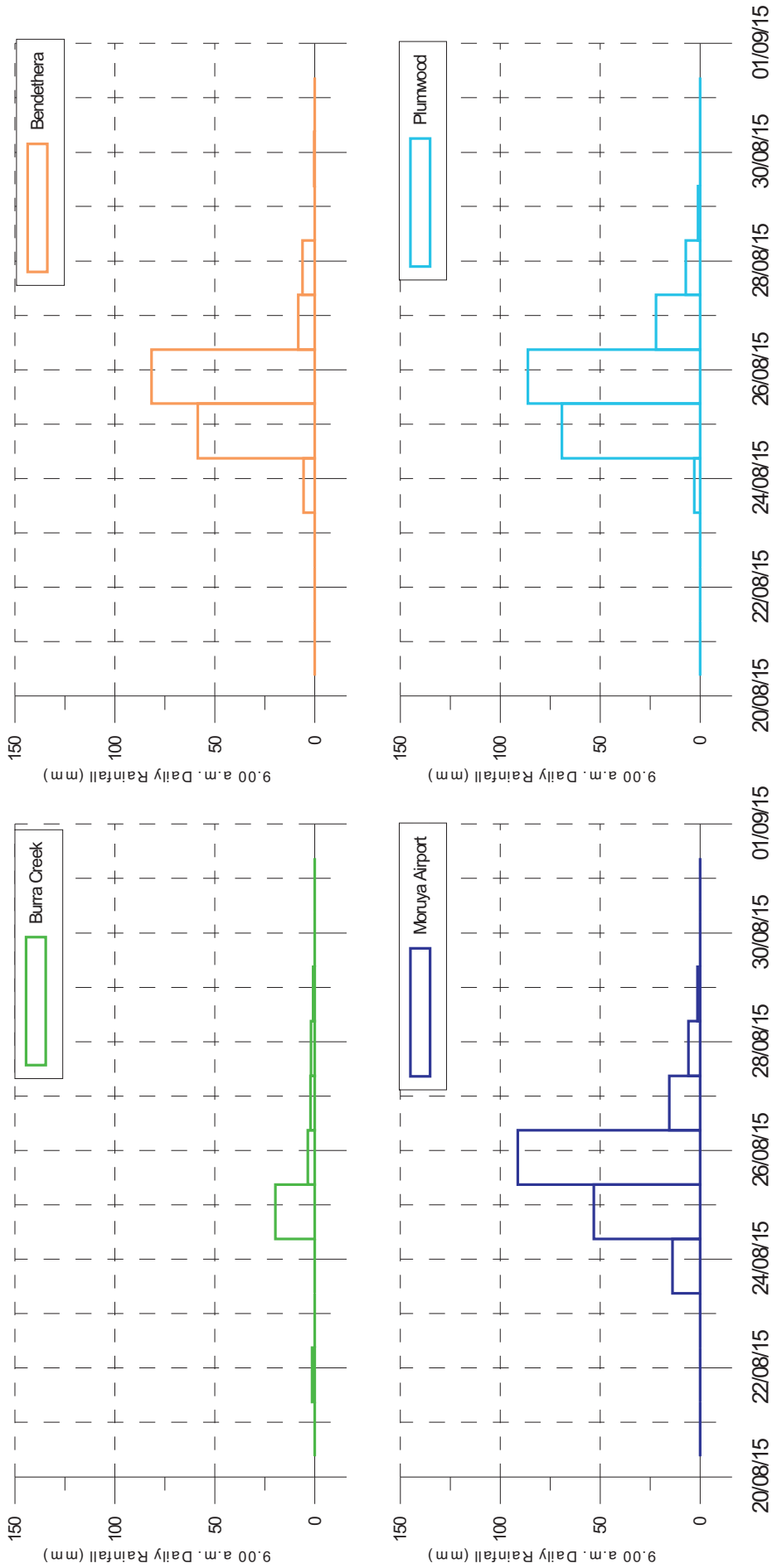
Table 9.3 Moruya river region daily rainfall totals

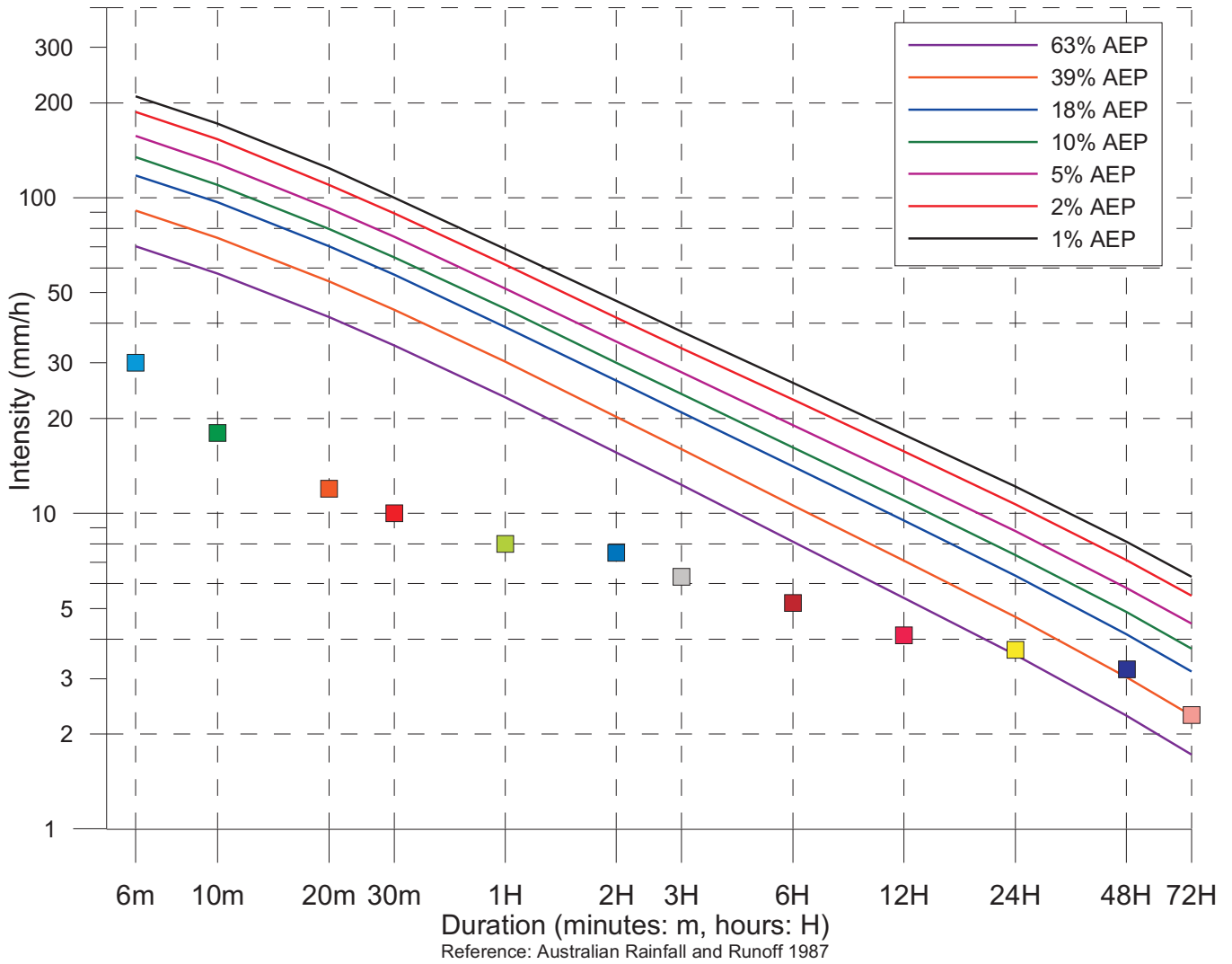
Date	Majors Creek (mm)	Araluen (mm)	Bettowynd (mm)	McGregors Creek (mm)	Burra Creek (mm)	Moruya Airport (mm)	Bendethera (mm)	Plumwood (mm)
	BoM	BoM	BoM	BoM	BoM	BoM	BoM	BoM
20/08/2015	0.0	0.0	1.0	0.0	0.2	0.0	0.0	0.0
21/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22/08/2015	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
23/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24/08/2015	2.0	4.0	6.0	9.6	0.0	13.8	5.6	3.0
25/08/2015	61.0	64.0	50.0	71.8	19.6	53.2	58.4	69.0
26/08/2015	89.0	61.0	51.0	119.4	3.4	91.0	81.6	86.0
27/08/2015	14.0	13.0	6.0	21.0	2.2	15.4	8.2	22.0
28/08/2015	2.0	1.0	3.0	2.4	2.0	5.8	6.2	7.0
29/08/2015	0.0	2.0	1.0	2.0	0.8	1.2	0.0	1.0
30/08/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
31/08/2015	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Total	168.0	145.0	118.0	226.4	29.6	180.4	160.2	188.0







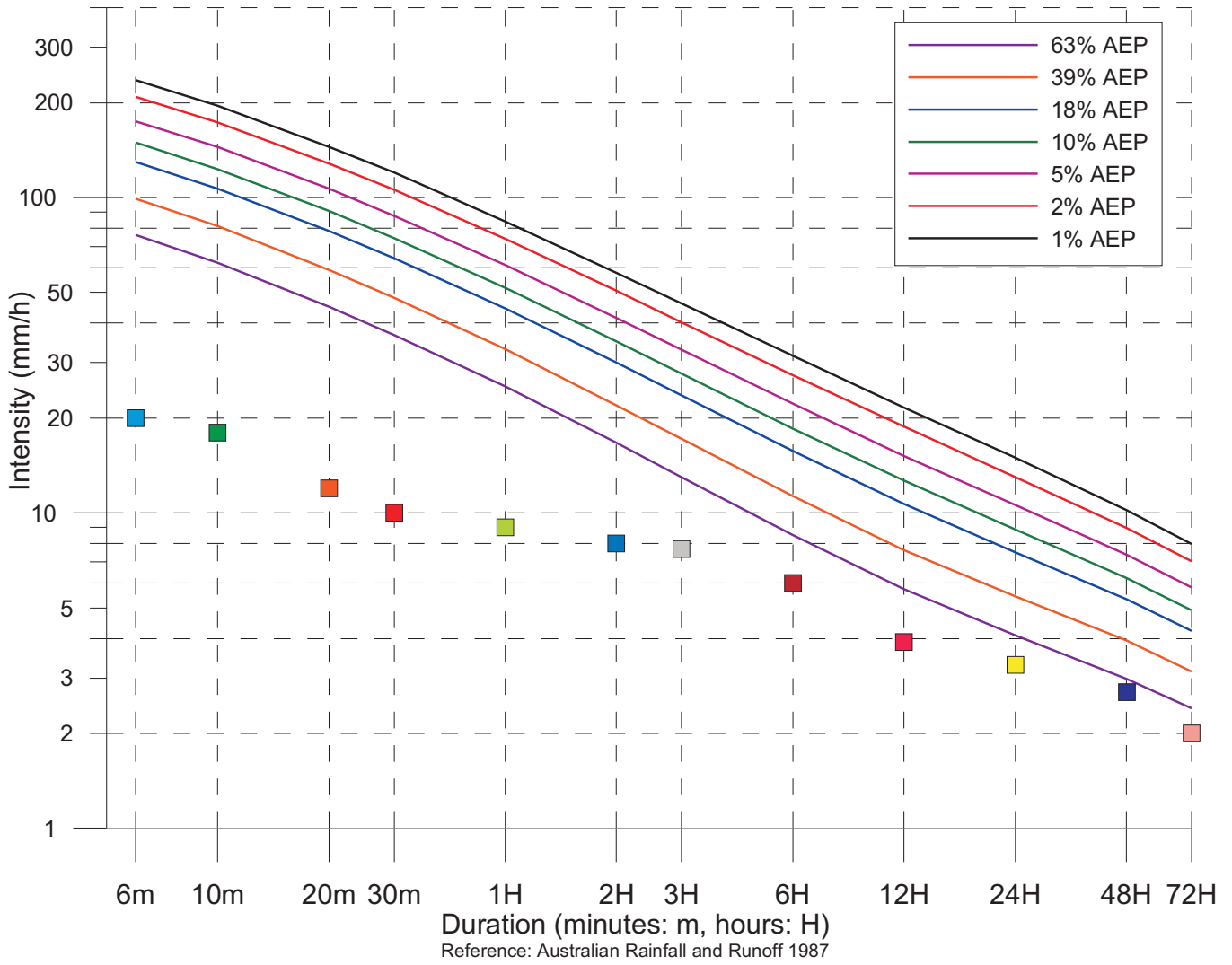




Majors Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	30	11:52_17/08/2015
10m	18	18:24_25/08/2015
20m	12	17:54_24/08/2015
30m	10	17:54_24/08/2015
1H	8	17:48_24/08/2015
2H	7.5	17:42_24/08/2015
3H	6.3	14:34_25/08/2015
6H	5.2	17:42_24/08/2015
12H	4.1	13:56_25/08/2015
24H	3.7	11:00_25/08/2015
48H	3.2	14:52_24/08/2015
72H	2.3	04:28_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

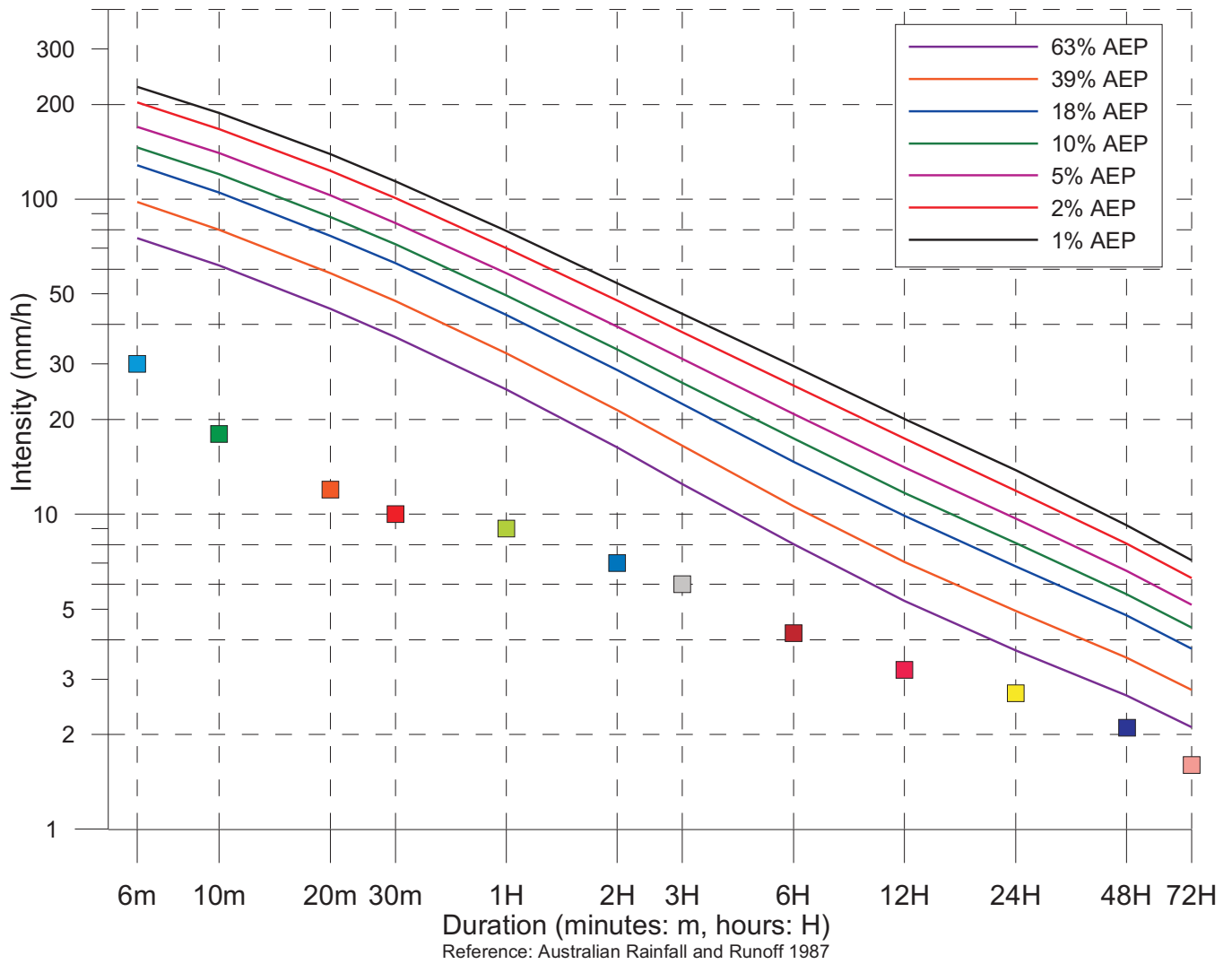




Araluen Rainfall Intensity		
01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	20	08:32_26/08/2015
10m	18	20:36_24/08/2015
20m	12	20:36_24/08/2015
30m	10	19:22_24/08/2015
1H	9	19:06_24/08/2015
2H	8	18:06_24/08/2015
3H	7.7	17:58_24/08/2015
6H	6	17:46_24/08/2015
12H	3.9	17:46_24/08/2015
24H	3.3	17:26_24/08/2015
48H	2.7	14:00_24/08/2015
72H	2	07:16_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

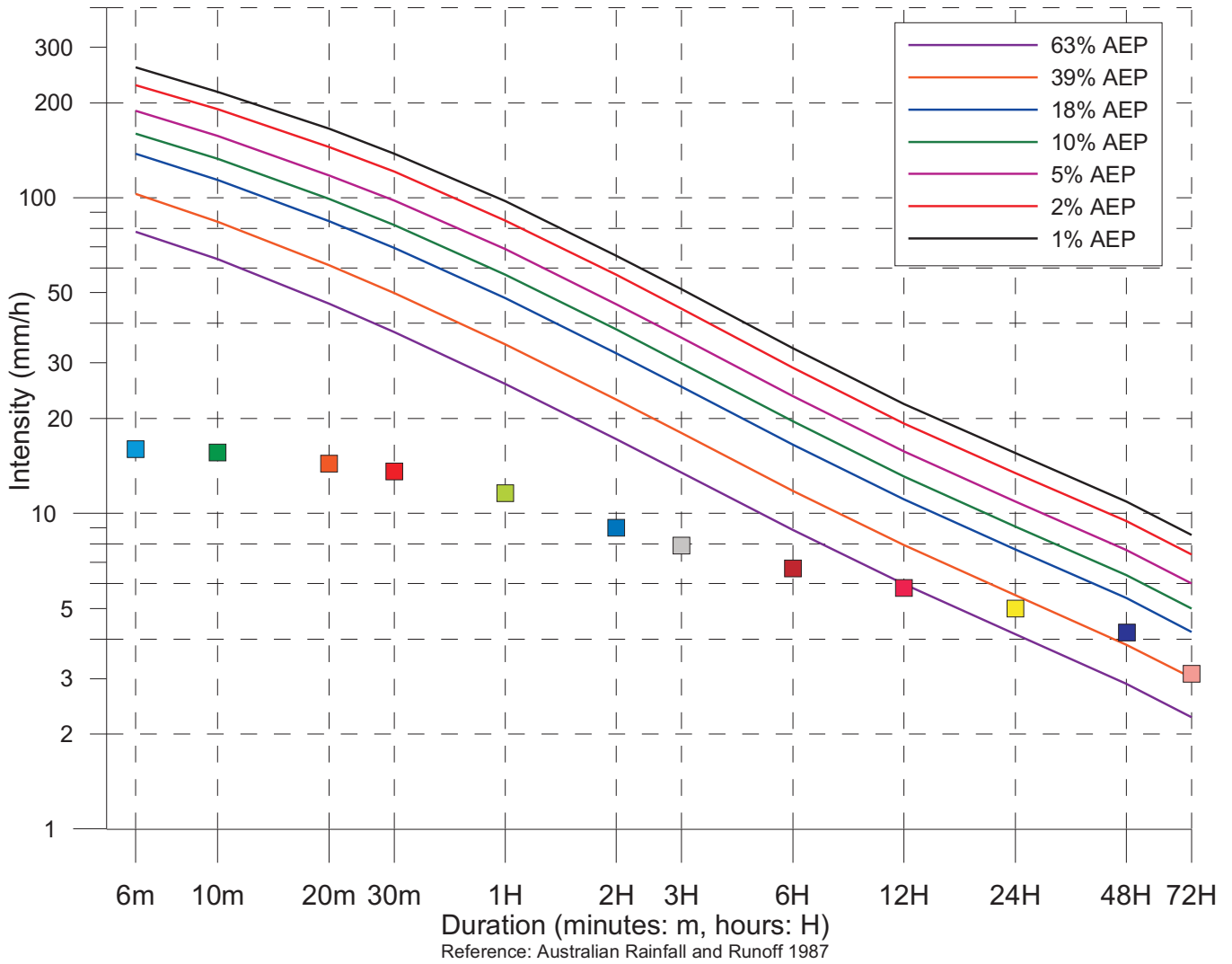




Bettowynd Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	30	06:30_26/08/2015
10m	18	06:30_26/08/2015
20m	12	18:10_24/08/2015
30m	10	18:10_24/08/2015
1H	9	17:48_24/08/2015
2H	7	17:48_24/08/2015
3H	6	17:48_24/08/2015
6H	4.2	17:48_24/08/2015
12H	3.2	15:14_24/08/2015
24H	2.7	17:48_24/08/2015
48H	2.1	15:14_24/08/2015
72H	1.6	01:36_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

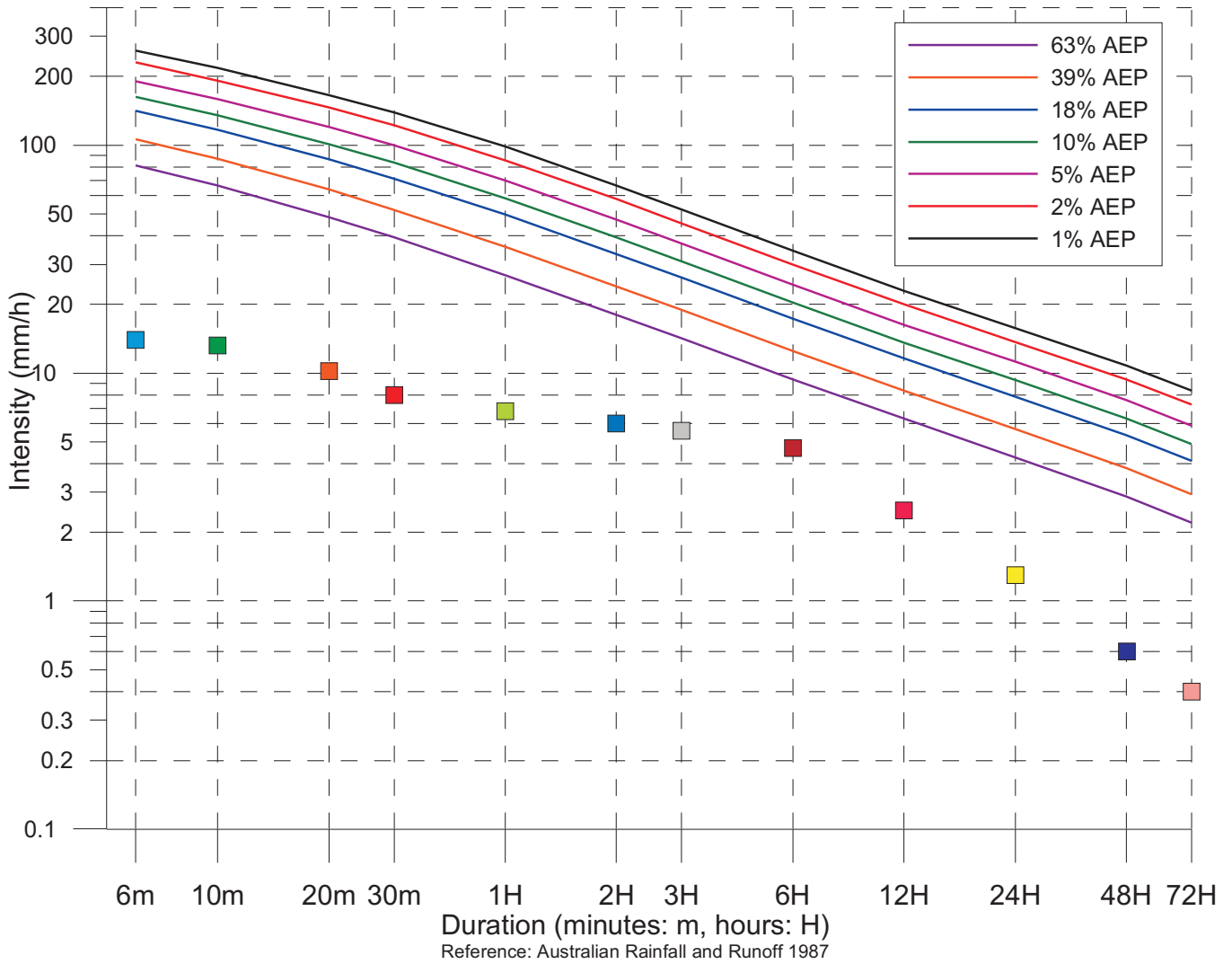




McGregors Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	16	08:26_26/08/2015
10m	15.6	16:50_25/08/2015
20m	14.4	16:50_25/08/2015
30m	13.6	16:50_25/08/2015
1H	11.6	16:32_25/08/2015
2H	9	15:20_25/08/2015
3H	7.9	17:36_24/08/2015
6H	6.7	14:48_25/08/2015
12H	5.8	13:48_25/08/2015
24H	5	06:56_25/08/2015
48H	4.2	14:08_24/08/2015
72H	3.1	23:28_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

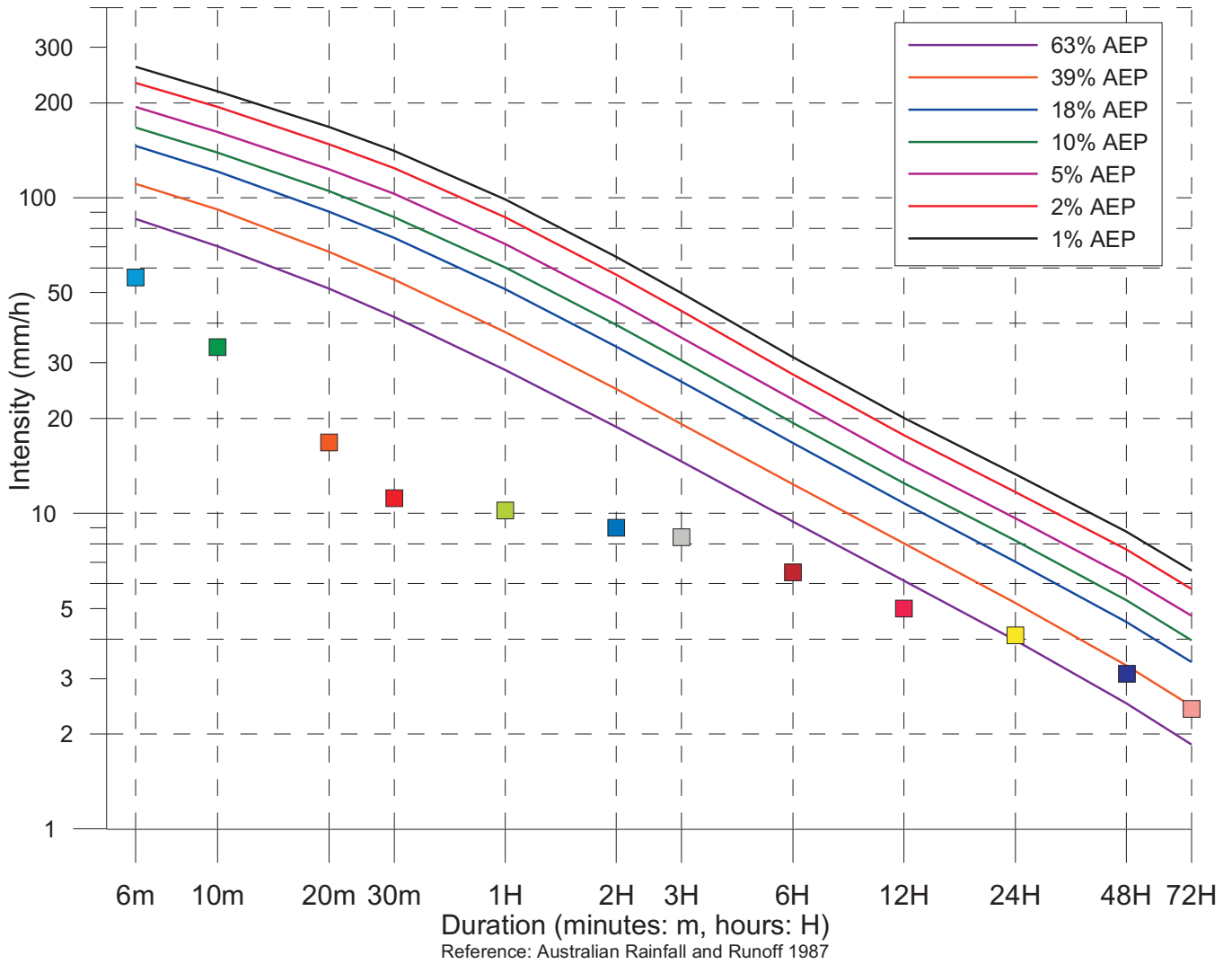




Burra Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	14	05:40_02/08/2015
10m	13.2	05:36_02/08/2015
20m	10.2	05:30_02/08/2015
30m	8	18:46_24/08/2015
1H	6.8	04:46_02/08/2015
2H	6	03:54_02/08/2015
3H	5.6	02:50_02/08/2015
6H	4.7	01:10_02/08/2015
12H	2.5	00:50_02/08/2015
24H	1.3	00:50_02/08/2015
48H	0.6	00:50_02/08/2015
72H	0.4	00:50_02/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

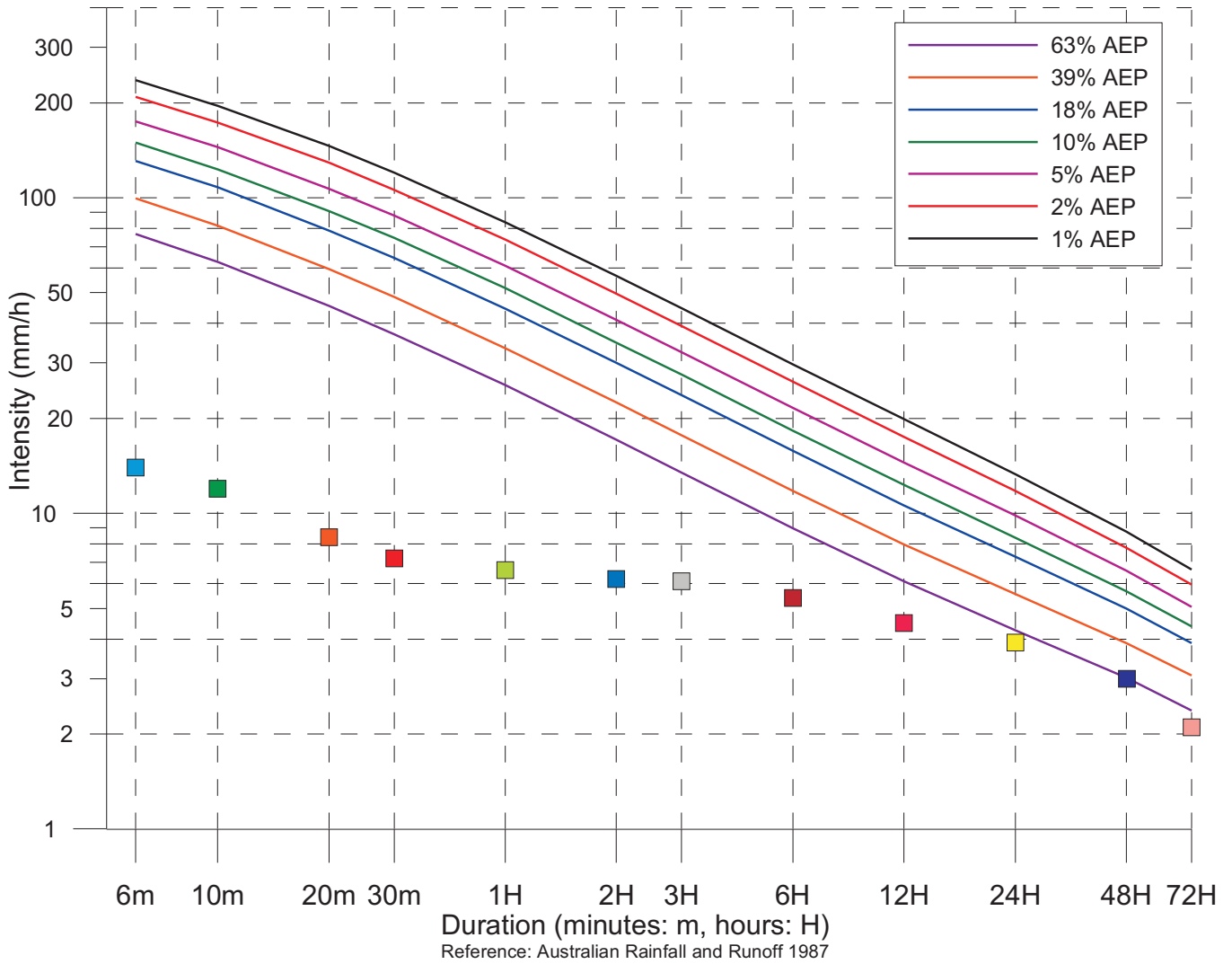




Moruya Airport Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	56	14:58_25/08/2015
10m	33.6	14:58_25/08/2015
20m	16.8	14:58_25/08/2015
30m	11.2	14:58_25/08/2015
1H	10.2	14:28_25/08/2015
2H	9	14:28_25/08/2015
3H	8.4	13:28_25/08/2015
6H	6.5	10:28_25/08/2015
12H	5	06:58_25/08/2015
24H	4.1	06:58_25/08/2015
48H	3.1	13:58_24/08/2015
72H	2.4	21:58_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

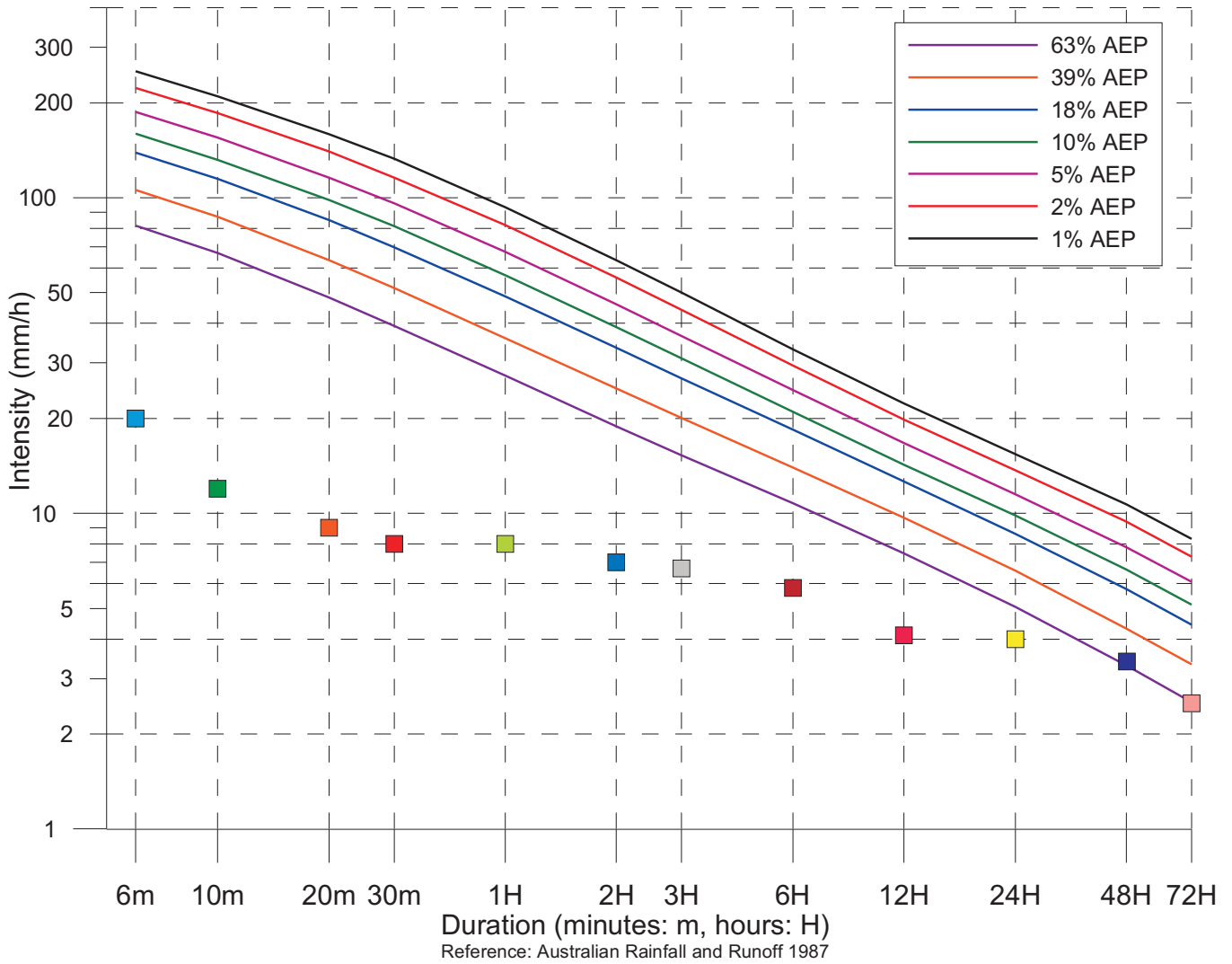




Bendethera Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	14	22:36_23/08/2015
10m	12	22:36_23/08/2015
20m	8.4	22:32_23/08/2015
30m	7.2	15:38_25/08/2015
1H	6.6	15:24_25/08/2015
2H	6.2	14:42_25/08/2015
3H	6.1	13:18_25/08/2015
6H	5.4	11:10_25/08/2015
12H	4.5	06:22_25/08/2015
24H	3.9	18:20_24/08/2015
48H	3	13:50_24/08/2015
72H	2.1	22:32_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*





Plumwood Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	20	19:20_25/08/2015
10m	12	19:20_25/08/2015
20m	9	21:20_24/08/2015
30m	8	21:20_24/08/2015
1H	8	18:28_24/08/2015
2H	7	17:08_24/08/2015
3H	6.7	16:50_24/08/2015
6H	5.8	17:02_24/08/2015
12H	4.1	05:16_25/08/2015
24H	4	16:50_24/08/2015
48H	3.4	15:46_24/08/2015
72H	2.5	04:32_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*



10. Coila, Tuross and Wagonga Inlet river region

10.1 Coila, Tuross and Wagonga Inlet river region - water level

The locations of water level stations within the Coila, Tuross and Wagonga Inlet river region are shown in Figure 10.1. The water level data for the period 20th to 31st August 2015 are displayed graphically in Figures 10.2 to 10.3. The peak observed water levels are listed in Table 10.1.

Currently there are no SES flood classifications for the Coila, Tuross and Wagonga Inlet river region.

Table 10.1 Coila, Tuross and Wagonga Inlet river region flood peaks

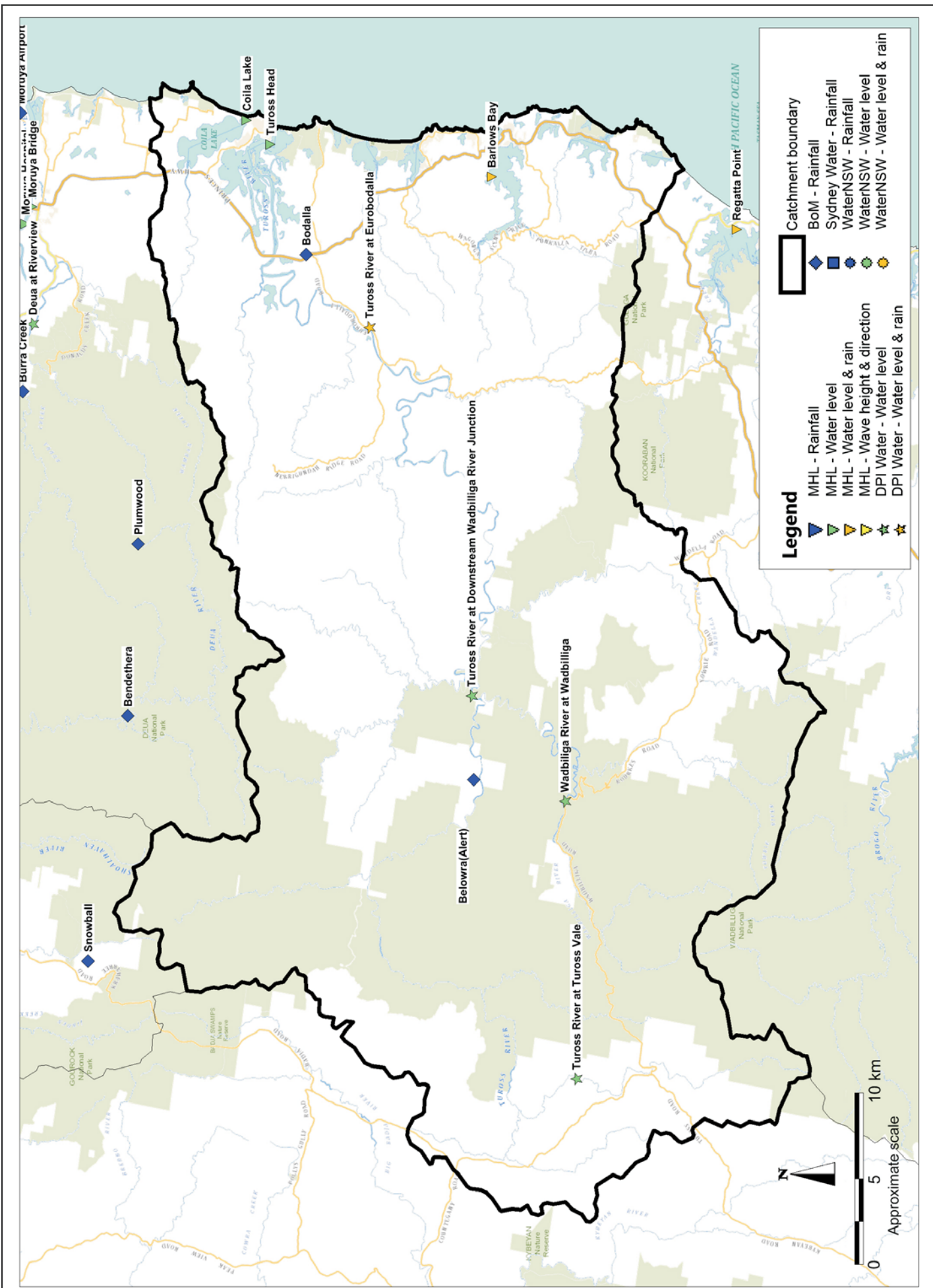
Station Name	Station No.	Site Owner	Datum	Peak level (m)
Coila Lake	218405	MHL	AHD	2.22
Tuross Head	218410	MHL	AHD	0.86
Tuross River at Eurobodalla	218008	DPI Water	Local Datum	4.46
Tuross River at Downstream Wadbilliga River Junction	218005	DPI Water	Local Datum	1.87
Wadbilliga River at Wadbilliga	218007	DPI Water	Local Datum	1.58
Tuross River at Tuross Vale	218001	DPI Water	Local Datum	1.71
Barlows Bay	218415	MHL	AHD	0.52
Regatta Point	219405	MHL	AHD	0.75

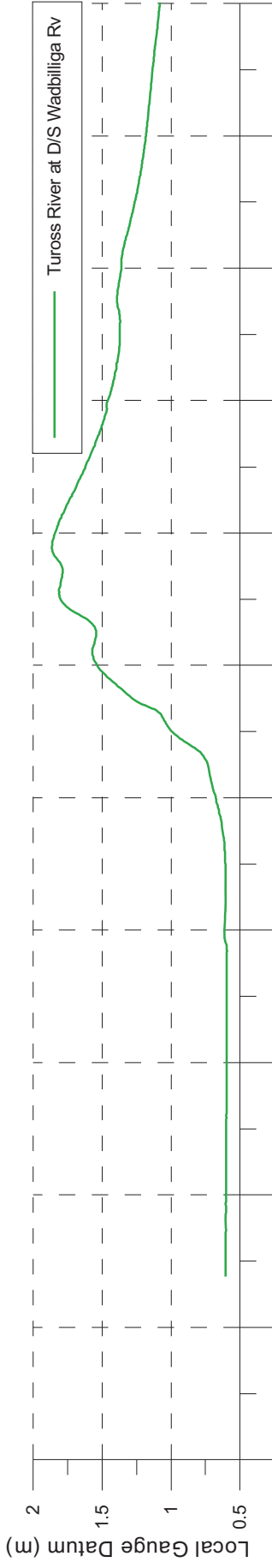
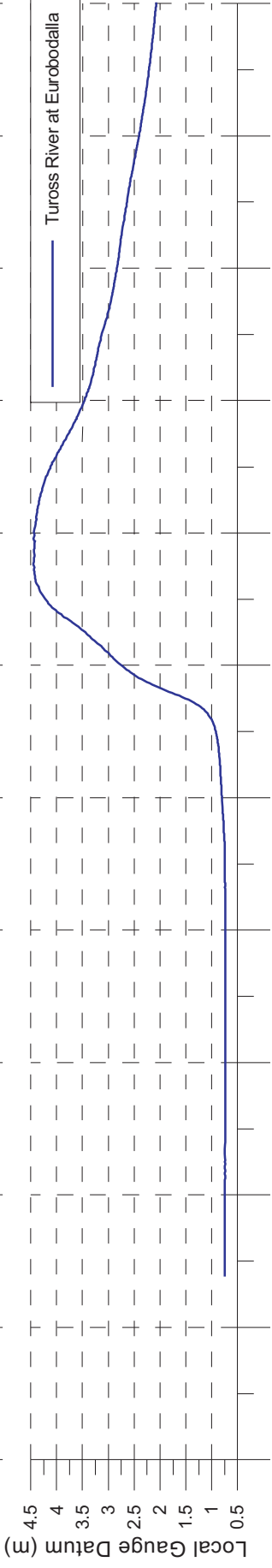
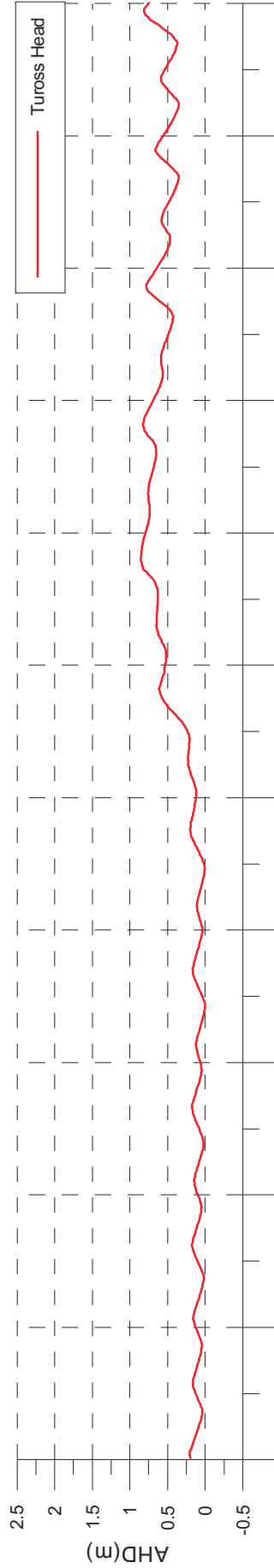
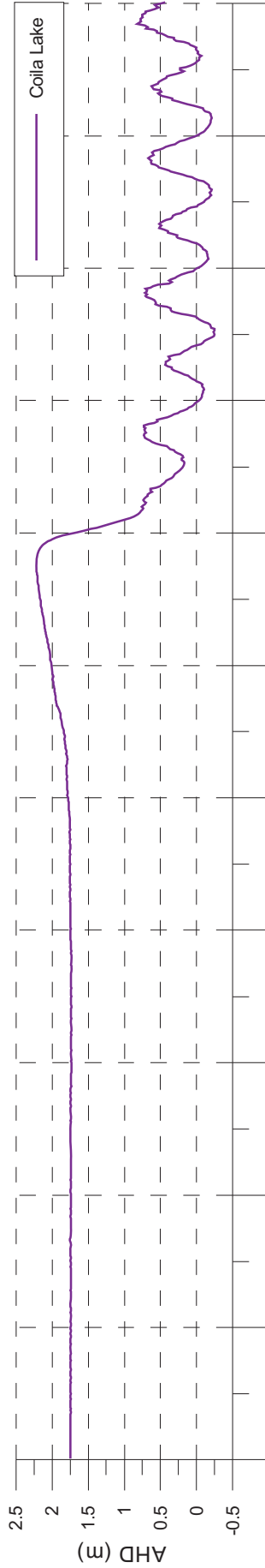
10.2 Coila, Tuross and Wagonga Inlet river region - rainfall

24 hour rainfall totals up until 9.00 a.m. are displayed in Table 10.2 and Figures 10.3 to 10.4 for the period 20th to 31st August 2015. The rainfall data and intensities are displayed graphically in Figures 10.5 to 10.8.

Table 10.2 Coila, Tuross and Wagonga Inlet river region daily rainfall Totals

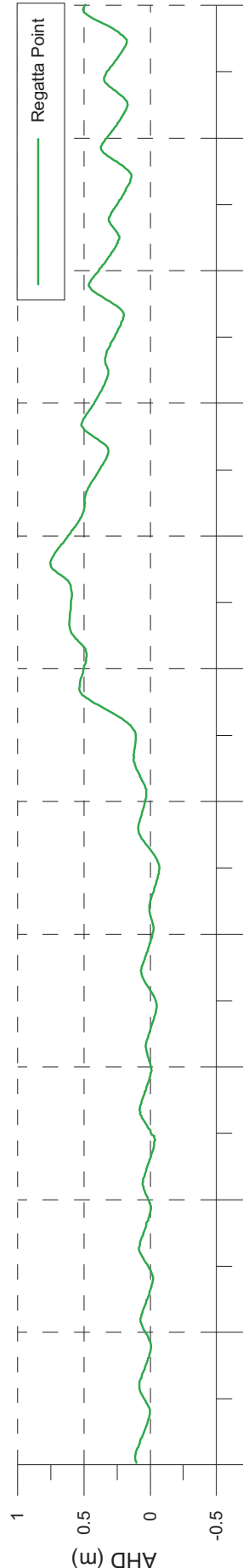
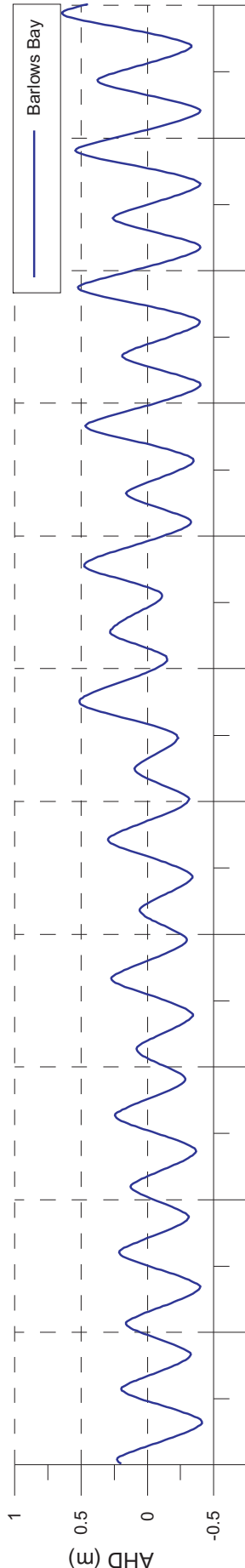
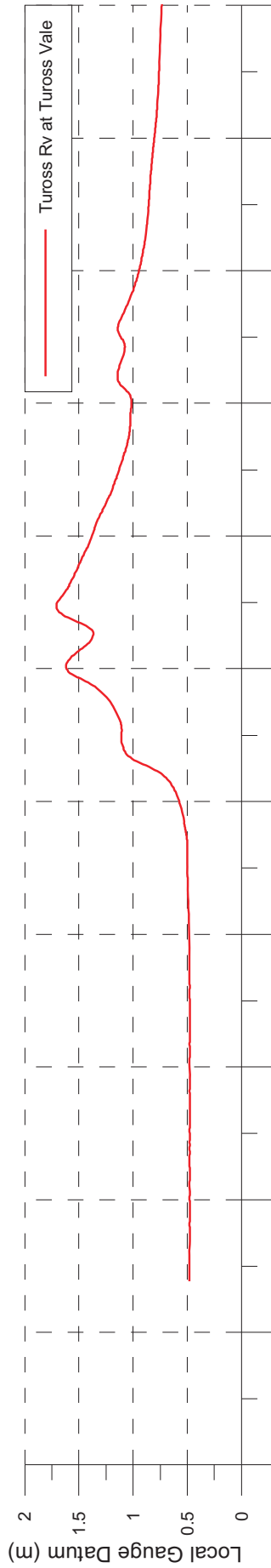
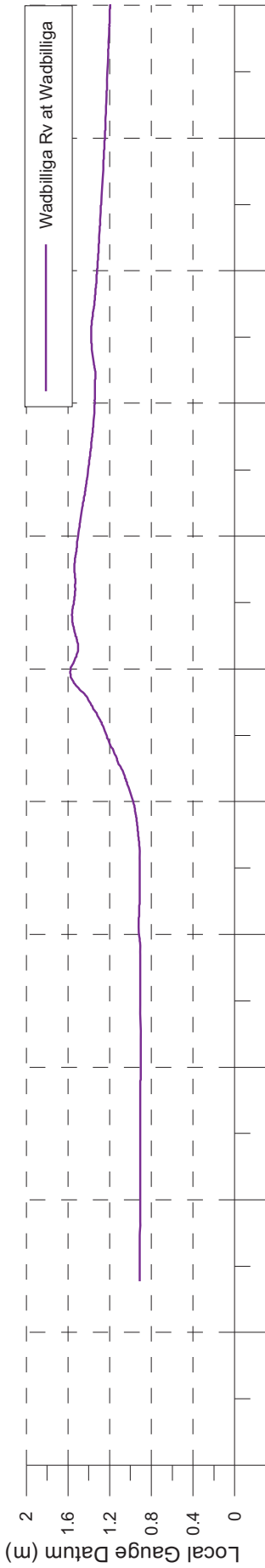
Date	Tuross at Eurobodalla	Belowra (mm)	Barlows Bay (mm)	Regatta Point (mm)
	DPI Water	BoM	MHL	MHL
20/08/2015	0.0	1.0	0.0	0.0
21/08/2015	0.0	0.0	0.0	0.0
22/08/2015	0.0	0.0	0.0	0.0
23/08/2015	0.0	0.0	0.0	0.0
24/08/2015	3.8	6.0	7.5	3.0
25/08/2015	58.6	40.0	66.5	41.0
26/08/2015	86.6	16.0	89.5	57.0
27/08/2015	11.8	4.0	8.5	12.0
28/08/2015	9.4	3.0	9.0	26.0
29/08/2015	0.8	0.0	0.5	0.0
30/08/2015	0.2	1.0	0.5	0.0
31/08/2015	0.0	0.0	0.0	0.0
Total	171.2	71.0	182.0	139.0





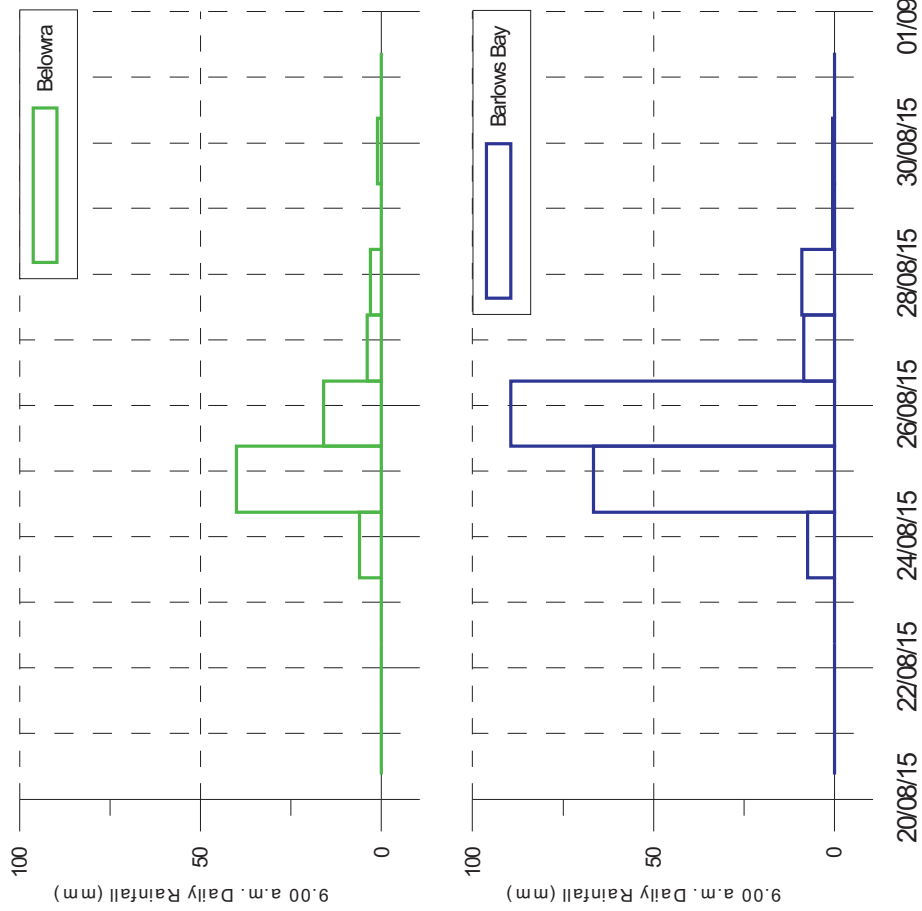
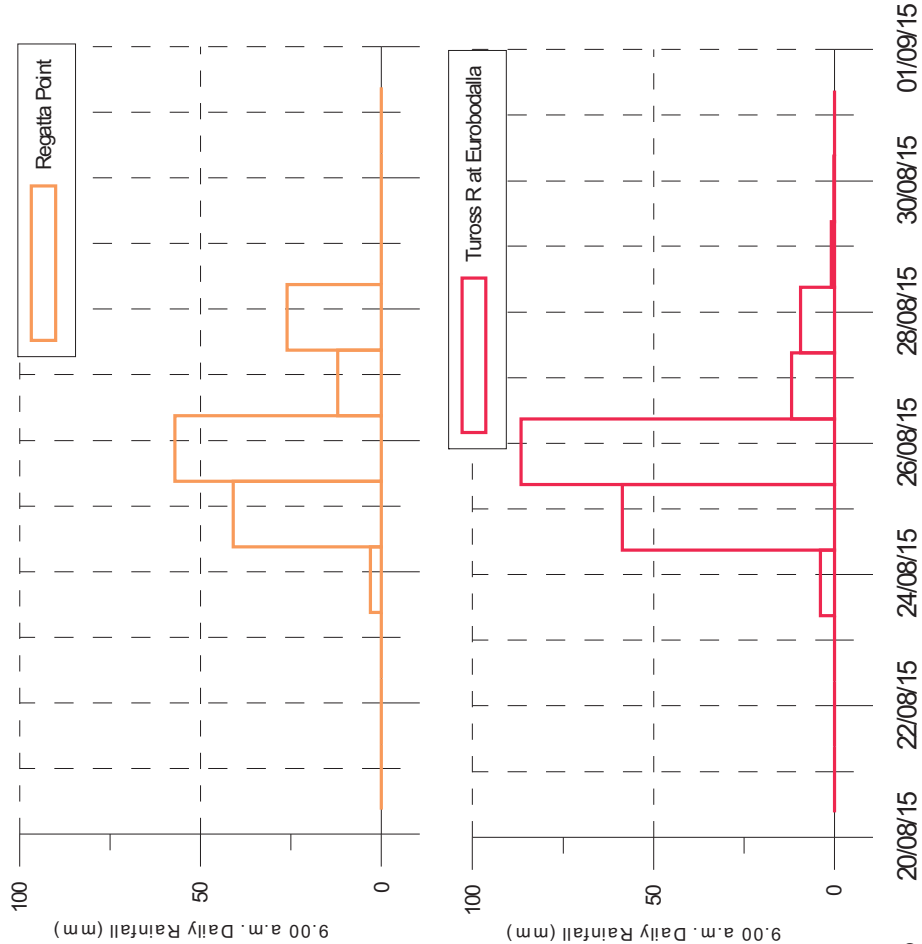
20/08/15 21/08/15 22/08/15 23/08/15 24/08/15 25/08/15 26/08/15 27/08/15 28/08/15 29/08/15 30/08/15 31/08/15

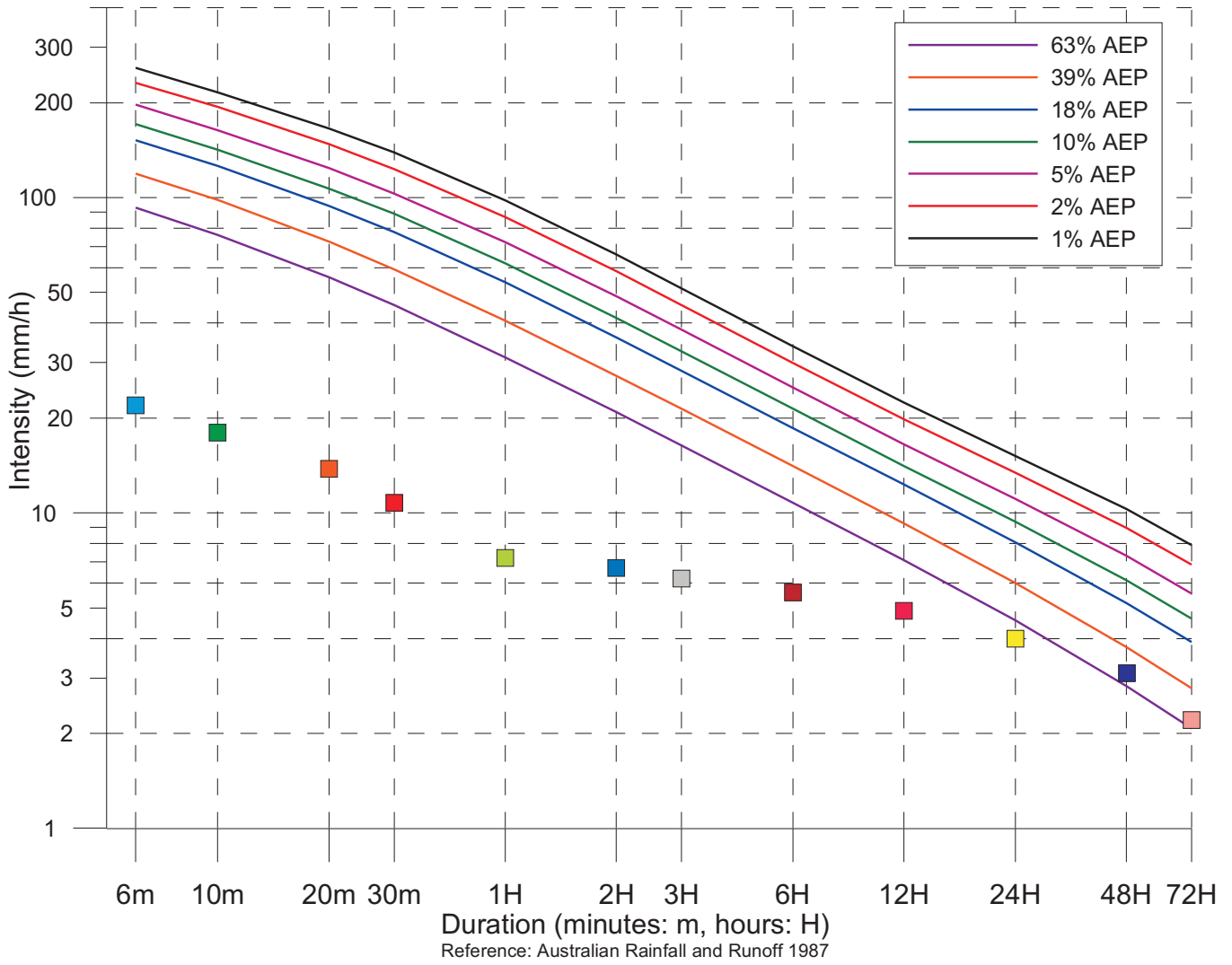




20/08/15 21/08/15 22/08/15 23/08/15 24/08/15 25/08/15 26/08/15 27/08/15 28/08/15 29/08/15 30/08/15 31/08/15



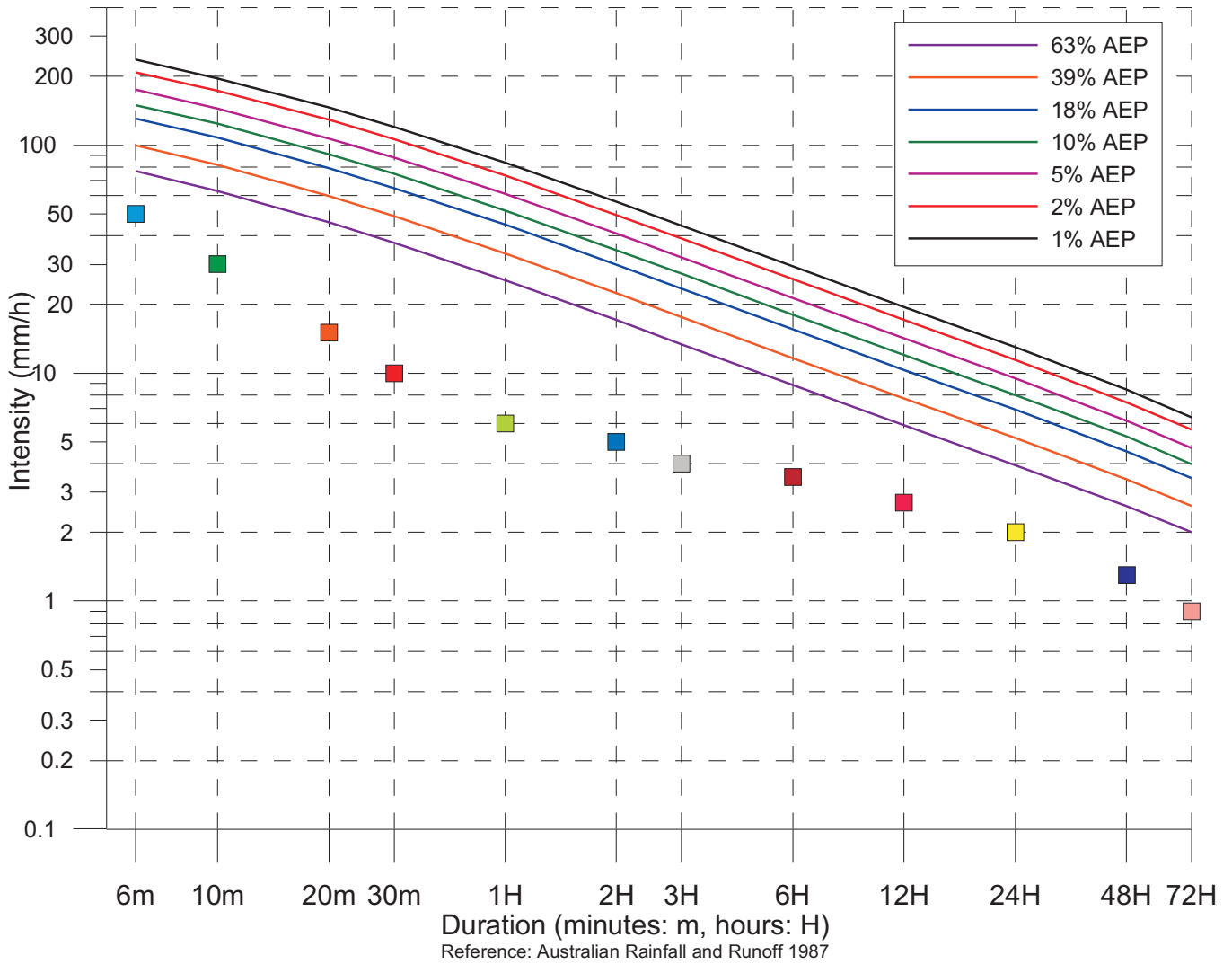




Tuross River at Eurobodalla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	22	20:44_25/08/2015
10m	18	16:50_26/08/2015
20m	13.8	06:14_26/08/2015
30m	10.8	06:14_26/08/2015
1H	7.2	10:36_25/08/2015
2H	6.7	09:36_25/08/2015
3H	6.2	08:44_25/08/2015
6H	5.6	05:20_25/08/2015
12H	4.9	04:36_25/08/2015
24H	4	05:16_25/08/2015
48H	3.1	12:30_24/08/2015
72H	2.2	01:32_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

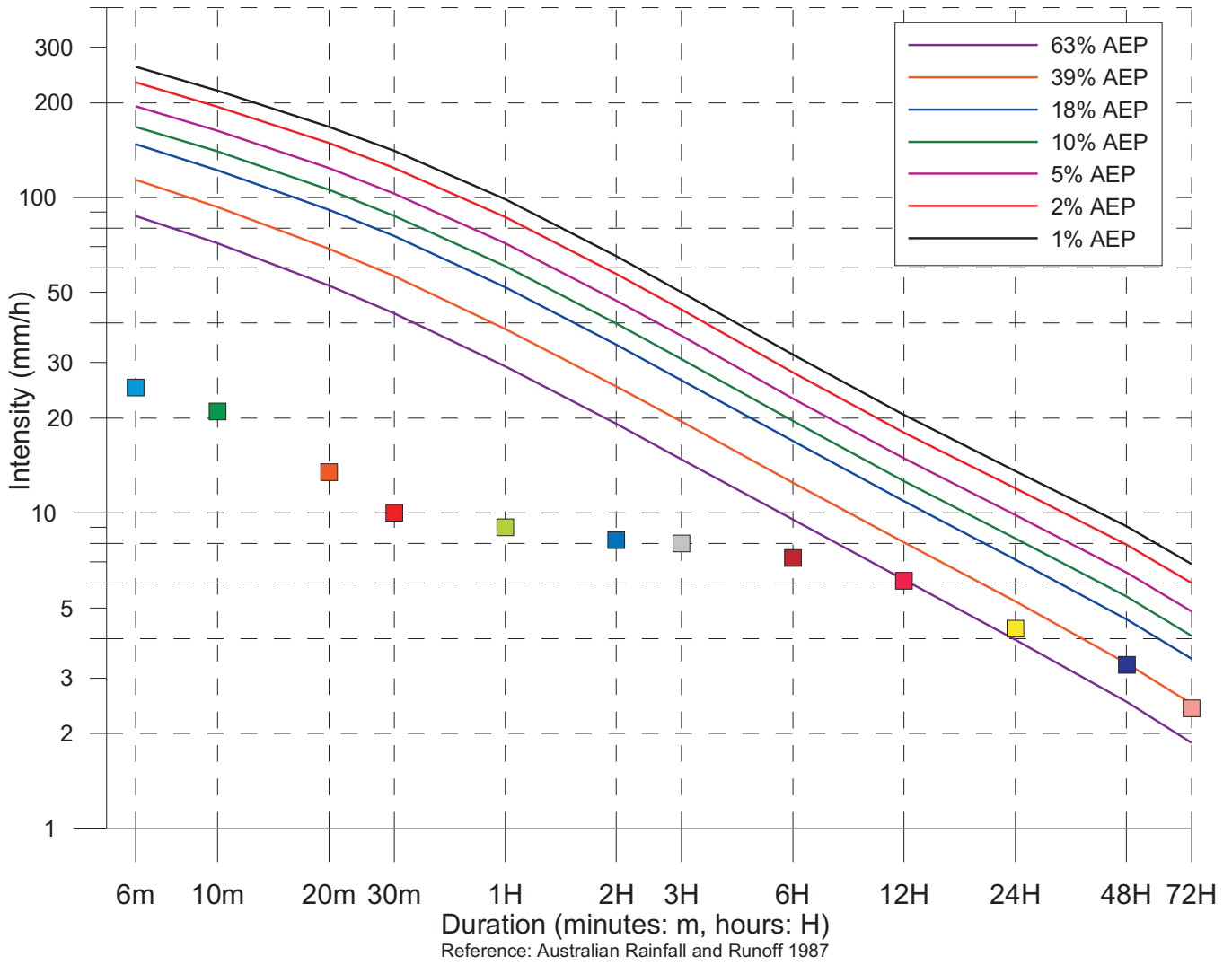




Belowra Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	50	19:28_25/08/2015
10m	30	19:28_25/08/2015
20m	15	19:28_25/08/2015
30m	10	19:28_25/08/2015
1H	6	02:24_25/08/2015
2H	5	16:32_24/08/2015
3H	4	14:50_24/08/2015
6H	3.5	16:32_24/08/2015
12H	2.7	15:46_24/08/2015
24H	2	14:50_24/08/2015
48H	1.3	21:02_23/08/2015
72H	0.9	21:02_23/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*

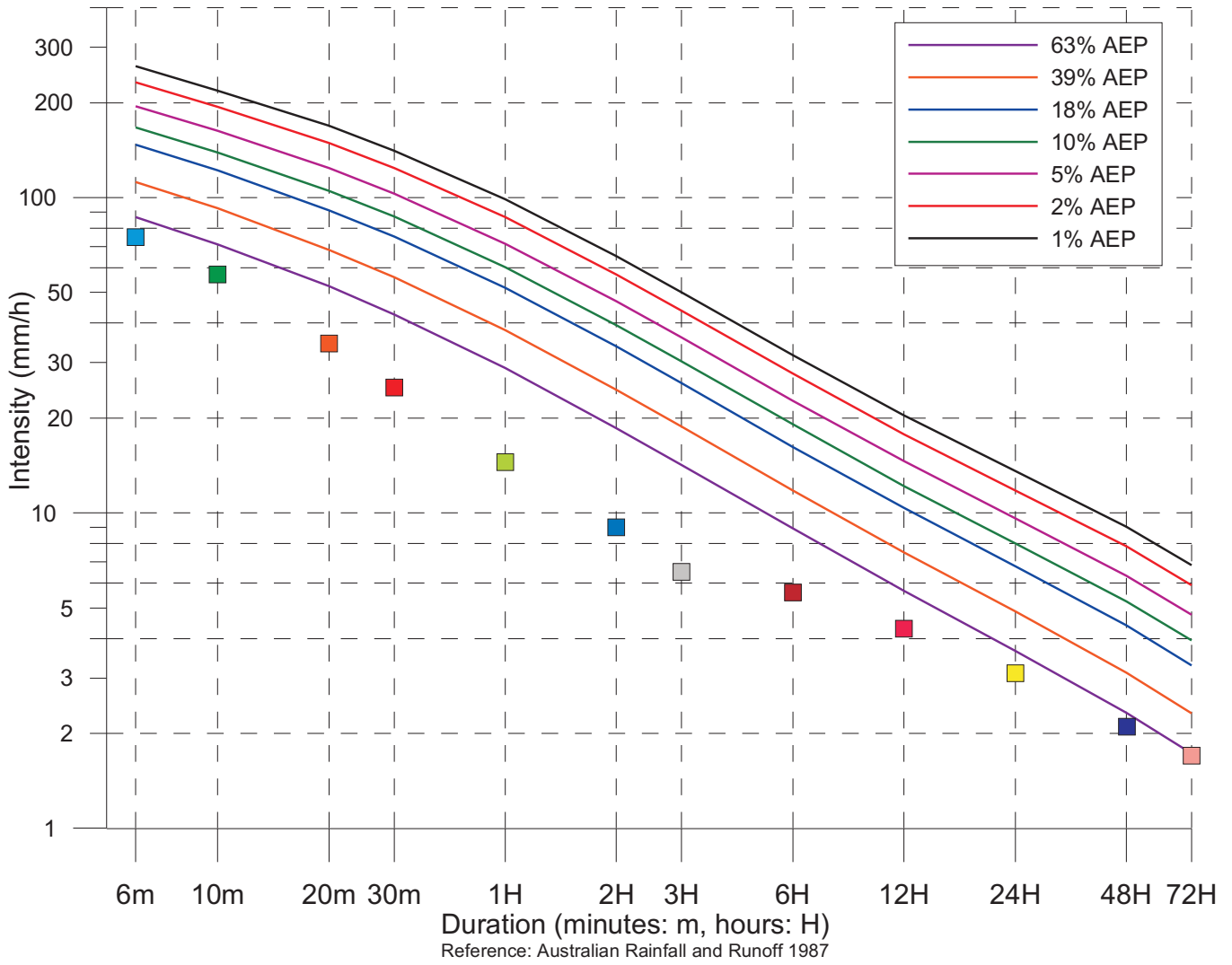




Barlows Bay Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	25	16:50_27/08/2015
10m	21	05:56_26/08/2015
20m	13.5	05:50_26/08/2015
30m	10	13:58_25/08/2015
1H	9	13:56_25/08/2015
2H	8.2	13:40_25/08/2015
3H	8	12:36_25/08/2015
6H	7.2	09:40_25/08/2015
12H	6.1	04:16_25/08/2015
24H	4.3	15:54_24/08/2015
48H	3.3	08:54_24/08/2015
72H	2.4	00:16_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*





Regatta Point Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Intensity (mm/h)	Time/Date
6m	75	16:38_27/08/2015
10m	57	16:36_27/08/2015
20m	34.5	16:34_27/08/2015
30m	25	16:36_27/08/2015
1H	14.5	16:34_27/08/2015
2H	9	16:34_27/08/2015
3H	6.5	16:34_27/08/2015
6H	5.6	09:54_25/08/2015
12H	4.3	04:54_25/08/2015
24H	3.1	16:14_24/08/2015
48H	2.1	15:44_24/08/2015
72H	1.7	19:34_24/08/2015

Australian Rainfall and Runoff (Institute of Engineers Australia 1987) states: *Use of the terms 'recurrence interval' and 'return period' has been criticised as leading to confusion in the minds of some decision-makers and members of the public. Although the terms are simple superficially, they are sometimes misinterpreted as implying that the associated magnitude is only exceeded at regular intervals, and that they are referring to the elapsed time to the next exceedance. It is preferable, therefore, to express the rarity of a rainfall event in terms of Annual Exceedance Probability (AEP).*



Appendix A
Station performance

Table A1 Station performance

Station name	Station type	Owner	April data capture (%)	Explanation for data loss
Woronora, Nepean and Avon river region				
Sydney	Wave Height and Direction	MHL	100%	
Woronora River at The Needles	Water Level	WaterNSW	100%	
Waratah River at Fire Rd No 95	Water Level	WaterNSW	100%	
Woronora River at Fire Rd 9F	Water Level	WaterNSW	100%	
Cataract River at Angels Creek	Water Level	WaterNSW	100%	
Cataract River at Broughtons Pass Notch	Water Level	WaterNSW	100%	
Cataract River at Broughtons Pass Weir	Water Level	WaterNSW	100%	
Cataract River at Cataract Dam	Water Level	WaterNSW	100%	
Cataract River at Jordans Crossing	Water Level	WaterNSW	100%	
Loddon River at Bulli Appin Road	Water Level	WaterNSW	100%	
Cordeaux River at Cordeaux Dam	Water Level	WaterNSW	100%	
Cordeaux River at Cordeaux Weir	Water Level	WaterNSW	100%	
Goondarrin Creek at Kemira 'D' Cast	Water Level	WaterNSW	100%	
Flying Fox No3 Creek at Upper Avon	Water Level	WaterNSW	100%	
Sandy Creek at Fire RD 15	Water Level	WaterNSW	100%	
Glenquarry Creek at Alcorns	Water Level	WaterNSW	100%	
Avon River at Avon Dam	Water Level	WaterNSW	100%	
Avon River at Summit Tank	Water Level	WaterNSW	100%	
Nepean River at Avon Dam Road	Water Level	WaterNSW	88%	Telemetry issue, data will be recovered with on site download.
Nepean River at Maguires Crossing	Water Level	WaterNSW	100%	
Nepean River at Nepean Dam	Water Level	WaterNSW	100%	
Nepean River at Nepean Dam Inflow	Water Level	WaterNSW	100%	
Nepean River at Pheasants Nest	Water Level	WaterNSW	100%	
Caalang Creek at Maugers	Water Level	WaterNSW	100%	
Albion Park	Rainfall	BoM	100%	
Robertson	Rainfall	BoM	100%	
Wollongong and Lake Illawarra				
Port Kembla	Wave Height and Direction	MHL	100%	
Hewitts Creek Upstream	Water Level	MHL	100%	
Hewitts Creek Downstream	Water Level	MHL	100%	
Hewitts Creek Entrance	Water Level	MHL	100%	
Bellambi	Water Level	MHL	100%	
Towradgi Creek Upstream	Water Level	MHL	100%	
Towradgi Creek Downstream	Water Level	MHL	100%	
Balgownie Road	Water Level	MHL	100%	
Cabbage Tree Creek Upstream	Water Level	MHL	100%	
Cabbage Tree Creek Downstream	Water Level	MHL	100%	
Fairy Creek Upstream	Water Level	MHL	100%	

Station name	Station type	Owner	April data capture (%)	Explanation for data loss
Fairy Creek Downstream	Water Level	MHL	100%	
Byarong Creek Upstream (Koloona Ave)	Water Level	MHL	100%	
Byarong Creek Downstream (Koloona Ave)	Water Level	MHL	100%	
Byarong Creek (F6)	Water Level	MHL	100%	
Blackmans Parade Upstream	Water Level	MHL	100%	
Blackmans Parade Downstream	Water Level	MHL	100%	
Koonawarra Bay	Water Level	MHL	100%	
Cudgerie Bay	Water Level	MHL	100%	
Lake Illawarra Entrance	Water Level	MHL	100%	
Princes Highway (Macquarie Rivulet)	Water Level	MHL	100%	
Little Lake Entrance	Water Level	MHL	100%	
Macquarie Rivulet at Albion Park	Water Level	DPI Water	100%	
Minnamurra	Water Level	MHL	100%	
Minnamurra River at Browns Lane	Water Level	DPI Water	100%	
Bulli	Rainfall	Sydney Water	100%	
Rixons Pass	Rainfall	MHL	100%	
Russell Vale	Rainfall	MHL	100%	
Bellambi	Rainfall	BoM	100%	
Balgownie	Rainfall	BoM	100%	
Mt Pleasant	Rainfall	MHL	100%	
Figtree	Rainfall	BoM	100%	
Mt Kembla	Rainfall	MHL	100%	
Dombarton	Rainfall	MHL	100%	
Whytes Gully	Rainfall	MHL	100%	
Wongawilli	Rainfall	MHL	100%	
Darkes Rd	Rainfall	MHL	100%	
Cringila	Rainfall	BoM	100%	
Berkeley	Rainfall	Sydney Water	100%	
Port Kembla	Rainfall	MHL	100%	
Kanahooka	Rainfall	Sydney Water	100%	
Dapto	Rainfall	Sydney Water	100%	
Cleveland Rd	Rainfall	MHL	100%	
Huntley Colliery	Rainfall	MHL	100%	
Upper Calderwood	Rainfall	MHL	100%	
Wollongong	Rainfall	BoM	100%	
Nurrewin	Rainfall	MHL	100%	

Station name	Station type	Owner	April data capture (%)	Explanation for data loss
Clover Hill	Rainfall	MHL	100%	
North Macquarie	Rainfall	MHL	100%	
Little Lake Entrance	Rainfall	MHL	100%	
Shellharbour	Rainfall	Sydney Water	100%	
Shoalhaven north east				
Yarrunga Creek at Wildes Meadow	Water Level	WaterNSW	100%	
Bundanoon Creek at The Rocks	Water Level	WaterNSW	100%	
Kangaroo River at Oakdale	Water Level	WaterNSW	100%	
Brogers Creek at Clinton Park	Water Level	WaterNSW	100%	
Kangaroo River at Hampden Bridge	Water Level	WaterNSW	83%	Sensor was over ranged during flood event.
Werri Lagoon	Water Level	MHL	100%	
Broughton Creek at Broughton Vale	Water Level	DPI Water	100%	
Gerroa	Water Level	MHL	100%	
Jaspers Brush at Jaspers Brush	Water Level	DPI Water	100%	
Bomaderry Creek at Bomaderry	Water Level	DPI Water	100%	
Shoalhaven River Downstream Tallowa Dam	Water Level	WaterNSW	100%	
Shoalhaven River at Fossickers Flat	Water Level	WaterNSW	100%	
Shoalhaven River at Grassy Gully No. 2	Water Level	WaterNSW	100%	
Gradys Caravan Park	Water Level	MHL	100%	
Nowra Bridge	Water Level	MHL	100%	
Terrara	Water Level	MHL	100%	
Shoalhaven Heads	Water Level	MHL	100%	
Hay Street	Water Level	MHL	100%	
Greenwell Point	Water Level	MHL	100%	
Lake Wollumboola	Water Level	MHL	90%	Battery terminal failure during high winds.
Fitzroy Falls Dam	Rainfall	BoM	40%	Data not delivered
Barrengarry	Rainfall	BoM	100%	
Hampden Bridge	Rainfall	BoM	100%	
Wattamolla	Rainfall	BoM	100%	
Brogers No. 2	Rainfall	BoM	40%	Data not delivered
Foxground	Rainfall	BoM	100%	
Broughton Creek	Rainfall	BoM	100%	
Grassy Gully	Rainfall	BoM	100%	
Nowra Boat Shed	Rainfall	BoM	100%	
Nowra	Rainfall	BoM	100%	
Greenwell Point	Rainfall	BoM	100%	
Bumbulla	Rainfall	BoM	100%	
Yalwal	Rainfall	BoM	100%	
Touga	Rainfall	BoM	100%	
Shoalhaven central				

Station name	Station type	Owner	April data capture (%)	Explanation for data loss
Bungonia at Bungonia	Water Level	DPI Water	100%	
Nerrimunga Creek at Minshull Trig	Water Level	WaterNSW	100%	
Corang River at Meangora	Water Level	WaterNSW	100%	
Corang River at Hockeys	Water Level	DPI Water	100%	
Shoalhaven River at Hillview	Water Level	WaterNSW	100%	
Boro Creek at Marlowe	Water Level	WaterNSW	100%	
Reedy Creek at Manar	Water Level	WaterNSW	100%	
Shoalhaven at Warri Bridge	Water Level	DPI Water	100%	
Windellama	Rainfall	BoM	40%	Data not delivered
Nerriga	Rainfall	BoM	100%	
Millendale	Rainfall	BoM	40%	Data not delivered
Oallen (Hillview)	Rainfall	WaterNSW	100%	
Hillview	Rainfall	BoM	100%	
Oallen (Moga)	Rainfall	WaterNSW	100%	
Duan Durra	Rainfall	BoM	40%	Data not delivered
Mongarlowe	Rainfall	BoM	100%	
Shoalhaven south				
Mongarlowe River at Mongarlowe	Water Level	WaterNSW	100%	
Gillamatong Creek No. 2	Water Level	WaterNSW	100%	
Shoalhaven River at Mountview	Water Level	WaterNSW	100%	
Jembaicumbene Creek at Bendoura	Water Level	WaterNSW	100%	
Mongarlowe River at Monga	Water Level and Rainfall	DPI Water	100%	
Shoalhaven at Kadoona	Water Level and Rainfall	DPI Water	100%	
Braidwood	Rainfall	BoM	100%	
Braidwood (Mountview)	Rainfall	WaterNSW	100%	
Mountview	Rainfall	BoM	100%	
Oranmeir	Rainfall	BoM	50%	Data not delivered
Snowball	Rainfall	BoM	100%	
Jervis Bay to Ulladulla				
Currumbene Creek at Falls Creek	Water Level	DPI Water	100%	
Currarong Creek	Water Level	MHL	100%	
Island Point	Water Level	MHL	100%	
Sussex Inlet	Water Level	MHL	100%	
Swan Lake	Water Level	MHL	100%	
Lake Conjola	Water Level	MHL	100%	
Narrawallee Inlet	Water Level	MHL	100%	
Currarong	Rainfall	BoM	100%	
Tomerong (Eucalypt Lane)	Rainfall	BoM	100%	
Tomerong Creek	Rainfall	BoM	100%	
Glennely Creek	Rainfall	BoM	100%	
Vincentia	Rainfall	BoM	100%	
Sassafras	Rainfall	BoM	100%	

Station name	Station type	Owner	April data capture (%)	Explanation for data loss
Island Point Rd	Rainfall	BoM	100%	
Fishermans	Rainfall	BoM	100%	
Porters Creek Dam	Rainfall	BoM	100%	
Lake Conjola	Rainfall	Shoalhaven Council	100%	
Ulladulla	Rainfall	BoM	100%	
Ulladulla AWS	Rainfall	BoM	100%	
Clyde river				
Burrill Lake Bridge	Water Level	MHL	100%	
Lake Tabourie	Water Level	MHL	100%	
Clyde River at Brooman	Water Level	DPI Water	100%	
Durras Lake	Water Level	MHL	100%	
Nelligen	Water Level	MHL	100%	
Buckenbowra Ck at Buckendowra No 3	Water Level	DPI Water	100%	
George Bass Drive	Water Level	MHL	100%	
Burrill Lake	Rainfall	BoM	100%	
Lake Tabourie	Rainfall	BoM	100%	
Moruya river				
Araluen at Neringla Road	Water Level	DPI Water	100%	
Deua at Riverview	Water Level	DPI Water	100%	
Moruya Hospital	Water Level	MHL	100%	
Moruya Bridge	Water Level	MHL	100%	
Majors Creek	Rainfall	BoM	100%	
Araluen	Rainfall	BoM	100%	
Bettowynd	Rainfall	BoM	100%	
McGregors Creek	Rainfall	BoM	100%	
Burra Creek	Rainfall	BoM	100%	
Moruya Airport	Rainfall	BoM	100%	
Bendethera	Rainfall	BoM	100%	
Plumwood	Rainfall	BoM	100%	
Coila, Tuross and Wagonga Inlet				
Coila Lake	Water Level	MHL	100%	
Tuross Head	Water Level	MHL	100%	
Tuross River at Eurobodalla	Water Level and Rainfall	DPI Water	100%	
Tuross River at Downstream Wadbilliga River Junction	Water Level	DPI Water	100%	
Wadbilliga River at Wadbilliga	Water Level	DPI Water	100%	
Tuross River at Tuross Vale	Water Level	DPI Water	100%	
Bodalla	Rainfall	BoM	0%	Instrument failure
Belowra	Rainfall	BoM	100%	
Barlows Bay	Water Level and Rainfall	MHL	100%	
Regatta Point	Water Level and Rainfall	MHL	100%	

Appendix B
Flood photographs August 2015 event



Shoalhaven river at Fossickers Flat 27/08/2015 2.00 pm 4.1 m (local datum)



Lake Conjola 27/08/2015 9.43 am 0.61 m AHD



Lake Conjola debris line survey 27/08/2015 1.920 m AHD



Nowra Bridge 26/08/2015 3.09pm 3.86 m AHD



Shoalhaven Heads 28/08/2015 9.14 am 0.37m AHD



Island Point 27/08/2015 8.51 am 1.61 m AHD



Island Point debris line survey 27/08/2015 9.01 am 1.88 m AHD



Shoalhaven Heads debris line 28/08/2015



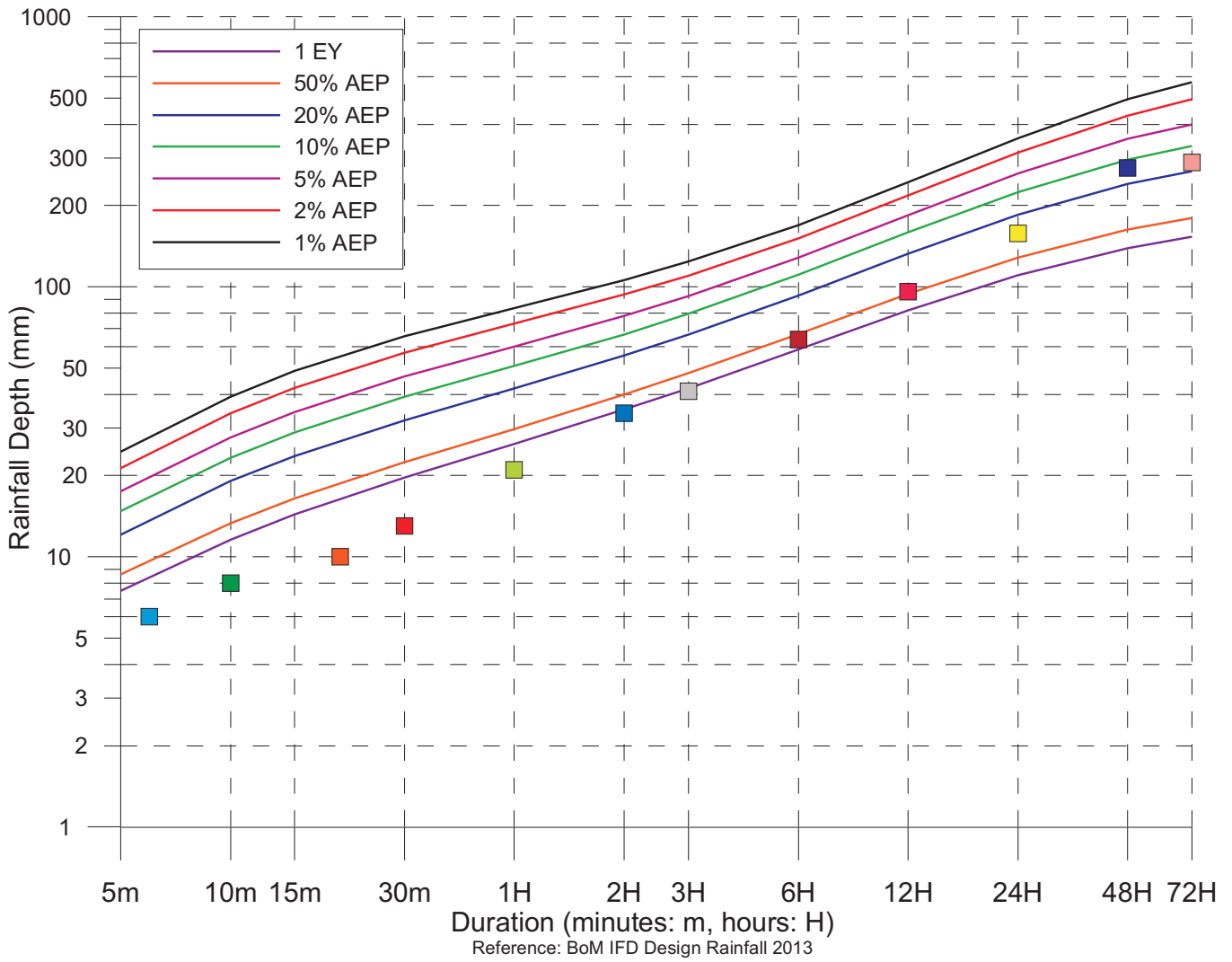
Terara 26/08/2015 4.05 pm 3.59 m AHD



Lake Wollumboola 26/08/2015 4.35 pm

Appendix C

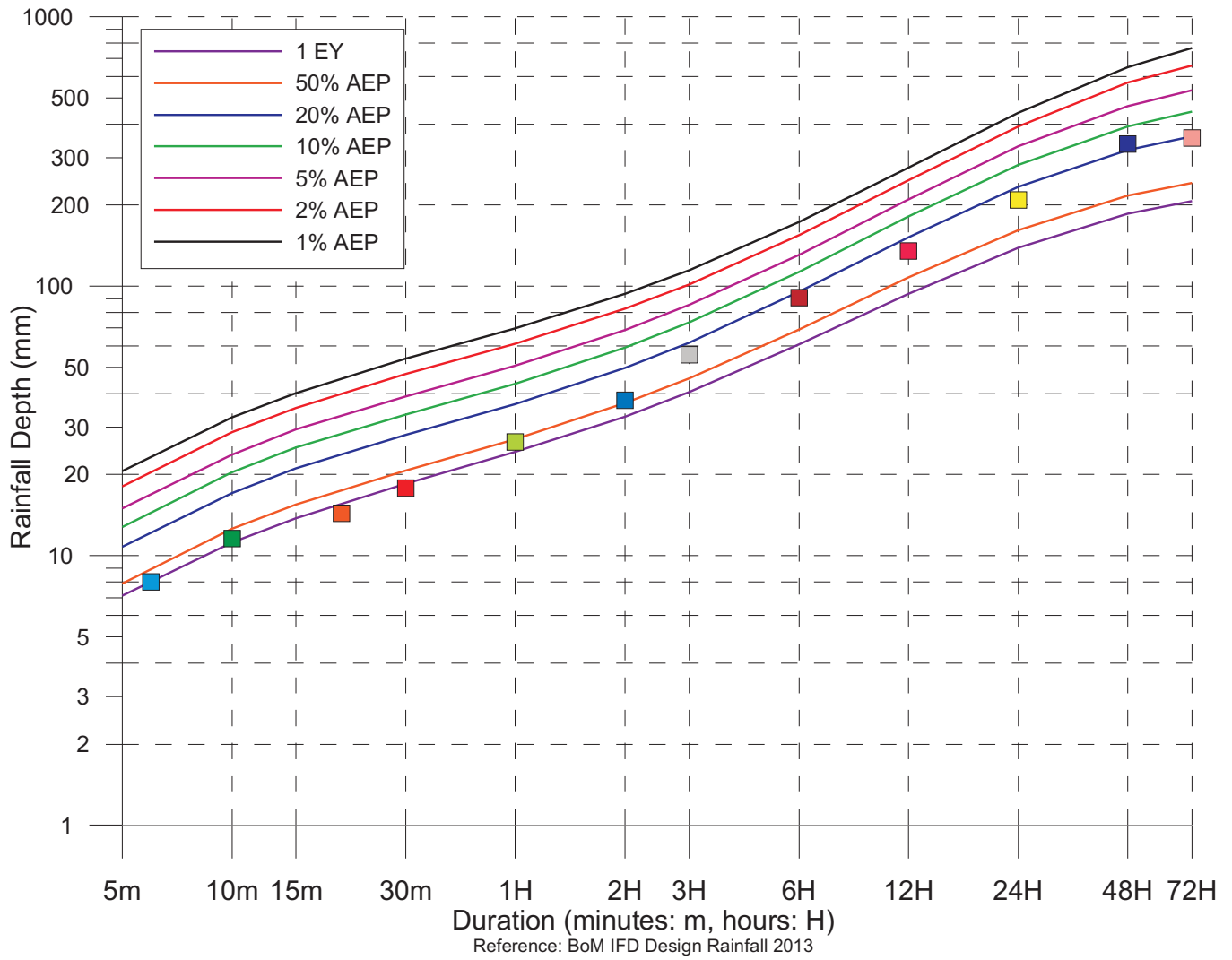
**Intensity-frequency-duration
new AEP version formulated in 2013**



Albion Park Bowling Club Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	6.0	07:46_26/08/2015
10m	8.0	23:40_25/08/2015
20m	10.0	00:48_25/08/2015
30m	13.0	06:52_26/08/2015
1H	21.0	06:52_26/08/2015
2H	34.0	06:52_26/08/2015
3H	41.0	06:12_26/08/2015
6H	64.0	04:12_26/08/2015
12H	96.0	23:26_25/08/2015
24H	158.0	11:52_24/08/2015
48H	276.0	11:52_24/08/2015
72H	289.0	01:08_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

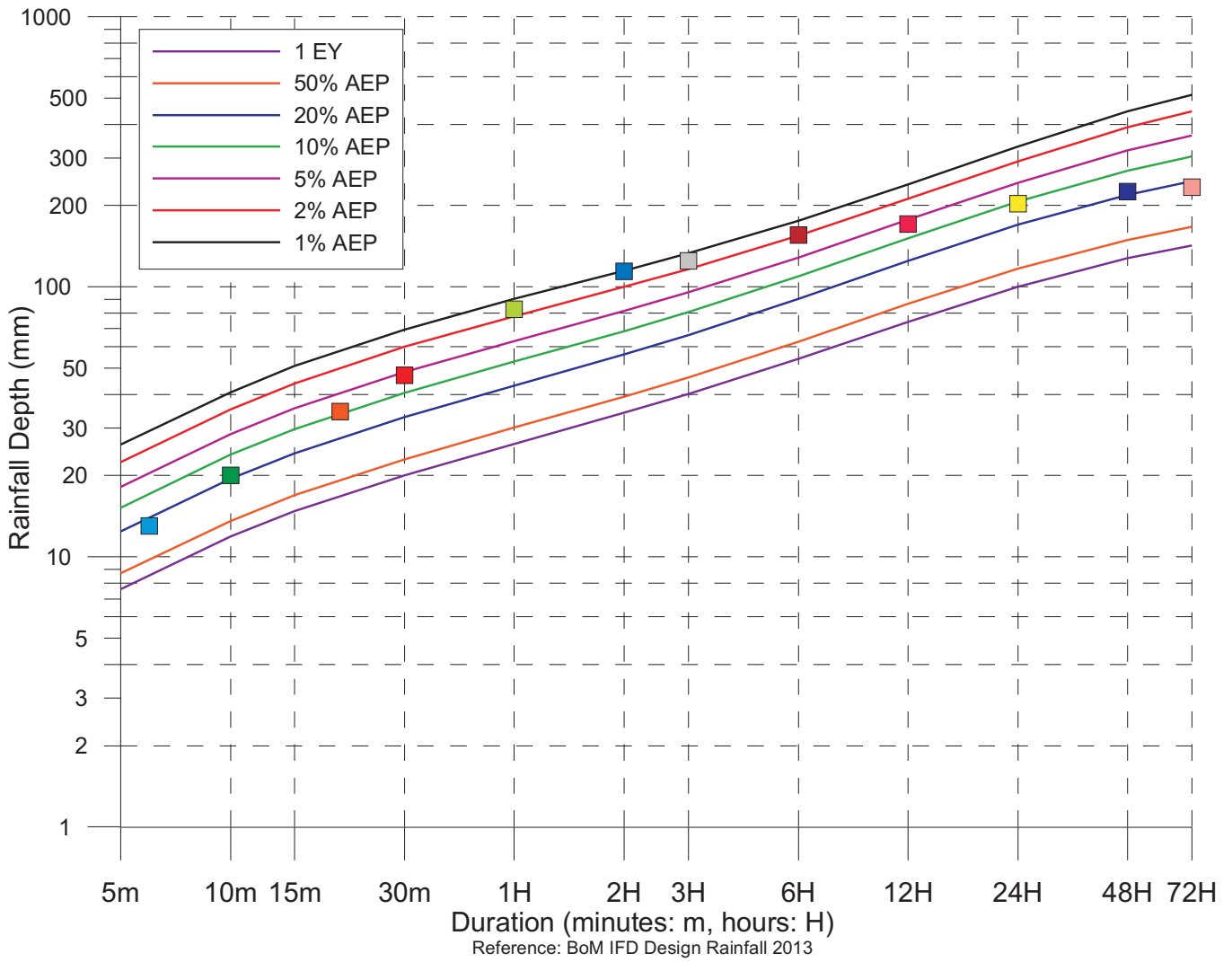




Robertson Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	8.0	00:44_26/08/2015
10m	11.6	00:42_26/08/2015
20m	14.4	01:50_26/08/2015
30m	17.8	00:22_26/08/2015
1H	26.4	01:52_26/08/2015
2H	37.8	00:10_26/08/2015
3H	55.8	00:06_26/08/2015
6H	90.8	00:00_26/08/2015
12H	135.2	17:36_25/08/2015
24H	208.6	07:00_25/08/2015
48H	336.8	11:48_24/08/2015
72H	355.0	06:16_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

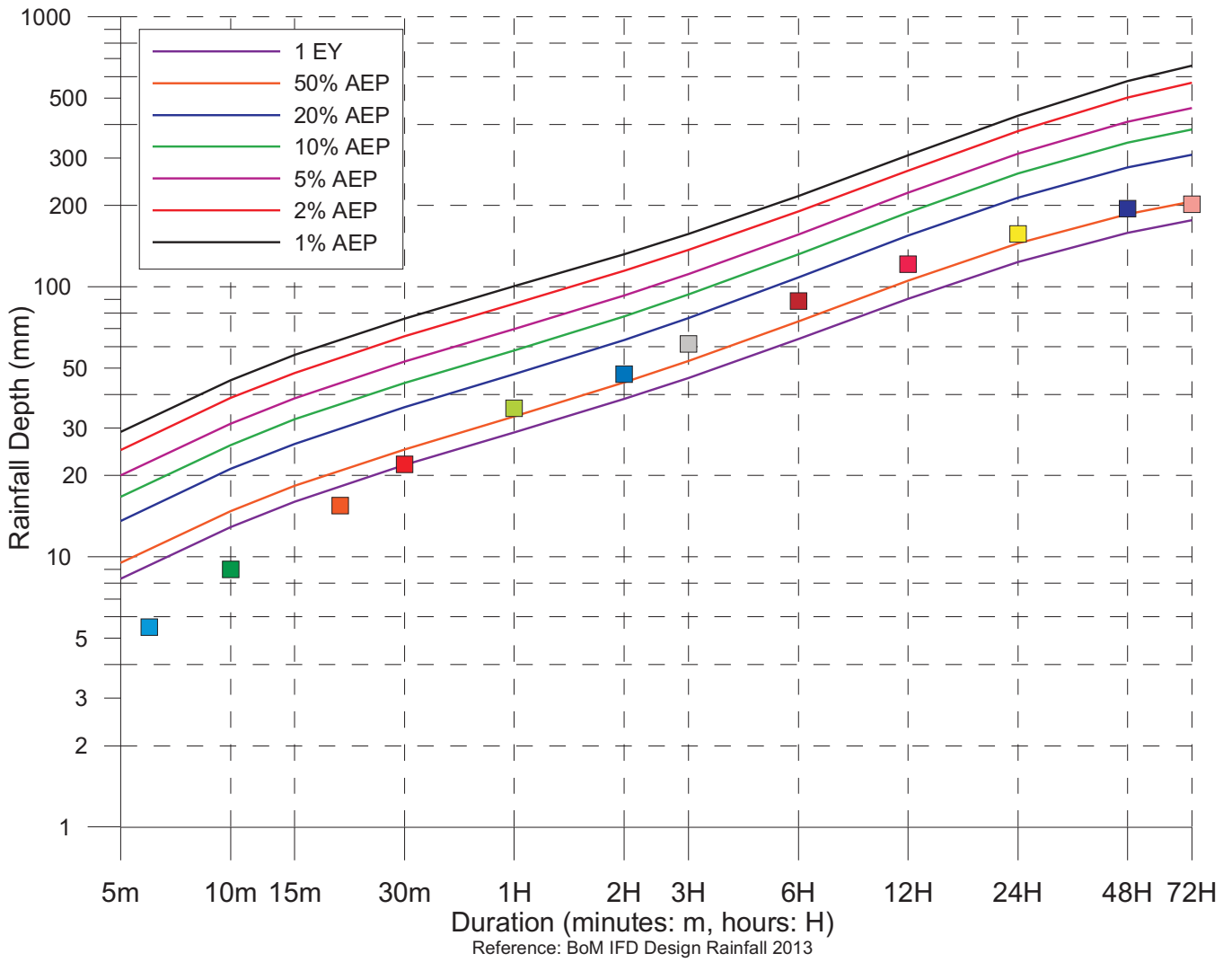




Bulli Bowling Club Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	13.0	21:10_24/08/2015
10m	20.0	21:08_24/08/2015
20m	34.5	21:04_24/08/2015
30m	47.0	20:46_24/08/2015
1H	82.5	20:32_24/08/2015
2H	114.0	19:52_24/08/2015
3H	124.5	18:48_24/08/2015
6H	155.5	18:36_24/08/2015
12H	171.0	12:40_24/08/2015
24H	203.5	13:56_24/08/2015
48H	225.0	12:08_24/08/2015
72H	233.5	23:44_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

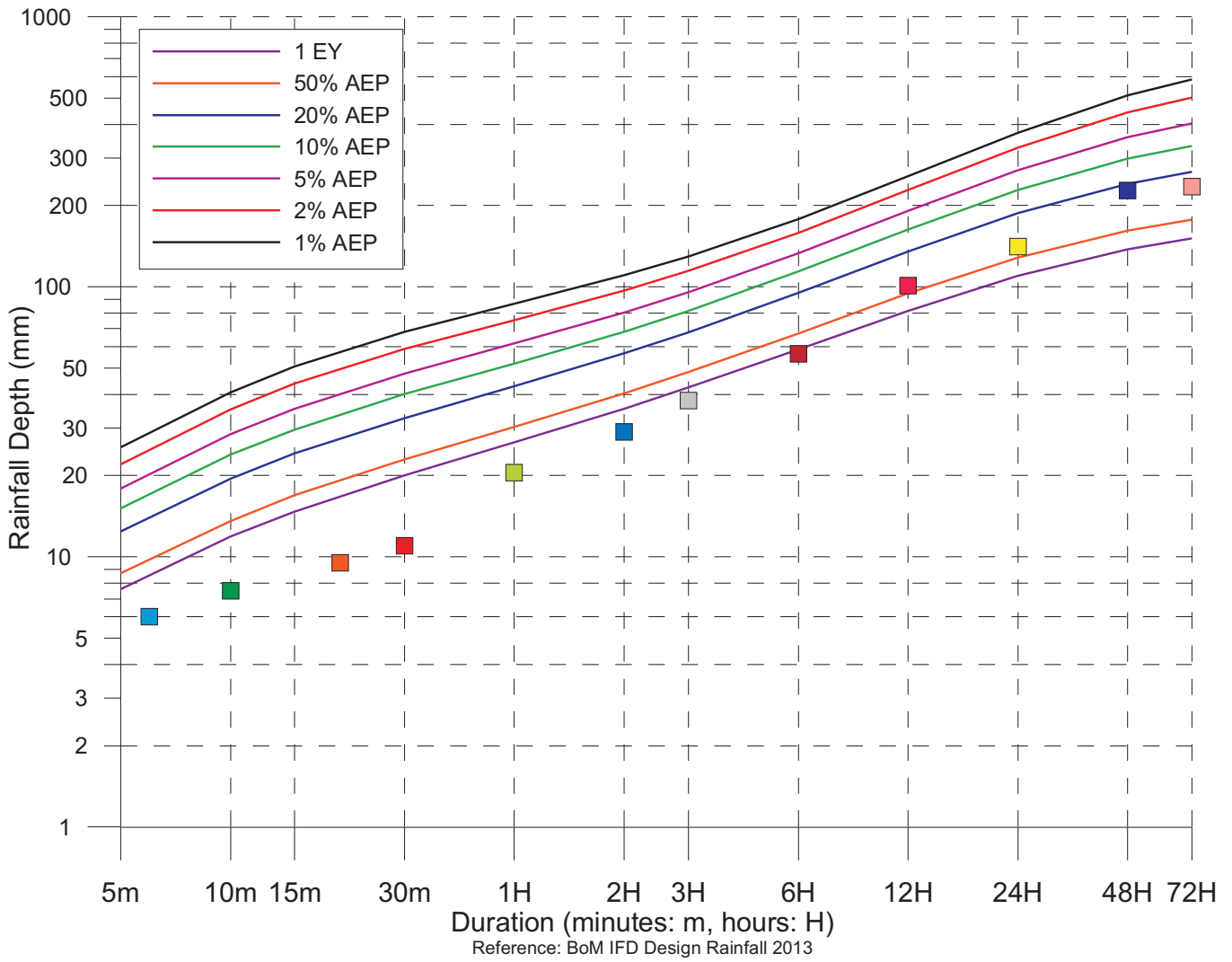




Rixons Pass Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.5	20:56_24/08/2015
10m	9.0	20:54_24/08/2015
20m	15.5	20:48_24/08/2015
30m	22.0	20:38_24/08/2015
1H	35.5	20:32_24/08/2015
2H	47.5	19:42_24/08/2015
3H	61.5	18:36_24/08/2015
6H	88.5	18:38_24/08/2015
12H	121.0	14:04_24/08/2015
24H	157.0	14:04_24/08/2015
48H	194.5	12:02_24/08/2015
72H	202.0	19:56_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

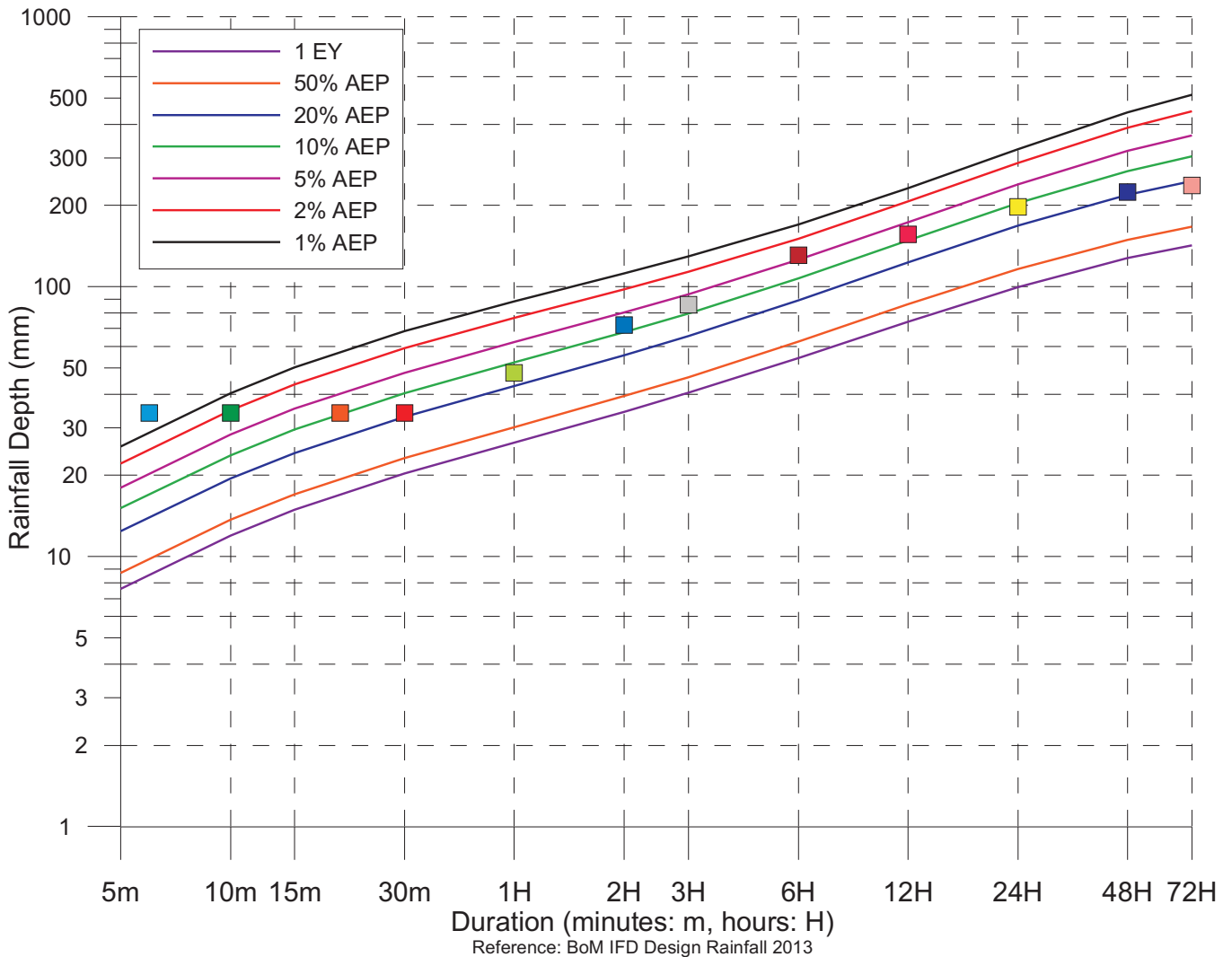




Russell Vale Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	10.0	21:02 24/08/2015
10m	16.0	20:58 24/08/2015
20m	27.5	20:50 24/08/2015
30m	37.0	20:40 24/08/2015
1H	53.5	20:30 24/08/2015
2H	68.0	19:50 24/08/2015
3H	80.5	18:38 24/08/2015
6H	111.5	18:38 24/08/2015
12H	132.5	13:46 24/08/2015
24H	173.0	13:46 24/08/2015
48H	204.0	10:42 24/08/2015
72H	212.5	20:10 23/08/2015

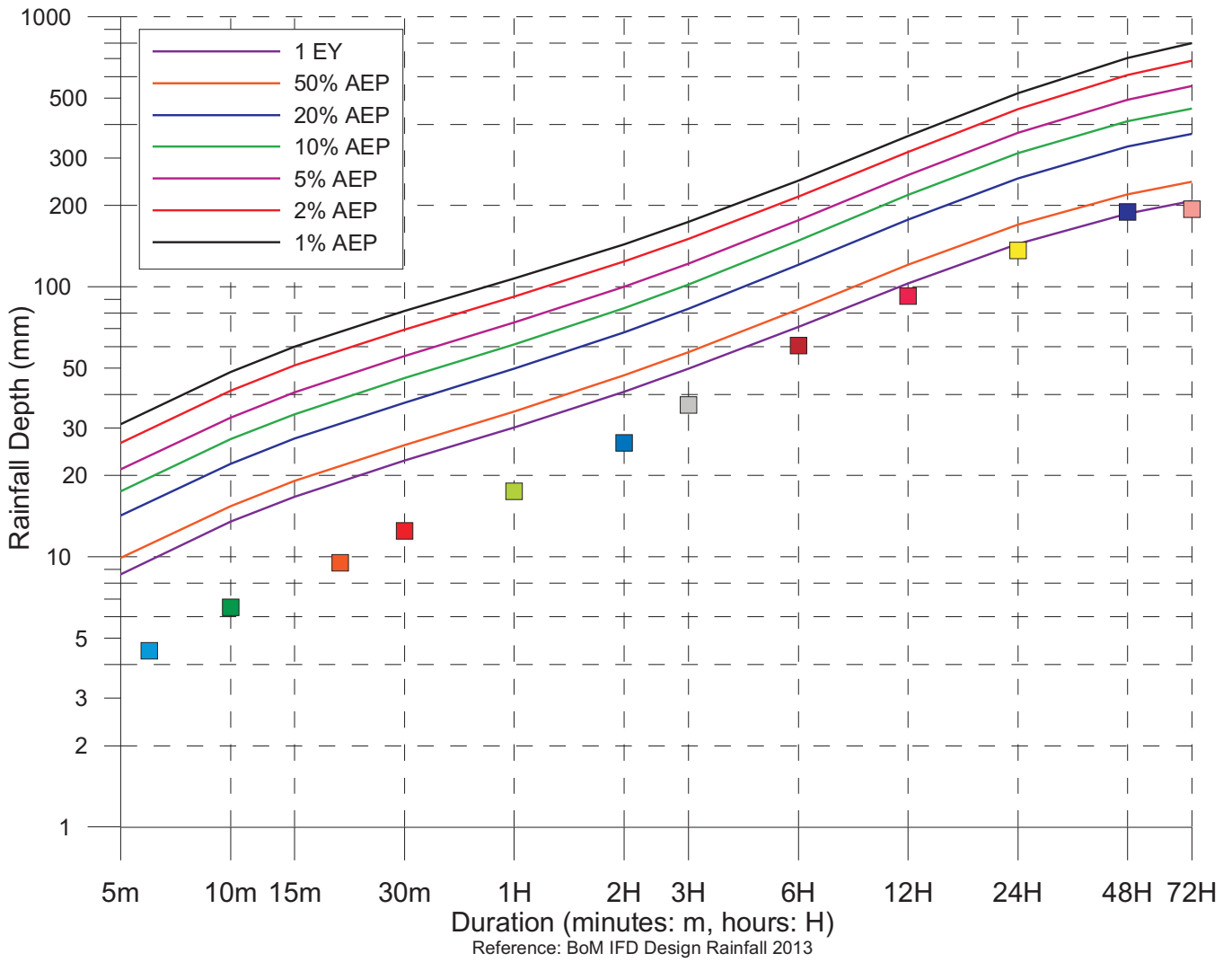
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>





Bellambi Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	34.0	21:28_24/08/2015
10m	34.0	21:28_24/08/2015
20m	34.0	21:28_24/08/2015
30m	34.0	21:28_24/08/2015
1H	48.0	21:28_24/08/2015
2H	72.0	20:28_24/08/2015
3H	85.6	19:28_24/08/2015
6H	130.6	18:58_24/08/2015
12H	156.4	18:28_24/08/2015
24H	197.6	12:28_24/08/2015
48H	224.0	10:28_24/08/2015
72H	236.8	10:28_24/08/2015

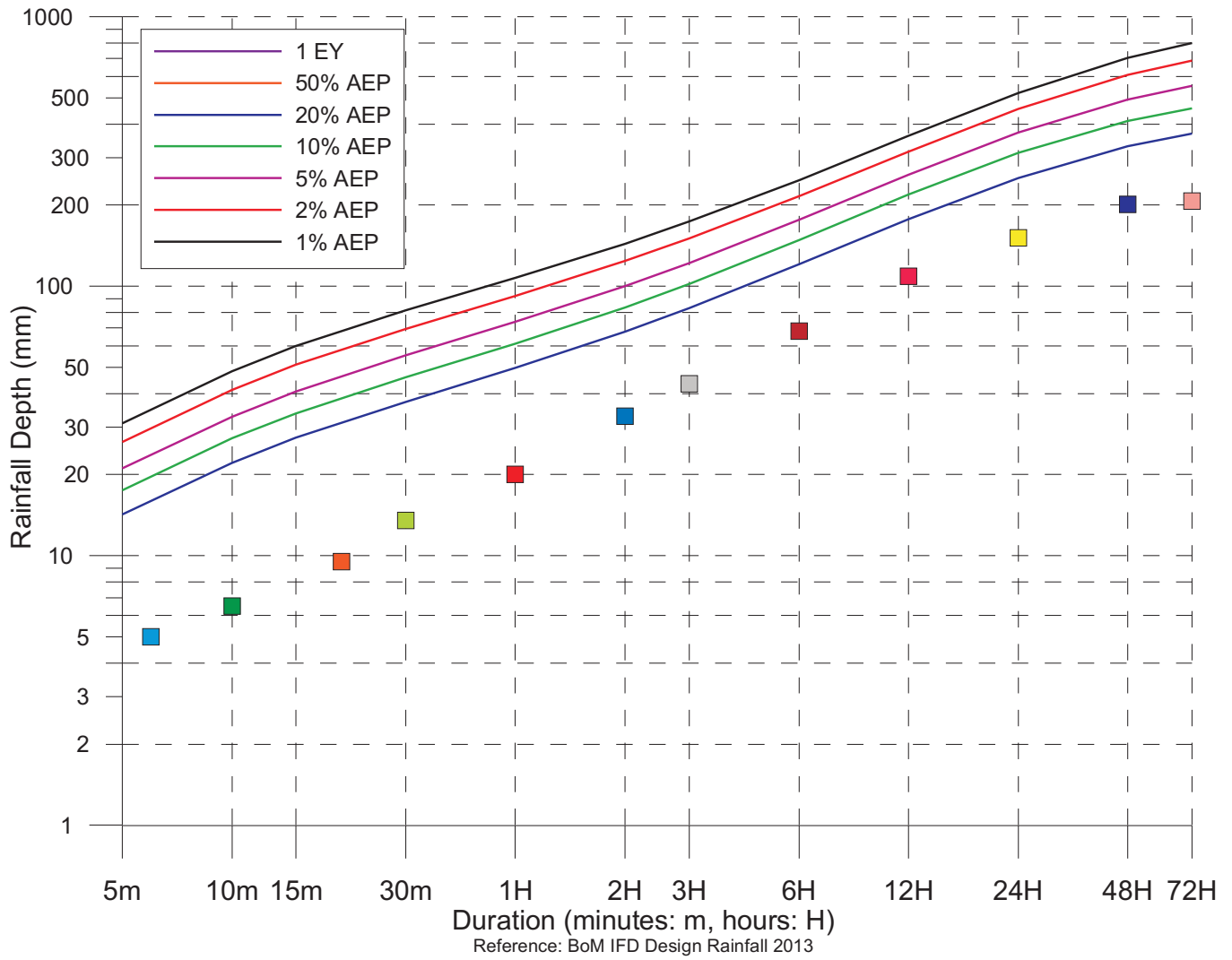
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Balgownie Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	4.5	00:40_25/08/2015
10m	6.5	20:44_24/08/2015
20m	9.5	20:42_24/08/2015
30m	12.5	20:42_24/08/2015
1H	17.5	20:34_24/08/2015
2H	26.5	19:34_24/08/2015
3H	36.5	18:14_24/08/2015
6H	60.5	19:00_24/08/2015
12H	92.5	16:16_24/08/2015
24H	136.5	14:16_24/08/2015
48H	189.5	11:56_24/08/2015
72H	194	20:36_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

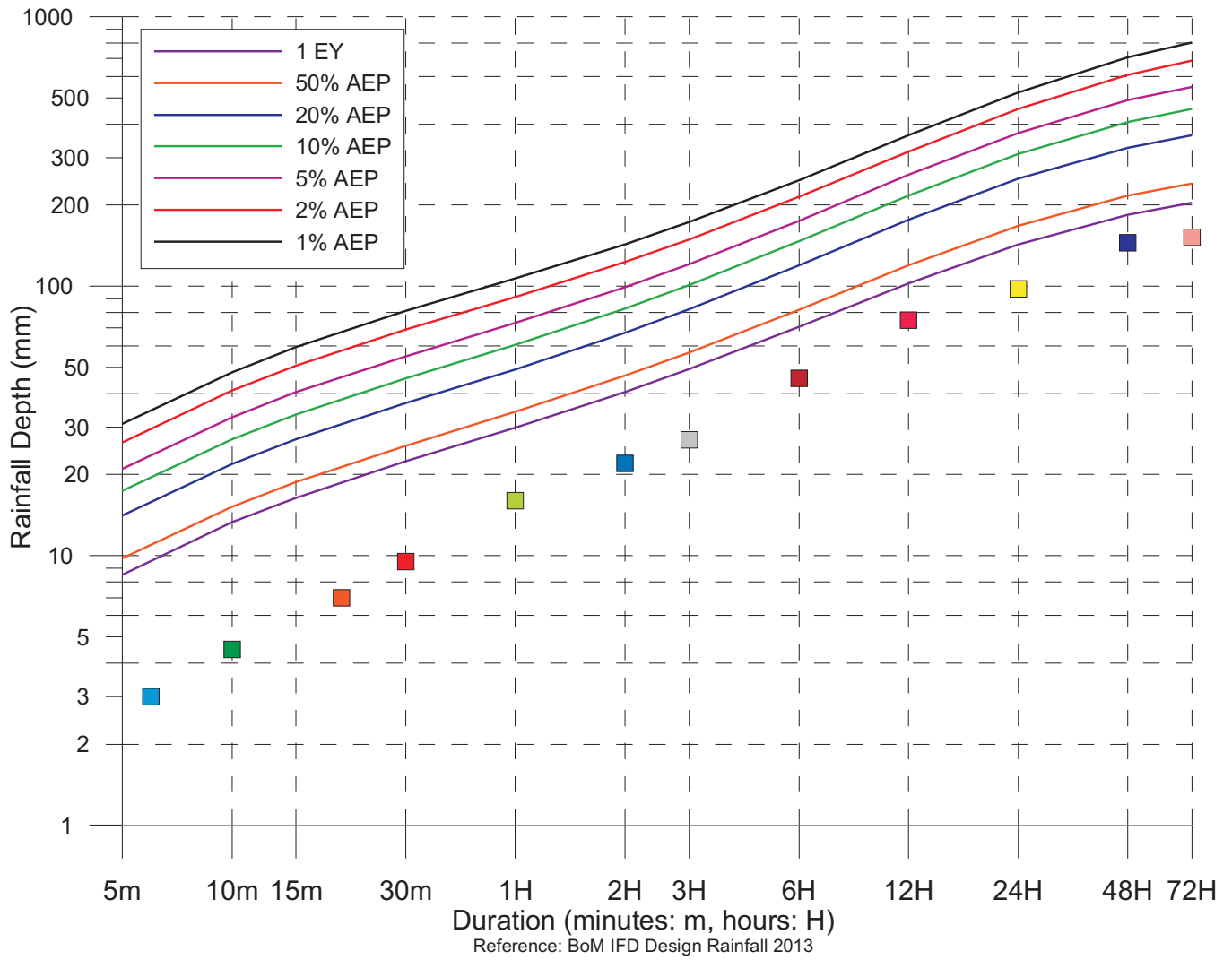




Mount Pleasant Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	00:42_25/08/2015
10m	6.5	00:42_25/08/2015
20m	9.5	00:42_25/08/2015
30m	13.5	00:24_25/08/2015
1H	20.0	00:10_25/08/2015
2H	33.0	18:08_24/08/2015
3H	43.5	18:10_24/08/2015
6H	68.0	19:02_24/08/2015
12H	109.0	16:10_24/08/2015
24H	151.5	13:58_24/08/2015
48H	201.0	10:36_24/08/2015
72H	206.5	10:36_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

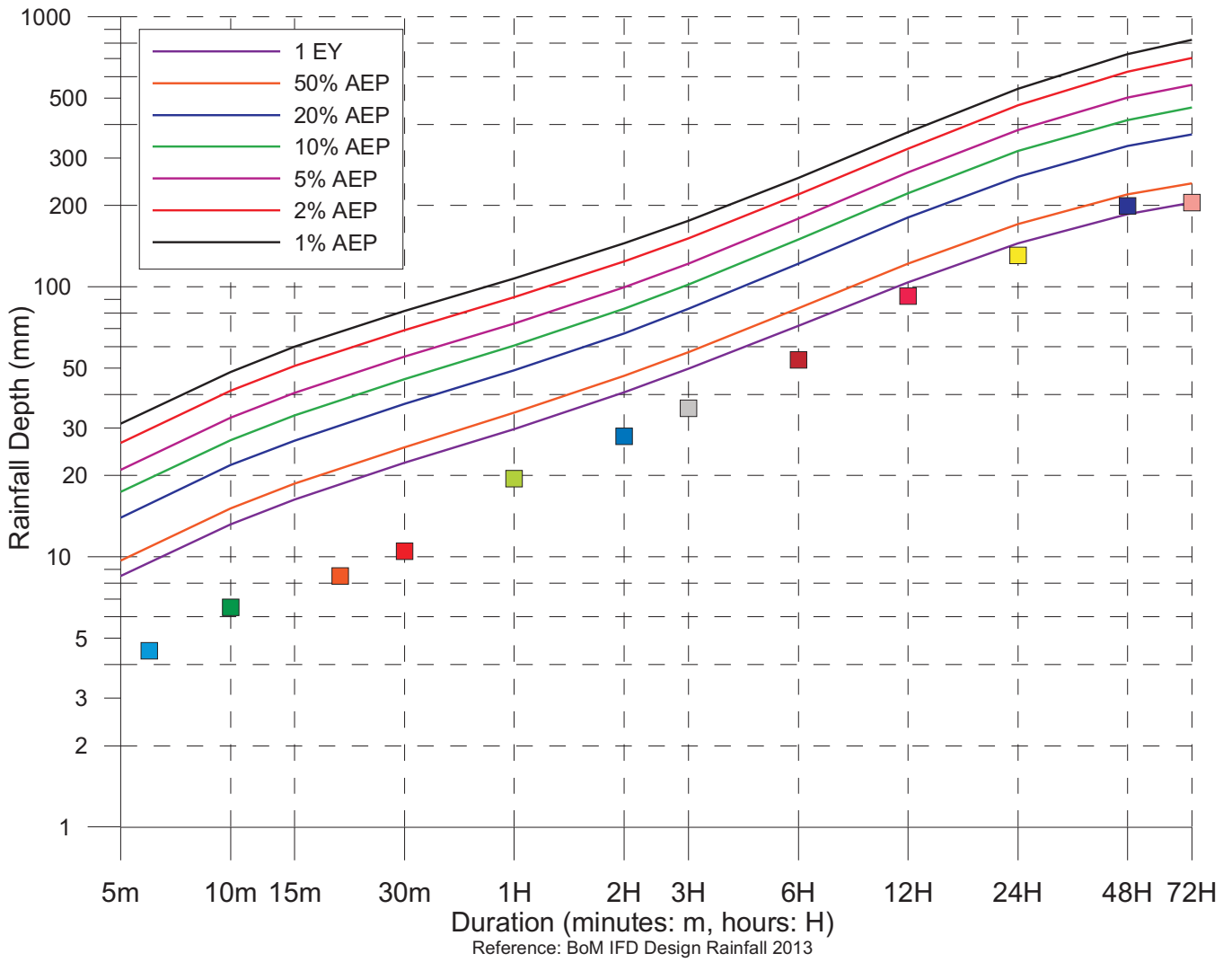




Figtree Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	3	14:30_24/08/2015
10m	4.5	00:24_25/08/2015
20m	7	00:46_25/08/2015
30m	9.5	00:30_25/08/2015
1H	16	00:12_25/08/2015
2H	22	23:00_24/08/2015
3H	27	22:40_24/08/2015
6H	45.5	19:06_24/08/2015
12H	75	16:04_24/08/2015
24H	98	12:06_24/08/2015
48H	145	11:54_24/08/2015
72H	152	20:38_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

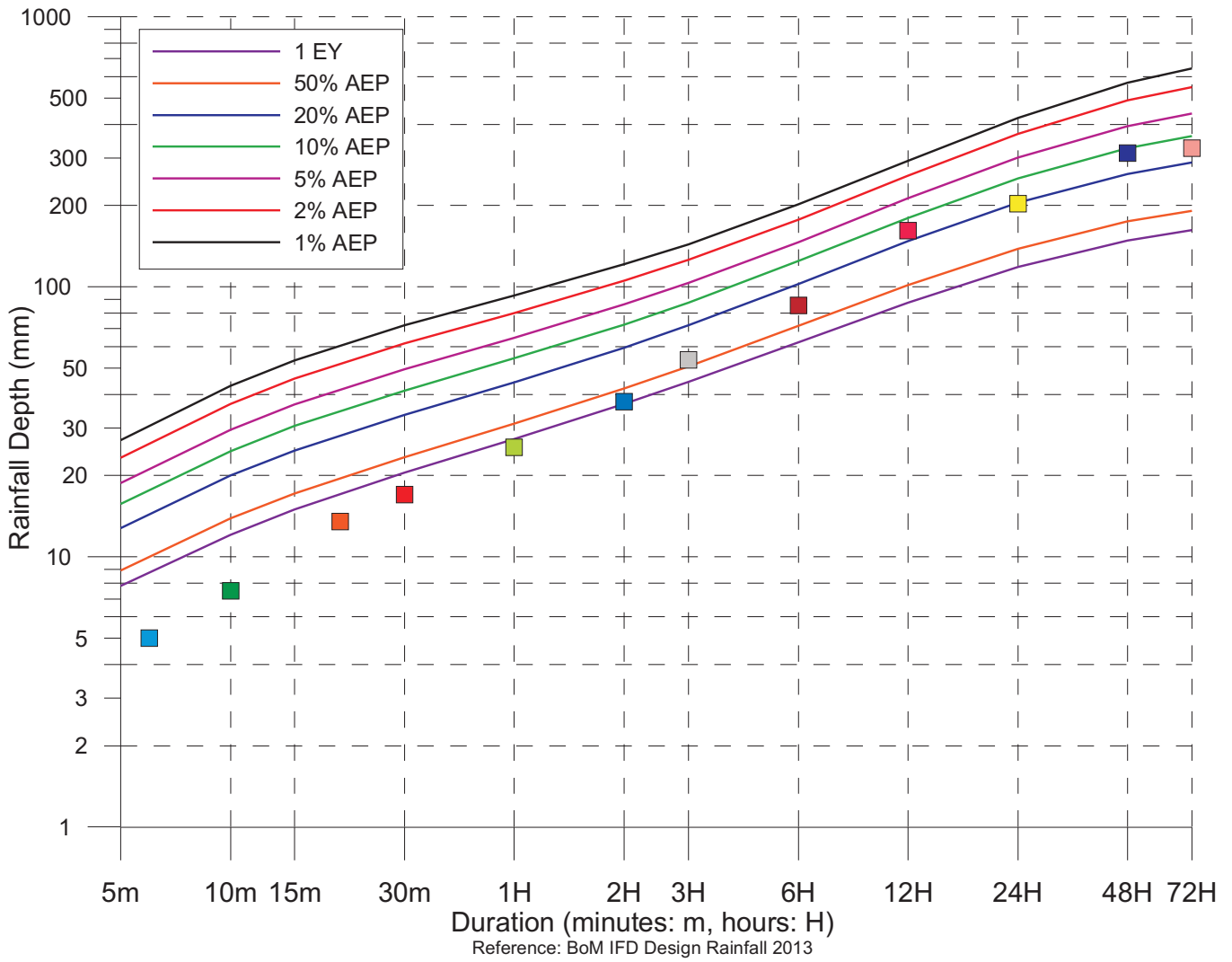




Mt Kembla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	4.5	01:34_25/08/2015
10m	6.5	01:30_25/08/2015
20m	8.5	01:28_25/08/2015
30m	10.5	01:12_25/08/2015
1H	19.5	00:42_25/08/2015
2H	28.0	23:54_24/08/2015
3H	35.5	22:54_24/08/2015
6H	53.5	19:48_24/08/2015
12H	92.5	16:02_24/08/2015
24H	131.0	12:04_24/08/2015
48H	199.5	11:56_24/08/2015
72H	205.5	10:20_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

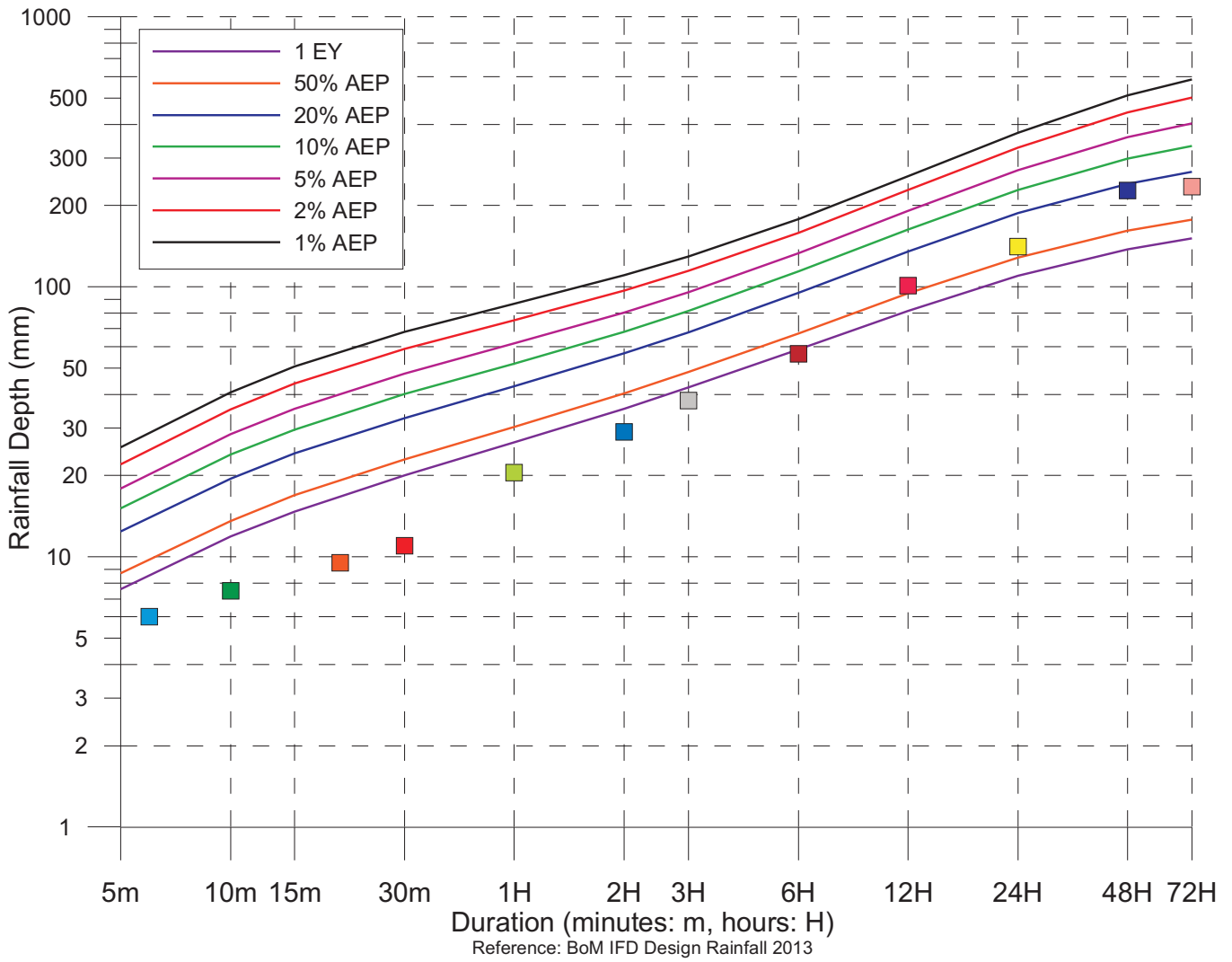




Dombarton Loop Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	15:56_24/08/2015
10m	7.5	00:38_25/08/2015
20m	13.5	00:32_25/08/2015
30m	17.0	00:32_25/08/2015
1H	25.5	00:32_25/08/2015
2H	37.5	23:16_24/08/2015
3H	53.5	22:38_24/08/2015
6H	85.5	14:18_24/08/2015
12H	161.5	13:22_24/08/2015
24H	203.0	11:54_24/08/2015
48H	313.0	12:06_24/08/2015
72H	327.0	10:08_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

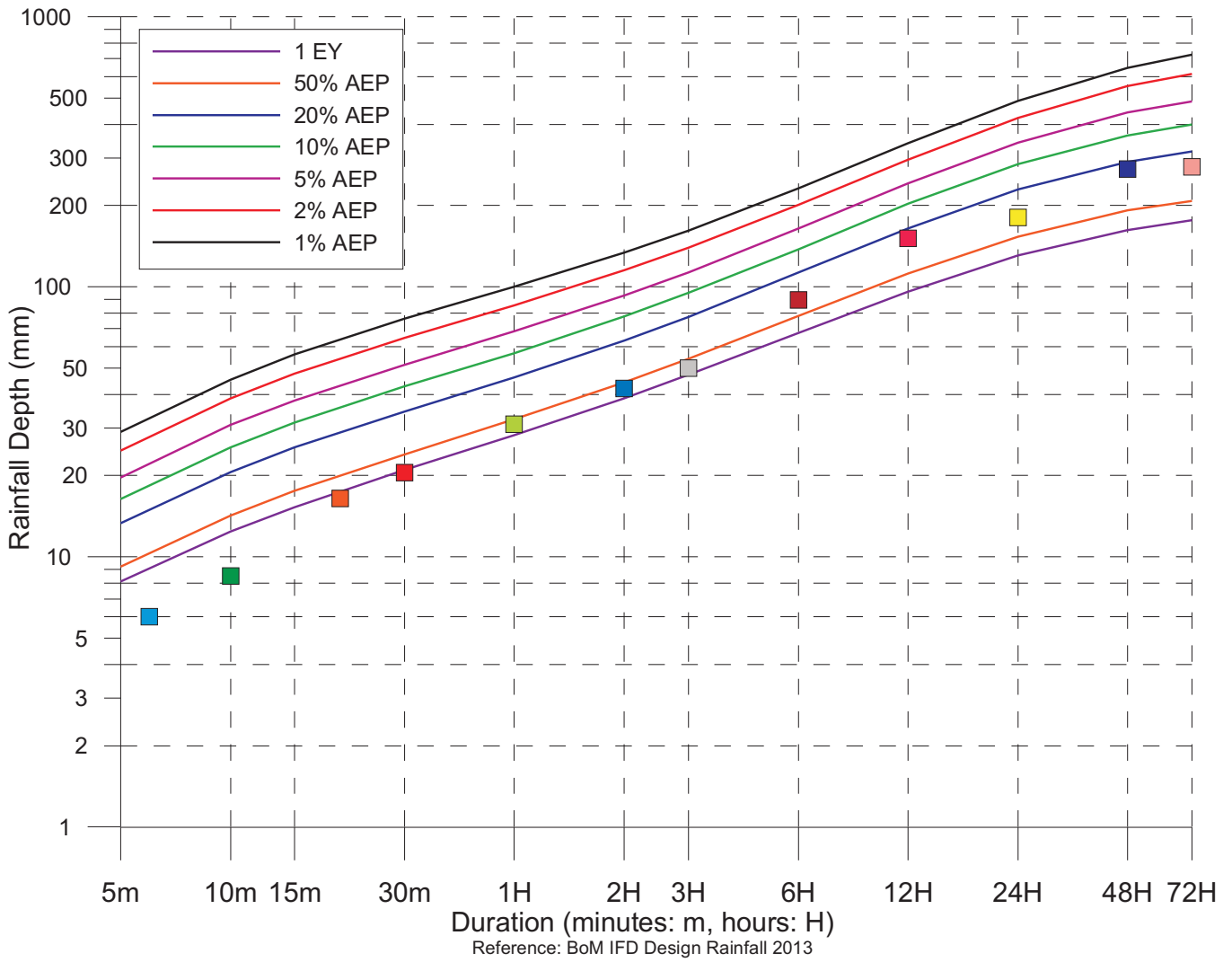




Whytes Gully Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	6.0	11:00_21/04/2015
10m	7.5	11:00_21/04/2015
20m	9.5	11:00_21/04/2015
30m	11.0	10:54_21/04/2015
1H	20.5	11:00_21/04/2015
2H	29.0	10:40_21/04/2015
3H	38.0	10:44_21/04/2015
6H	56.5	10:40_21/04/2015
12H	101.0	09:40_21/04/2015
24H	141.0	19:04_20/04/2015
48H	227.5	07:24_20/04/2015
72H	235.0	04:30_20/04/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

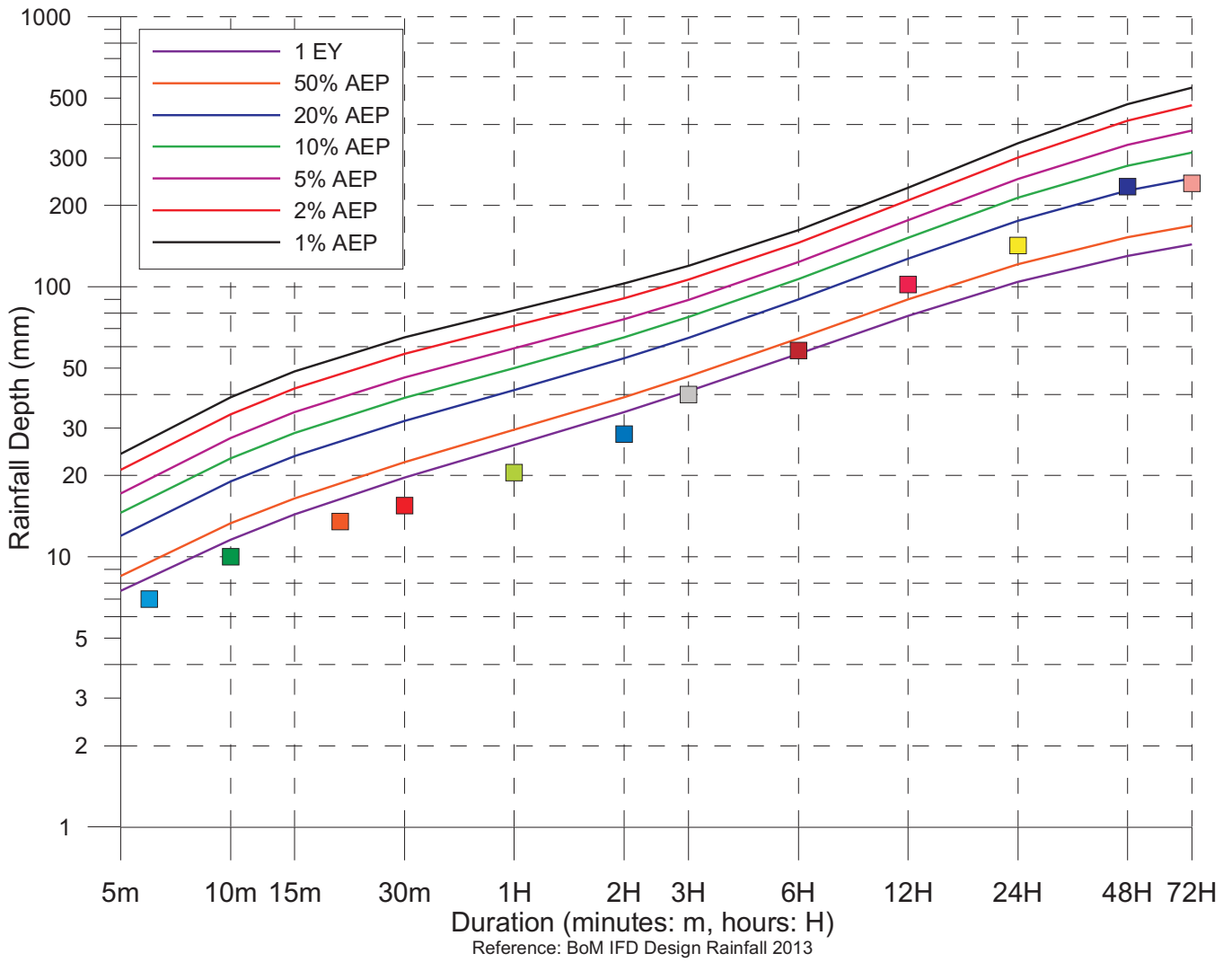




Wongawilli Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	6.0	15:44_24/08/2015
10m	8.5	15:46_24/08/2015
20m	16.5	15:44_24/08/2015
30m	20.5	15:38_24/08/2015
1H	31.0	15:22_24/08/2015
2H	42.0	15:12_24/08/2015
3H	50.0	13:32_24/08/2015
6H	89.5	15:14_24/08/2015
12H	151.5	13:30_24/08/2015
24H	180.5	11:52_24/08/2015
48H	273.0	11:52_24/08/2015
72H	278.5	10:12_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

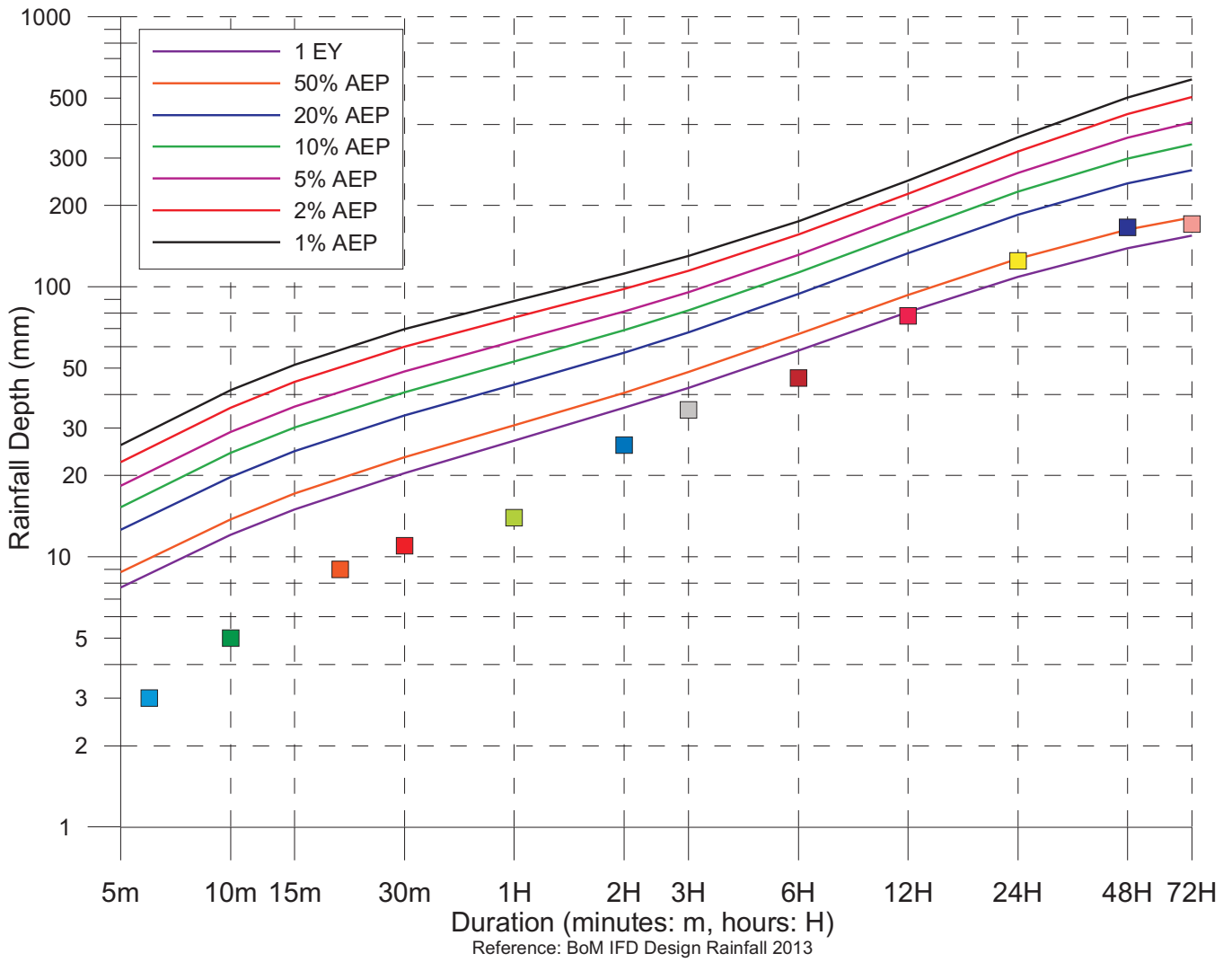




Darkes Road Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	7.0	01:52_26/08/2015
10m	10.0	01:48_26/08/2015
20m	13.5	01:40_26/08/2015
30m	15.5	01:36_26/08/2015
1H	20.5	01:08_26/08/2015
2H	28.5	00:00_26/08/2015
3H	40.0	22:42_24/08/2015
6H	58.0	19:42_24/08/2015
12H	102.0	14:04_24/08/2015
24H	142.5	12:04_24/08/2015
48H	234.5	12:04_24/08/2015
72H	241.5	00:14_24/08/2015

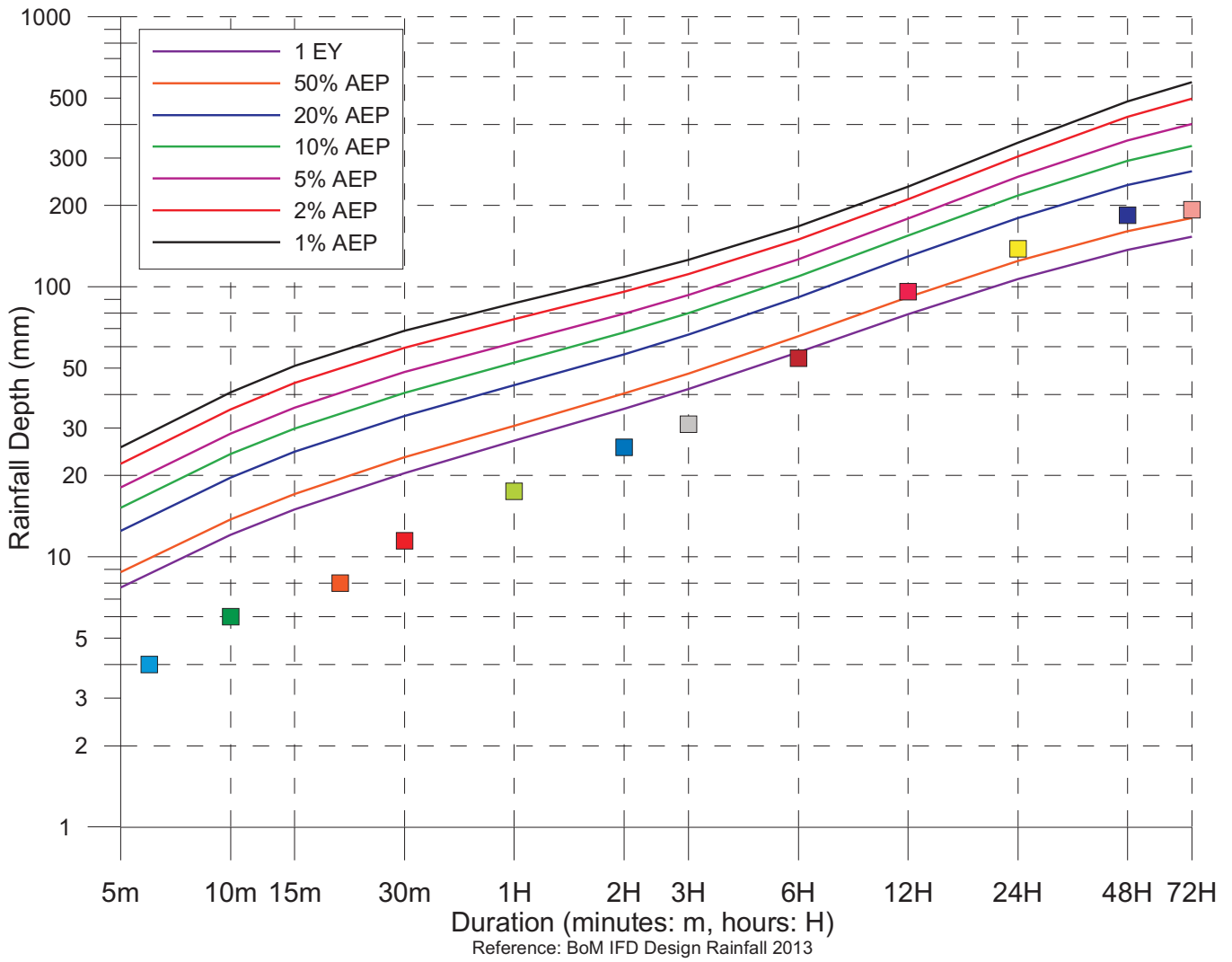
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>





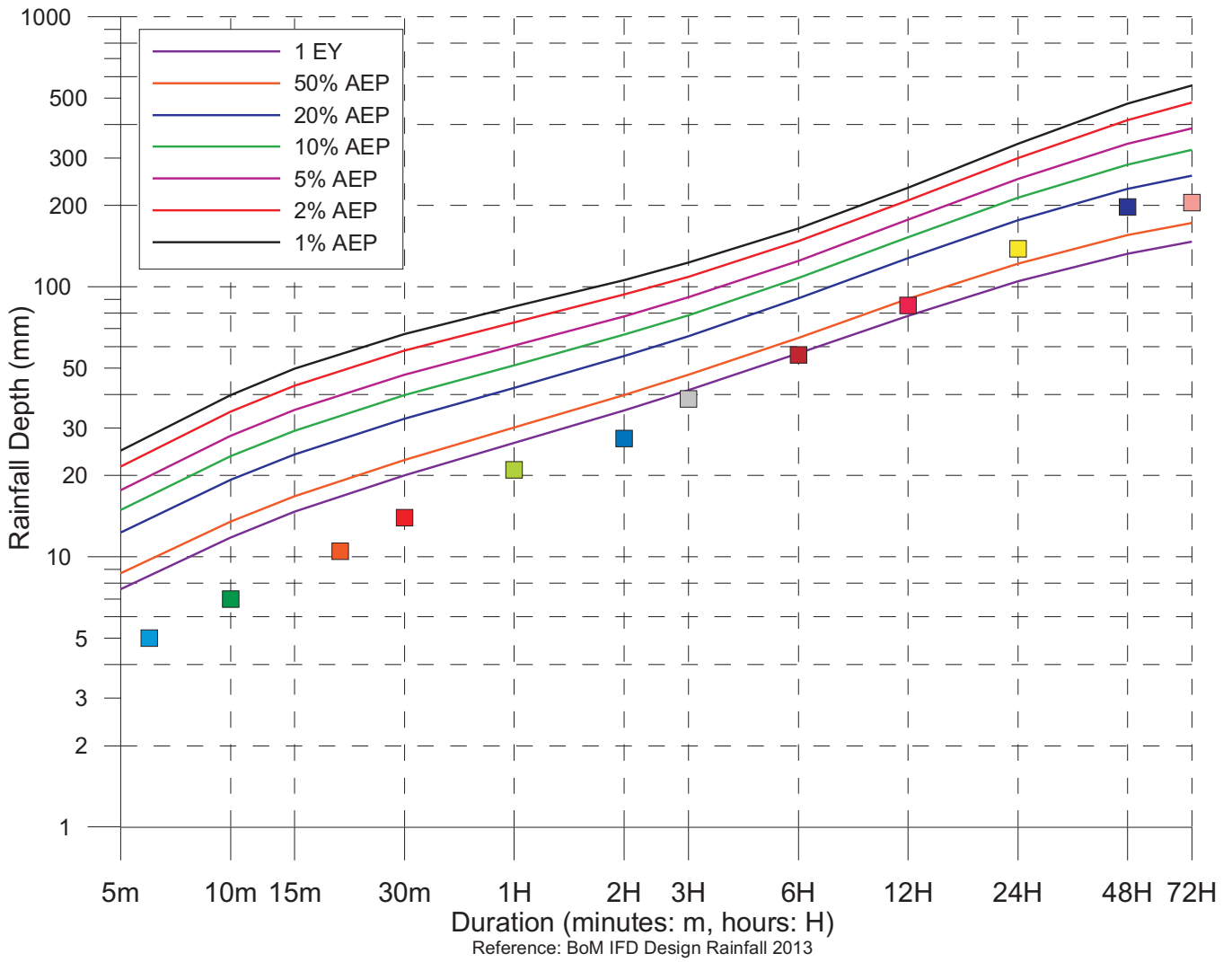
Cringila Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	3.0	07:10_25/08/2015
10m	5.0	12:14_24/08/2015
20m	9.0	12:08_24/08/2015
30m	11.0	12:06_24/08/2015
1H	14.0	08:18_25/08/2015
2H	26.0	07:10_25/08/2015
3H	35.0	06:56_25/08/2015
6H	46.0	05:04_25/08/2015
12H	78.0	22:52_24/08/2015
24H	125.0	11:52_24/08/2015
48H	166.0	11:52_24/08/2015
72H	171.0	11:52_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



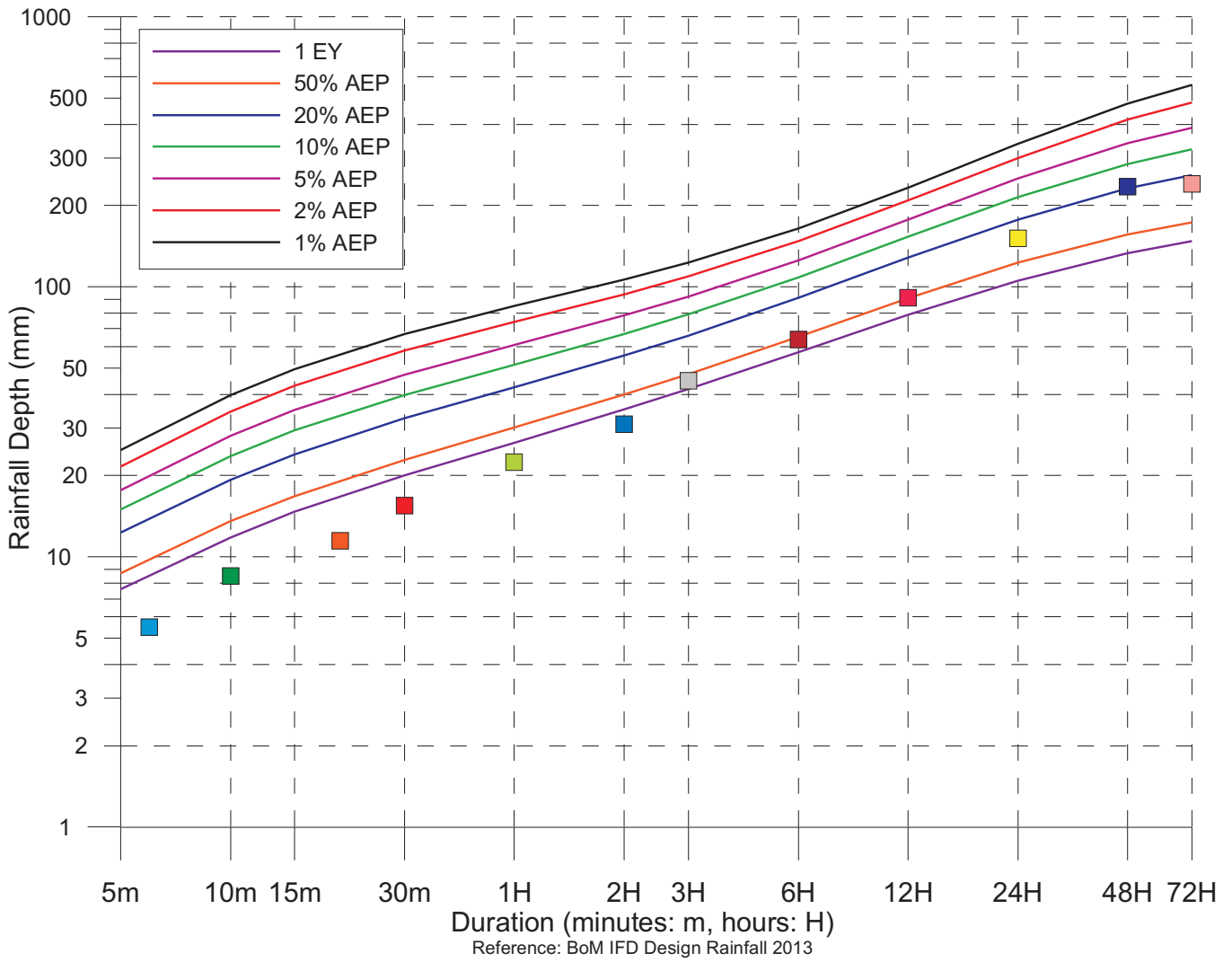
Port Kembla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	4.0	02:06_26/08/2015
10m	6.0	02:02_26/08/2015
20m	8.0	01:00_25/08/2015
30m	11.5	00:48_25/08/2015
1H	17.5	00:36_25/08/2015
2H	25.5	23:36_24/08/2015
3H	31.0	23:36_24/08/2015
6H	54.5	19:52_24/08/2015
12H	96.0	21:16_24/08/2015
24H	138.5	11:50_24/08/2015
48H	184.5	11:50_24/08/2015
72H	193.5	20:46_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Berkeley Sport and Social Club Club Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	12:14_24/08/2015
10m	7.0	12:14_24/08/2015
20m	10.5	12:08_24/08/2015
30m	14.0	00:54_25/08/2015
1H	21.0	00:28_25/08/2015
2H	27.5	23:42_24/08/2015
3H	38.5	22:46_24/08/2015
6H	56.0	19:42_24/08/2015
12H	85.5	21:12_24/08/2015
24H	138.5	11:56_24/08/2015
48H	197.5	11:56_24/08/2015
72H	205.0	19:44_23/08/2015

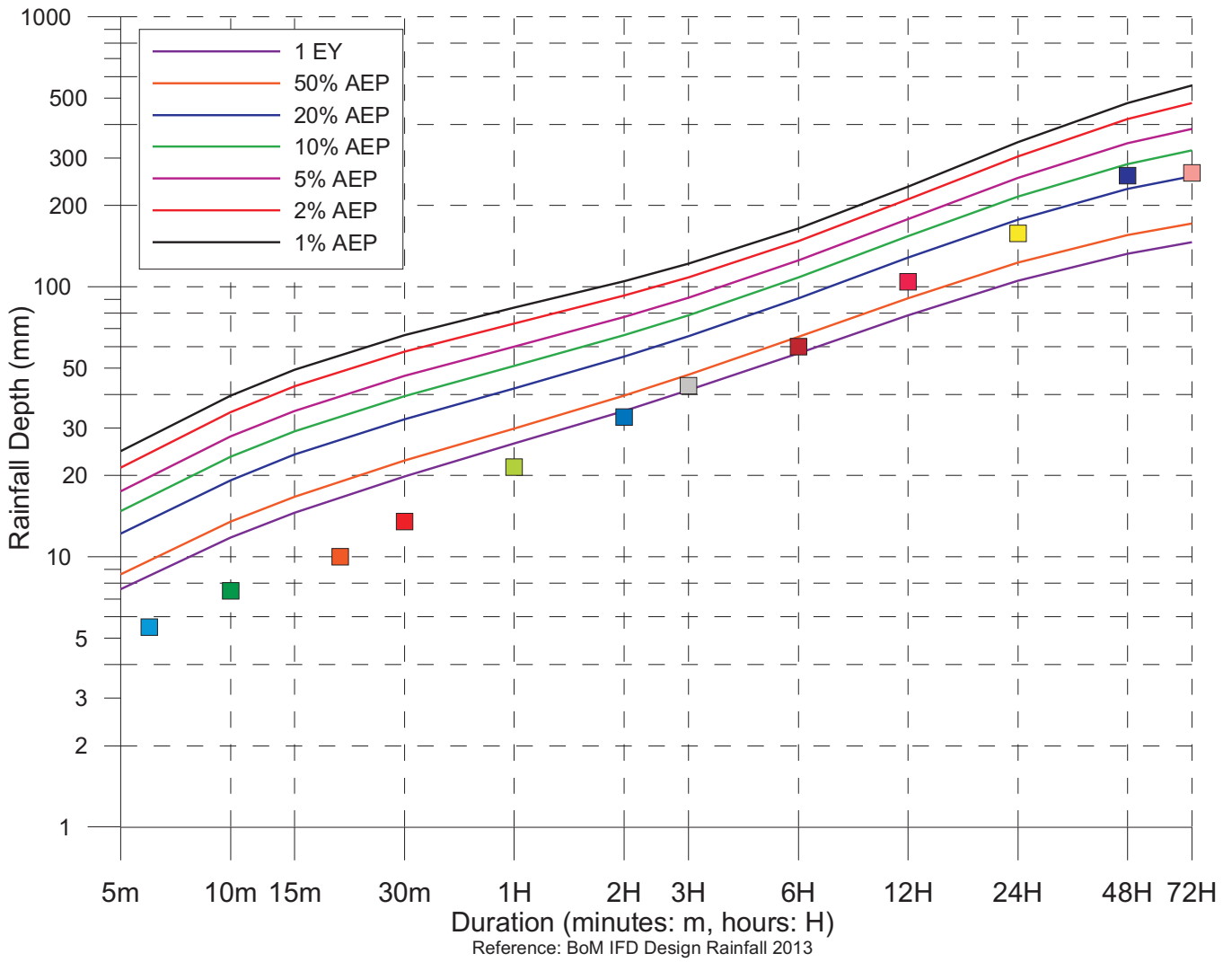
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Kanahooka Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.5	01:48_26/08/2015
10m	8.5	01:44_26/08/2015
20m	11.5	00:52_25/08/2015
30m	15.5	00:50_25/08/2015
1H	22.5	00:30_25/08/2015
2H	31.0	23:16_24/08/2015
3H	45.0	22:38_24/08/2015
6H	64.0	19:42_24/08/2015
12H	91.0	20:50_24/08/2015
24H	151.0	11:56_24/08/2015
48H	234.5	11:56_24/08/2015
72H	241.0	01:04_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

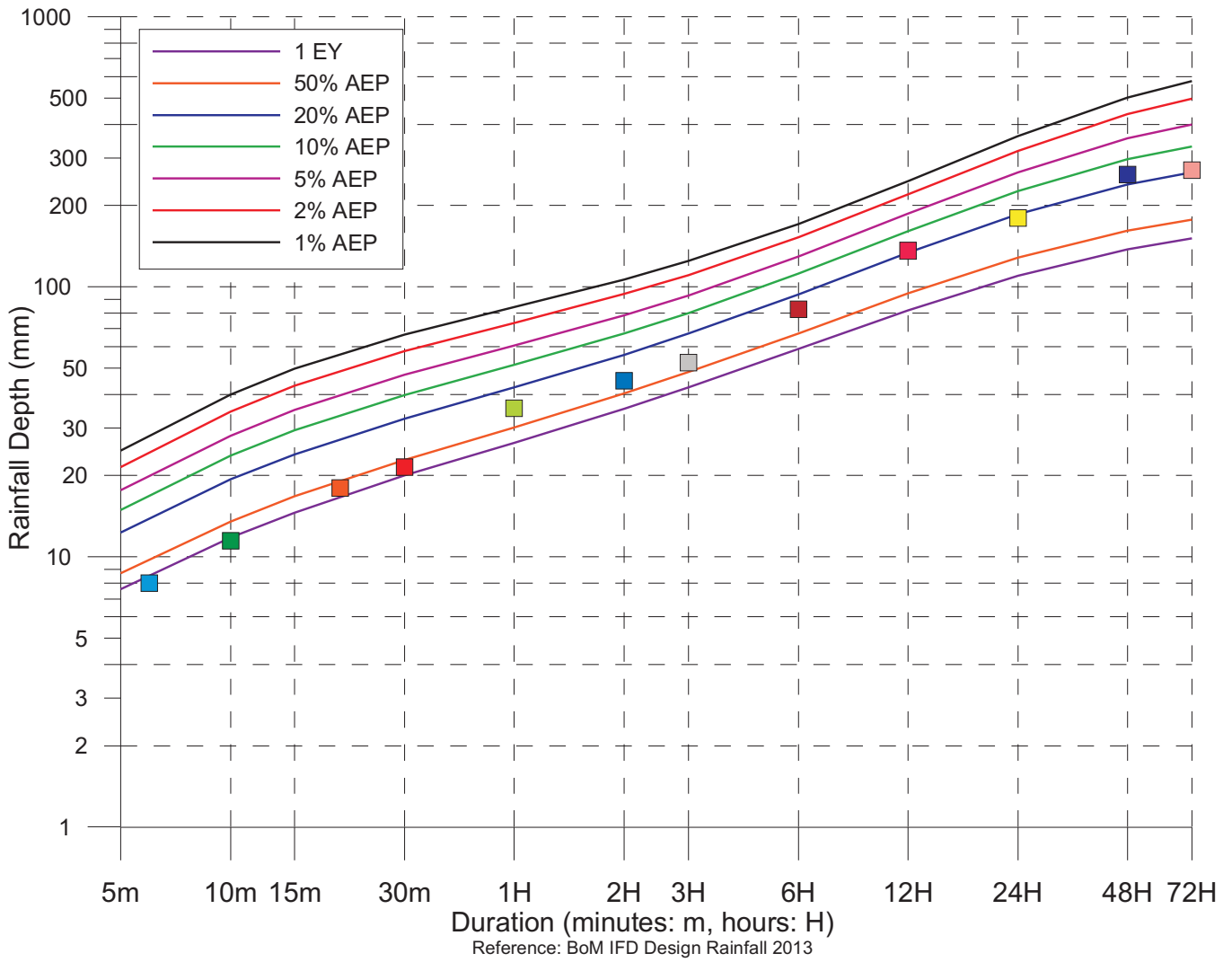




Dapto Citizens Bowling Club Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.5	11:08_26/08/2015
10m	7.5	11:08_26/08/2015
20m	10.0	04:14_26/08/2015
30m	13.5	00:38_25/08/2015
1H	21.5	15:16_24/08/2015
2H	33.0	14:16_24/08/2015
3H	43.0	22:42_24/08/2015
6H	60.0	19:48_24/08/2015
12H	104.5	14:16_24/08/2015
24H	158.0	11:54_24/08/2015
48H	258.5	12:00_24/08/2015
72H	264.0	02:48_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

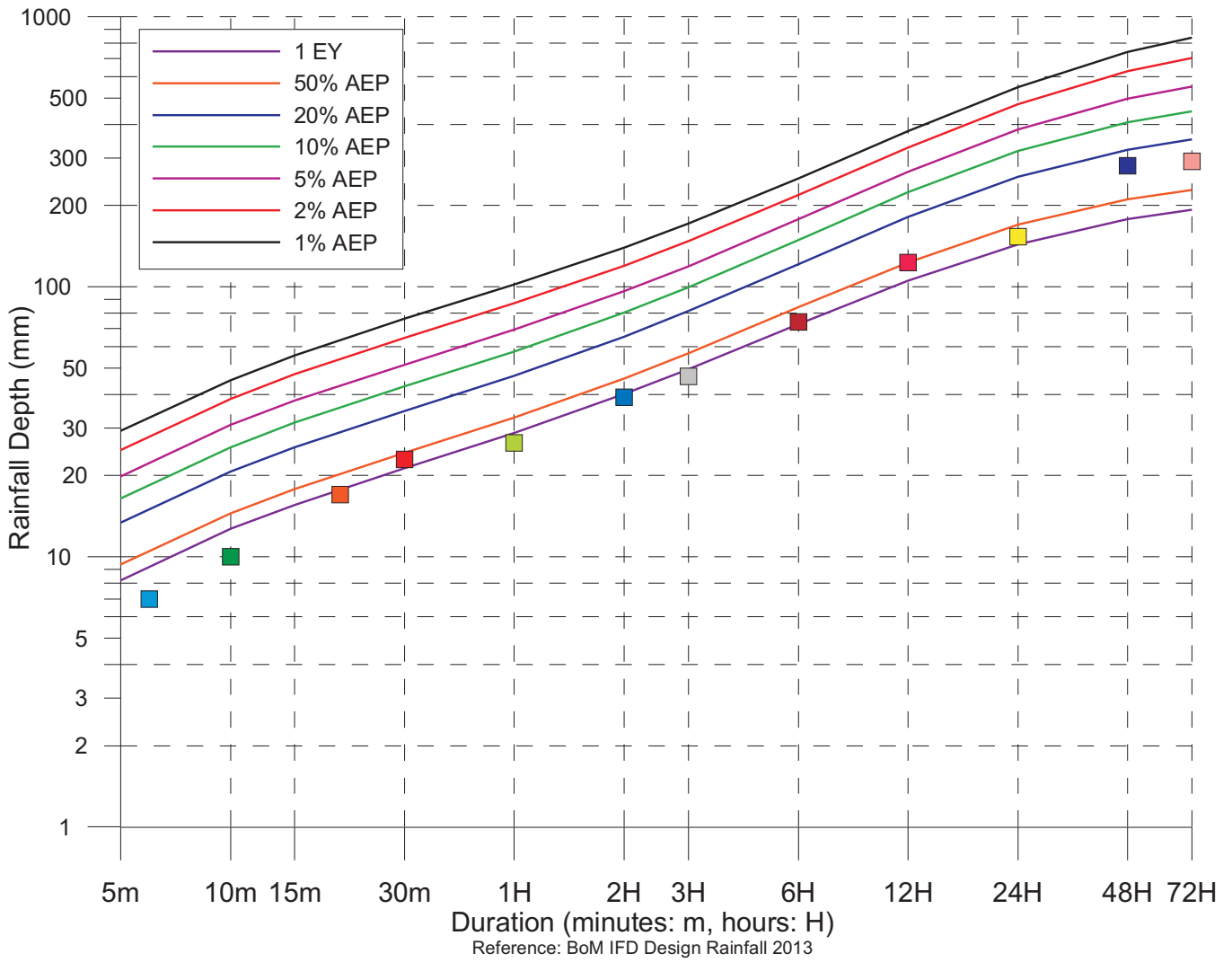




Cleveland Road Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	8.0	15:52_24/08/2015
10m	11.5	15:50_24/08/2015
20m	18.0	15:46_24/08/2015
30m	21.5	15:36_24/08/2015
1H	35.5	15:16_24/08/2015
2H	45.0	15:16_24/08/2015
3H	52.5	14:18_24/08/2015
6H	82.5	15:16_24/08/2015
12H	136.0	13:20_24/08/2015
24H	180.0	12:02_24/08/2015
48H	261.0	11:58_24/08/2015
72H	270.0	02:28_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

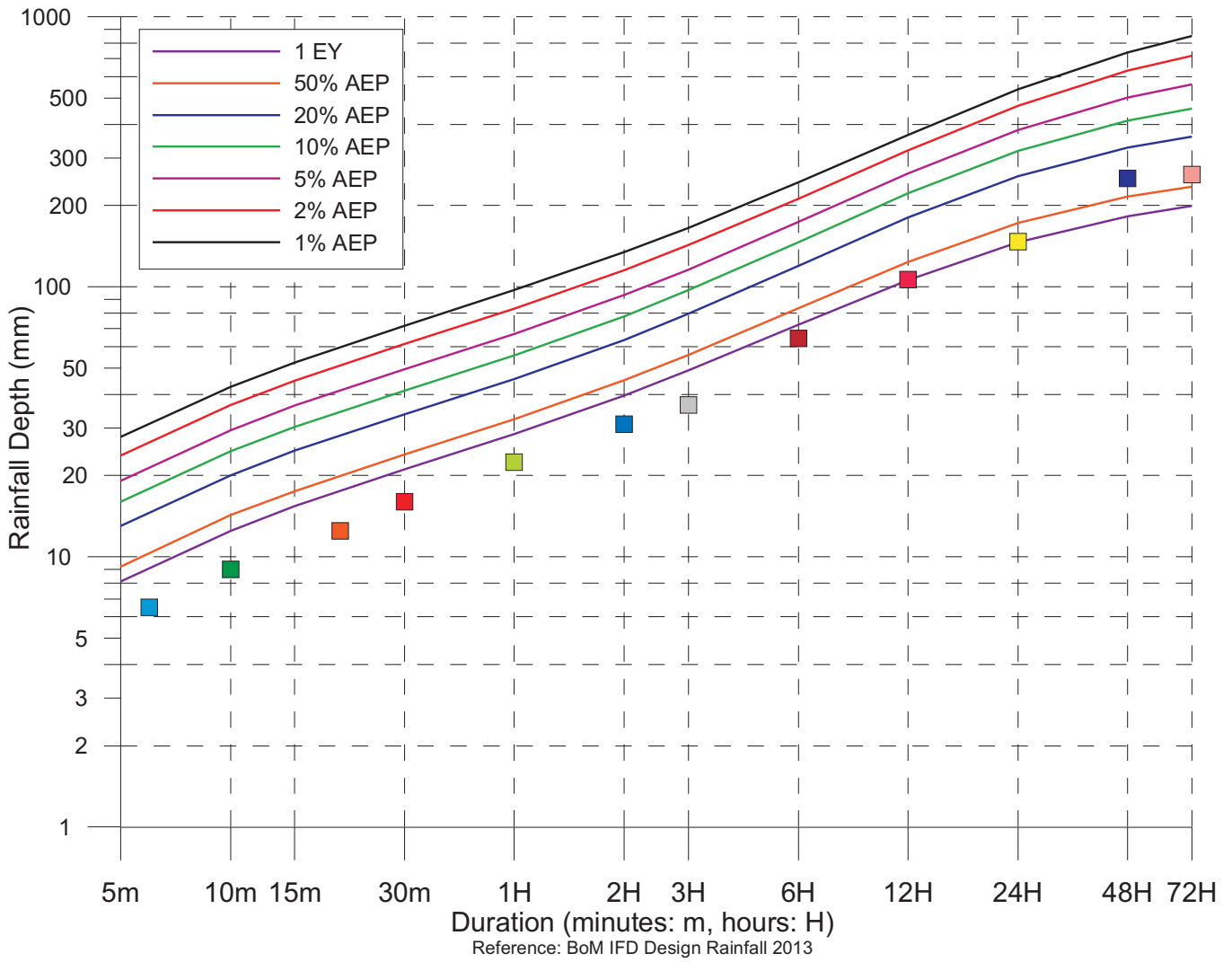




Huntley Colliery Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	7.0	23:42_25/08/2015
10m	10.0	23:42_25/08/2015
20m	17.0	23:36_25/08/2015
30m	23.0	23:28_25/08/2015
1H	26.5	23:28_25/08/2015
2H	39.0	07:00_26/08/2015
3H	46.5	06:52_26/08/2015
6H	74.0	15:28_24/08/2015
12H	123.0	13:22_24/08/2015
24H	153.5	11:48_24/08/2015
48H	280.5	11:48_24/08/2015
72H	291.0	11:48_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

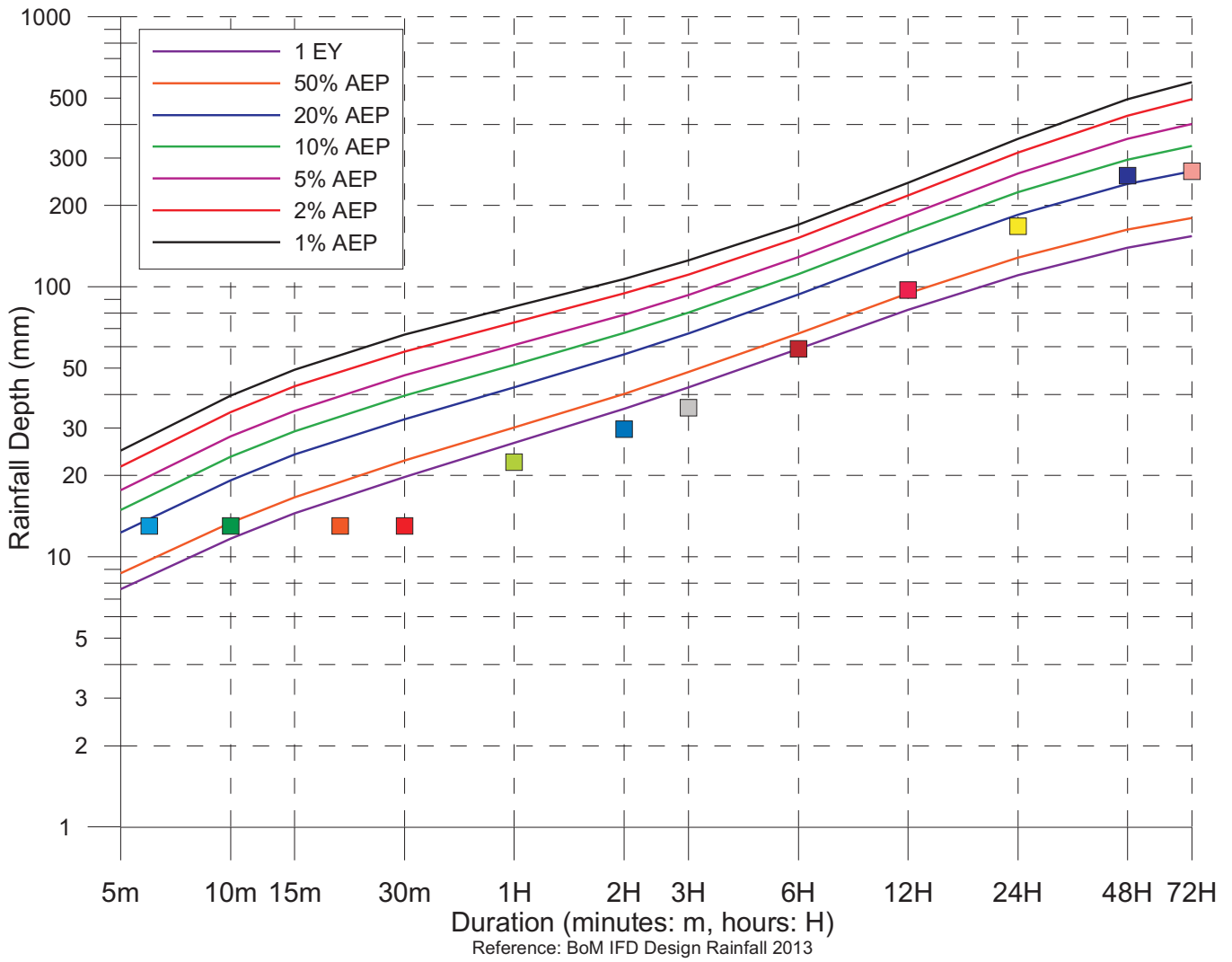




Upper Calderwood Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	6.5	01:36_26/08/2015
10m	9.0	01:34_26/08/2015
20m	12.5	01:26_26/08/2015
30m	16.0	01:14_26/08/2015
1H	22.5	00:50_26/08/2015
2H	31.0	23:52_25/08/2015
3H	36.5	18:14_24/08/2015
6H	64.5	15:28_24/08/2015
12H	106.5	13:42_24/08/2015
24H	147.0	11:50_24/08/2015
48H	251.5	11:50_24/08/2015
72H	261.0	19:54_23/08/2015

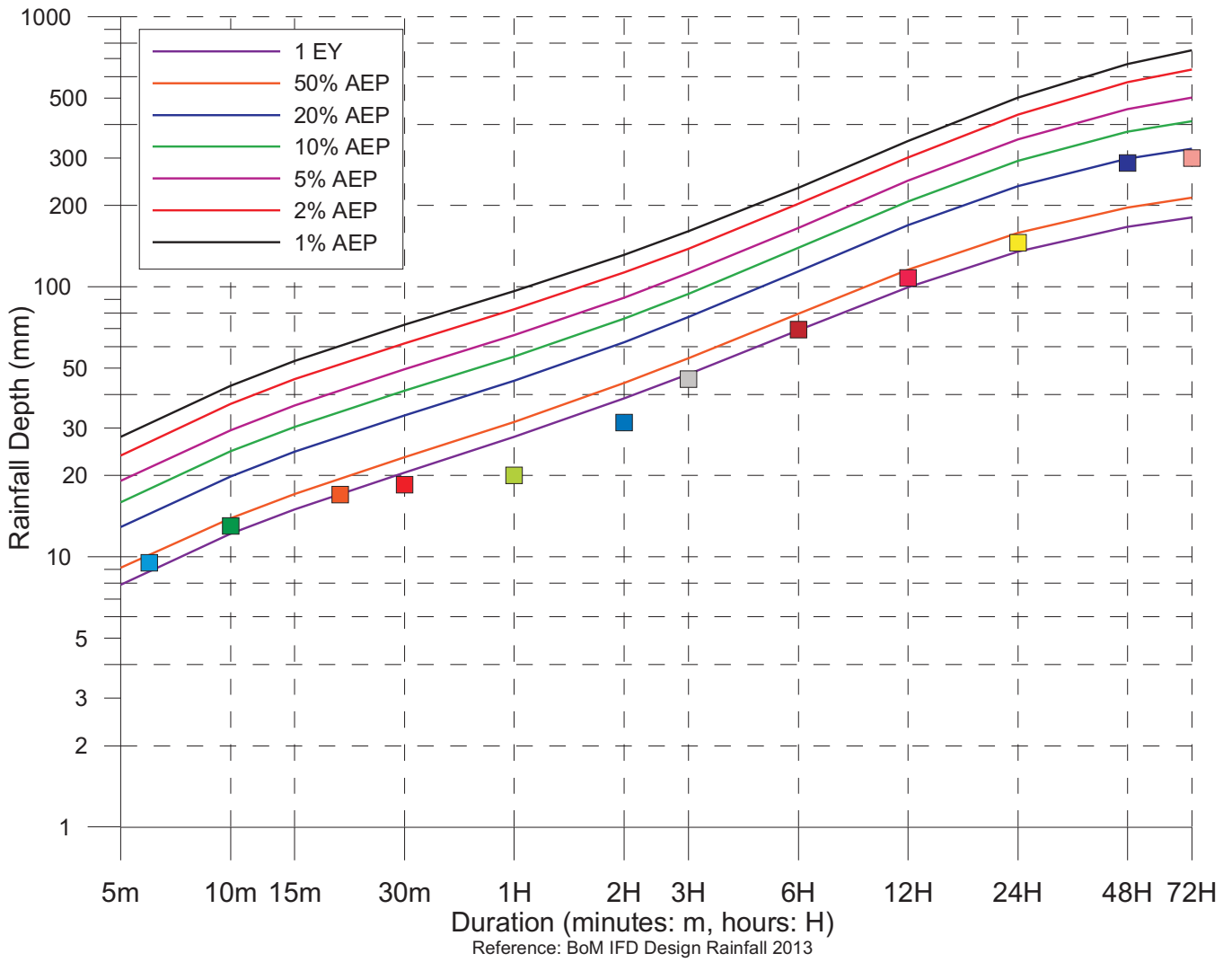
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>





Wollongong Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	13	04:58_26/08/2015
10m	13	04:58_26/08/2015
20m	13	04:58_26/08/2015
30m	13	15:58_24/08/2015
1H	22.4	15:58_24/08/2015
2H	29.8	15:28_24/08/2015
3H	35.6	14:28_24/08/2015
6H	58.8	11:58_24/08/2015
12H	97.2	14:28_24/08/2015
24H	167.4	11:58_24/08/2015
48H	258	11:58_24/08/2015
72H	268.4	23:58_23/08/2015

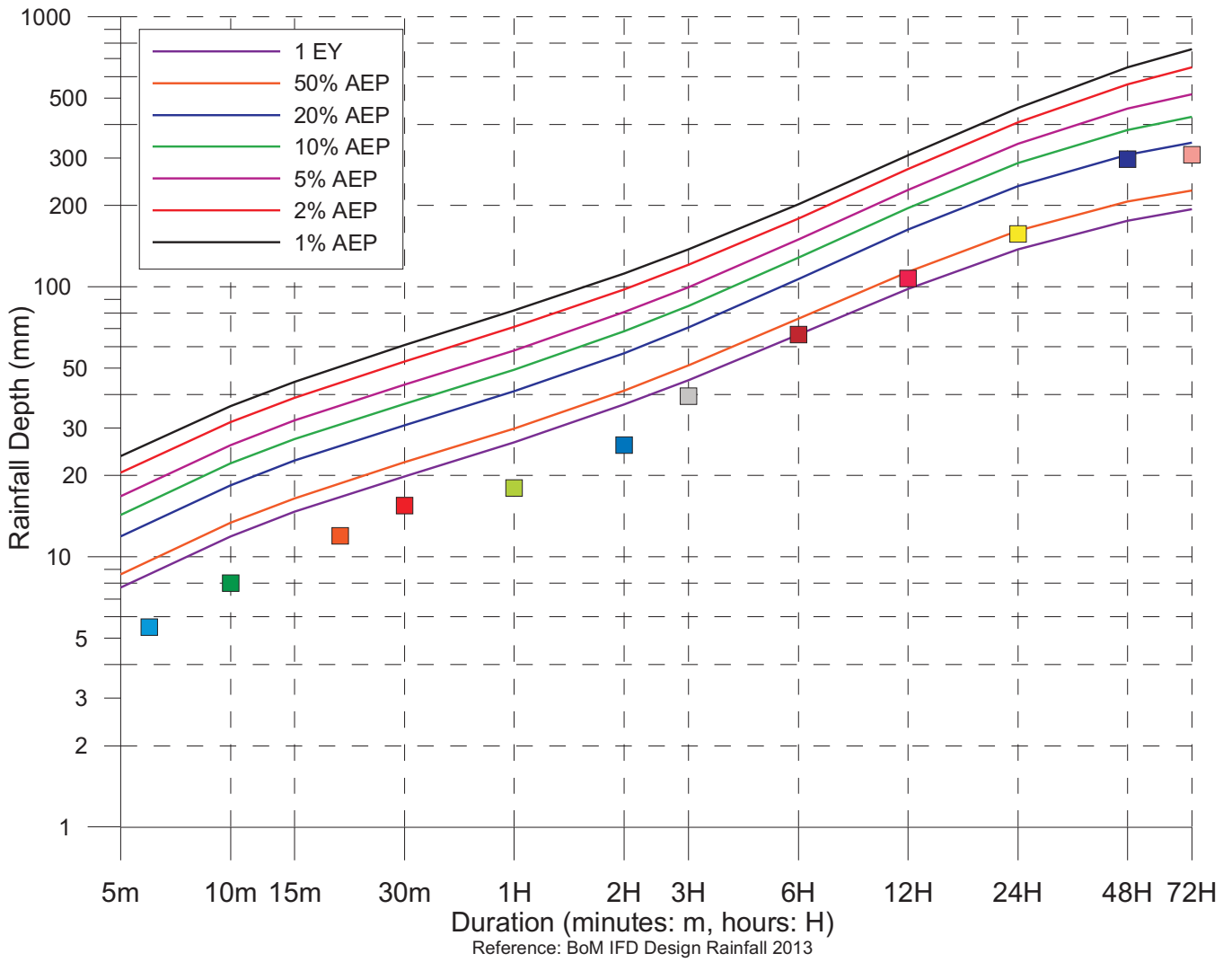
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Nurrewin Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	9.5	02:38_26/08/2015
10m	13.0	02:36_26/08/2015
20m	17.0	02:36_26/08/2015
30m	18.5	02:36_26/08/2015
1H	20.0	02:30_26/08/2015
2H	31.5	00:56_26/08/2015
3H	45.5	00:04_26/08/2015
6H	69.5	00:02_26/08/2015
12H	108.0	23:46_25/08/2015
24H	146.0	09:44_25/08/2015
48H	288.0	13:32_24/08/2015
72H	300.0	19:44_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

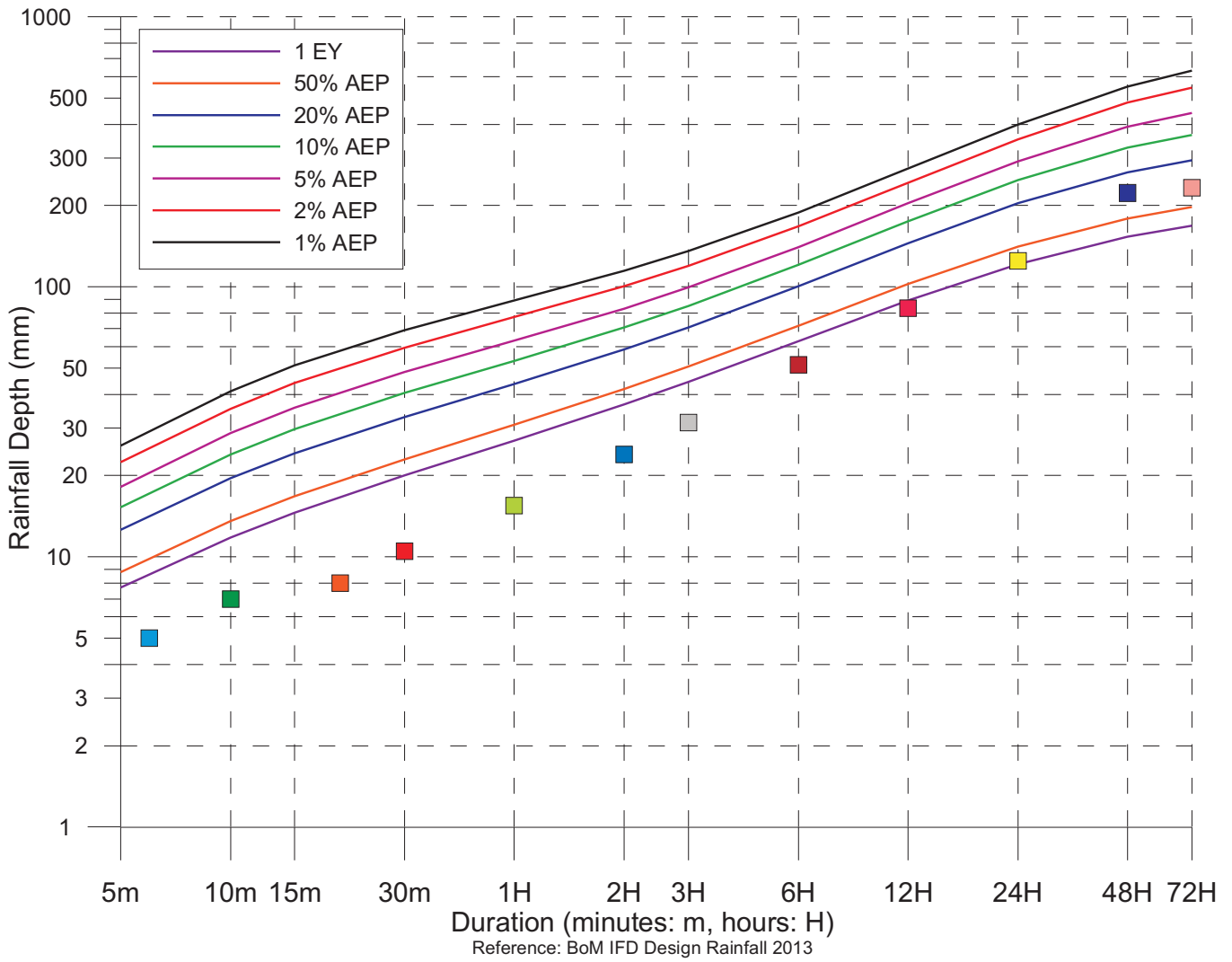




Clover Hill Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.5	02:38_26/08/2015
10m	8.0	02:38_26/08/2015
20m	12.0	02:36_26/08/2015
30m	15.5	02:34_26/08/2015
1H	18.0	02:06_26/08/2015
2H	26.0	19:52_24/08/2015
3H	39.5	00:06_26/08/2015
6H	66.5	00:00_26/08/2015
12H	107.5	23:50_25/08/2015
24H	157.0	11:02_25/08/2015
48H	297.0	13:42_24/08/2015
72H	309.0	19:58_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

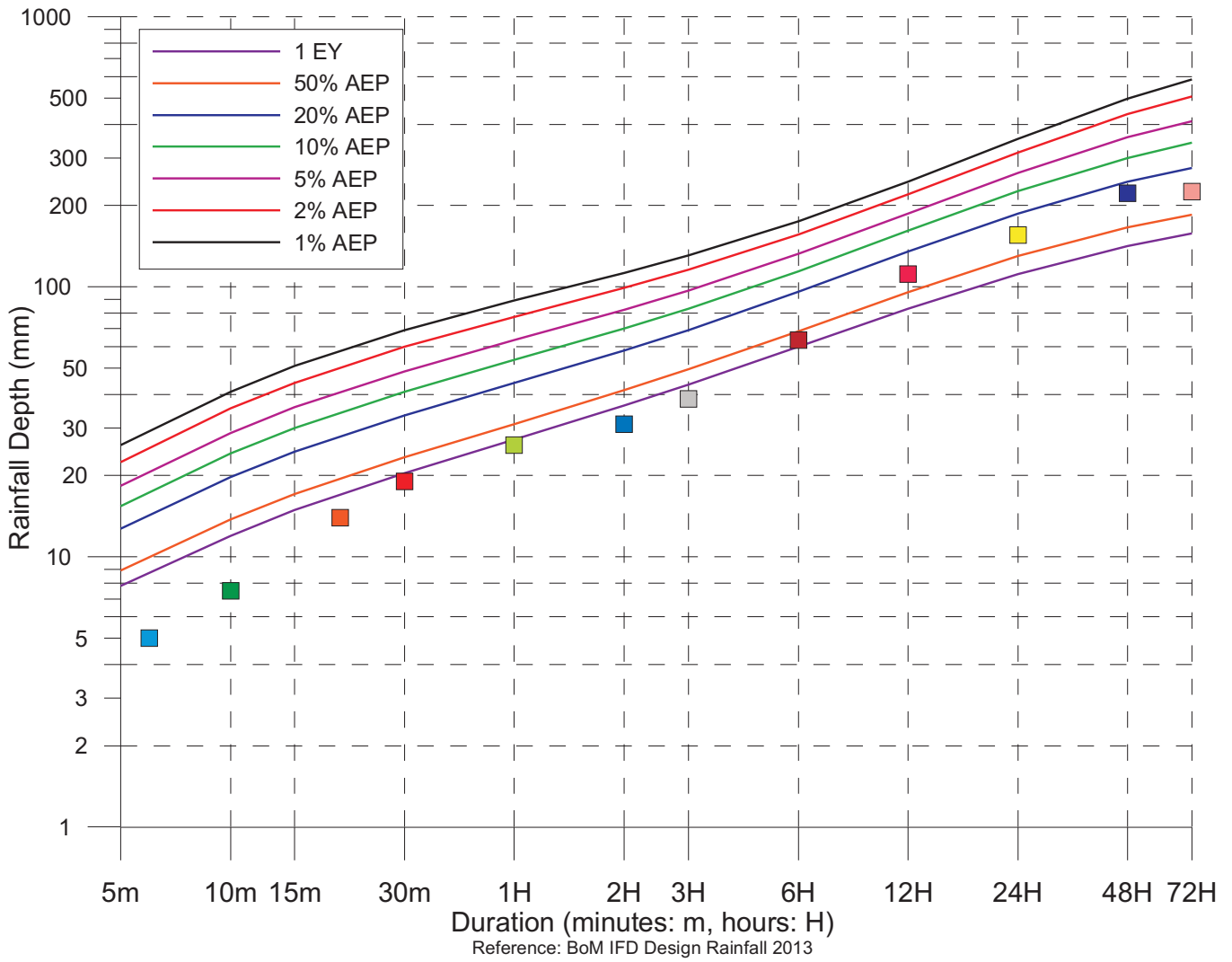




North Macquarie Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	23:50_25/08/2015
10m	7.0	23:48_25/08/2015
20m	8.0	23:48_25/08/2015
30m	10.5	07:32_26/08/2015
1H	15.5	07:20_26/08/2015
2H	24.0	06:42_26/08/2015
3H	31.5	06:42_26/08/2015
6H	51.5	03:40_26/08/2015
12H	83.5	13:34_24/08/2015
24H	124.5	11:46_24/08/2015
48H	222.5	11:46_24/08/2015
72H	232.5	01:16_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

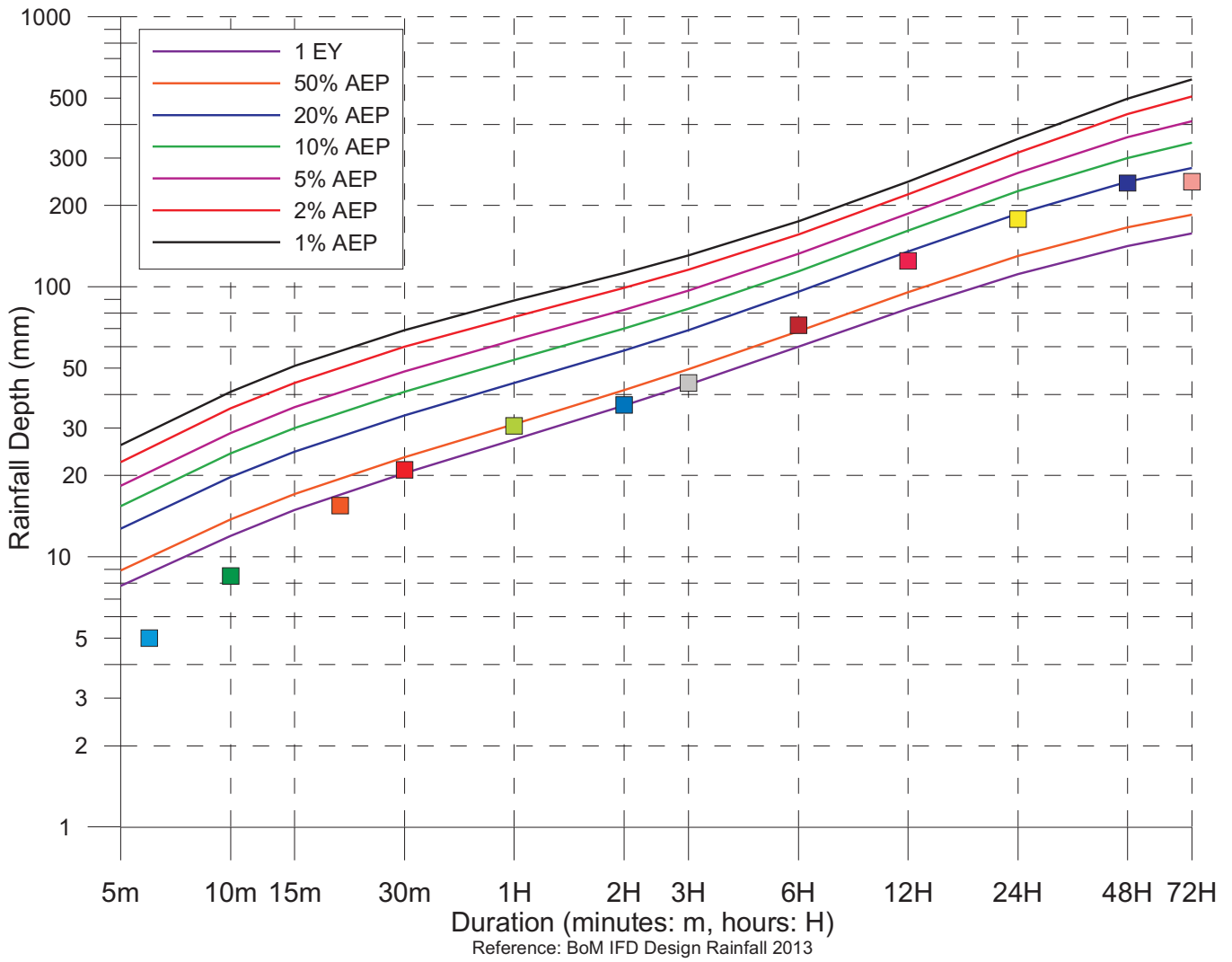




Little Lake Entrance Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	01:06_25/08/2015
10m	7.5	01:04_25/08/2015
20m	14.0	00:58_25/08/2015
30m	19.0	00:58_25/08/2015
1H	26.0	00:32_25/08/2015
2H	31.0	23:28_24/08/2015
3H	38.5	22:48_24/08/2015
6H	63.5	23:26_24/08/2015
12H	111.5	22:30_24/08/2015
24H	155.5	11:34_24/08/2015
48H	222.0	11:34_24/08/2015
72H	225.0	01:54_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

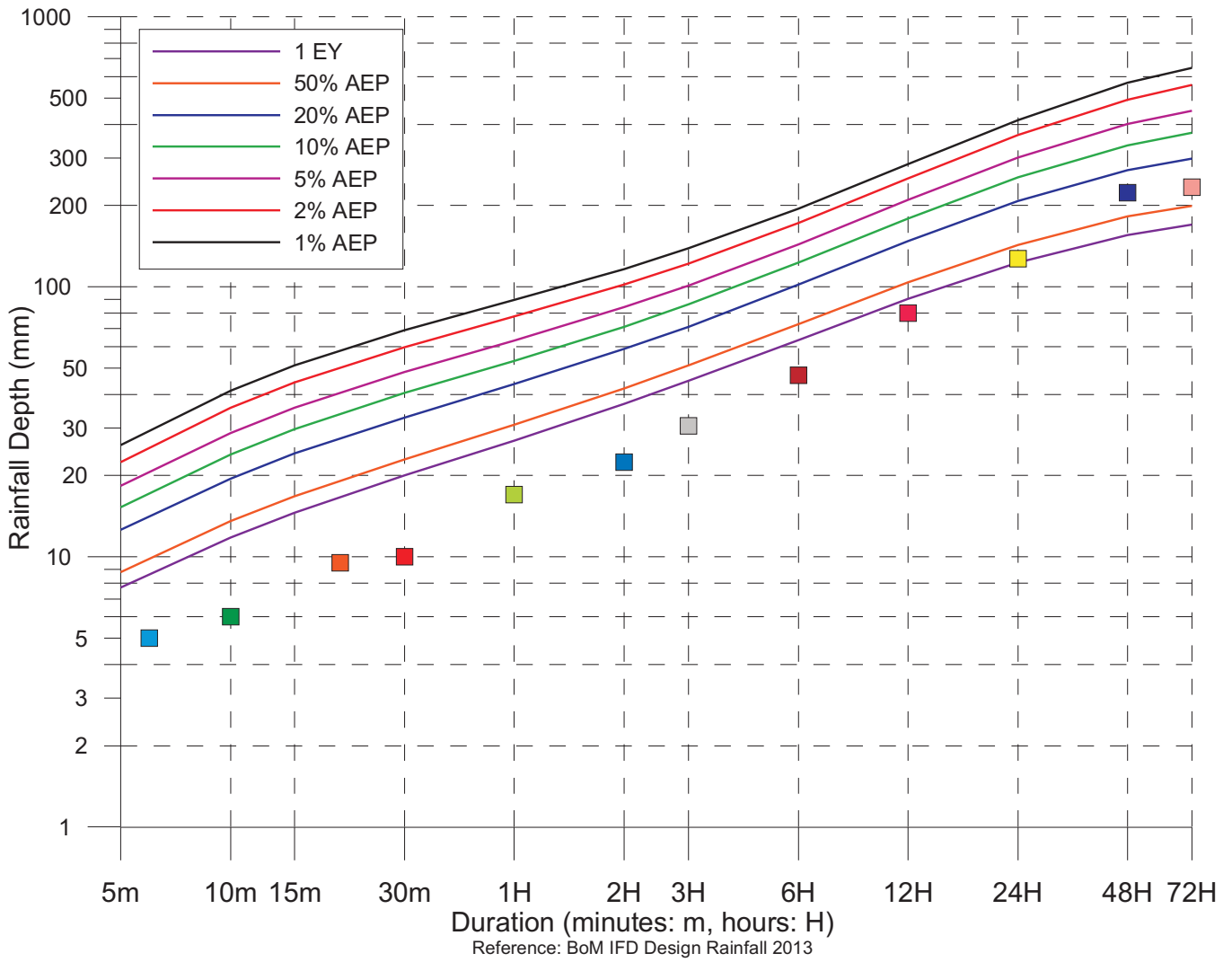




Shellharbour STP Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	01:08_25/08/2015
10m	8.5	01:04_25/08/2015
20m	15.5	00:56_25/08/2015
30m	21.0	00:58_25/08/2015
1H	30.5	00:30_25/08/2015
2H	36.5	23:30_24/08/2015
3H	44.0	22:46_24/08/2015
6H	72.0	23:26_24/08/2015
12H	125.0	22:54_24/08/2015
24H	178.5	11:42_24/08/2015
48H	242.5	11:42_24/08/2015
72H	245.5	22:30_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

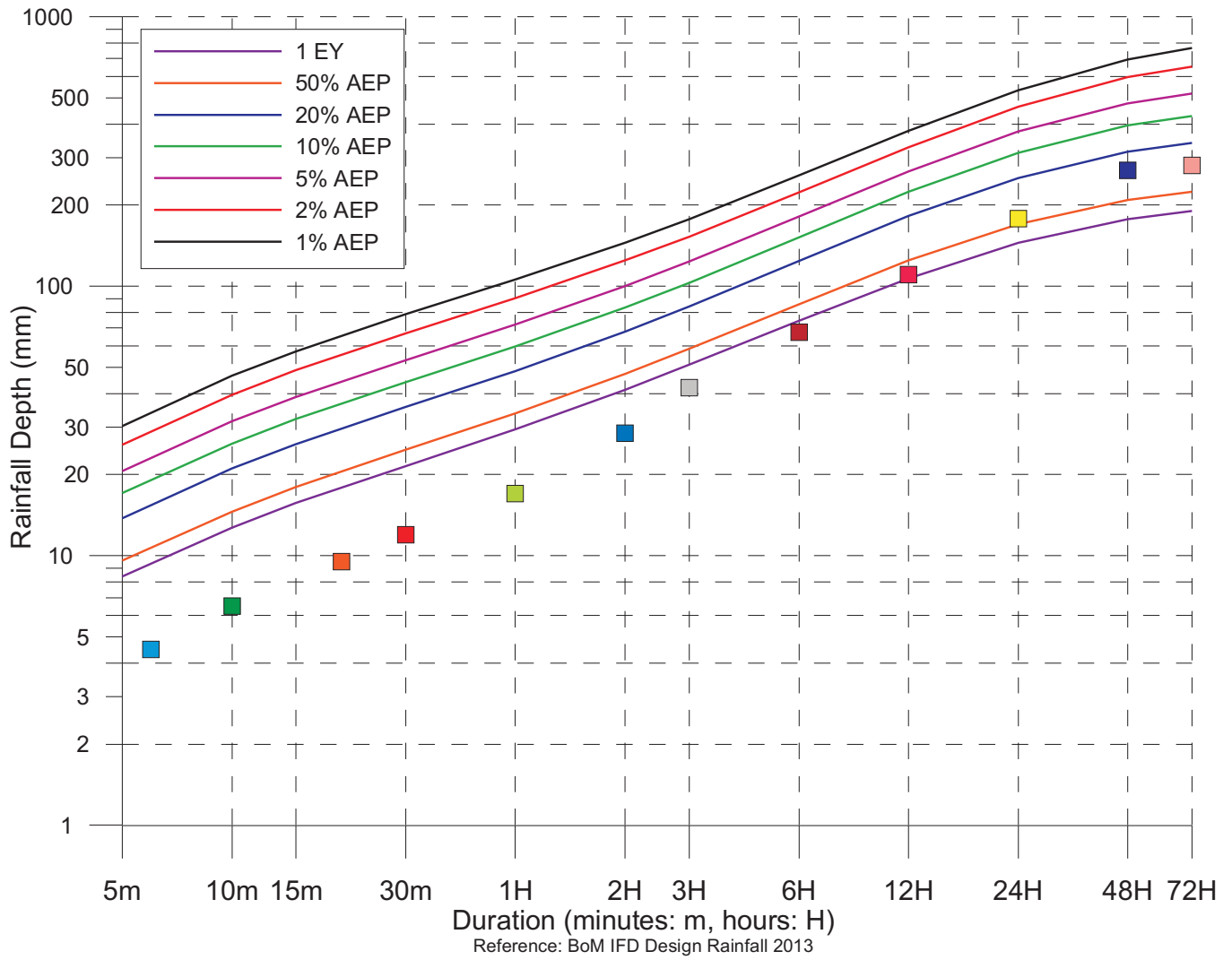




Tongarra Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	00:18_26/08/2015
10m	6.0	00:16_26/08/2015
20m	9.5.0	00:14_26/08/2015
30m	10.0	00:16_26/08/2015
1H	17.0	23:46_25/08/2015
2H	22.5	23:36_25/08/2015
3H	30.5	18:20_24/08/2015
6H	47.0	17:46_24/08/2015
12H	80.0	13:32_24/08/2015
24H	127.0	11:46_24/08/2015
48H	223.5	11:46_24/08/2015
72H	233.5	00:52_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

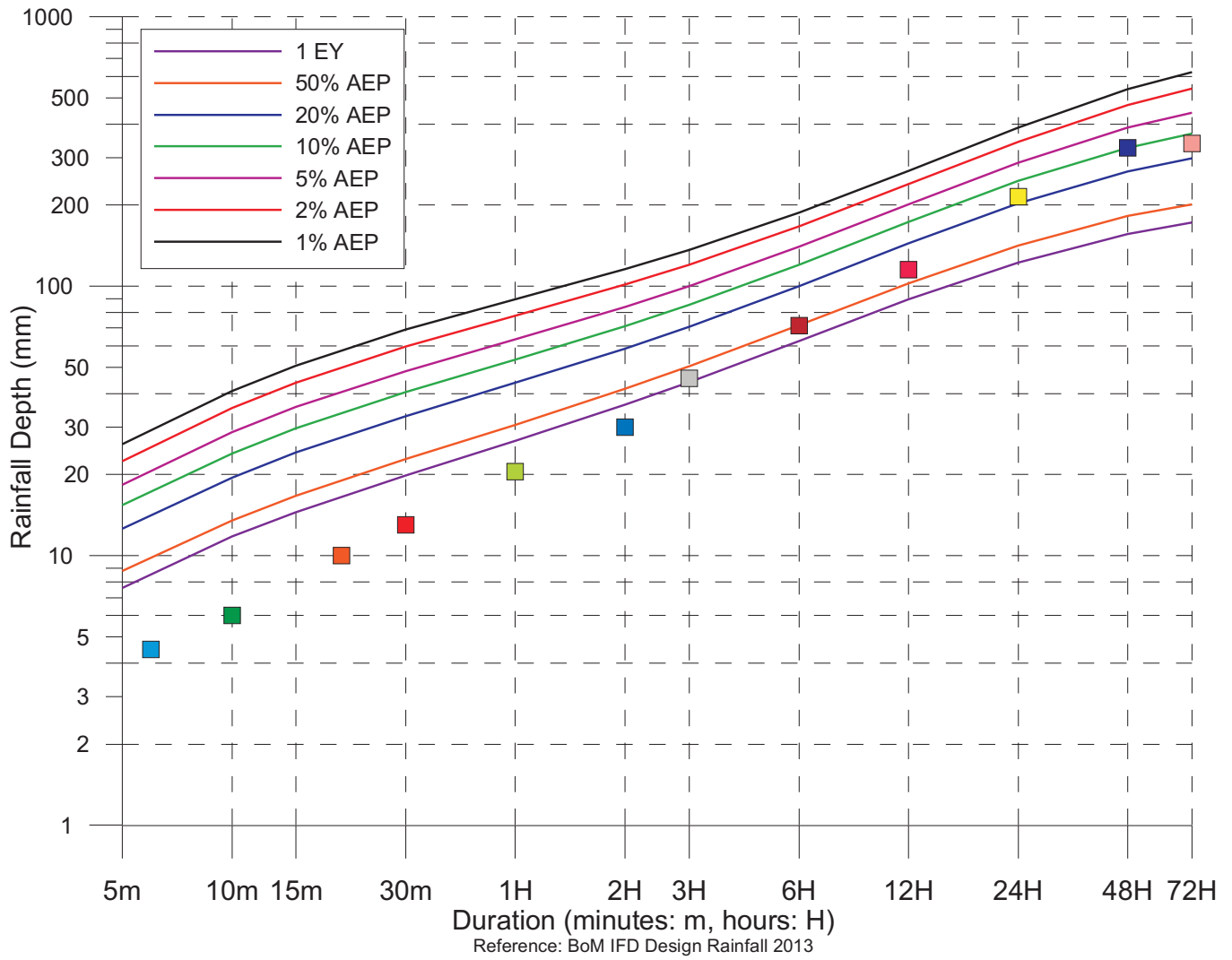




Yellow Rock Road Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	4.5	23:54_25/08/2015
10m	6.5	15:34_24/08/2015
20m	9.5	07:32_26/08/2015
30m	12.0	07:28_26/08/2015
1H	17.0	07:20_26/08/2015
2H	28.5	19:40_24/08/2015
3H	42.0	18:24_24/08/2015
6H	67.5	15:32_24/08/2015
12H	110.5	11:48_24/08/2015
24H	178.0	11:44_24/08/2015
48H	269.0	11:40_24/08/2015
72H	281.0	20:14_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

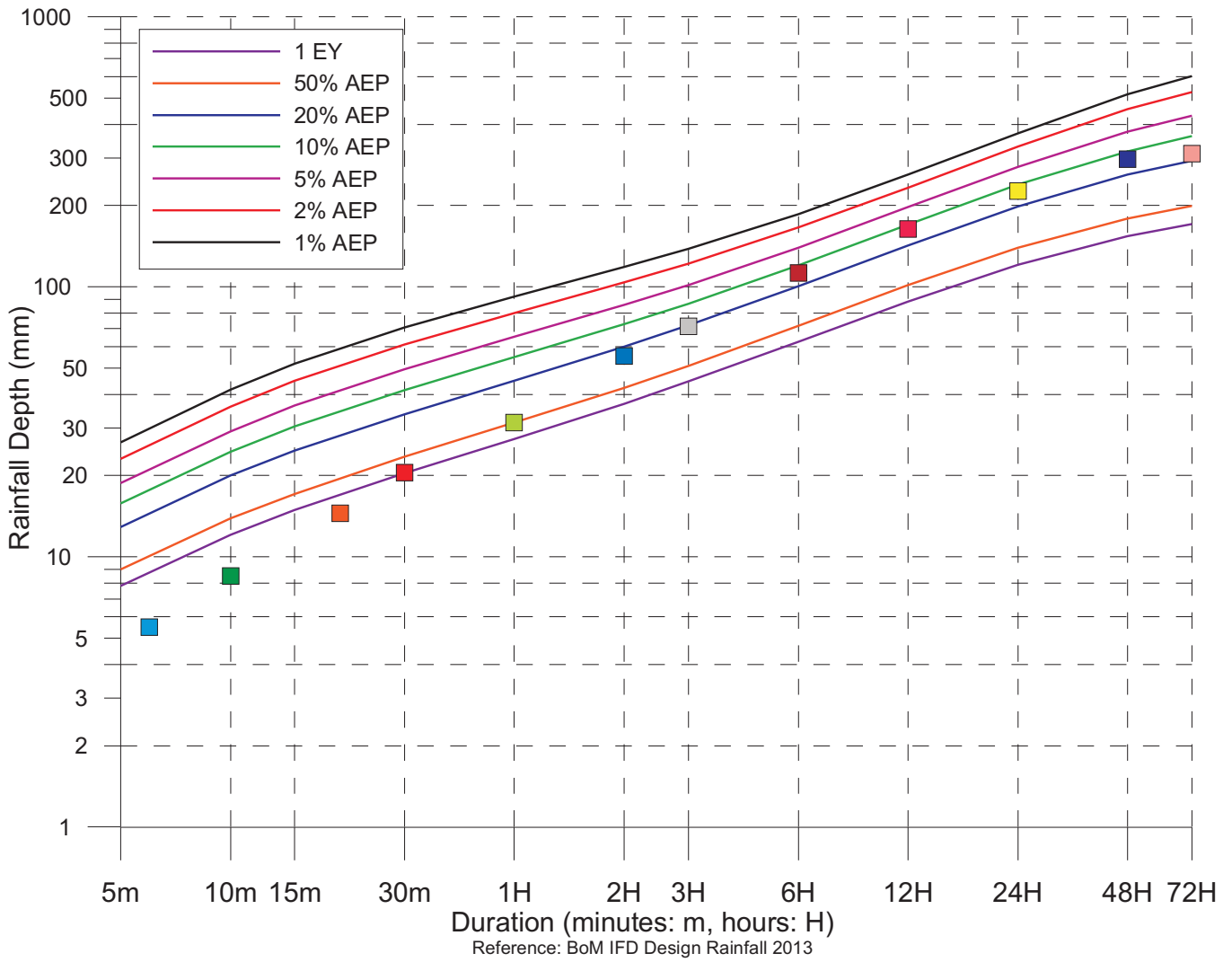




Jamberoo Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	4.5	00:08_26/08/2015
10m	6.0	07:36_26/08/2015
20m	10.0	07:30_26/08/2015
30m	13.0	07:26_26/08/2015
1H	20.5	07:30_26/08/2015
2H	30.0	18:34_24/08/2015
3H	45.5	18:34_24/08/2015
6H	71.5	17:58_24/08/2015
12H	115.5	13:50_24/08/2015
24H	215.0	11:44_24/08/2015
48H	327.0	11:38_24/08/2015
72H	339.0	20:36_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

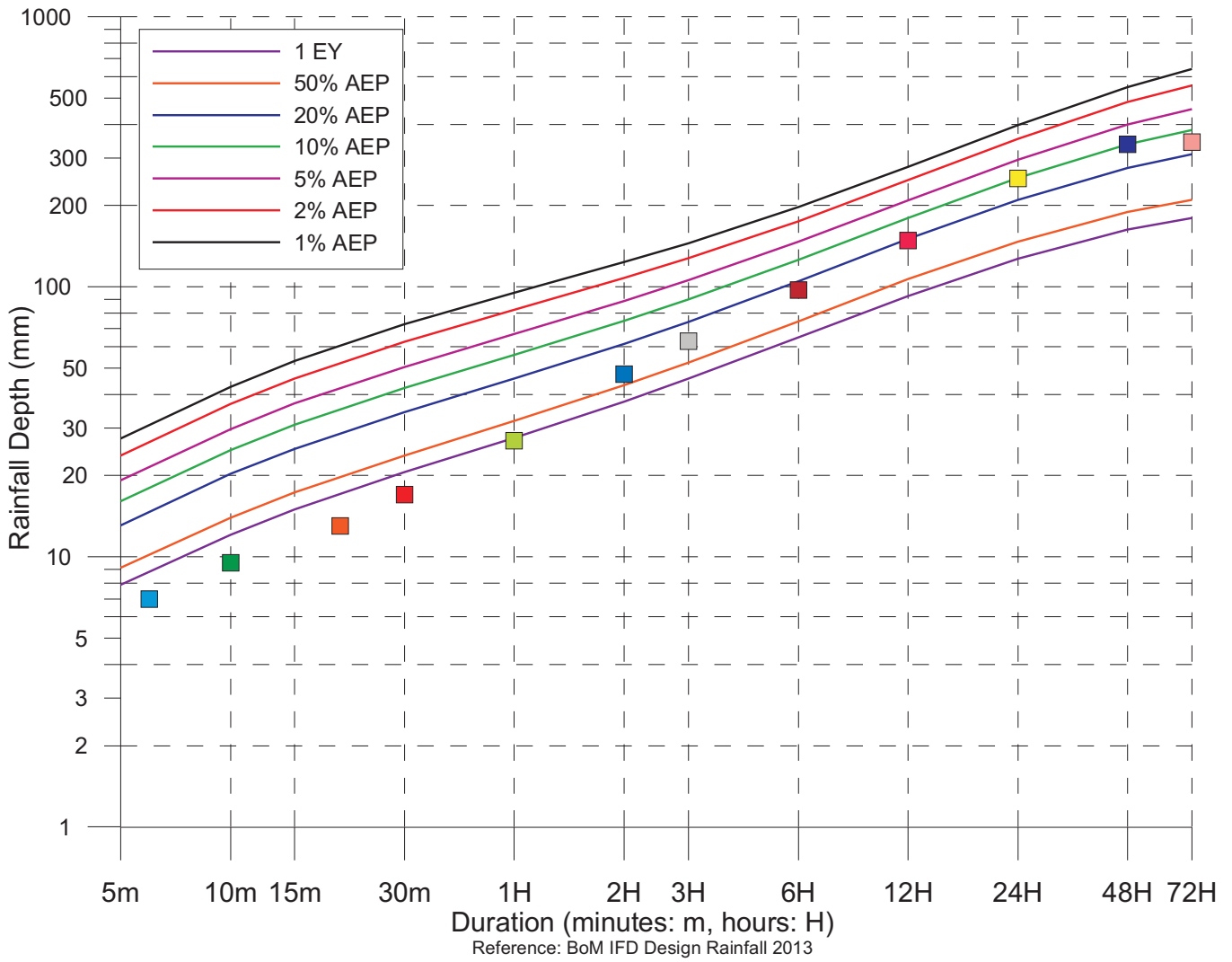




Bombo STP Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.5	07:58_25/08/2015
10m	8.5	07:54_25/08/2015
20m	14.5	07:56_25/08/2015
30m	20.5	07:48_25/08/2015
1H	31.5	07:20_25/08/2015
2H	55.5	06:32_25/08/2015
3H	71.5	06:30_25/08/2015
6H	112.5	03:22_25/08/2015
12H	164.0	23:18_24/08/2015
24H	226.5	12:18_24/08/2015
48H	297.0	11:24_24/08/2015
72H	311.0	11:24_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

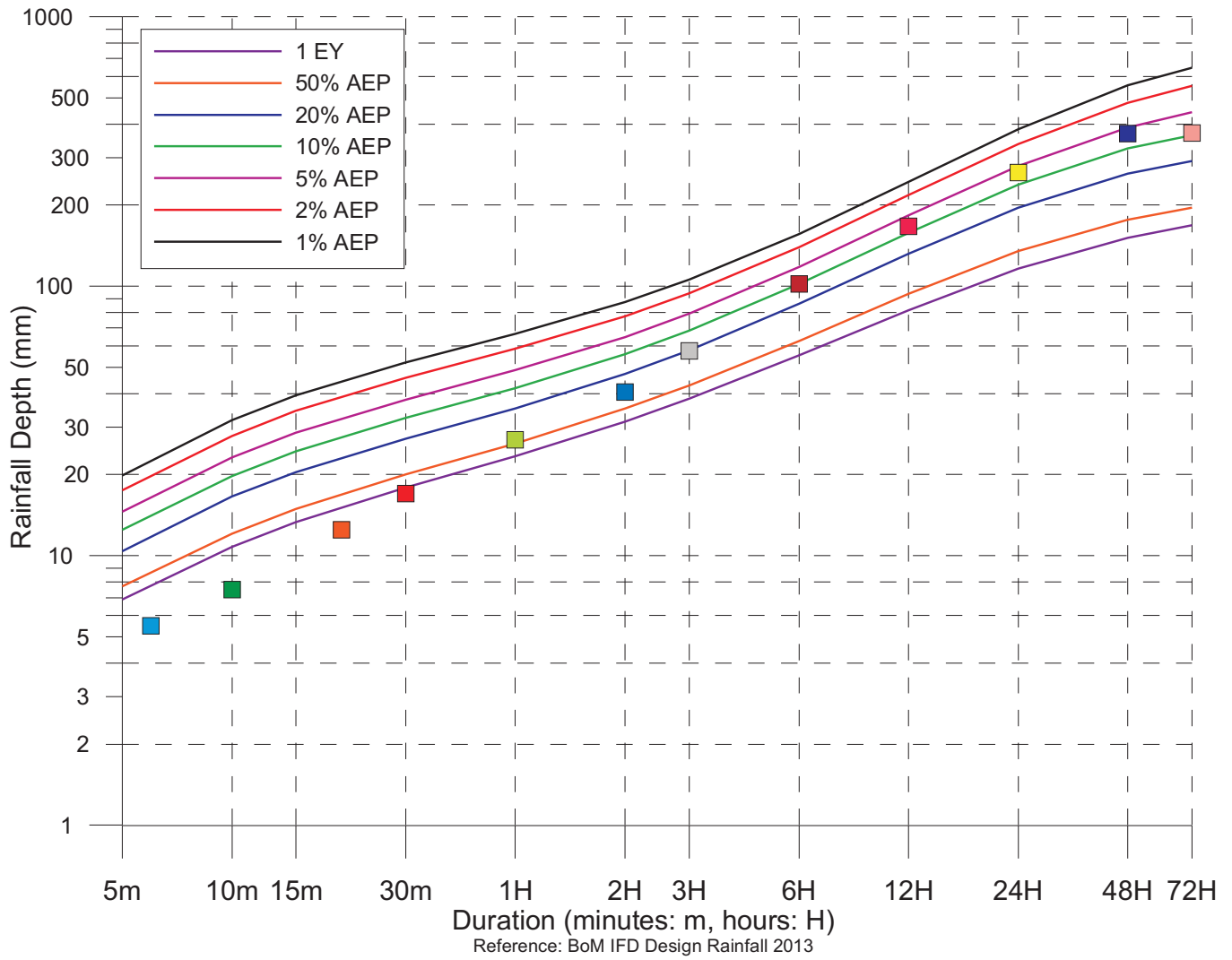




Kiama Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	7	06:26_26/08/2015
10m	9.5	06:22_26/08/2015
20m	13	06:14_26/08/2015
30m	17	07:50_25/08/2015
1H	27	07:16_25/08/2015
2H	47.5	06:28_25/08/2015
3H	63	06:30_25/08/2015
6H	97.5	03:50_25/08/2015
12H	148.5	01:00_25/08/2015
24H	252	12:10_24/08/2015
48H	336.5	11:28_24/08/2015
72H	343.5	11:28_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

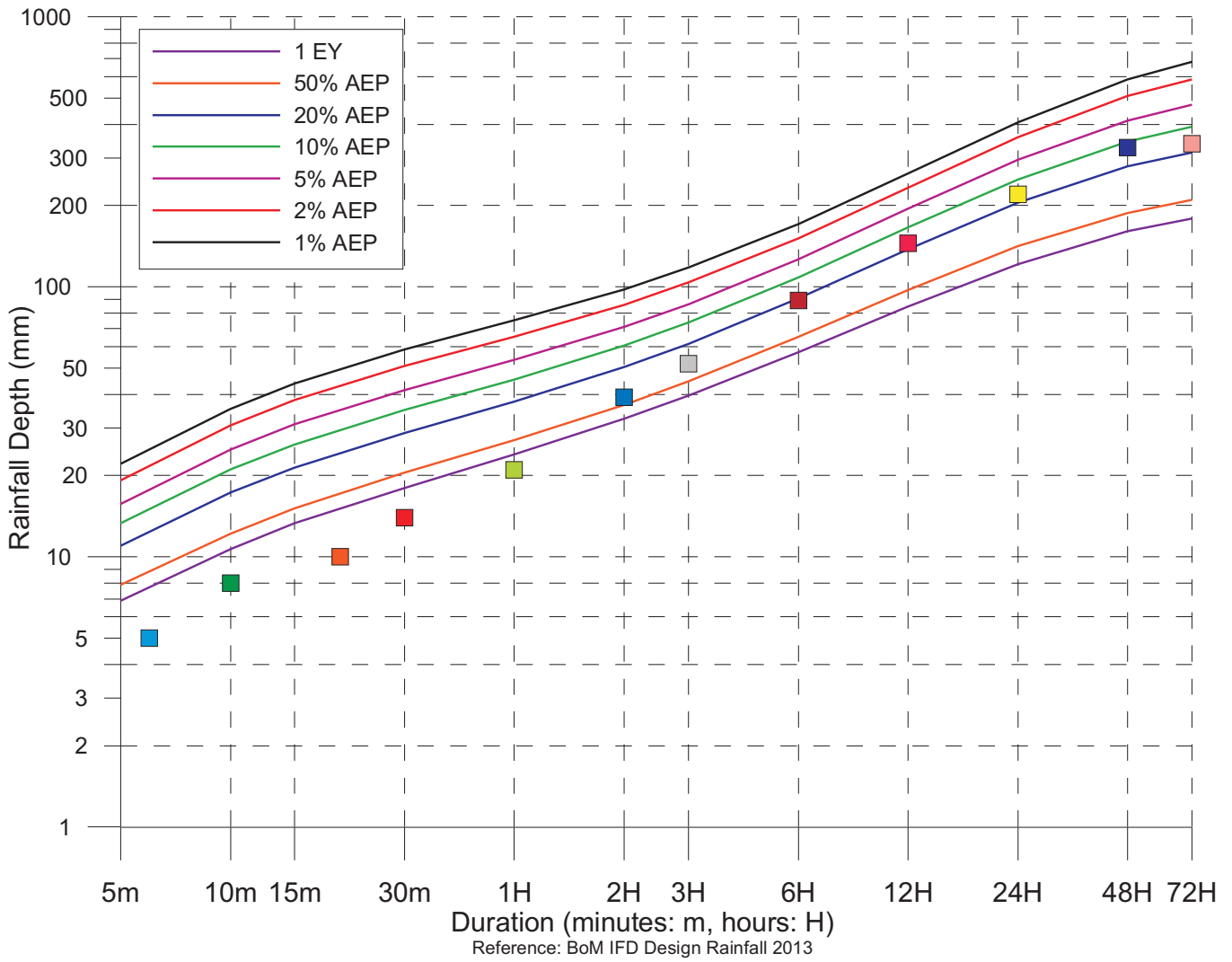




Fitzroy Falls Dam Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.5	00:42_26/08/2015
10m	7.5	00:42_26/08/2015
20m	12.5	00:42_26/08/2015
30m	17.0	00:32_26/08/2015
1H	27.0	00:18_26/08/2015
2H	40.5	20:38_25/08/2015
3H	57.5	19:30_25/08/2015
6H	102.0	19:26_25/08/2015
12H	167.0	15:12_25/08/2015
24H	264.5	09:04_25/08/2015
48H	368.5	20:52_24/08/2015
72H	371.0	20:52_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

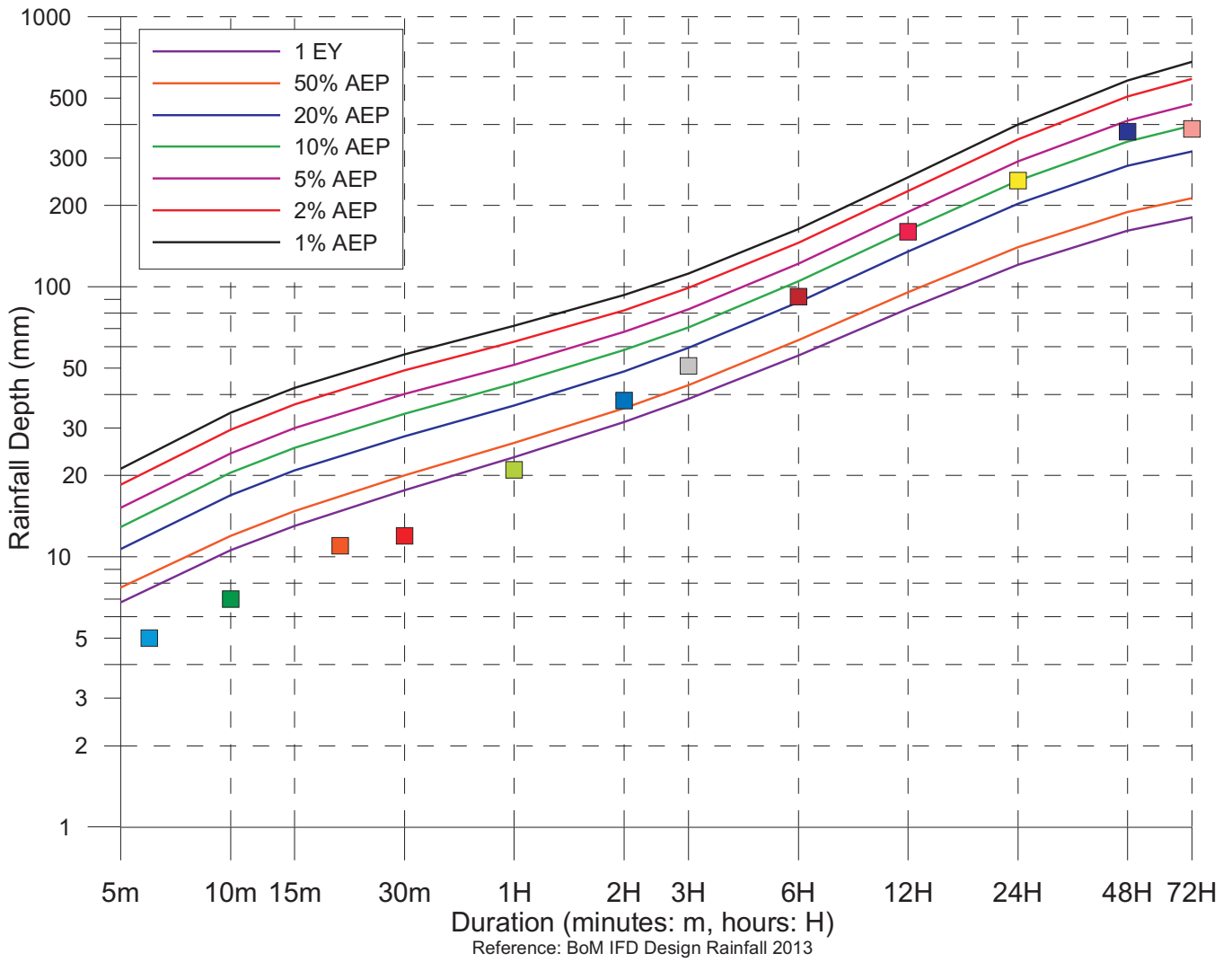




Barrengarry Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	00:16_26/08/2015
10m	8.0	00:12_26/08/2015
20m	10.0	20:46_25/08/2015
30m	14.0	00:14_26/08/2015
1H	21.0	20:06_25/08/2015
2H	39.0	19:08_25/08/2015
3H	52.0	19:28_25/08/2015
6H	89.0	15:48_25/08/2015
12H	145.0	15:06_25/08/2015
24H	220.0	07:42_25/08/2015
48H	328.0	13:20_24/08/2015
72H	338.0	10:48_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

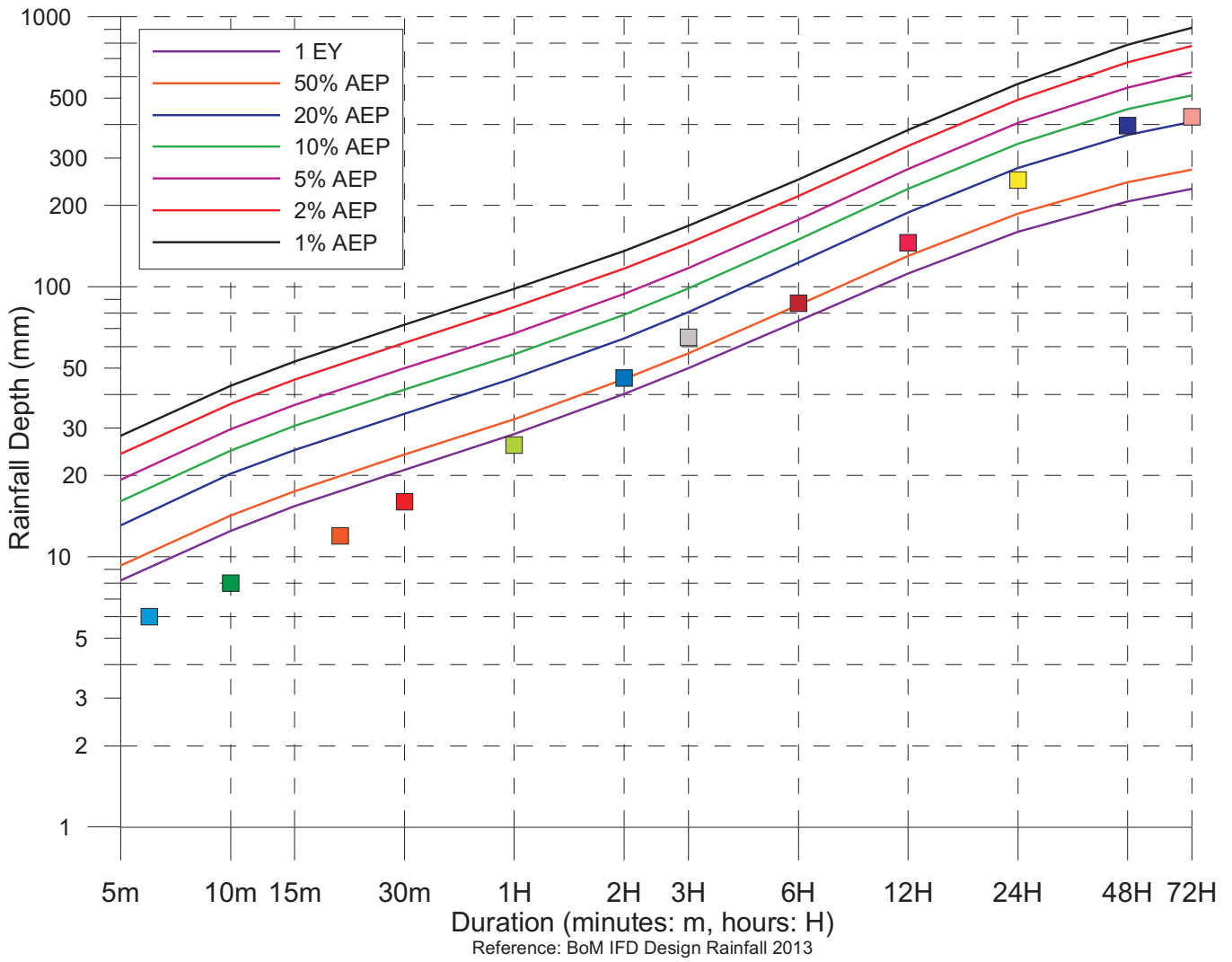




Hampden Bridge Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	00:16_26/08/2015
10m	7.0	20:46_25/08/2015
20m	11.0	00:06_26/08/2015
30m	120	19:40_25/08/2015
1H	21.0	20:04_25/08/2015
2H	38.0	19:40_25/08/2015
3H	51.0	19:40_25/08/2015
6H	92.0	18:28_25/08/2015
12H	160.0	15:40_25/08/2015
24H	247.0	10:58_25/08/2015
48H	375.0	12:10_24/08/2015
72H	384.0	11:52_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

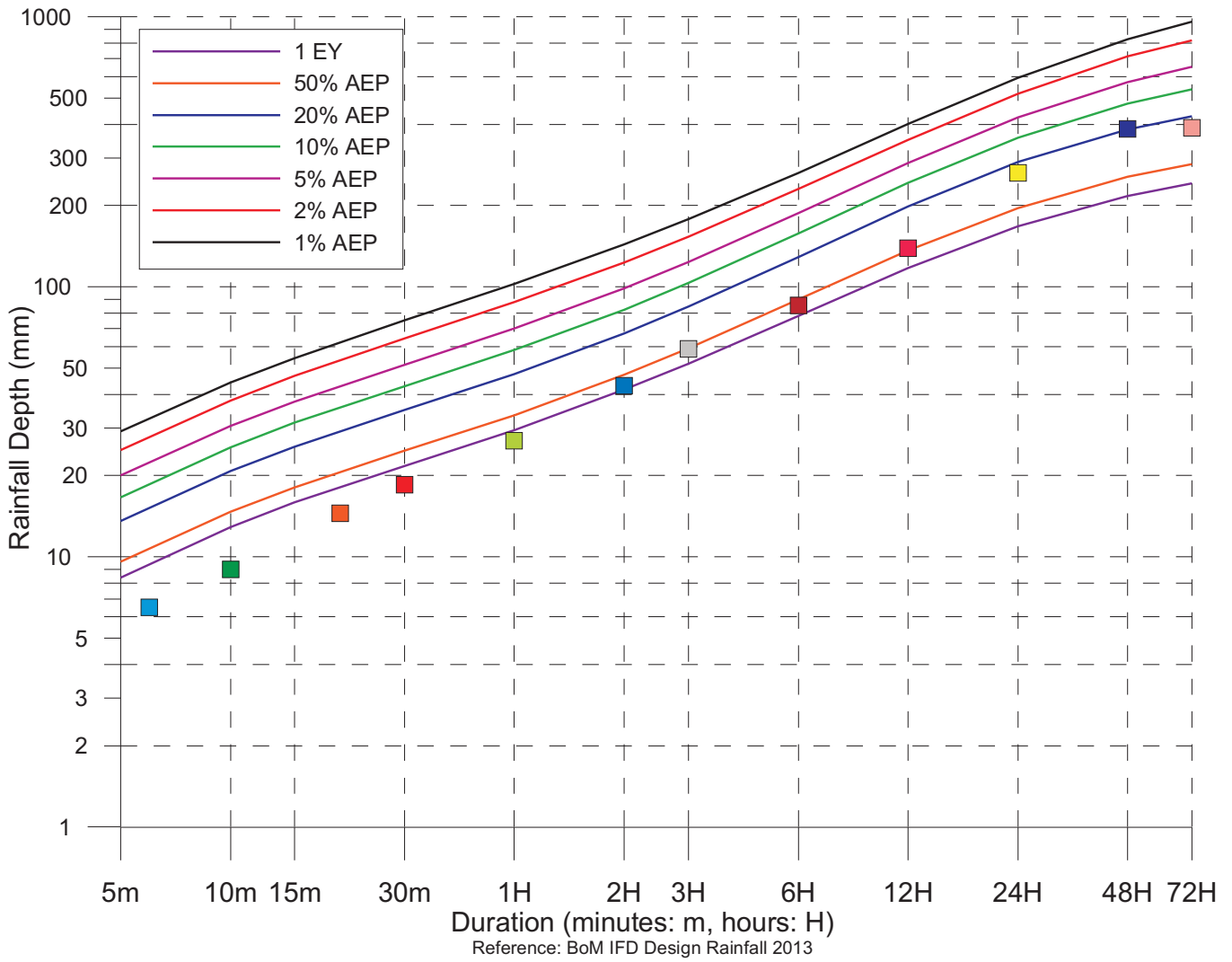




Wattamolla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	6.0	20:38_25/08/2015
10m	8.0	21:52_25/08/2015
20m	12.0	20:38_25/08/2015
30m	16.0	20:30_25/08/2015
1H	26.0	19:06_25/08/2015
2H	46.0	19:12_25/08/2015
3H	65.0	19:06_25/08/2015
6H	87.0	16:34_25/08/2015
12H	146.0	10:52_25/08/2015
24H	249.0	01:38_25/08/2015
48H	396.0	11:40_24/08/2015
72H	426.0	09:12_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

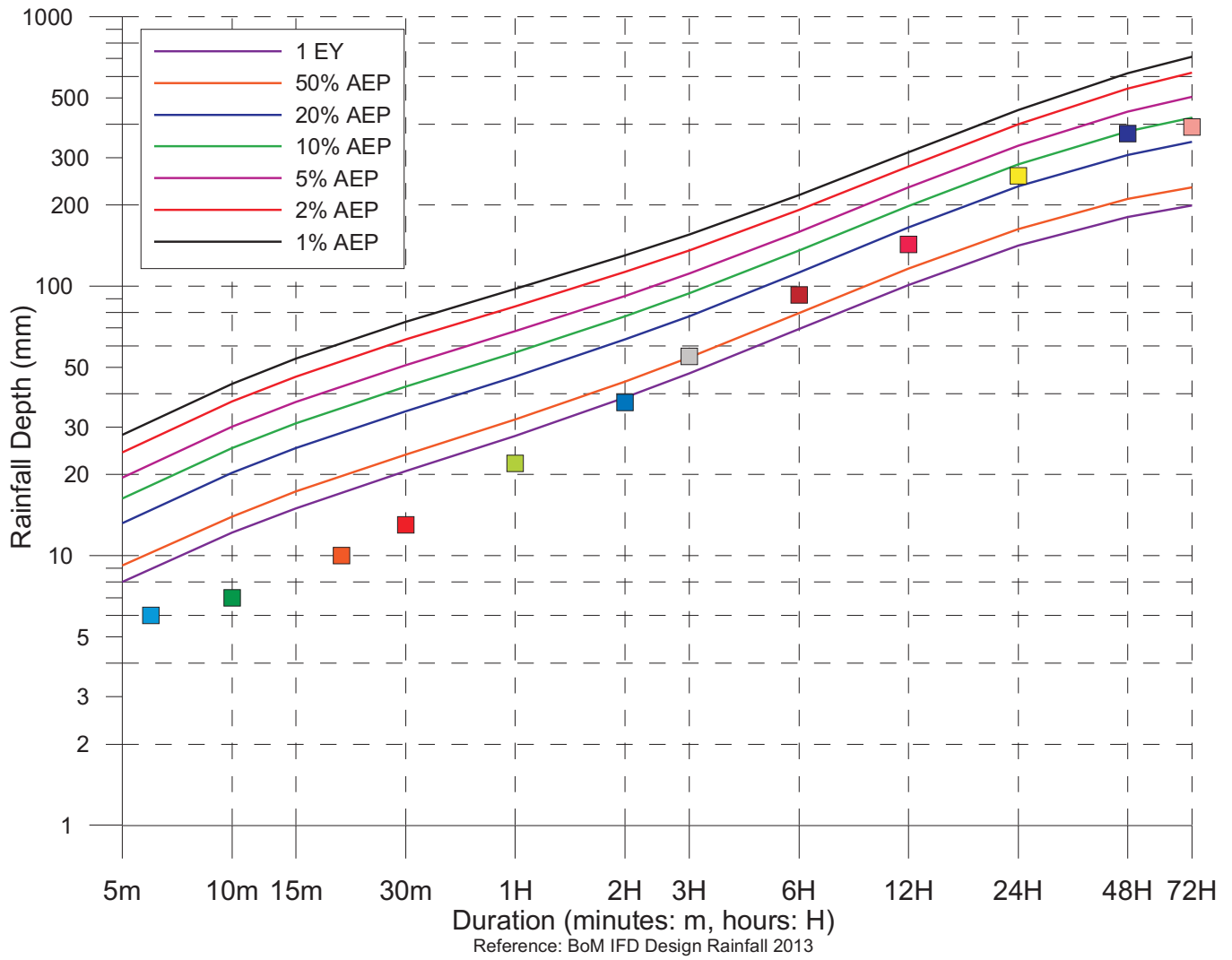




Brogers No 2 Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	6.5	00:28_26/08/2015
10m	9.0	00:24_26/08/2015
20m	14.5	02:34_26/08/2015
30m	18.5	02:30_26/08/2015
1H	27.0	23:50_25/08/2015
2H	43.0	23:44_25/08/2015
3H	59.0	23:52_25/08/2015
6H	85.5	23:44_25/08/2015
12H	139.0	16:28_25/08/2015
24H	265.0	04:34_25/08/2015
48H	385.0	20:50_24/08/2015
72H	388.5	20:50_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

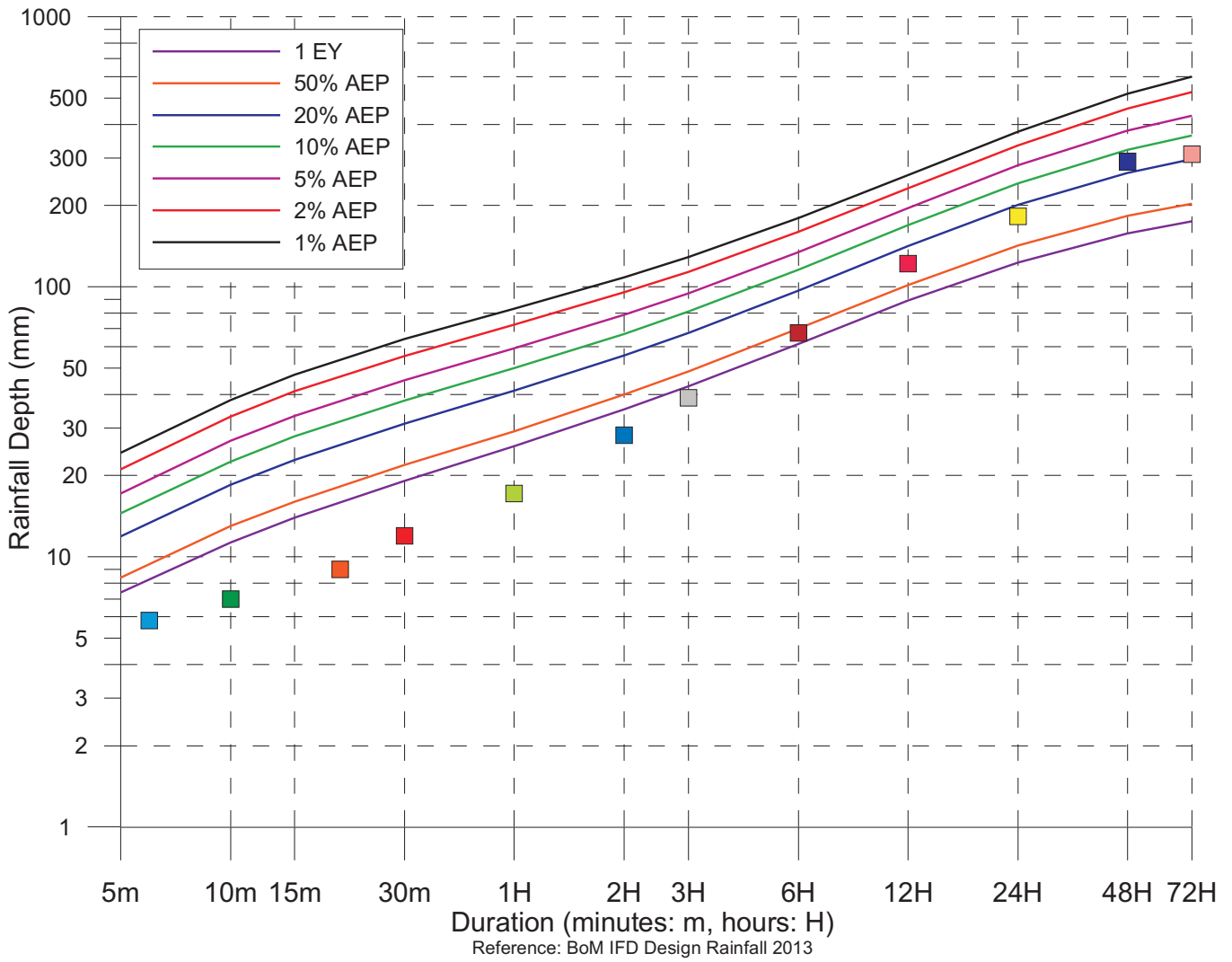




Foxground Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	6.0	02:18_26/08/2015
10m	7.0	02:18_26/08/2015
20m	10.0	12:00_24/08/2015
30m	13.0	11:58_24/08/2015
1H	22.0	08:28_25/08/2015
2H	37.0	07:08_25/08/2015
3H	55.0	06:44_25/08/2015
6H	93.0	04:36_25/08/2015
12H	143.0	02:58_25/08/2015
24H	257.0	11:30_24/08/2015
48H	369.0	11:30_24/08/2015
72H	390.0	19:34_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

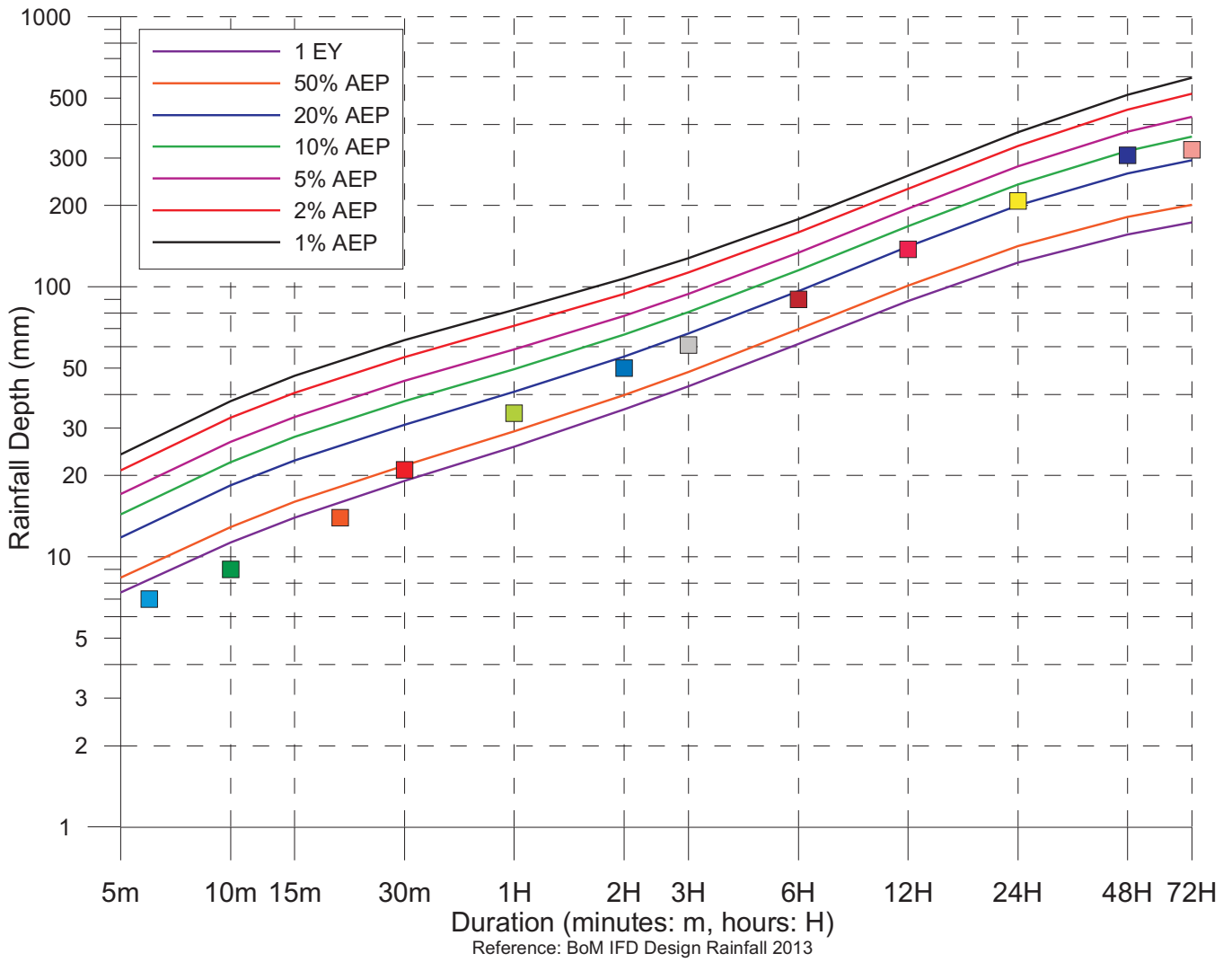




Broughton Creek at Broughton Vale Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.8	02:30_26/08/2015
10m	7.0	02:30_26/08/2015
20m	9.0	10:56_25/08/2015
30m	12.0	10:54_25/08/2015
1H	17.2	10:28_25/08/2015
2H	28.2	09:52_25/08/2015
3H	38.8	09:52_25/08/2015
6H	67.6	06:40_25/08/2015
12H	122.2	02:52_25/08/2015
24H	182.8	14:06_24/08/2015
48H	290.6	11:08_24/08/2015
72H	309.4	00:28_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

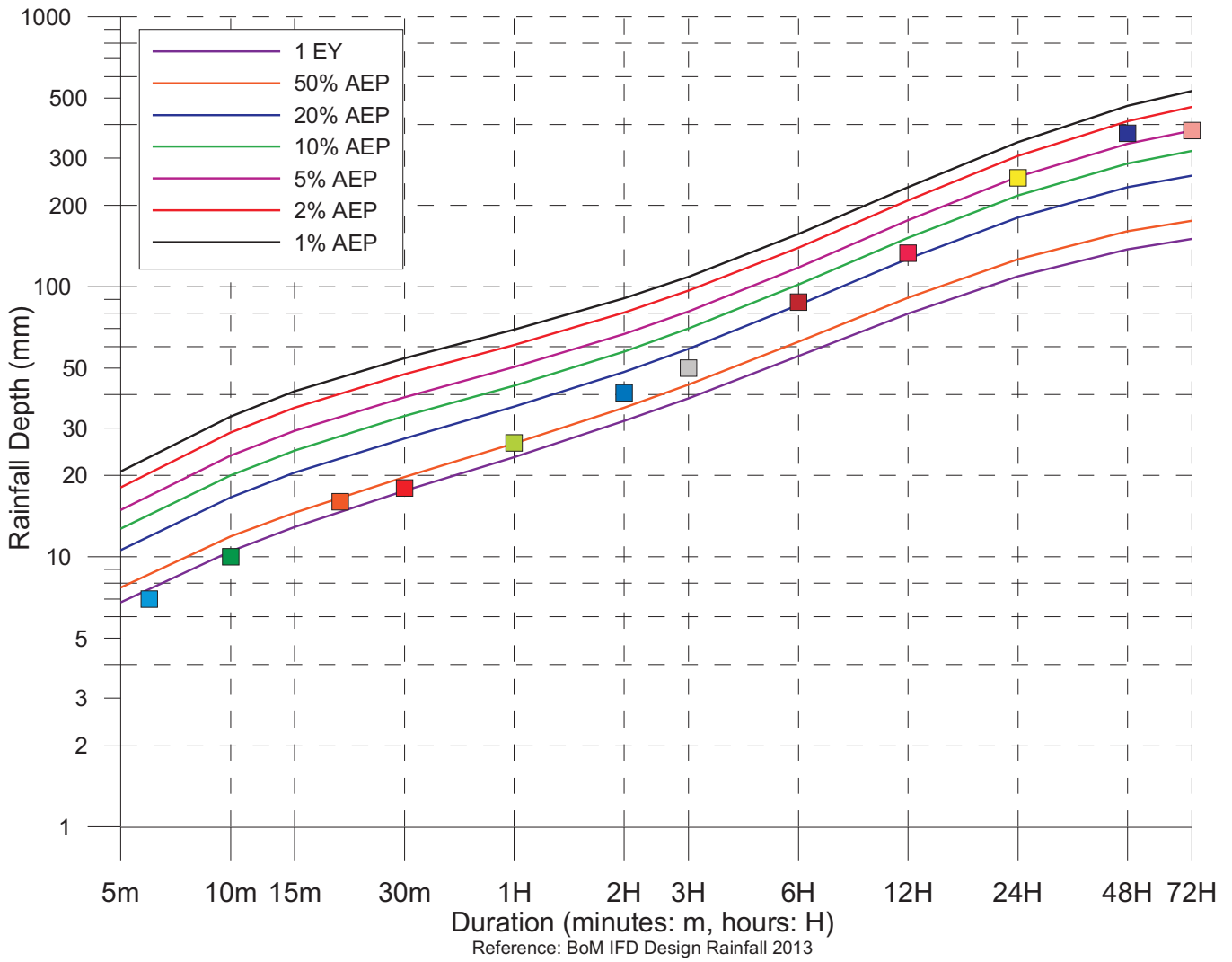




Broughton Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	7.0	10:56_25/08/2015
10m	9.0	10:56_25/08/2015
20m	14.0	10:54_25/08/2015
30m	21.0	10:54_25/08/2015
1H	34.0	10:50_25/08/2015
2H	50.0	10:20_25/08/2015
3H	61.0	09:42_25/08/2015
6H	90.0	07:46_25/08/2015
12H	138.0	03:04_25/08/2015
24H	208.0	13:54_24/08/2015
48H	307.0	11:32_24/08/2015
72H	322.0	08:52_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
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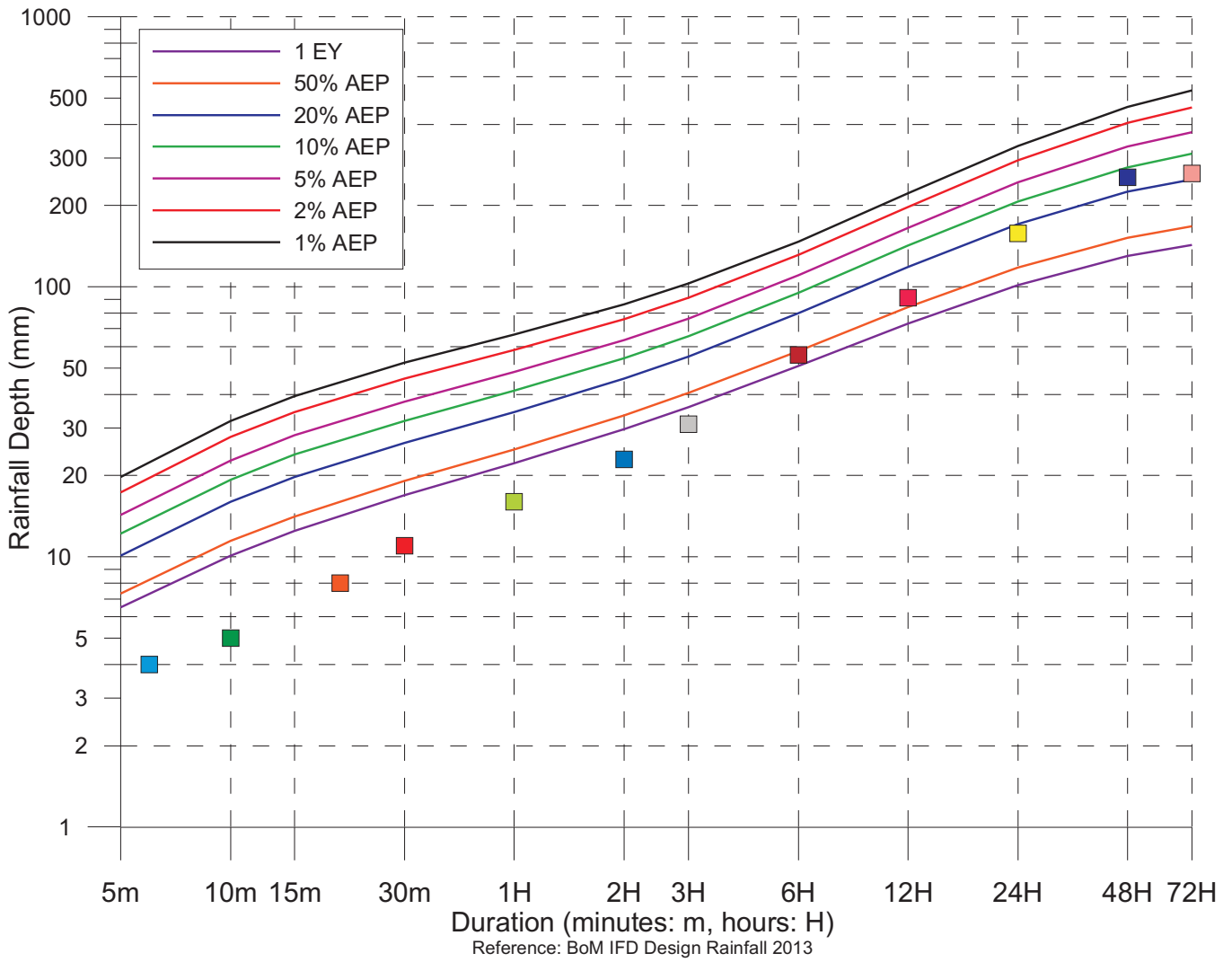




Bomaderry Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	7.0	19:42_25/08/2015
10m	10.0	22:54_25/08/2015
20m	16.0	22:50_25/08/2015
30m	18.0	22:46_25/08/2015
1H	26.5	22:48_25/08/2015
2H	40.5	22:20_25/08/2015
3H	50.0	21:20_25/08/2015
6H	88.0	18:18_25/08/2015
12H	133.5	11:10_25/08/2015
24H	253.0	00:18_25/08/2015
48H	370.0	11:52_24/08/2015
72H	378.5	19:26_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
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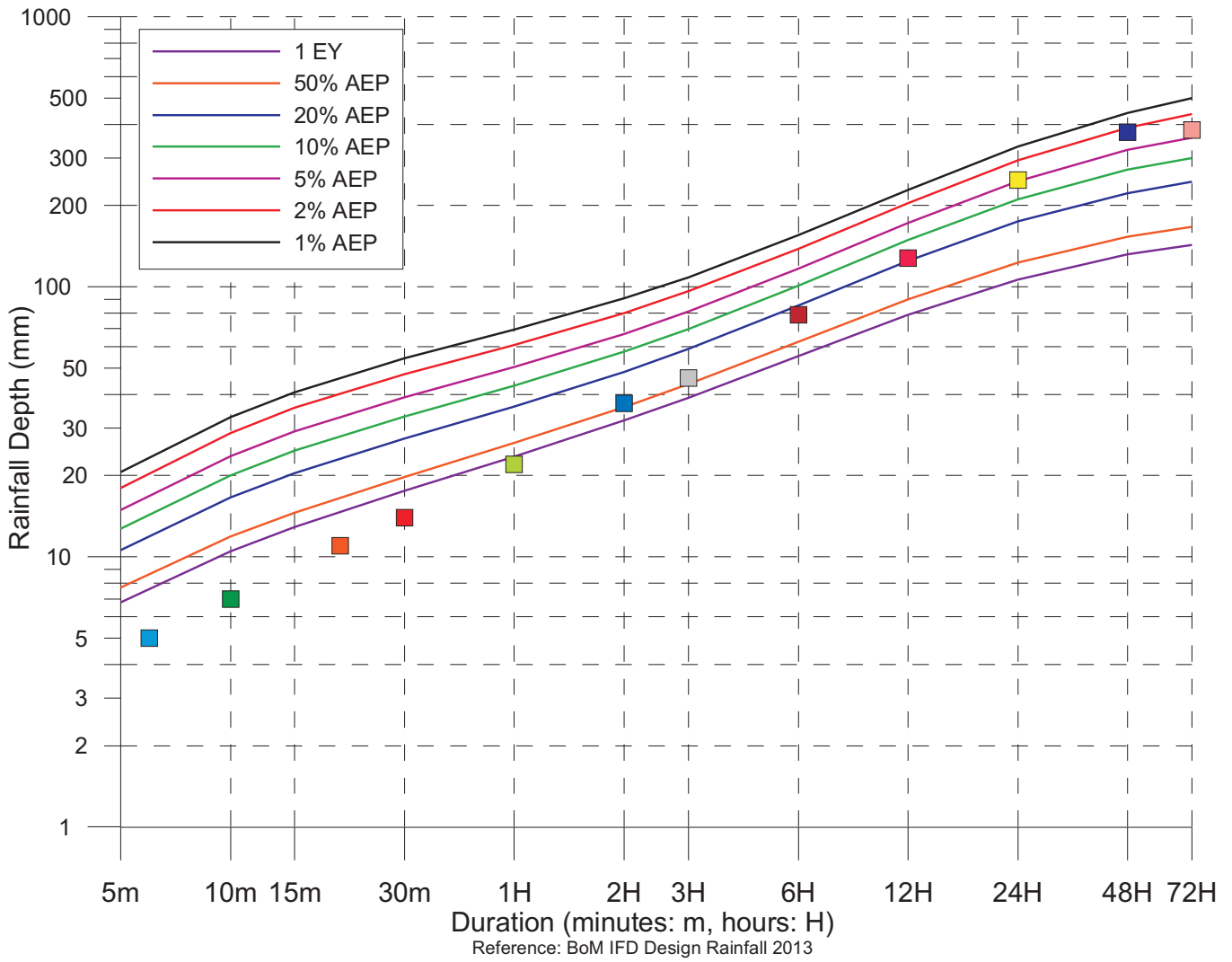




Grassy Gully Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	4.0	04:26_26/08/2015
10m	5.0	18:40_25/08/2015
20m	8.0	00:46_25/08/2015
30m	11.0	00:46_25/08/2015
1H	16.0	00:46_25/08/2015
2H	23.0	00:46_25/08/2015
3H	31.0	00:46_25/08/2015
6H	56.0	21:34_24/08/2015
12H	91.0	17:52_24/08/2015
24H	158.0	21:34_24/08/2015
48H	254.0	11:18_24/08/2015
72H	263.0	08:42_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
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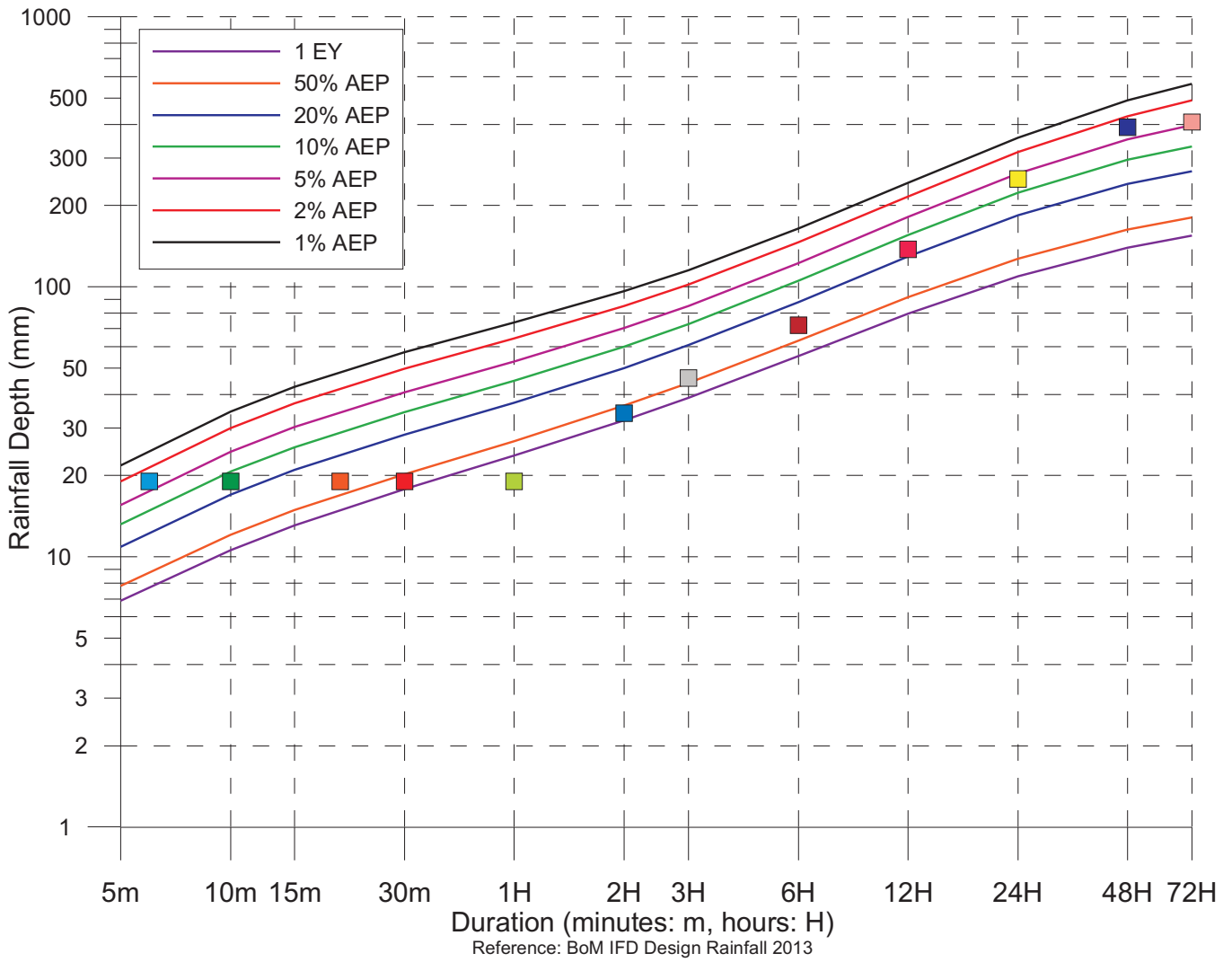




Nowra Boat Shed Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	06:24_26/08/2015
10m	7.0	06:20_26/08/2015
20m	11.0	19:28_25/08/2015
30m	14.0	23:40_25/08/2015
1H	22.0	22:56_25/08/2015
2H	37.0	22:16_25/08/2015
3H	46.0	21:34_25/08/2015
6H	79.0	18:18_25/08/2015
12H	128.0	11:06_25/08/2015
24H	248.0	00:14_25/08/2015
48H	374.0	11:36_24/08/2015
72H	381.0	19:28_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
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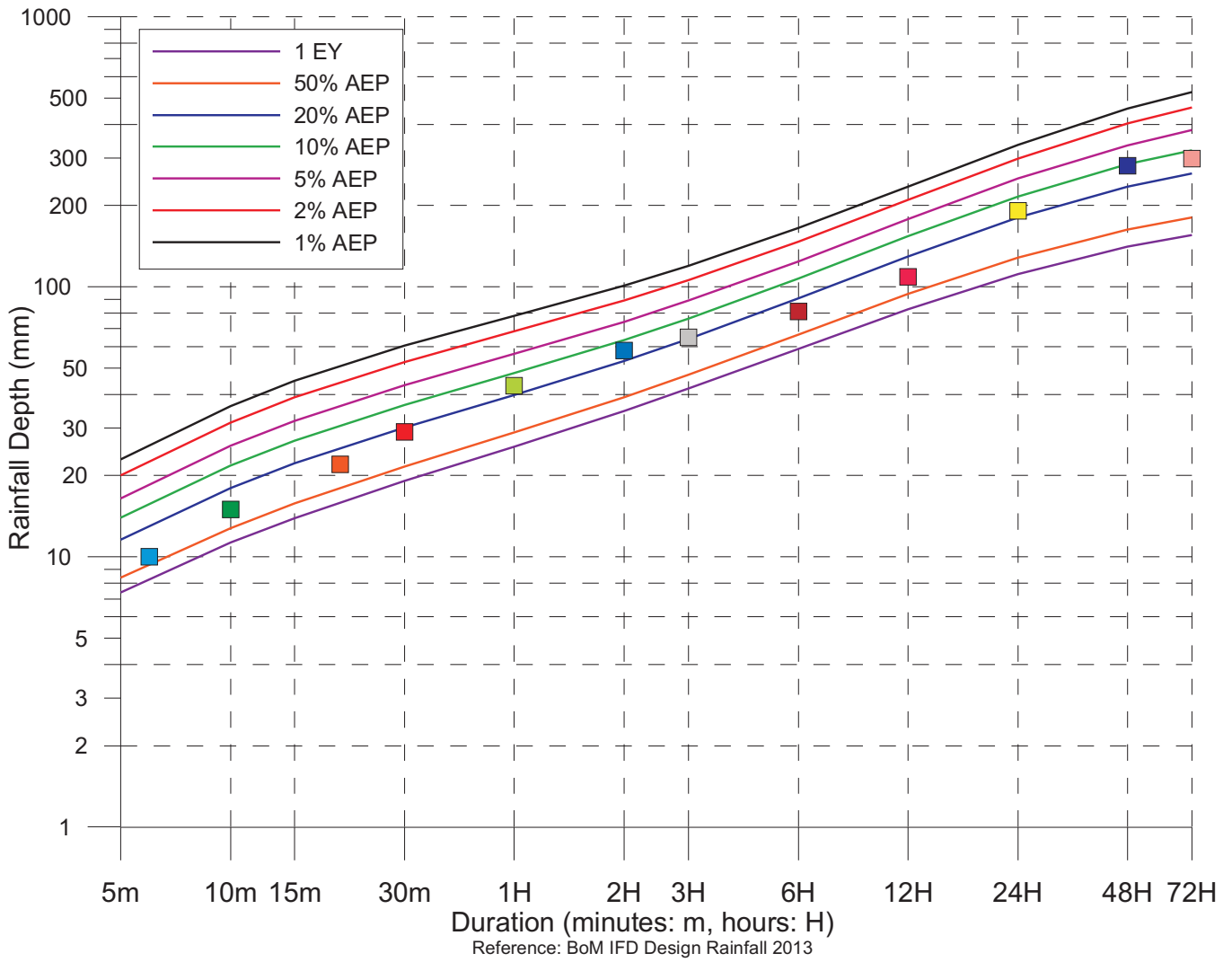




Nowra Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	19.0	19:58_25/08/2015
10m	19.0	19:58_25/08/2015
20m	19.0	19:58_25/08/2015
30m	19.0	19:58_25/08/2015
1H	19.0	19:58_25/08/2015
2H	34.0	18:58_25/08/2015
3H	46.0	18:58_25/08/2015
6H	72.2	22:58_24/08/2015
12H	137.6	10:58_25/08/2015
24H	251.0	22:58_24/08/2015
48H	390.0	14:58_24/08/2015
72H	407.4	19:58_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
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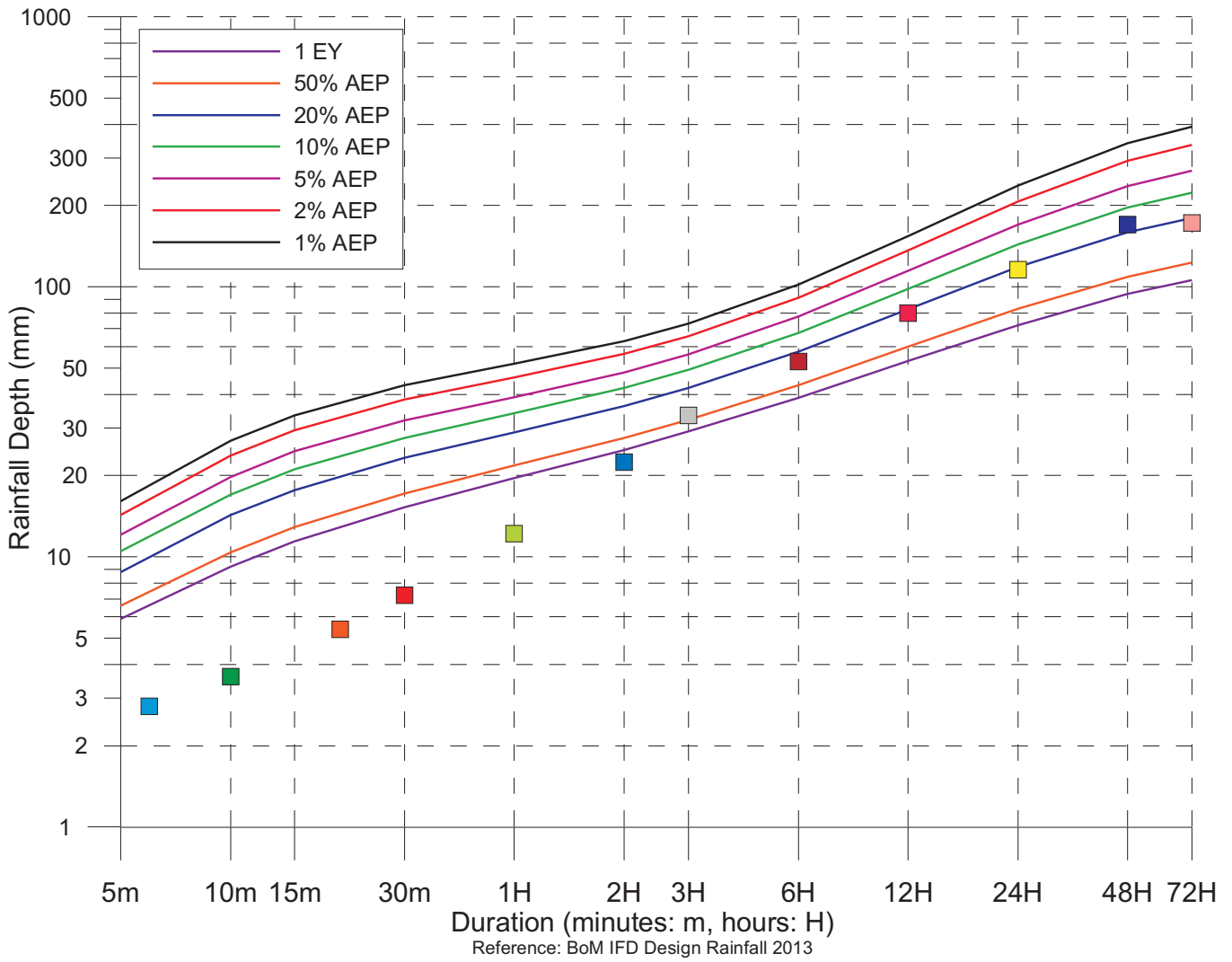




Greenwell Point Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	10	11:06_25/08/2015
10m	15	11:02_25/08/2015
20m	22	10:52_25/08/2015
30m	29	10:48_25/08/2015
1H	43	10:28_25/08/2015
2H	58	10:06_25/08/2015
3H	65	10:28_25/08/2015
6H	81	09:32_25/08/2015
12H	109	10:52_25/08/2015
24H	191	23:46_24/08/2015
48H	281	10:48_24/08/2015
72H	298	19:10_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

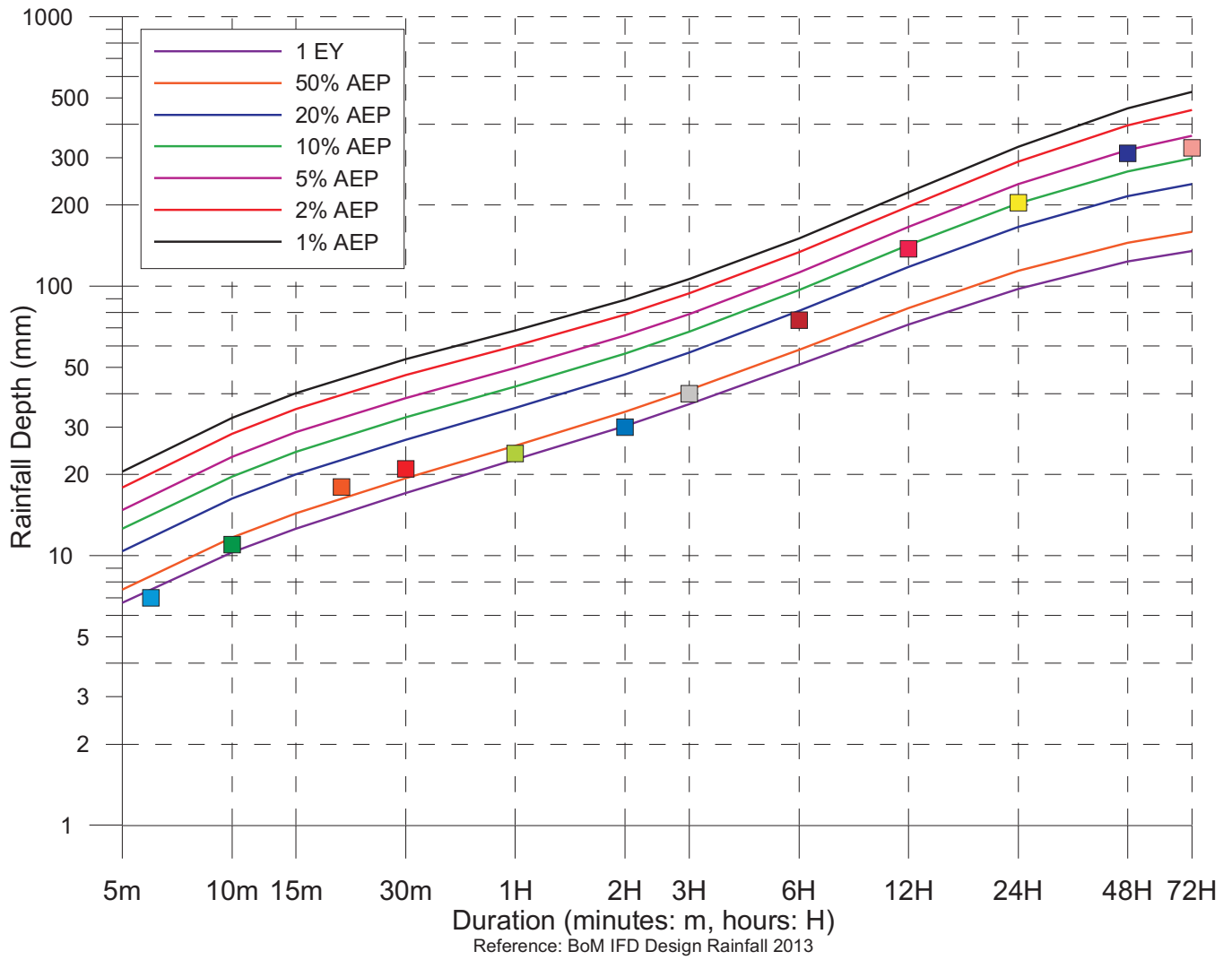




Bumbulla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	2.8	01:12_26/08/2015
10m	3.6	01:08_26/08/2015
20m	5.4	01:02_26/08/2015
30m	7.2	23:52_25/08/2015
1H	12.2	22:12_25/08/2015
2H	22.4	22:28_25/08/2015
3H	33.4	22:22_25/08/2015
6H	52.8	21:54_25/08/2015
12H	79.8	16:38_25/08/2015
24H	115.6	08:48_25/08/2015
48H	169.6	08:58_24/08/2015
72H	172.8	05:36_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

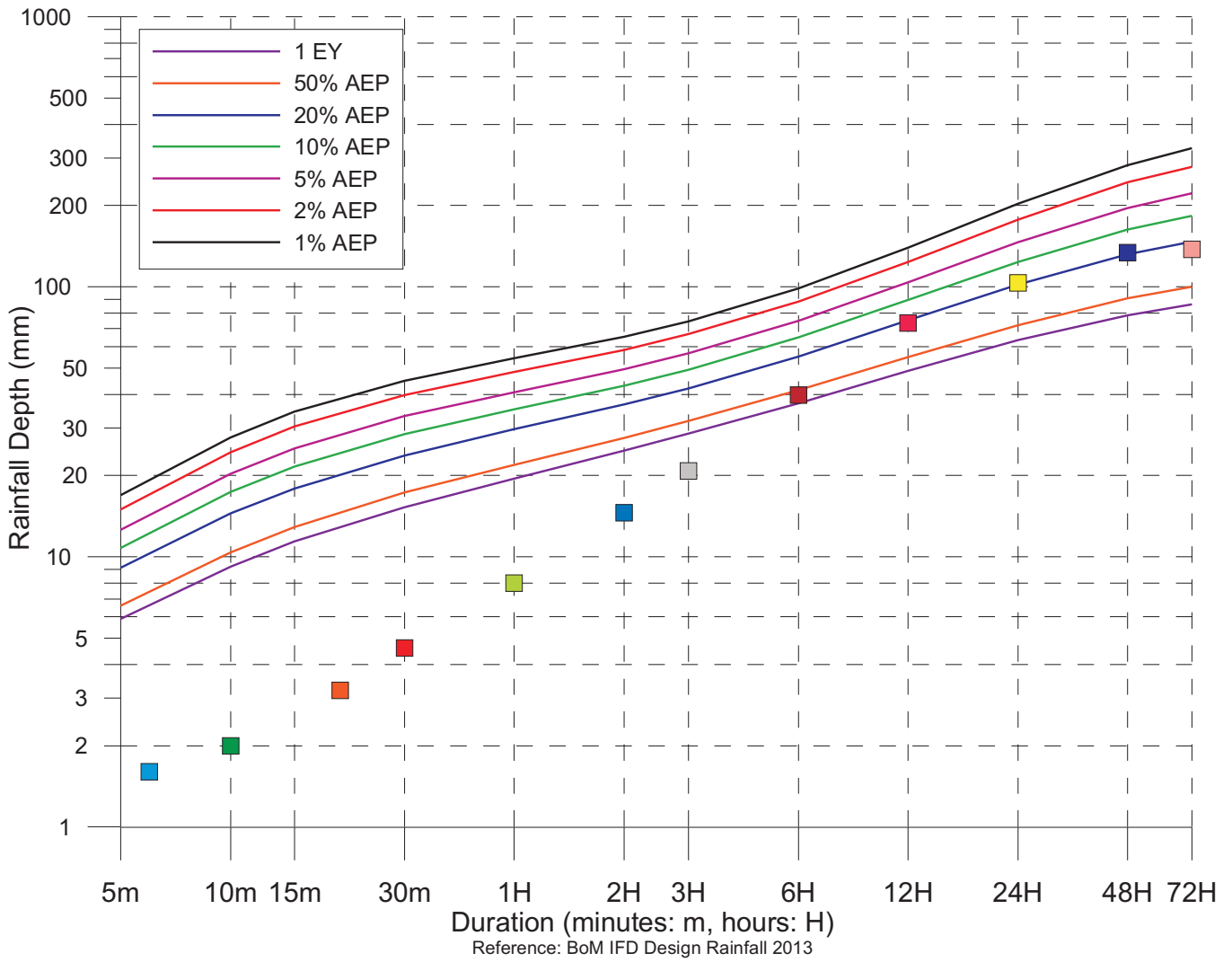




Yalwal Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	7.0	02:56_26/08/2015
10m	11.0	02:48_26/08/2015
20m	18.0	02:48_26/08/2015
30m	21.0	02:48_26/08/2015
1H	24.0	02:22_26/08/2015
2H	30.0	20:20_25/08/2015
3H	40.0	19:56_25/08/2015
6H	75.0	16:14_25/08/2015
12H	138.0	15:18_25/08/2015
24H	204.0	10:28_25/08/2015
48H	312.0	12:10_24/08/2015
72H	326.0	08:22_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

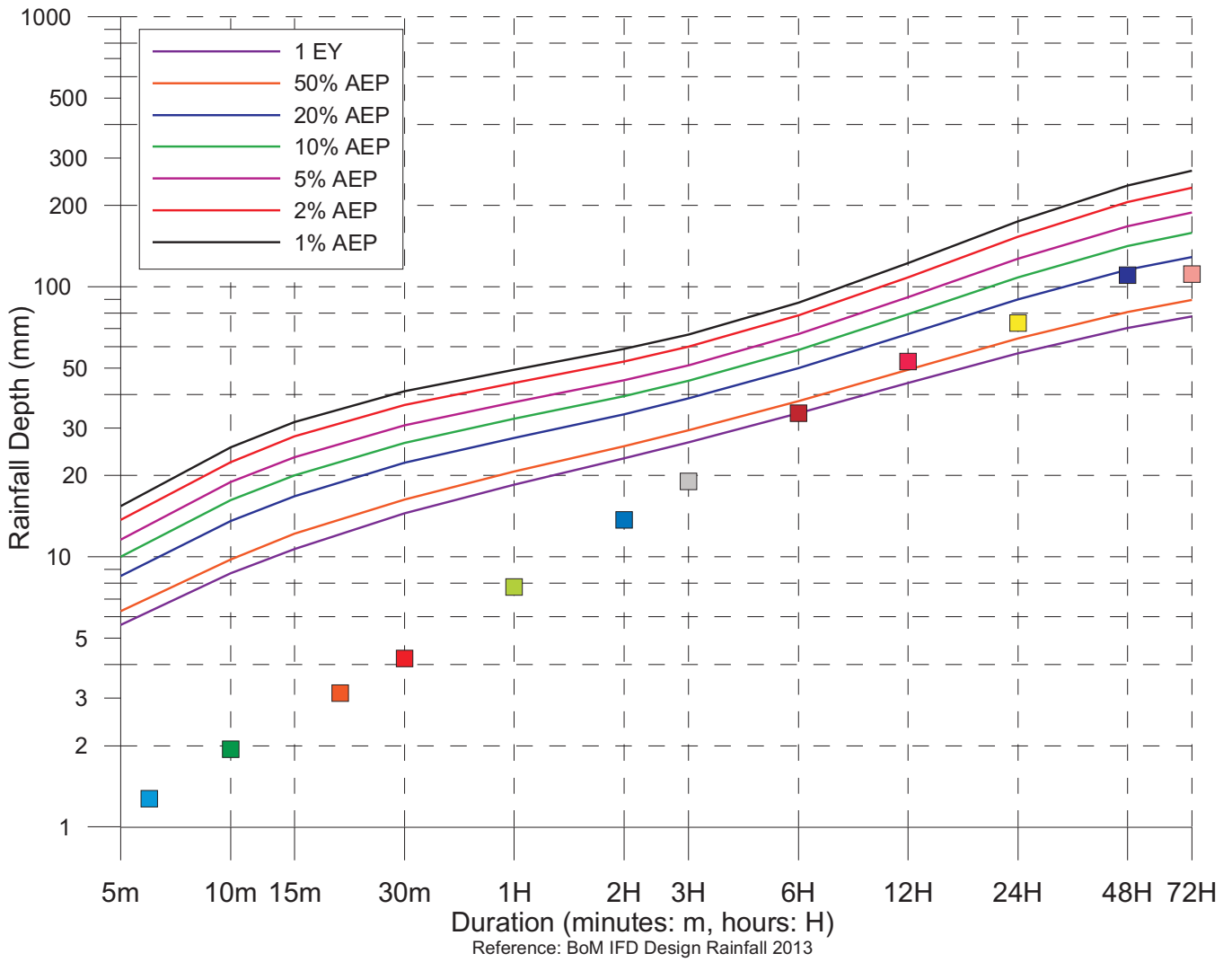




Touga Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.6	13:54_25/08/2015
10m	2.0	13:54_25/08/2015
20m	3.2	17:34_25/08/2015
30m	4.6	13:30_25/08/2015
1H	8.0	13:30_25/08/2015
2H	14.6	16:52_25/08/2015
3H	20.8	15:58_25/08/2015
6H	39.8	13:10_25/08/2015
12H	73.6	13:12_25/08/2015
24H	103.6	04:02_25/08/2015
48H	133.8	11:34_24/08/2015
72H	137.8	21:24_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

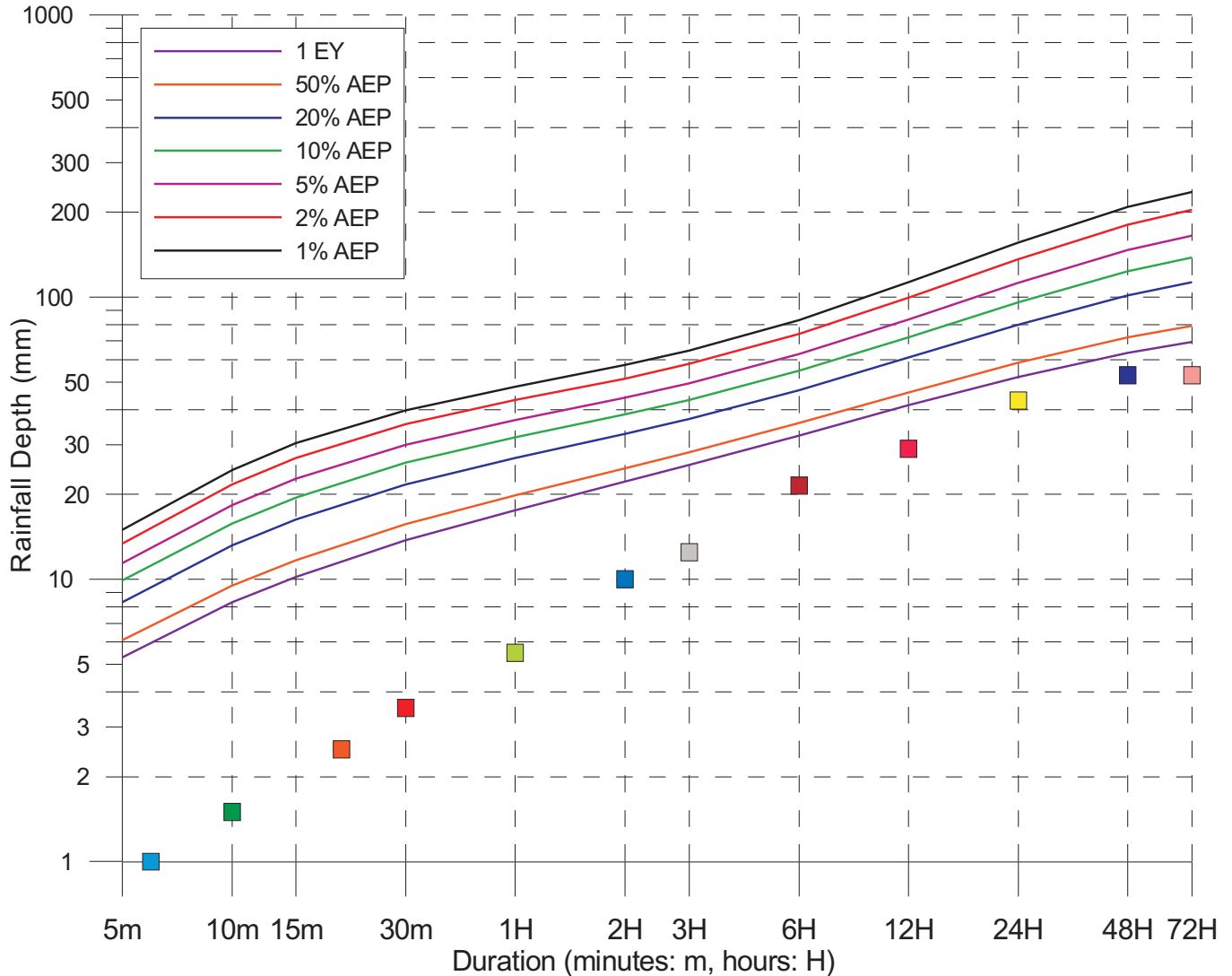




Bungonia Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.2	00:04_26/08/2015
10m	1.9	00:04_26/08/2015
20m	3.1	00:00_26/08/2015
30m	4.2	23:50_25/08/2015
1H	7.7	23:50_25/08/2015
2H	13.7	23:38_25/08/2015
3H	19.0	23:08_25/08/2015
6H	34.0	20:50_25/08/2015
12H	52.9	14:24_25/08/2015
24H	73.4	05:40_25/08/2015
48H	110.5	09:08_24/08/2015
72H	111.5	20:38_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

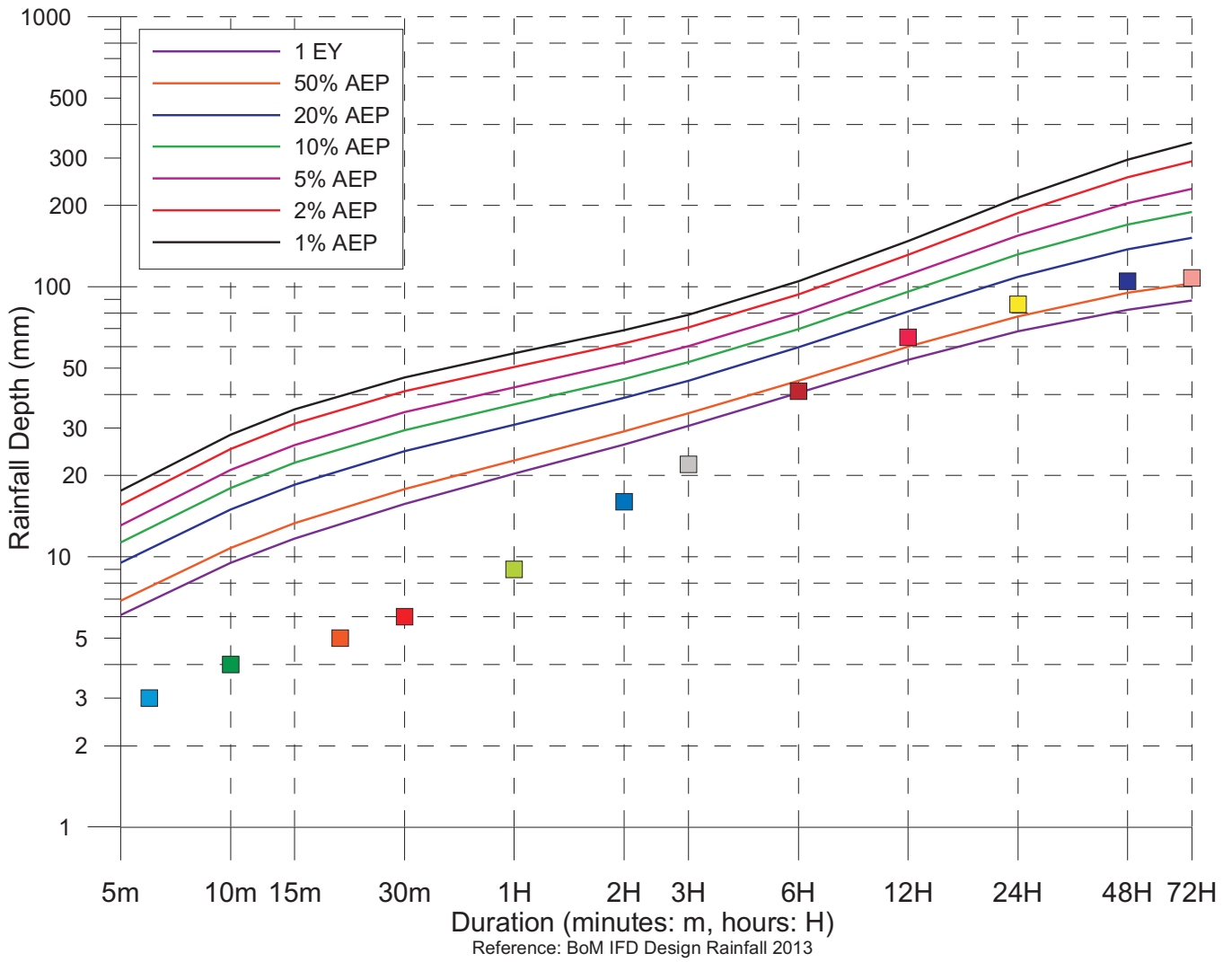




Windellama Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.0	20:58_24/08/2015
10m	1.5	19:32_25/08/2015
20m	2.5	19:24_25/08/2015
30m	3.5	19:24_25/08/2015
1H	5.5	19:08_25/08/2015
2H	10.0	17:54_25/08/2015
3H	12.5	17:16_25/08/2015
6H	21.5	14:18_25/08/2015
12H	29.0	11:34_25/08/2015
24H	43.0	22:44_24/08/2015
48H	53.0	20:54_24/08/2015
72H	53.0	20:54_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

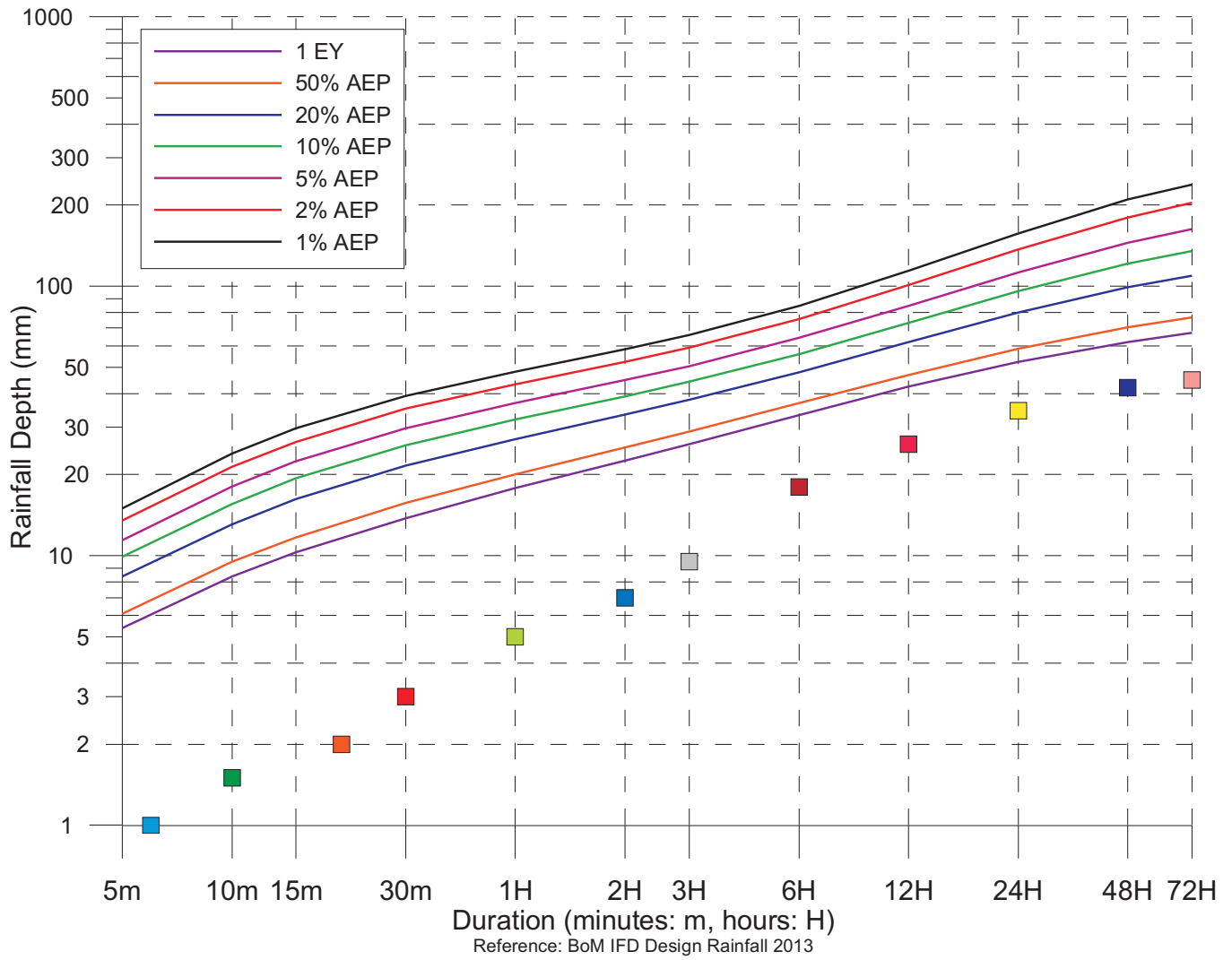




Nerriga Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	3.0	21:52_25/08/2015
10m	4.0	13:32_25/08/2015
20m	5.0	13:32_25/08/2015
30m	6.0	13:32_25/08/2015
1H	9.0	13:32_25/08/2015
2H	16.0	16:10_25/08/2015
3H	22.0	16:26_25/08/2015
6H	41.0	13:32_25/08/2015
12H	65.0	13:32_25/08/2015
24H	86.0	07:50_25/08/2015
48H	105.0	14:08_24/08/2015
72H	108.0	14:08_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

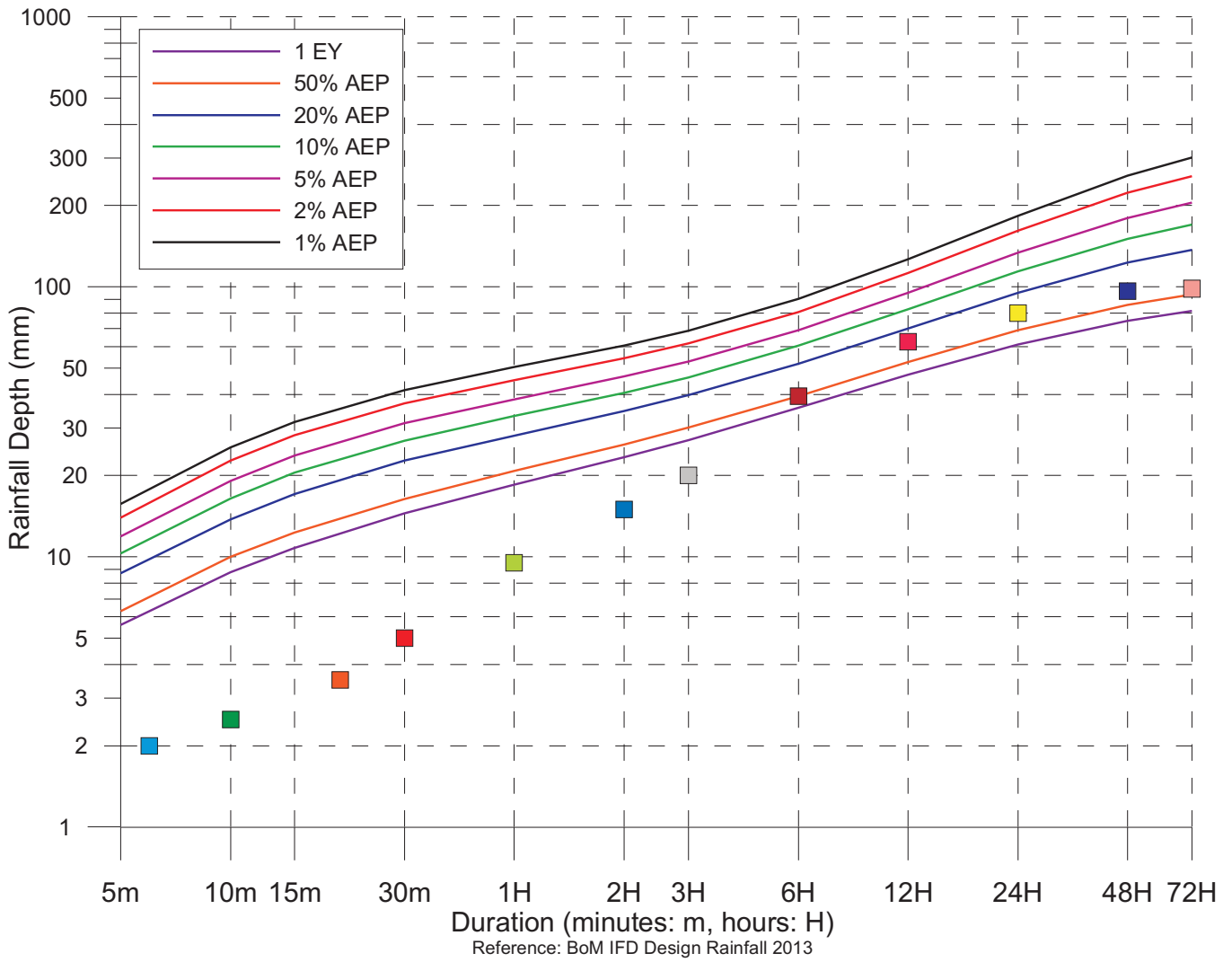




Millendale Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.0	19:44_25/08/2015
10m	1.5	21:10_24/08/2015
20m	2.0	14:36_25/08/2015
30m	3.0	14:26_25/08/2015
1H	5.0	14:10_25/08/2015
2H	7.0	14:06_25/08/2015
3H	9.5	13:54_25/08/2015
6H	18.0	14:06_25/08/2015
12H	26.0	13:54_25/08/2015
24H	34.5	23:14_24/08/2015
48H	42.0	21:10_24/08/2015
72H	45.0	21:10_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

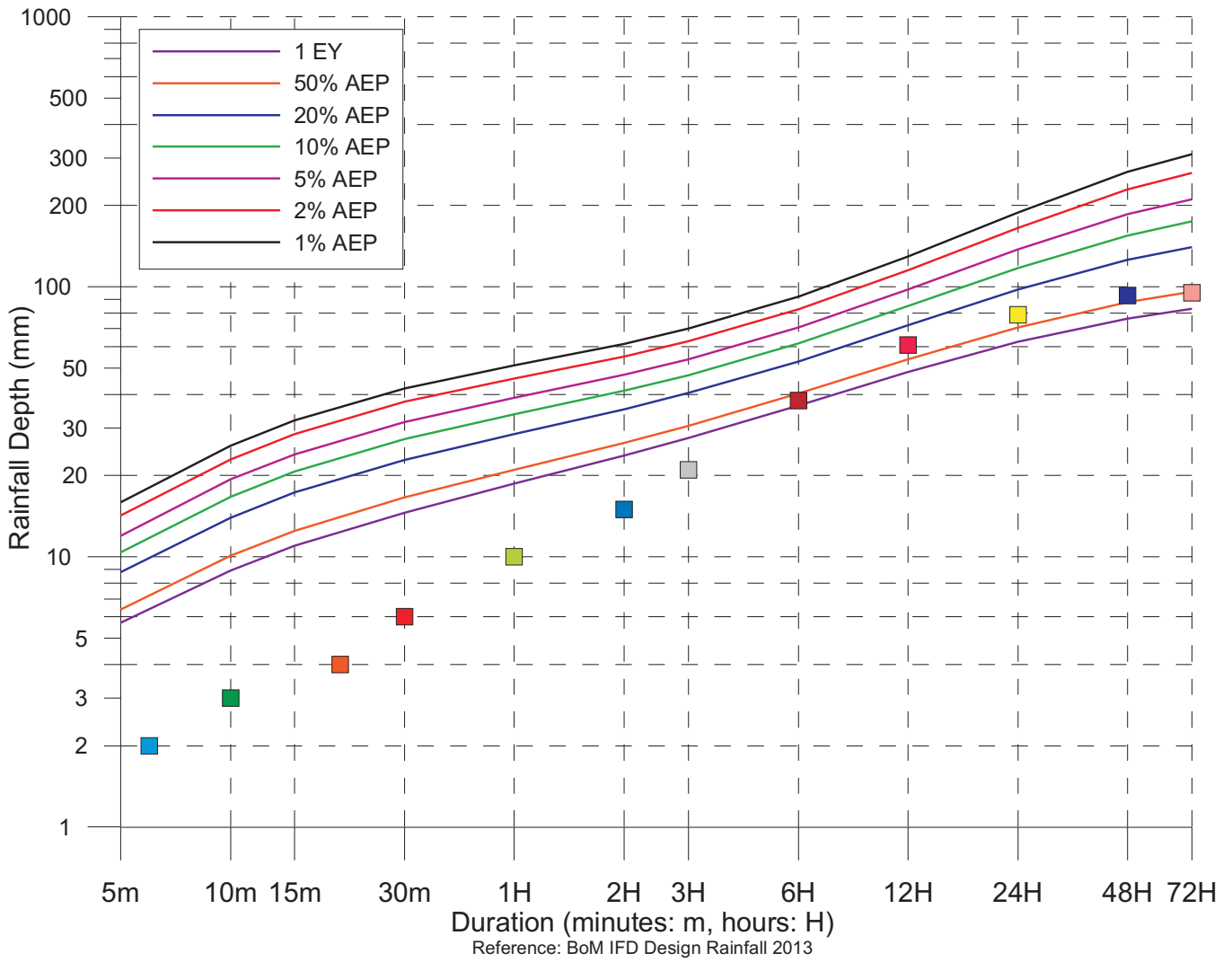




Oallen (Hillview) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	2.0	15:56_28/08/2015
10m	2.5	15:54_28/08/2015
20m	3.5	15:54_28/08/2015
30m	5.0	17:46_25/08/2015
1H	9.5	13:44_25/08/2015
2H	15.0	16:16_25/08/2015
3H	20.0	16:46_25/08/2015
6H	39.5	13:50_25/08/2015
12H	62.5	13:16_25/08/2015
24H	80.0	11:08_25/08/2015
48H	96.5	13:38_24/08/2015
72H	98.5	13:38_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

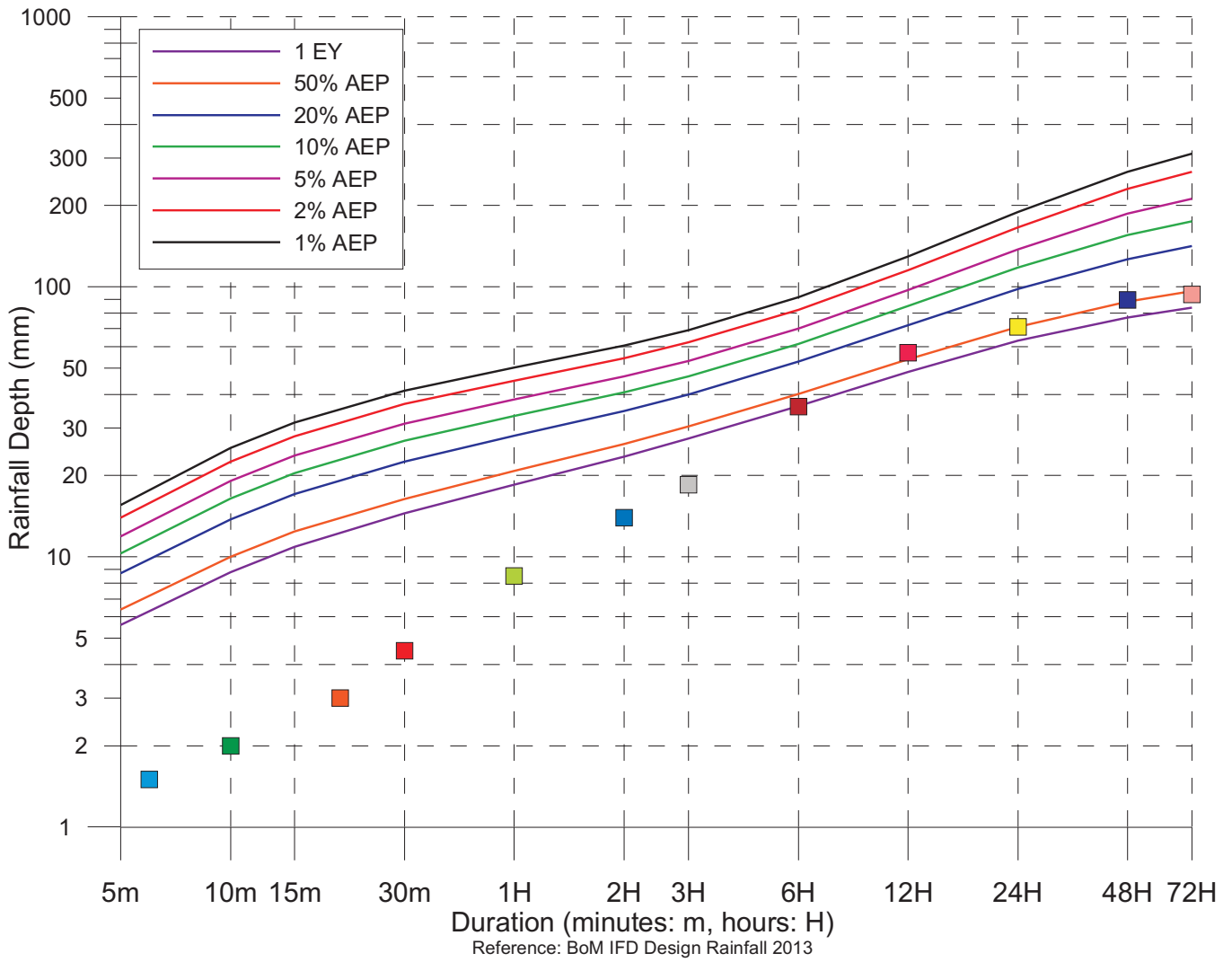




Hillview Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	2.0	10:20_26/08/2015
10m	3.0	19:42_25/08/2015
20m	4.0	14:22_25/08/2015
30m	6.0	14:22_25/08/2015
1H	10.0	13:44_25/08/2015
2H	15.0	13:38_25/08/2015
3H	210	13:30_25/08/2015
6H	38.0	13:44_25/08/2015
12H	61.0	13:30_25/08/2015
24H	79.0	11:04_25/08/2015
48H	93.0	14:10_24/08/2015
72H	95.0	13:44_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

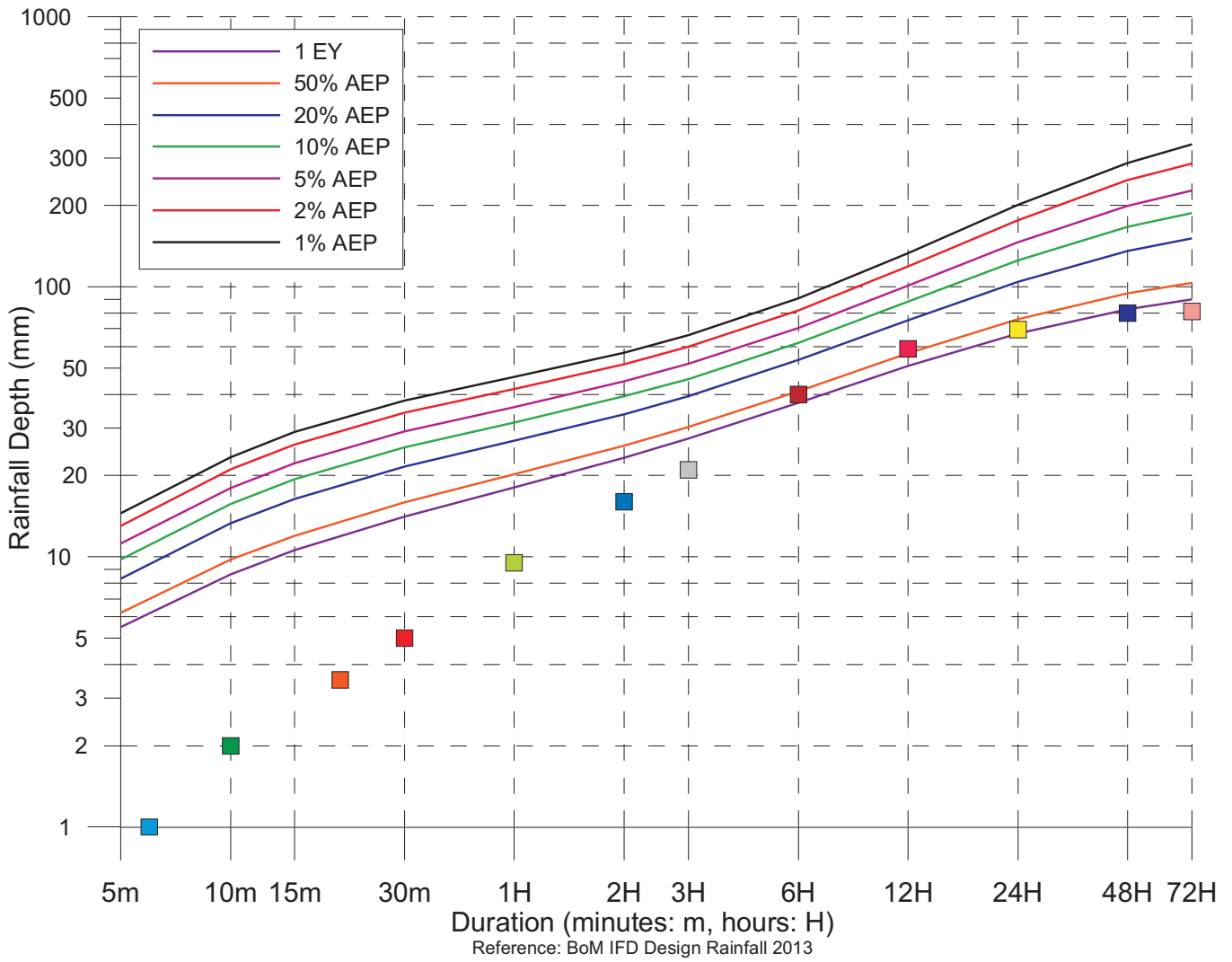




Oallen (Moga) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.5	16:00_28/08/2015
10m	2.0	17:54_25/08/2015
20m	3.0	17:54_25/08/2015
30m	4.5	14:02_25/08/2015
1H	8.5	13:44_25/08/2015
2H	14.0	13:36_25/08/2015
3H	18.5	13:46_25/08/2015
6H	36.0	13:44_25/08/2015
12H	57.0	12:56_25/08/2015
24H	71.0	12:14_25/08/2015
48H	89.5	15:48_24/08/2015
72H	93.5	13:32_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

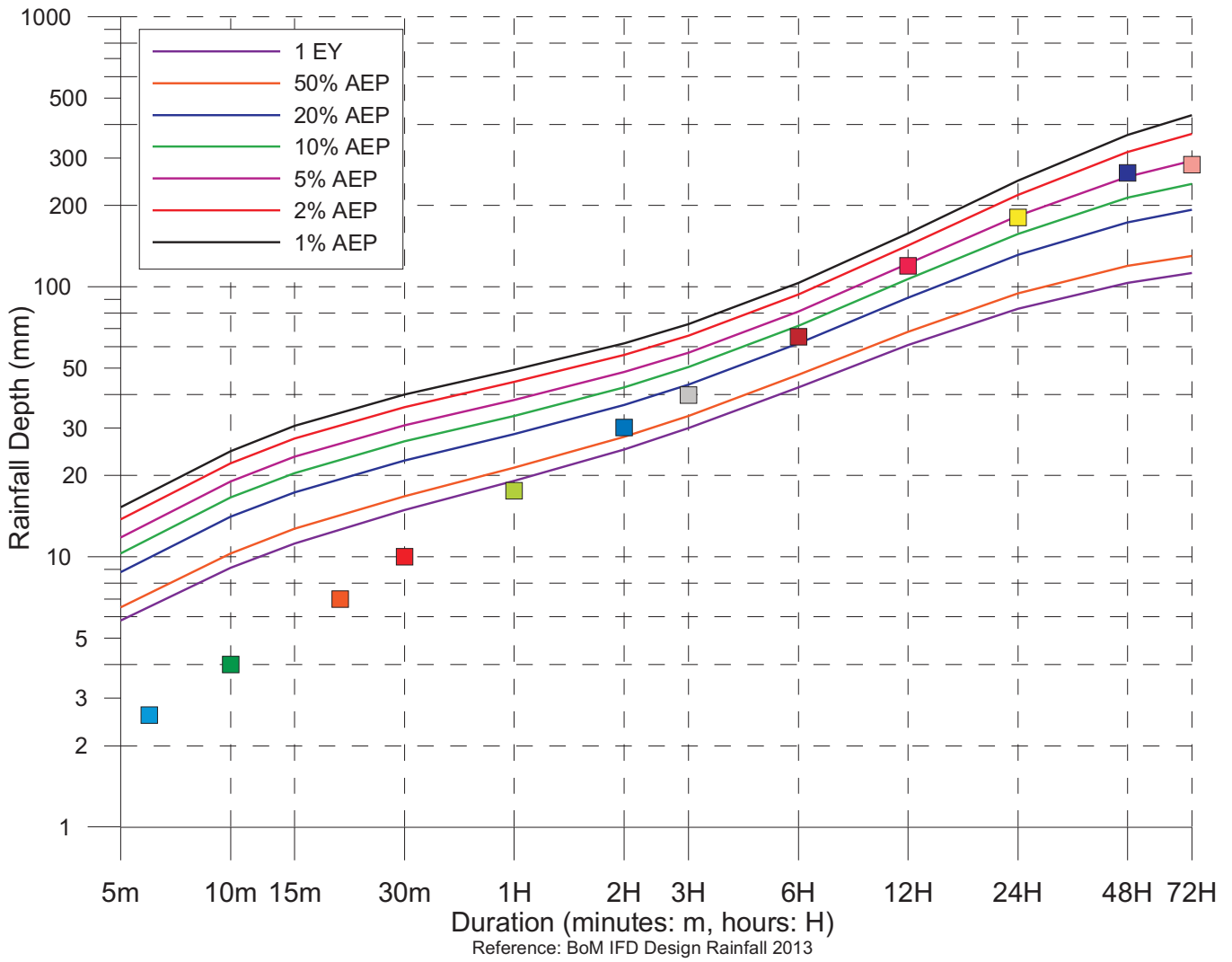




Duan Durra Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.0	17:42_25/08/2015
10m	2.0	17:22_25/08/2015
20m	3.5	17:12_25/08/2015
30m	5.0	17:10_25/08/2015
1H	9.5	13:44_25/08/2015
2H	16.0	13:42_25/08/2015
3H	21.0	13:48_25/08/2015
6H	40.0	13:42_25/08/2015
12H	59.0	13:00_25/08/2015
24H	69.5	09:40_25/08/2015
48H	80.0	21:48_24/08/2015
72H	81.0	21:48_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

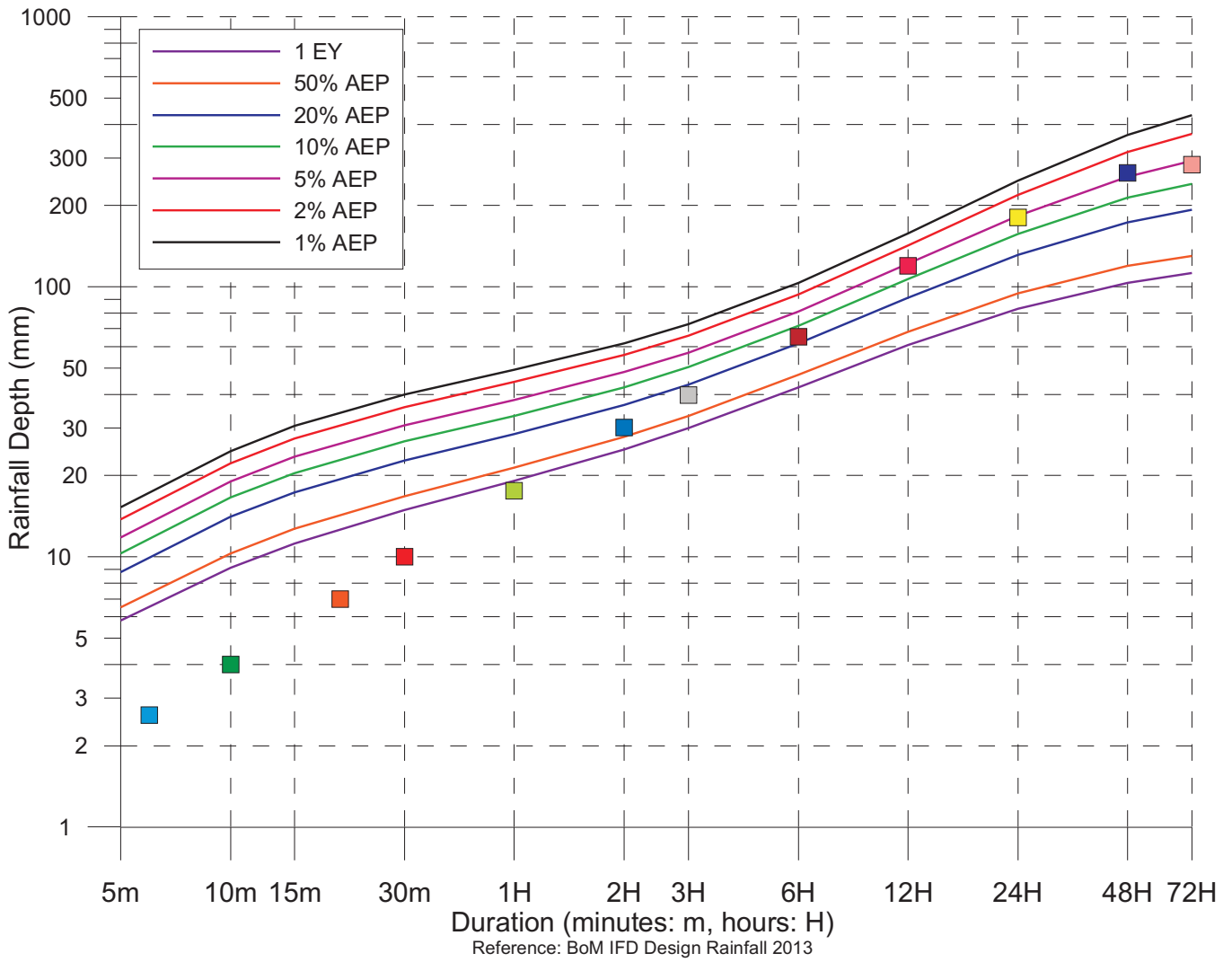




Mongarlowe (Leweston) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	2.6	18:08_25/08/2015
10m	4.0	18:06_25/08/2015
20m	7.0	17:56_25/08/2015
30m	10.0	17:48_25/08/2015
1H	17.6	17:18_25/08/2015
2H	30.2	16:24_25/08/2015
3H	39.8	16:12_25/08/2015
6H	65.2	13:40_25/08/2015
12H	119.4	13:30_25/08/2015
24H	181.2	05:42_25/08/2015
48H	264.0	12:12_24/08/2015
72H	284.0	05:36_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
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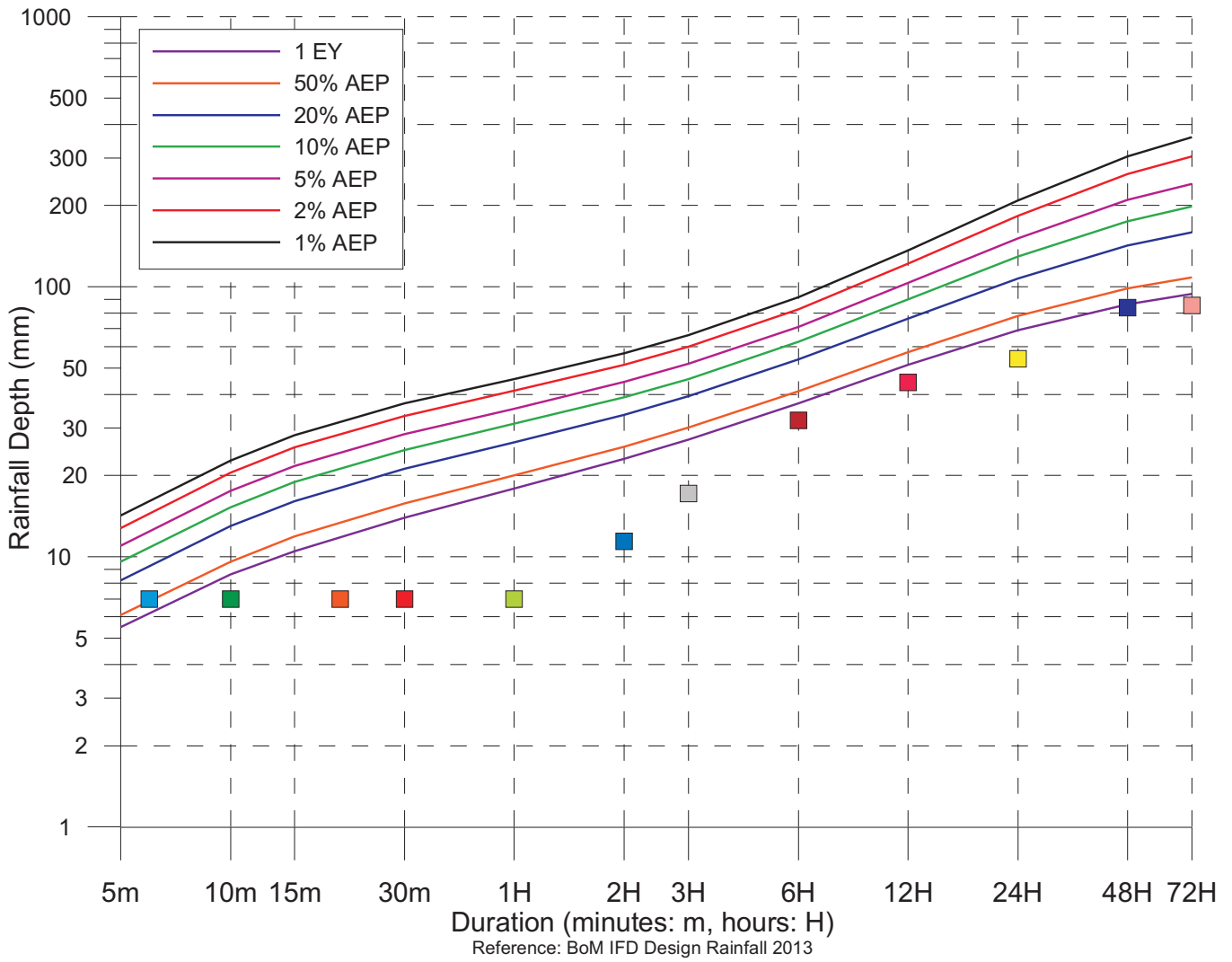




Mongarlowe Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.5	17:04_25/08/2015
10m	2.5	17:38_25/08/2015
20m	5.0	17:14_25/08/2015
30m	7.0	17:18_25/08/2015
1H	12.5	17:04_25/08/2015
2H	23.5	15:46_25/08/2015
3H	34.5	15:00_25/08/2015
6H	65.0	13:26_25/08/2015
12H	114.0	13:00_25/08/2015
24H	164.5	08:34_25/08/2015
48H	230.0	17:16_24/08/2015
72H	240.5	07:26_24/08/2015

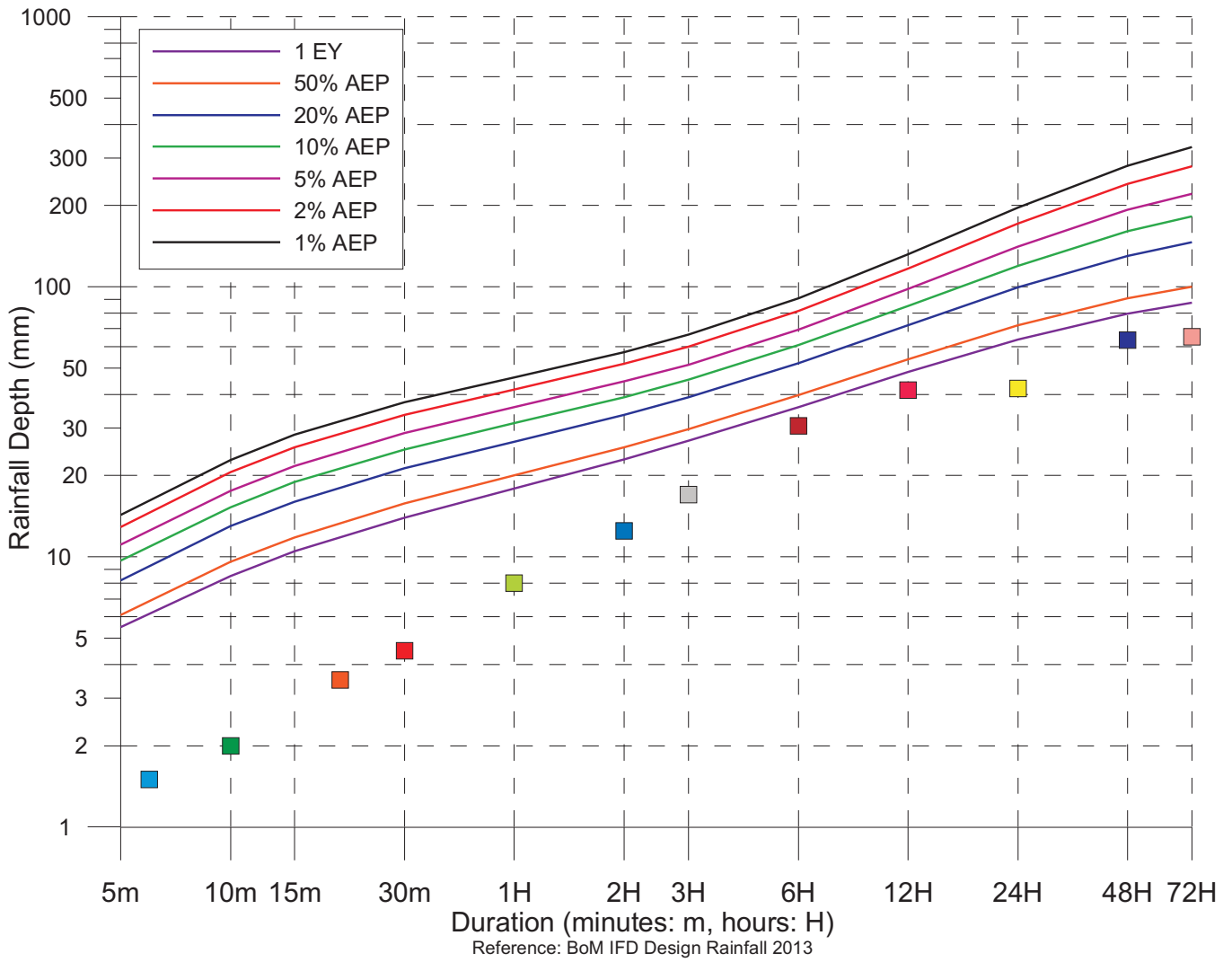
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
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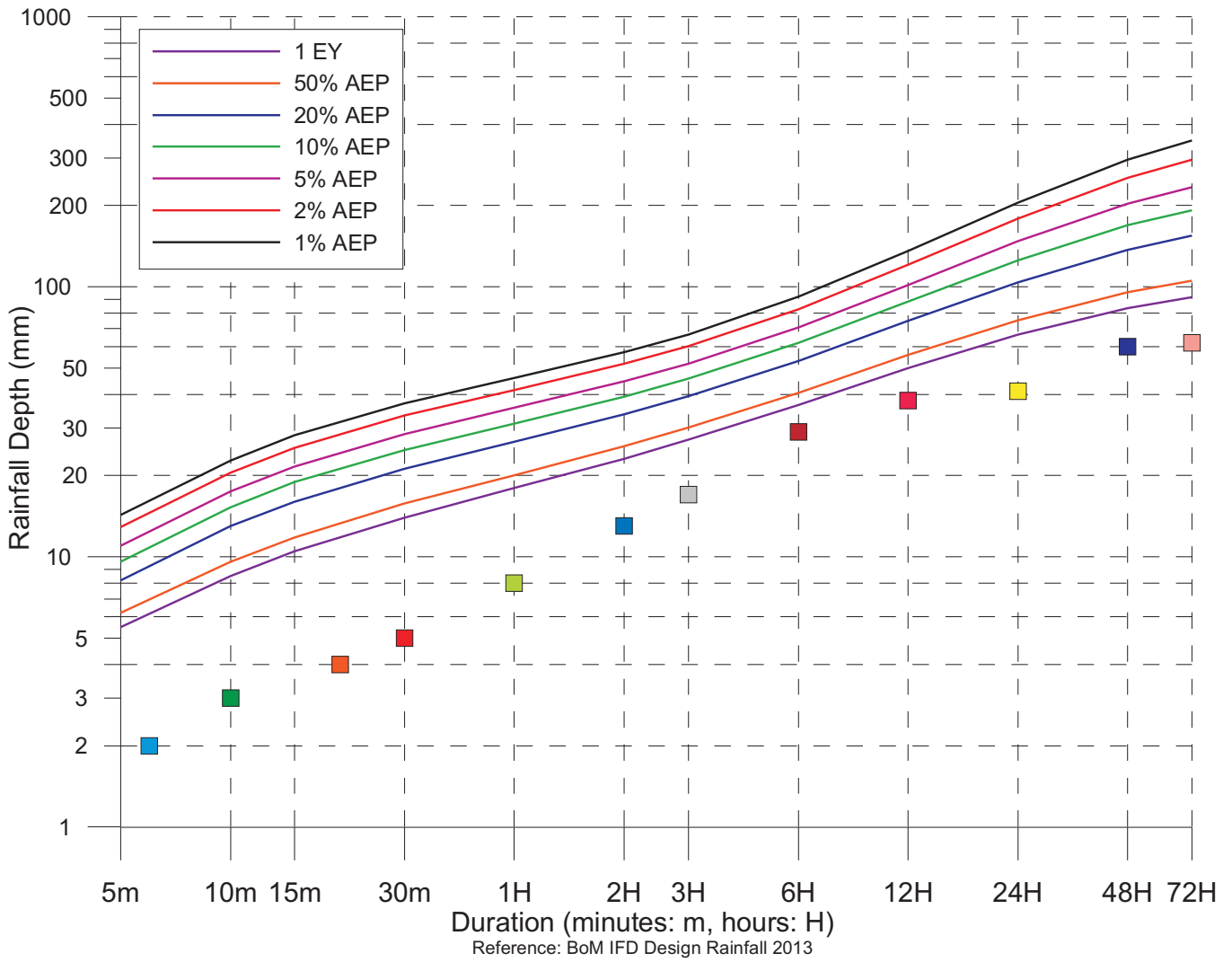
Braidwood Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	7.0	14:58_25/08/2015
10m	7.0	14:58_25/08/2015
20m	7.0	14:58_25/08/2015
30m	7.0	14:58_25/08/2015
1H	7.0	14:58_25/08/2015
2H	11.4	17:58_25/08/2015
3H	17.2	16:58_25/08/2015
6H	32.0	14:58_25/08/2015
12H	44.2	13:58_25/08/2015
24H	54.2	01:58_25/08/2015
48H	83.8	13:58_24/08/2015
72H	85.2	06:58_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Braidwood (Mountview) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.5	17:32_24/08/2015
10m	2.0	17:32_24/08/2015
20m	3.5	07:34_02/08/2015
30m	4.5	17:34_24/08/2015
1H	8.0	07:04_02/08/2015
2H	12.5	17:18_24/08/2015
3H	17.0	02:04_02/08/2015
6H	30.5	02:26_02/08/2015
12H	41.5	23:18_01/08/2015
24H	42.0	23:18_01/08/2015
48H	63.5	13:38_24/08/2015
72H	65.5	11:10_24/08/2015

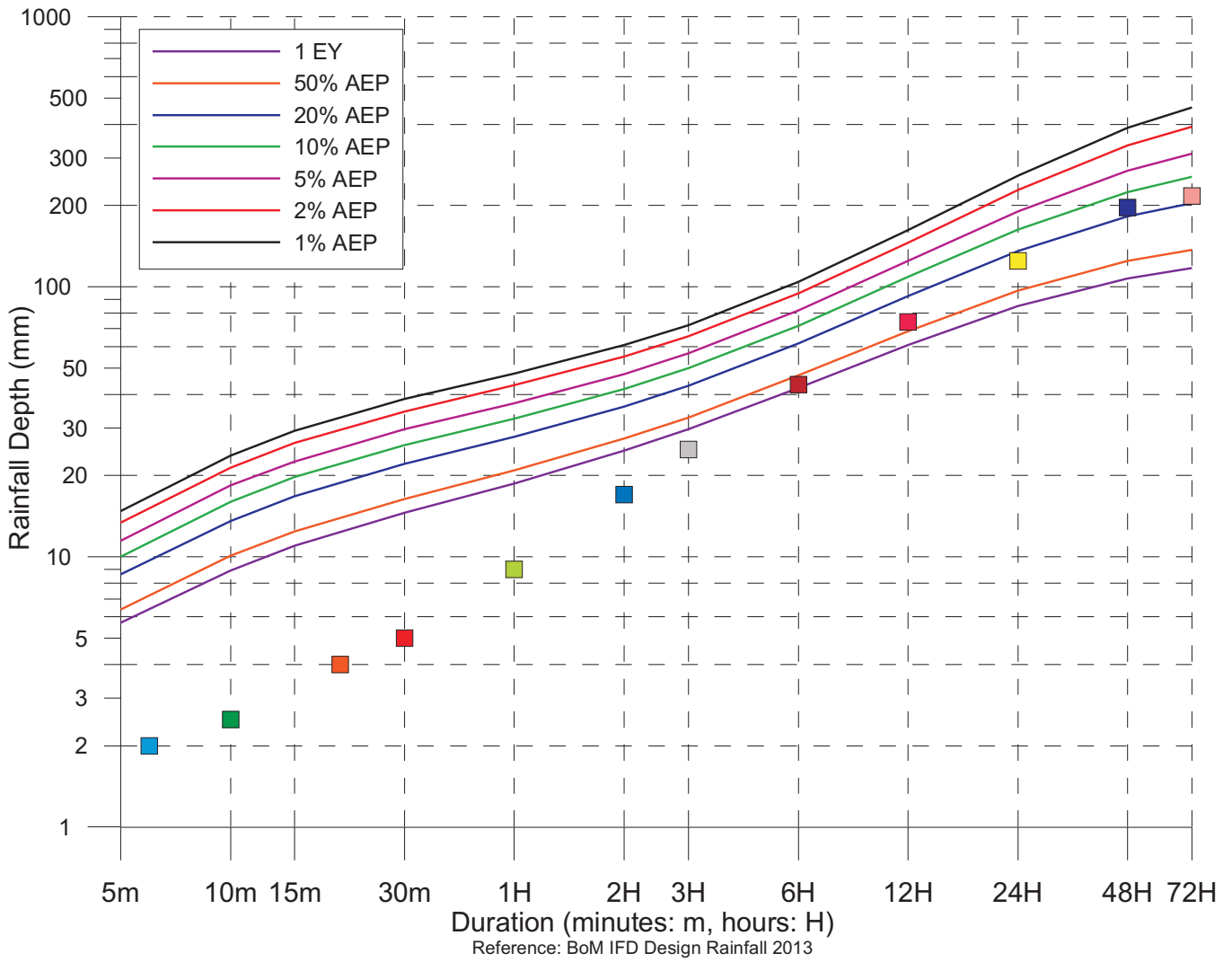
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Mountview Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	2.0	16:12_25/08/2015
10m	3.0	17:28_24/08/2015
20m	4.0	17:28_24/08/2015
30m	5.0	17:36_24/08/2015
1H	8.0	17:28_24/08/2015
2H	13.0	17:28_24/08/2015
3H	17.0	02:02_02/08/2015
6H	29.0	02:02_02/08/2015
12H	38.0	00:14_02/08/2015
24H	41.0	17:28_24/08/2015
48H	60.0	13:24_24/08/2015
72H	62.0	13:24_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

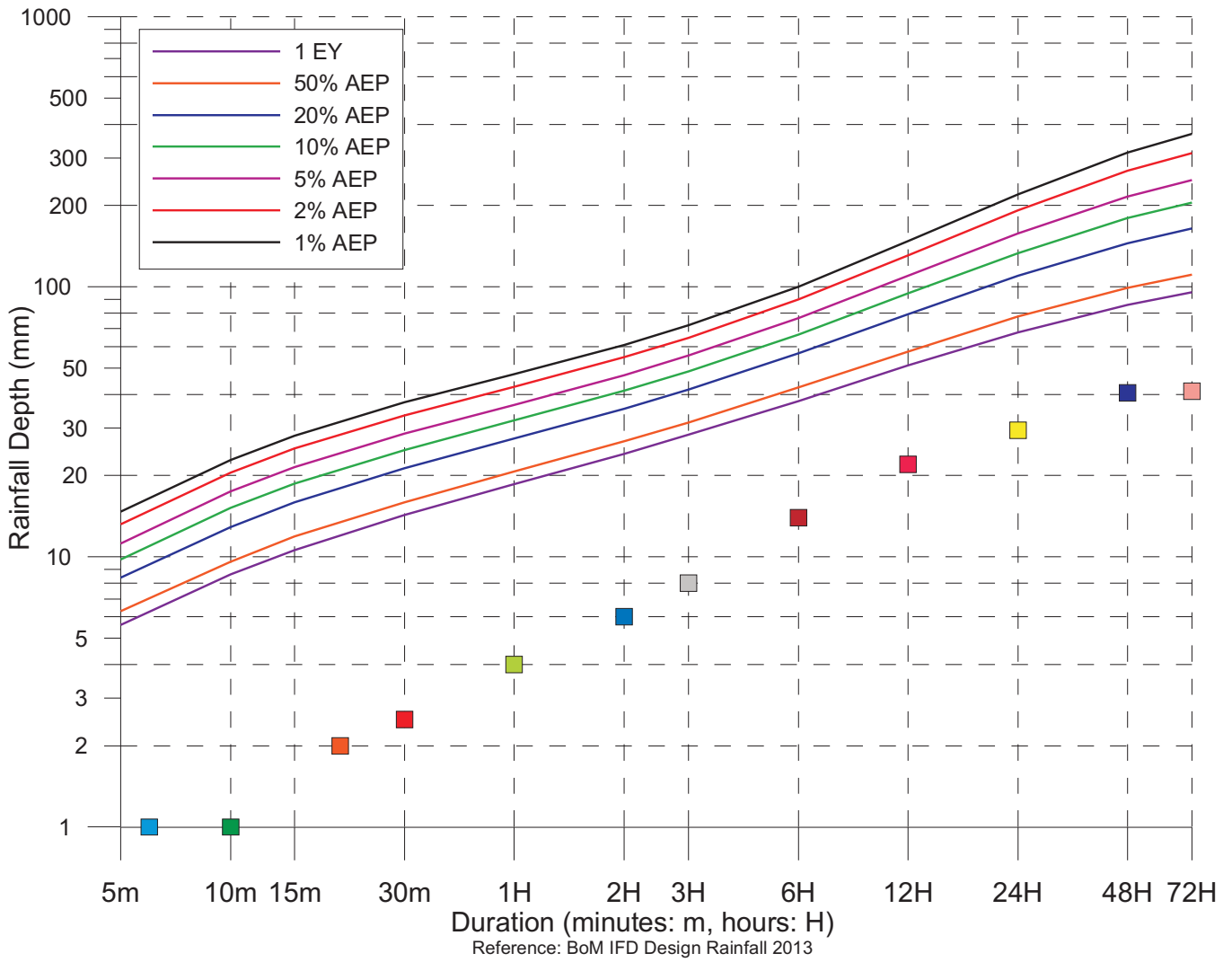




Monga Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	2.0	20:06_24/08/2015
10m	2.5	20:06_24/08/2015
20m	4.0	19:54_24/08/2015
30m	5.0	16:14_25/08/2015
1H	9.0	15:56_25/08/2015
2H	17.0	15:02_25/08/2015
3H	25.0	14:38_25/08/2015
6H	43.5	13:18_25/08/2015
12H	74.0	13:18_25/08/2015
24H	124.5	10:36_25/08/2015
48H	197.0	17:34_24/08/2015
72H	217.0	05:12_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

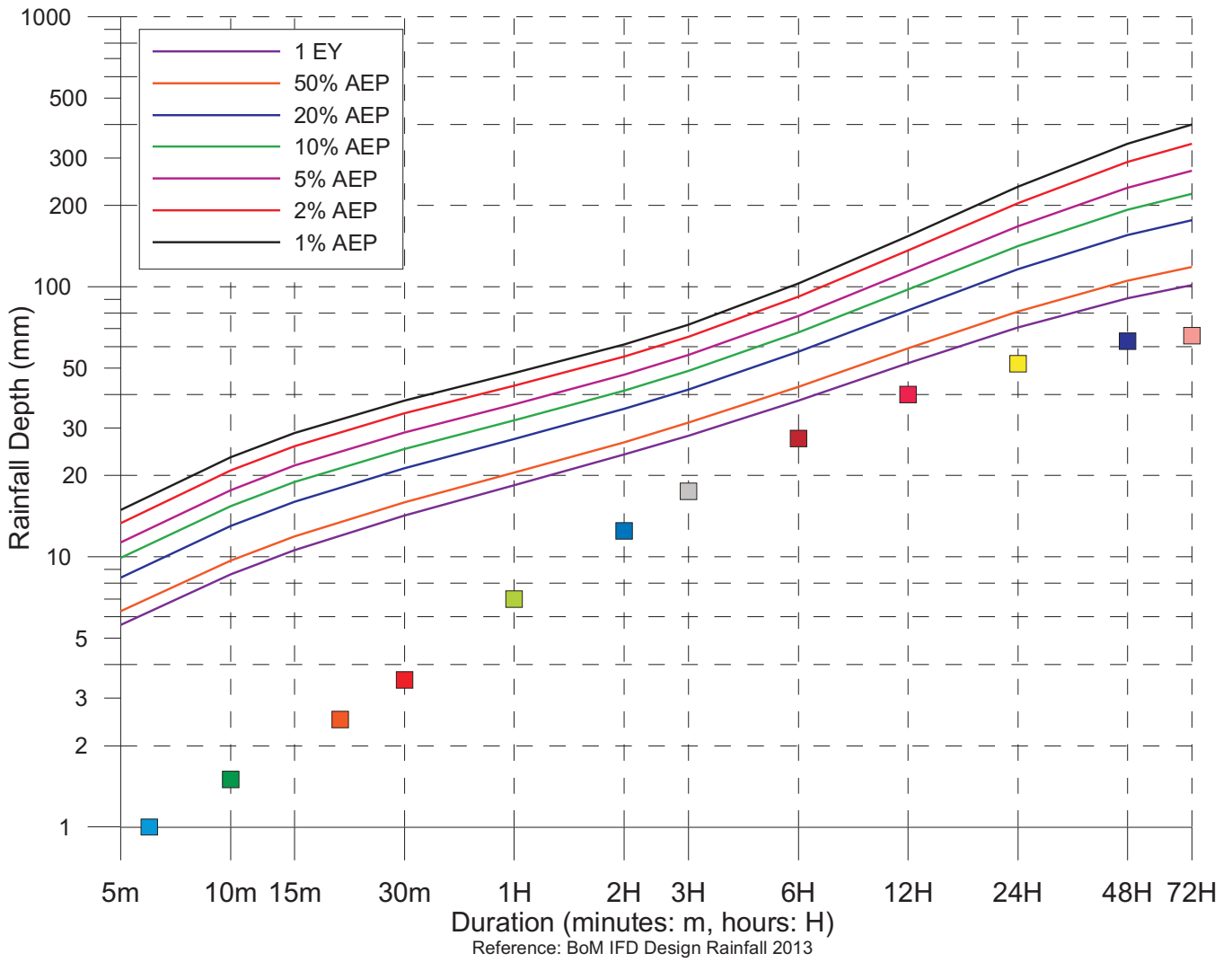




Oranmeir Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.0	04:04_25/08/2015
10m	1.0	22:40_24/08/2015
20m	2.0	22:24_24/08/2015
30m	2.5	22:16_24/08/2015
1H	4.0	21:58_24/08/2015
2H	6.0	21:06_24/08/2015
3H	8.0	21:20_24/08/2015
6H	14.0	22:10_24/08/2015
12H	22.0	21:06_24/08/2015
24H	29.5	21:06_24/08/2015
48H	40.5	21:06_24/08/2015
72H	41.0	21:06_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

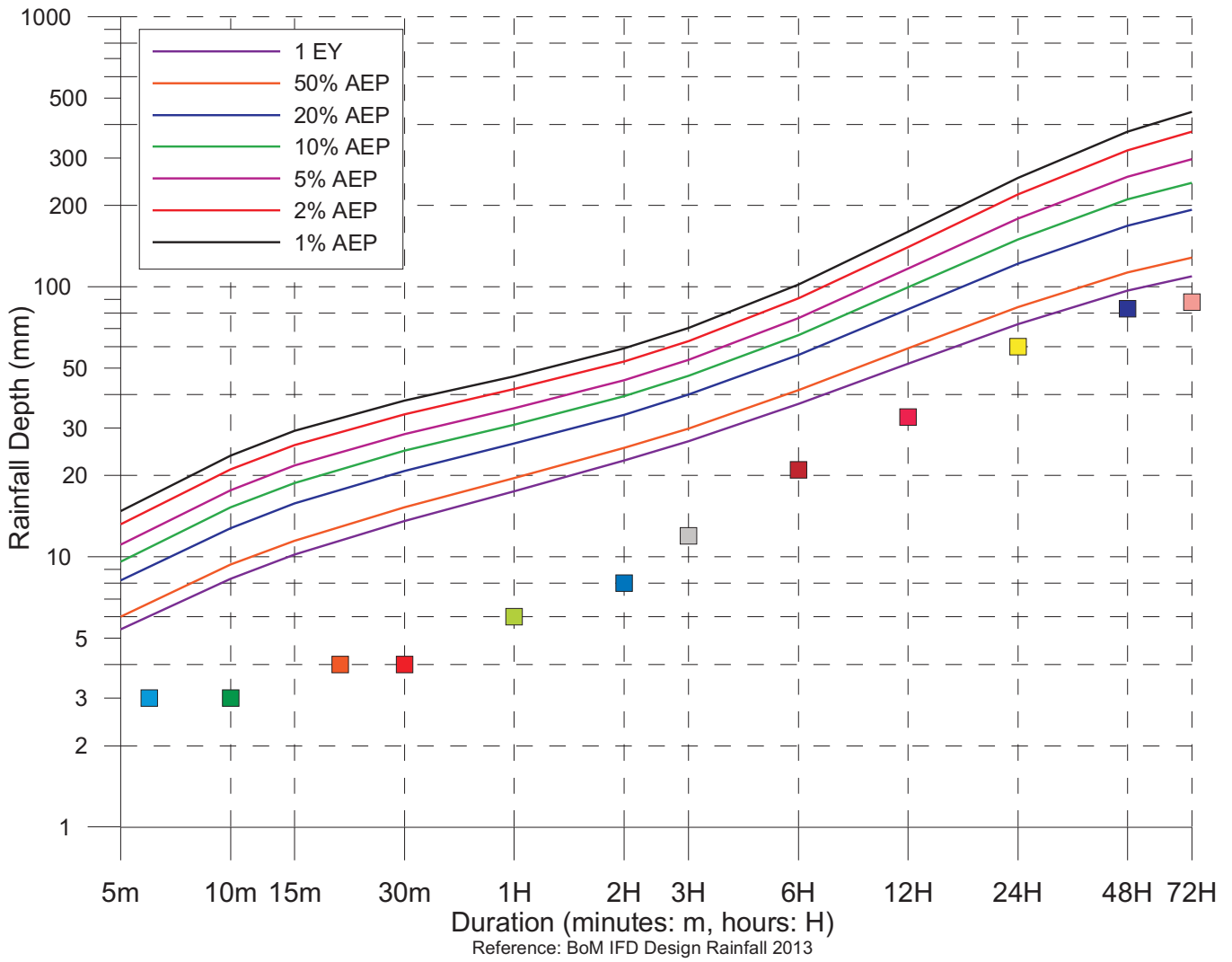




Kadoona Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.0	22:14_24/08/2015
10m	1.5	19:42_24/08/2015
20m	2.5	19:42_24/08/2015
30m	3.5	19:32_24/08/2015
1H	7.0	19:02_24/08/2015
2H	12.5	18:28_24/08/2015
3H	17.5	17:38_24/08/2015
6H	27.5	17:26_24/08/2015
12H	40.0	16:36_24/08/2015
24H	52.0	14:46_24/08/2015
48H	63.0	11:00_24/08/2015
72H	66.0	03:00_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

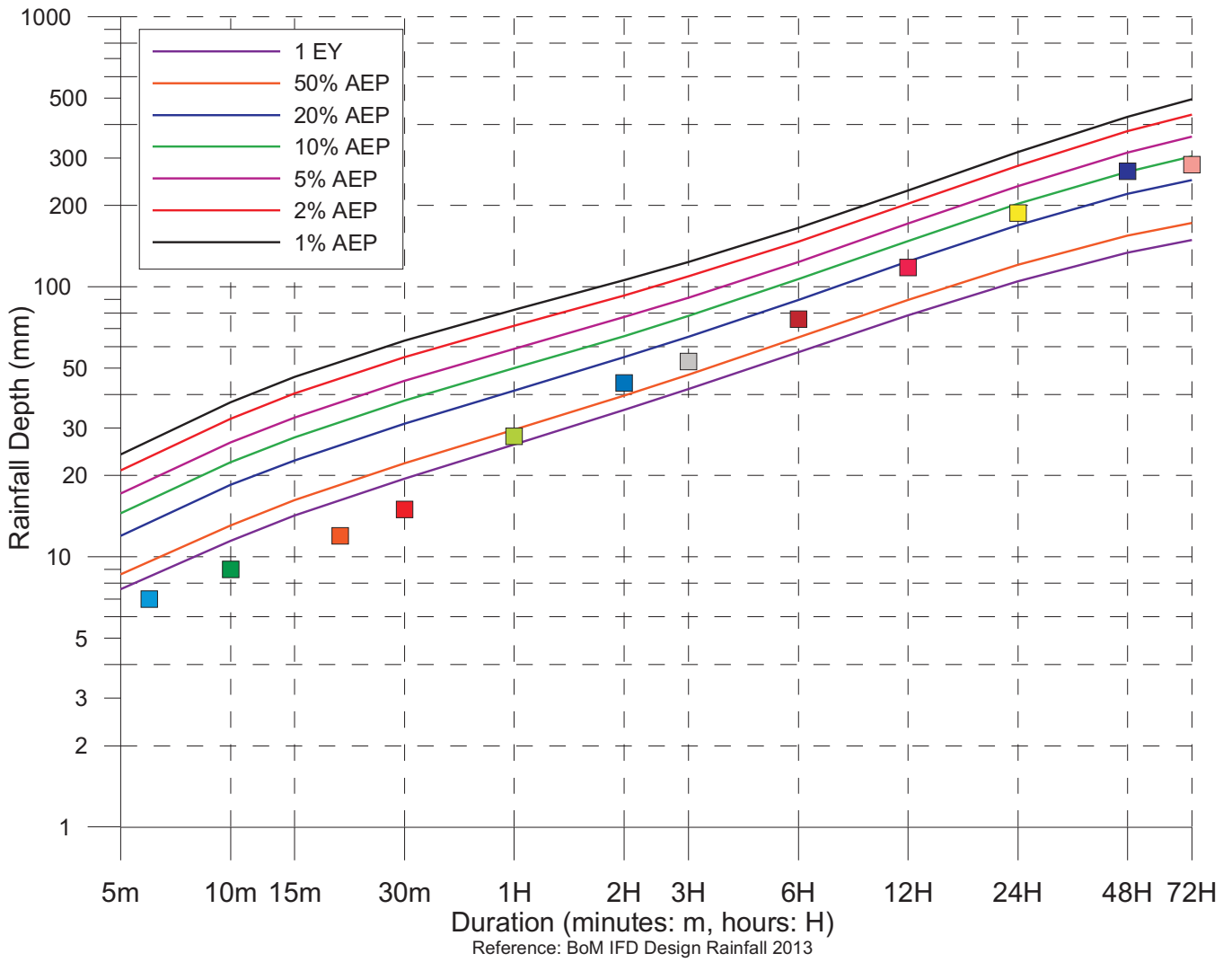




Snowball Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	3.0	03:20_26/08/2015
10m	3.0	03:20_26/08/2015
20m	4.0	23:24_24/08/2015
30m	4.0	23:24_24/08/2015
1H	6.0	22:42_24/08/2015
2H	8.0	14:34_25/08/2015
3H	12.0	17:54_24/08/2015
6H	21.0	17:54_24/08/2015
12H	33.0	15:44_24/08/2015
24H	60.0	17:54_24/08/2015
48H	83.0	15:10_24/08/2015
72H	88.0	01:58_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

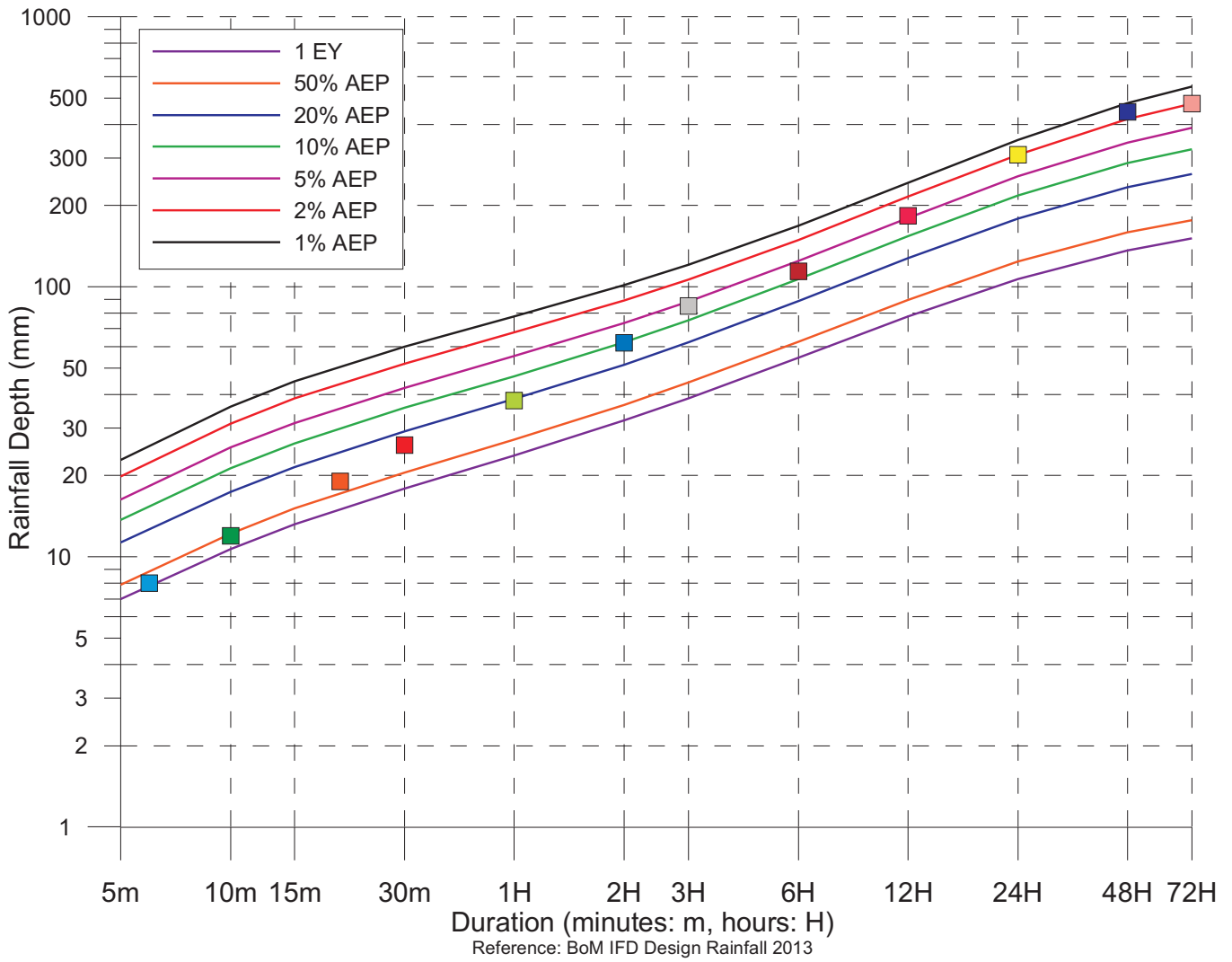




Currarong Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	7.0	21:20_25/08/2015
10m	9.0	11:24_25/08/2015
20m	12.0	11:16_25/08/2015
30m	15.0	11:04_25/08/2015
1H	28.0	10:34_25/08/2015
2H	44.0	09:44_25/08/2015
3H	53.0	08:40_25/08/2015
6H	76.0	05:42_25/08/2015
12H	118.0	02:34_25/08/2015
24H	188.0	01:26_25/08/2015
48H	268.0	10:26_24/08/2015
72H	283.0	21:38_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

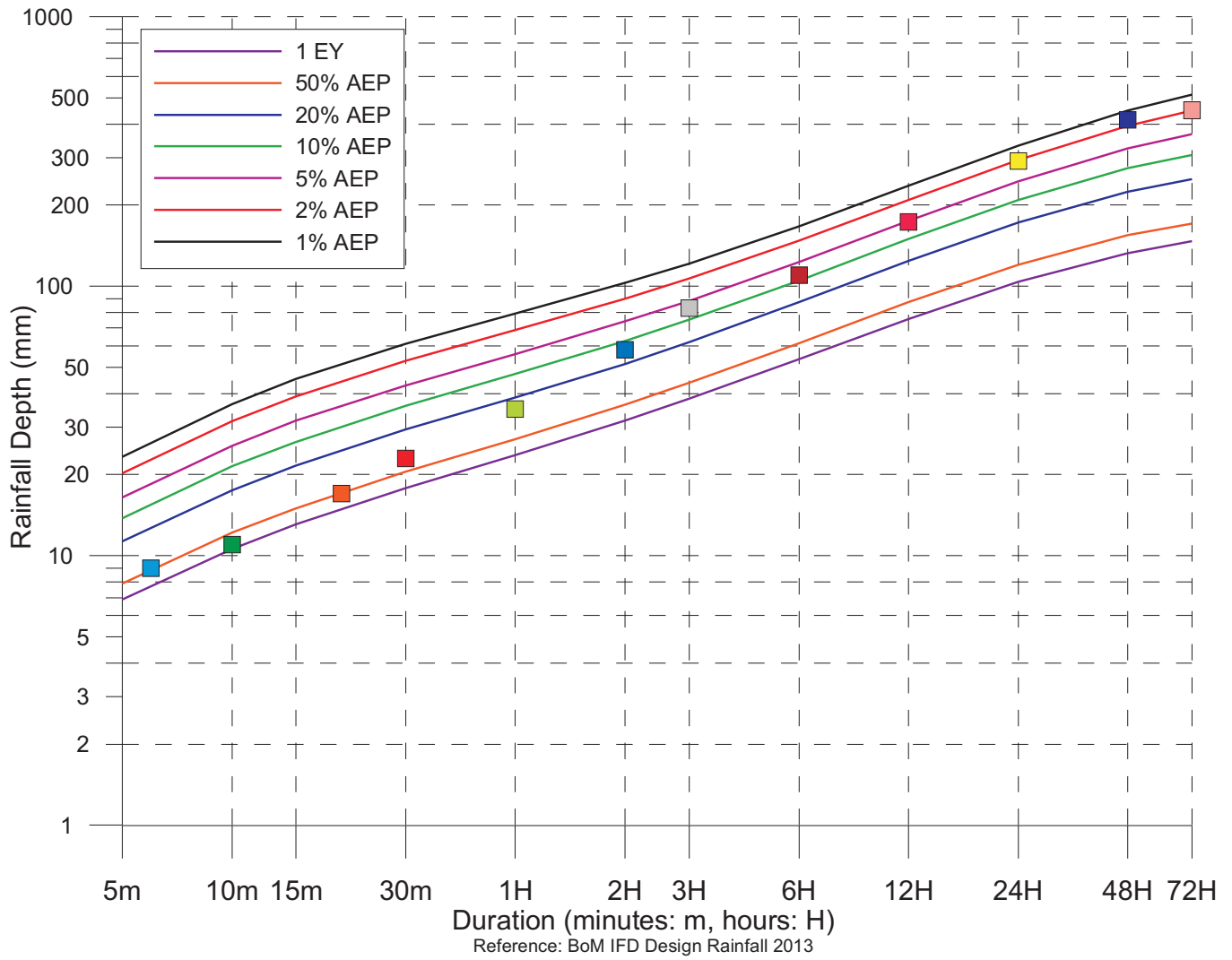




Tomerong (Eucalypt Lane) Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	8.0	13:10_25/08/2015
10m	12.0	13:06_25/08/2015
20m	19.0	13:04_25/08/2015
30m	26.0	12:50_25/08/2015
1H	38.0	12:28_25/08/2015
2H	62.0	11:30_25/08/2015
3H	85.0	10:26_25/08/2015
6H	114.0	09:10_25/08/2015
12H	183.0	01:32_25/08/2015
24H	309.0	18:26_24/08/2015
48H	444.0	08:04_24/08/2015
72H	477.0	19:50_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

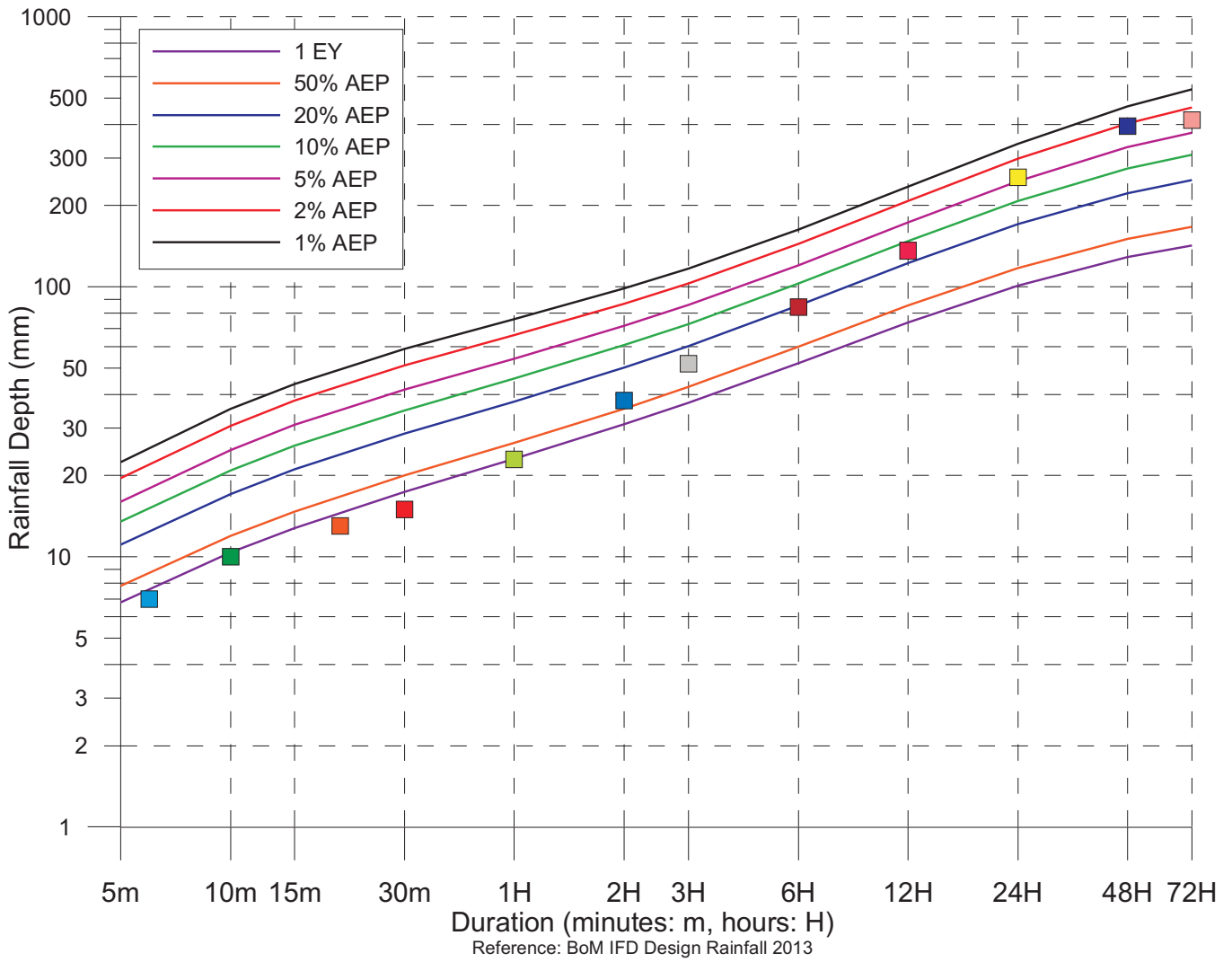




Tomerong Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	9.0	12:48_25/08/2015
10m	11.0	12:48_25/08/2015
20m	17.0	12:48_25/08/2015
30m	23.0	12:36_25/08/2015
1H	35.0	12:06_25/08/2015
2H	58.0	11:06_25/08/2015
3H	83.0	10:14_25/08/2015
6H	110.0	09:12_25/08/2015
12H	173.0	01:12_25/08/2015
24H	291.0	18:32_24/08/2015
48H	415.0	12:10_24/08/2015
72H	450.0	19:32_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

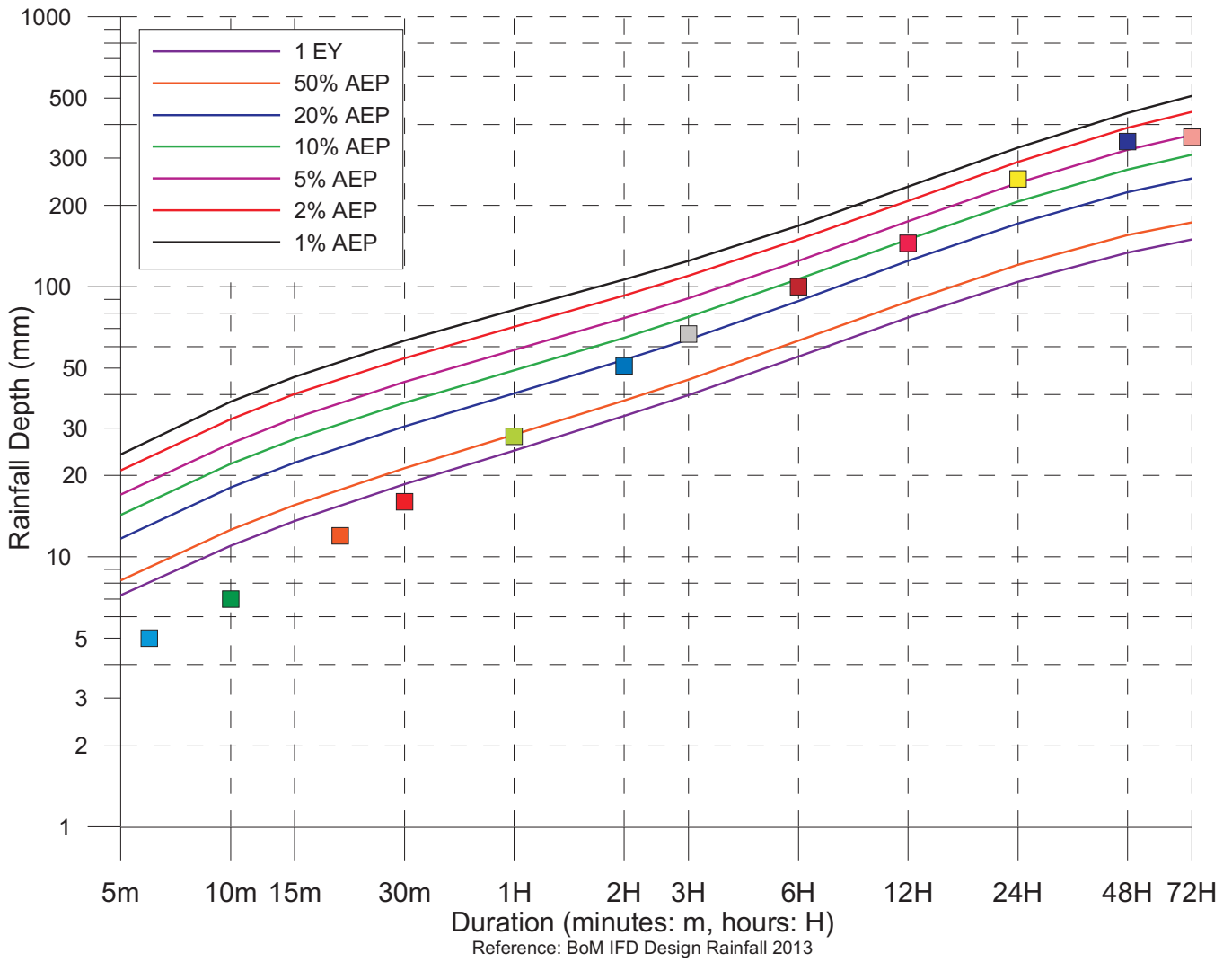




Glennely Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	7.0	01:18_25/08/2015
10m	10.0	01:18_25/08/2015
20m	13.0	01:18_25/08/2015
30m	15.0	01:18_25/08/2015
1H	23.0	00:26_25/08/2015
2H	38.0	23:52_24/08/2015
3H	52.0	22:56_24/08/2015
6H	84.0	22:56_24/08/2015
12H	136.0	19:22_24/08/2015
24H	255.0	21:50_24/08/2015
48H	394.0	13:50_24/08/2015
72H	415.0	01:20_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

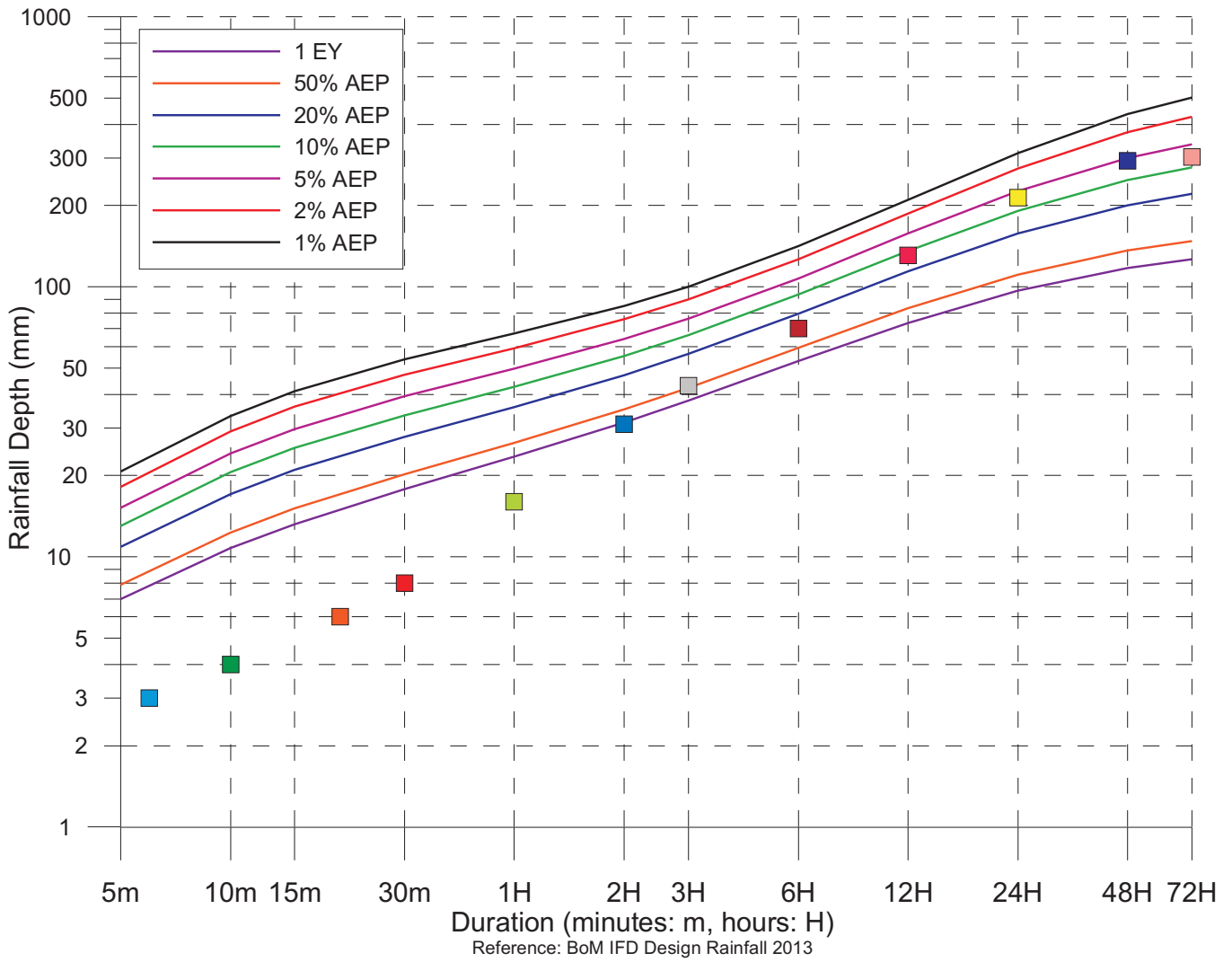




Vincentia Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	10:20_25/08/2015
10m	7.0	10:16_25/08/2015
20m	12.0	10:20_25/08/2015
30m	16.0	10:16_25/08/2015
1H	28.0	19:22_24/08/2015
2H	51.0	19:06_24/08/2015
3H	67.0	18:20_24/08/2015
6H	100.0	18:20_24/08/2015
12H	145.0	18:00_24/08/2015
24H	251.0	18:16_24/08/2015
48H	346.0	12:06_24/08/2015
72H	359.0	06:30_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

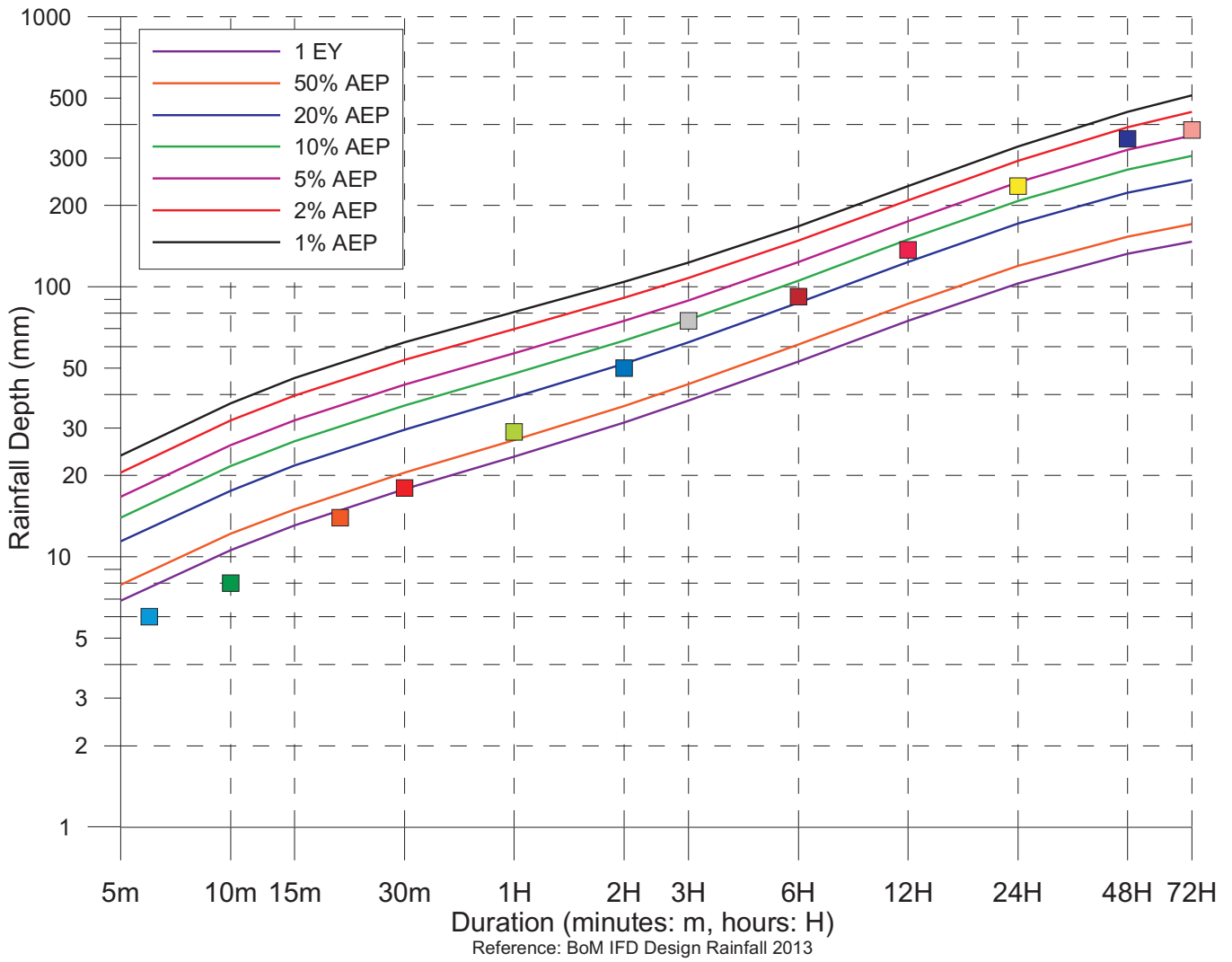




Sassafras Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	3.0	14:10_25/08/2015
10m	4.0	14:10_25/08/2015
20m	6.0	21:44_25/08/2015
30m	8.0	22:14_25/08/2015
1H	16.0	14:10_25/08/2015
2H	31.0	14:10_25/08/2015
3H	43.0	13:40_25/08/2015
6H	70.0	13:10_25/08/2015
12H	131.0	12:14_25/08/2015
24H	214.0	05:06_25/08/2015
48H	293.0	13:34_24/08/2015
72H	302.0	09:48_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

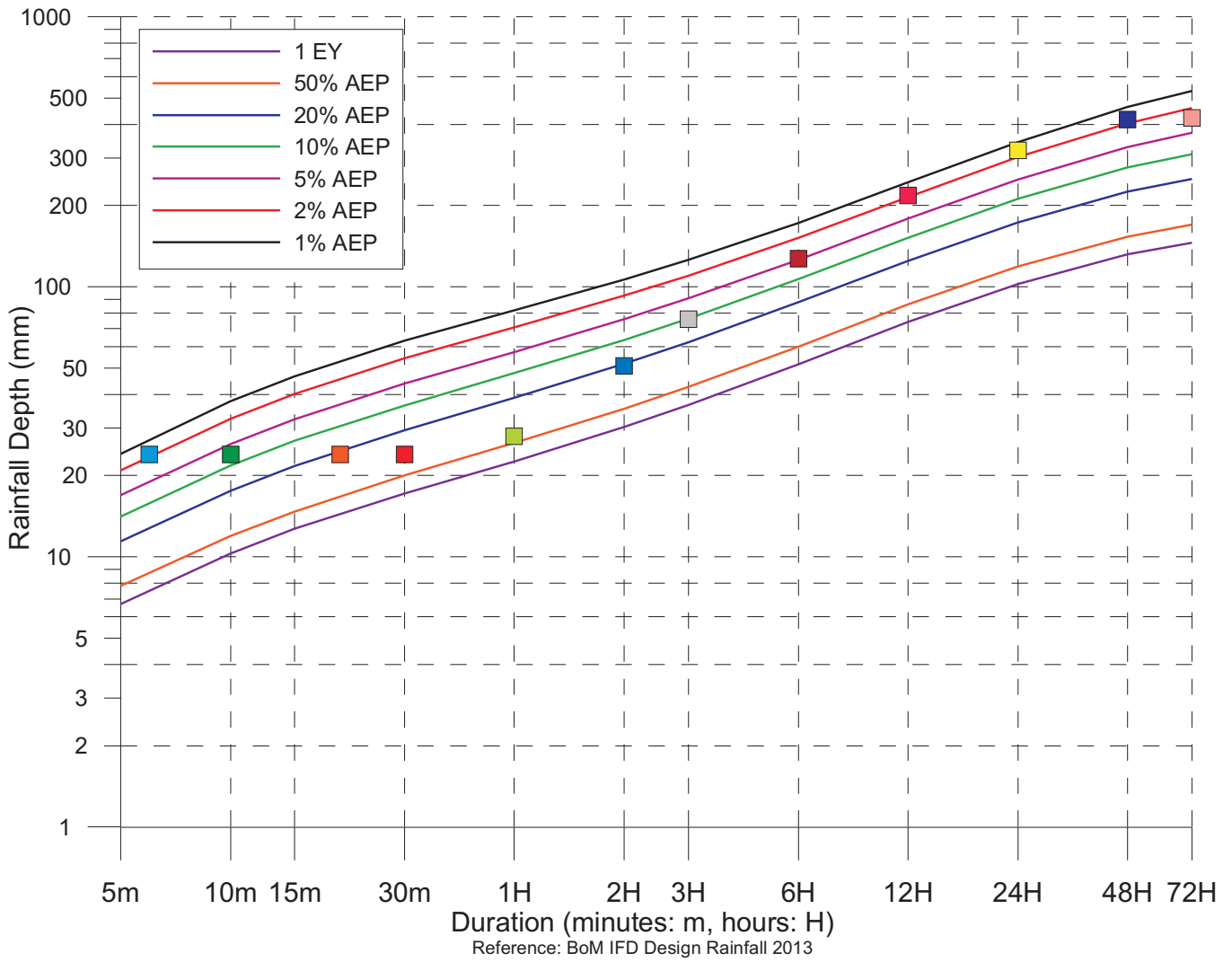




Island Point Road Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	6	12:58_25/08/2015
10m	8	12:50_25/08/2015
20m	14	12:40_25/08/2015
30m	18	12:30_25/08/2015
1H	29	10:30_25/08/2015
2H	50	11:00_25/08/2015
3H	75	10:02_25/08/2015
6H	92	09:10_25/08/2015
12H	137	01:02_25/08/2015
24H	236	18:30_24/08/2015
48H	353	07:50_24/08/2015
72H	381	00:18_24/08/2015

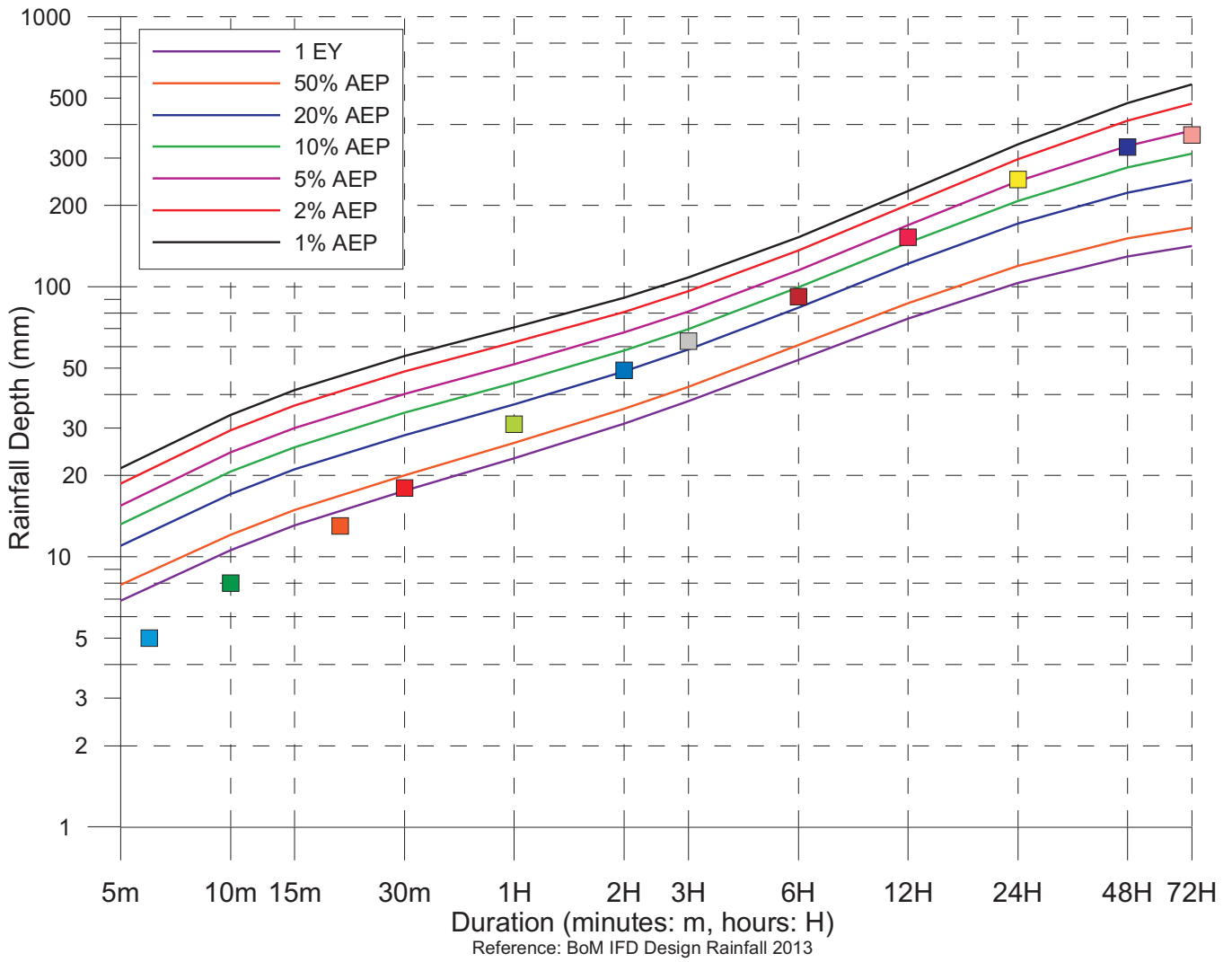
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>





Fishermans Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	24.0	08:42_31/08/2015
10m	24.0	08:42_31/08/2015
20m	24.0	08:42_31/08/2015
30m	24.0	08:42_31/08/2015
1H	28.0	12:46_25/08/2015
2H	51.0	04:14_25/08/2015
3H	76.0	03:20_25/08/2015
6H	127.0	01:50_25/08/2015
12H	218.0	02:10_25/08/2015
24H	321.0	22:24_24/08/2015
48H	416.0	07:22_24/08/2015
72H	422.0	05:36_24/08/2015

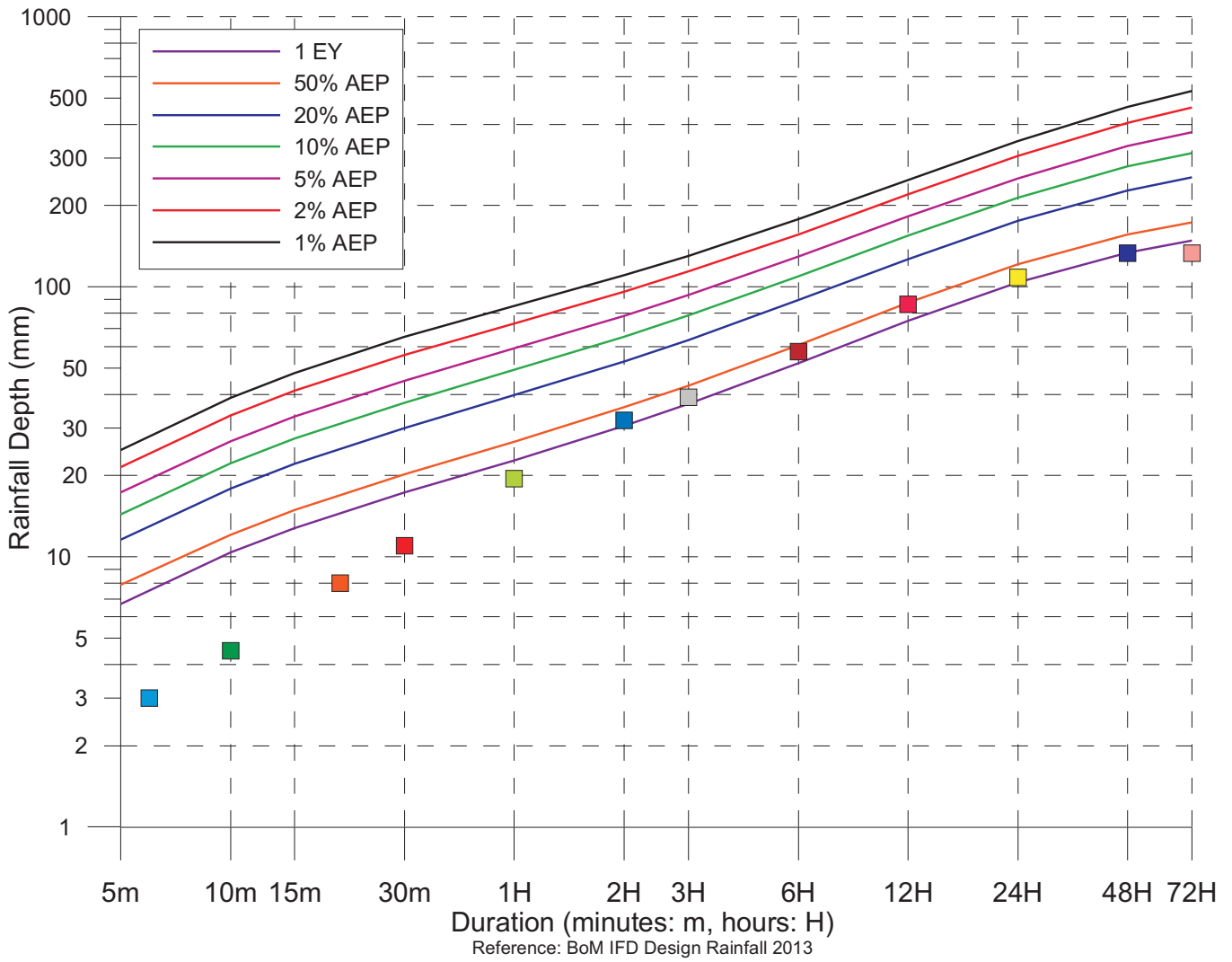
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Porters Creek Dam Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	13:48_25/08/2015
10m	8.0	13:46_25/08/2015
20m	13.0	13:46_25/08/2015
30m	18.0	13:38_25/08/2015
1H	31.0	13:32_25/08/2015
2H	49.0	13:08_25/08/2015
3H	63.0	12:54_25/08/2015
6H	92.0	12:10_25/08/2015
12H	153.0	10:30_25/08/2015
24H	250.0	23:34_24/08/2015
48H	329.0	08:36_24/08/2015
72H	366.0	05:32_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

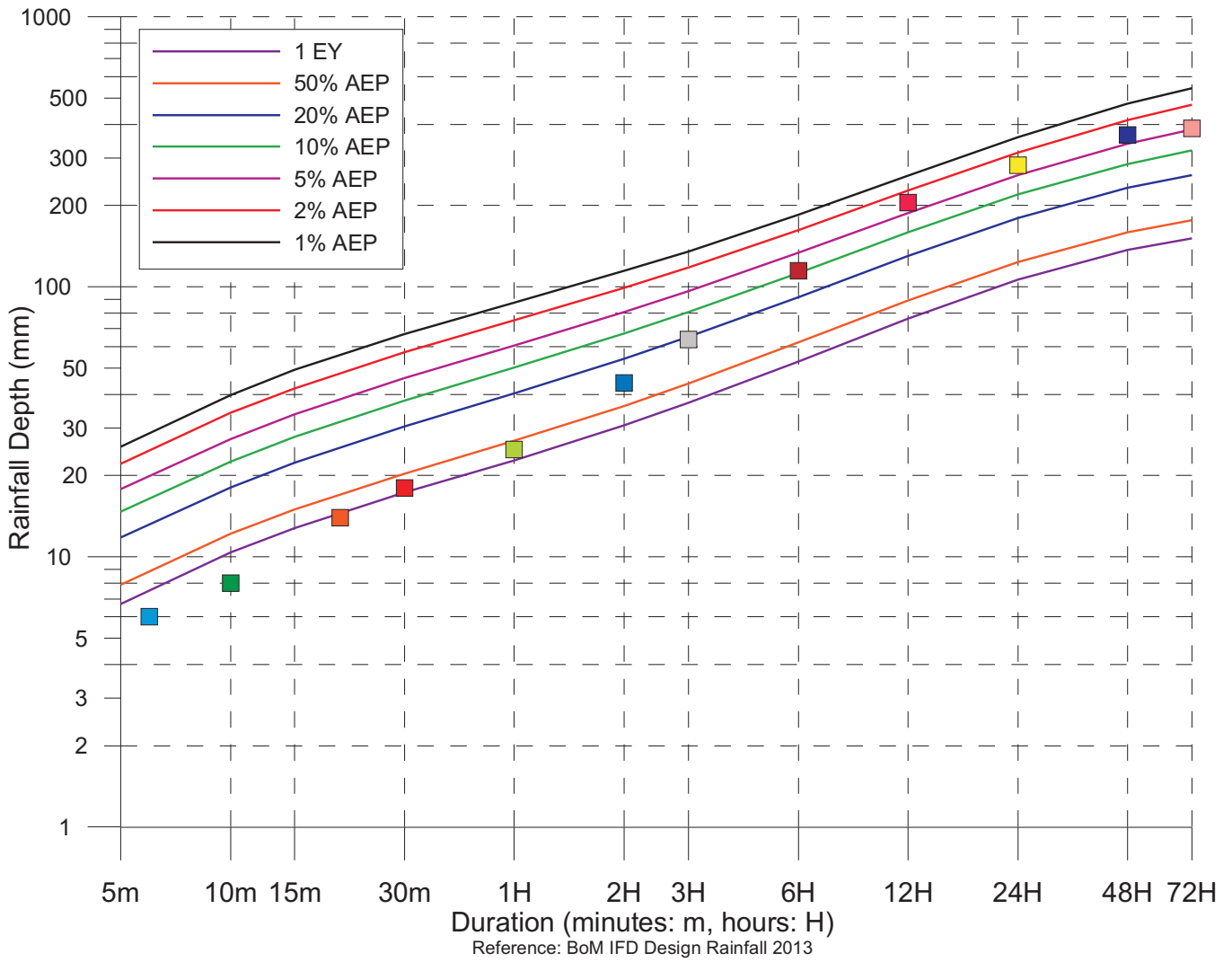




Lake Conjola Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	3.0	05:10_25/08/2015
10m	4.5	05:06_25/08/2015
20m	8.0	04:54_25/08/2015
30m	11.0	04:46_25/08/2015
1H	19.5	04:16_25/08/2015
2H	32.0	03:32_25/08/2015
3H	39.0	03:32_25/08/2015
6H	57.5	00:44_25/08/2015
12H	86.0	00:08_25/08/2015
24H	108.5	12:02_24/08/2015
48H	133.0	05:38_24/08/2015
72H	133.0	05:38_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

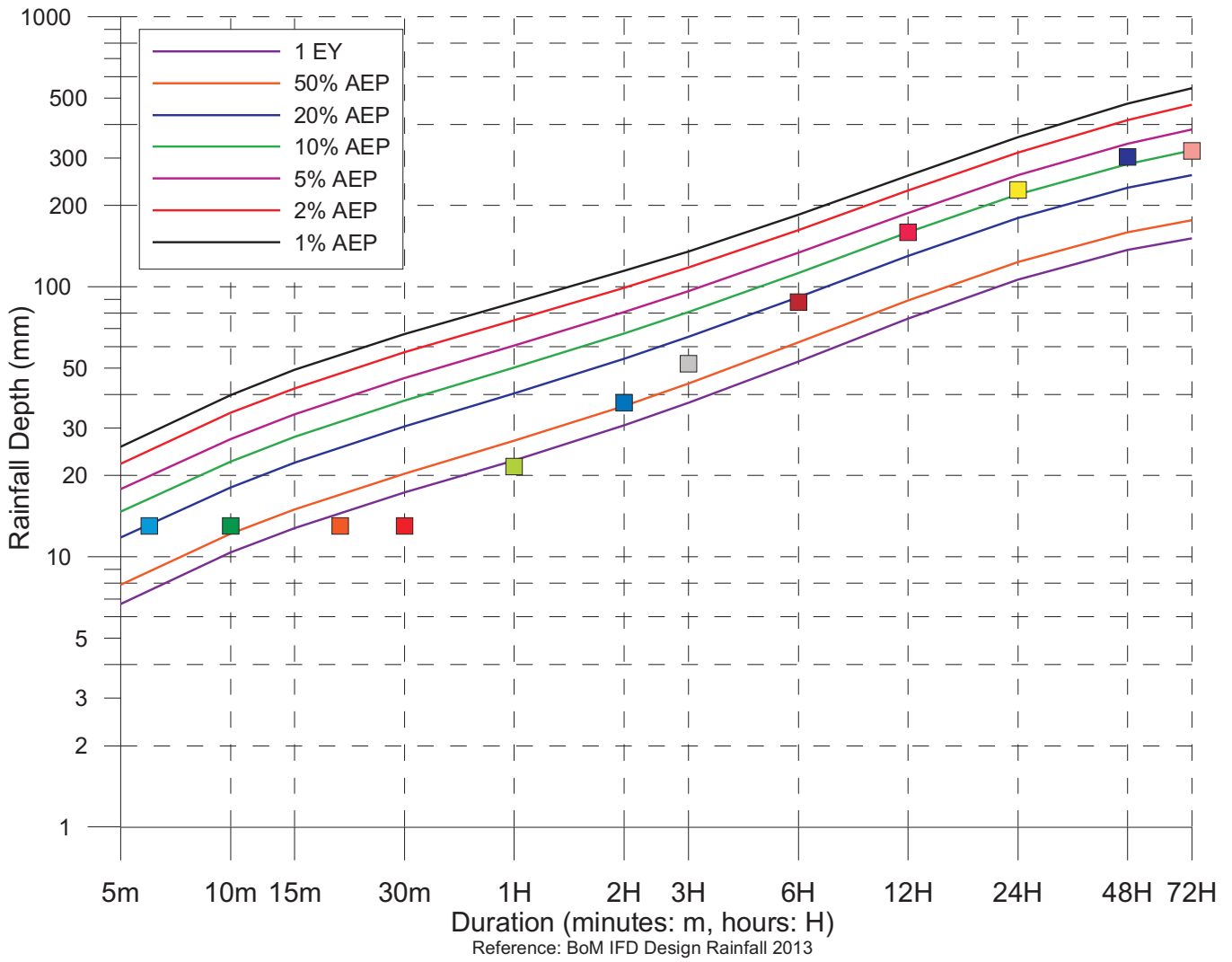




Ulladulla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	6.0	13:26_25/08/2015
10m	8.0	05:52_25/08/2015
20m	14.0	13:26_25/08/2015
30m	18.0	13:20_25/08/2015
1H	25.0	13:04_25/08/2015
2H	44.0	05:38_25/08/2015
3H	64.0	04:36_25/08/2015
6H	115.0	02:26_25/08/2015
12H	205.0	02:06_25/08/2015
24H	282.0	21:50_24/08/2015
48H	366.0	04:24_24/08/2015
72H	386.0	04:24_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

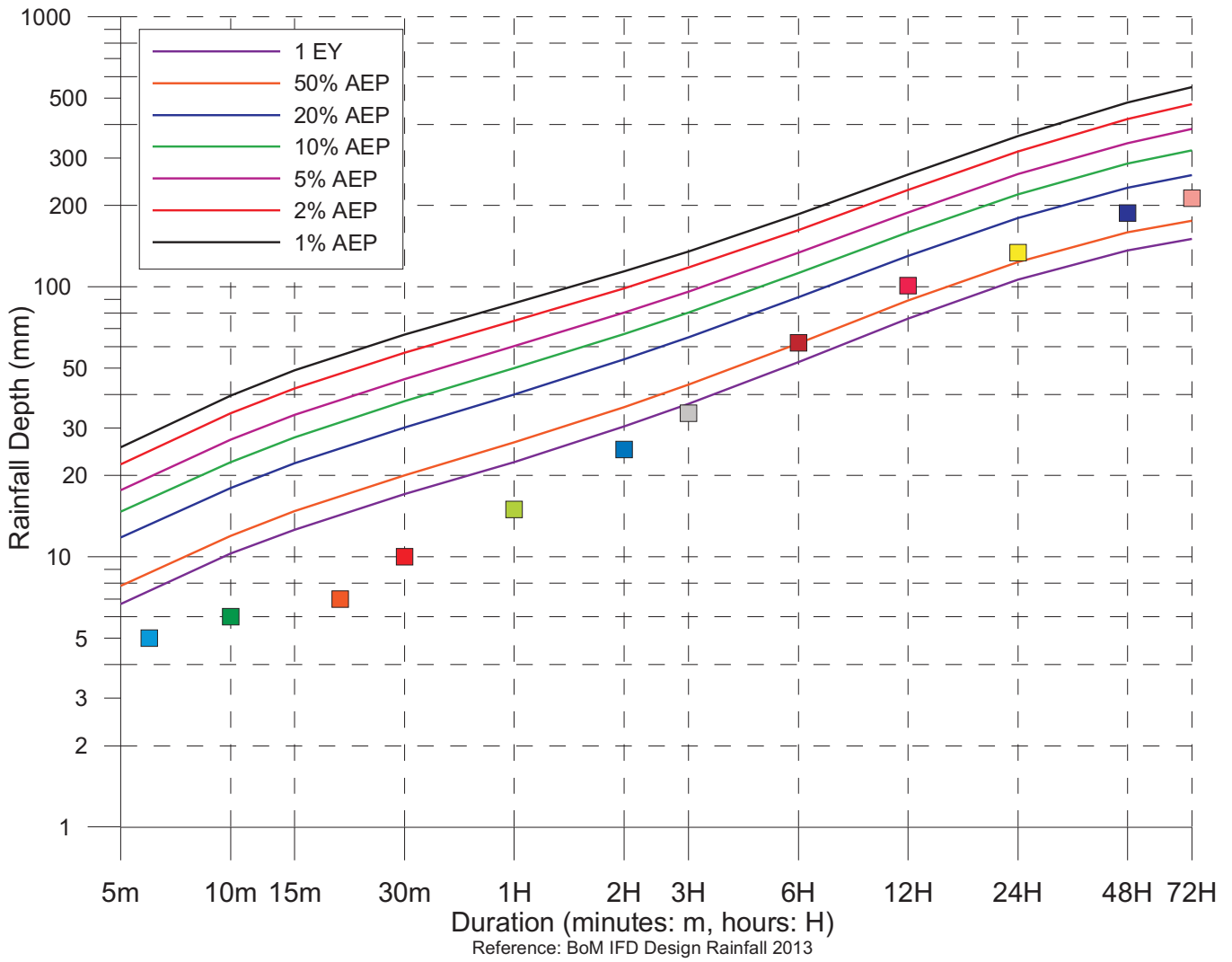




Ulladulla AWS Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	13.0	07:28_25/08/2015
10m	13.0	07:28_25/08/2015
20m	13.0	07:28_25/08/2015
30m	13.0	07:28_25/08/2015
1H	21.6	06:58_25/08/2015
2H	37.2	05:58_25/08/2015
3H	51.8	04:58_25/08/2015
6H	88.0	01:58_25/08/2015
12H	159.2	02:28_25/08/2015
24H	228.2	21:58_24/08/2015
48H	303.4	02:28_24/08/2015
72H	319.0	02:58_24/08/2015

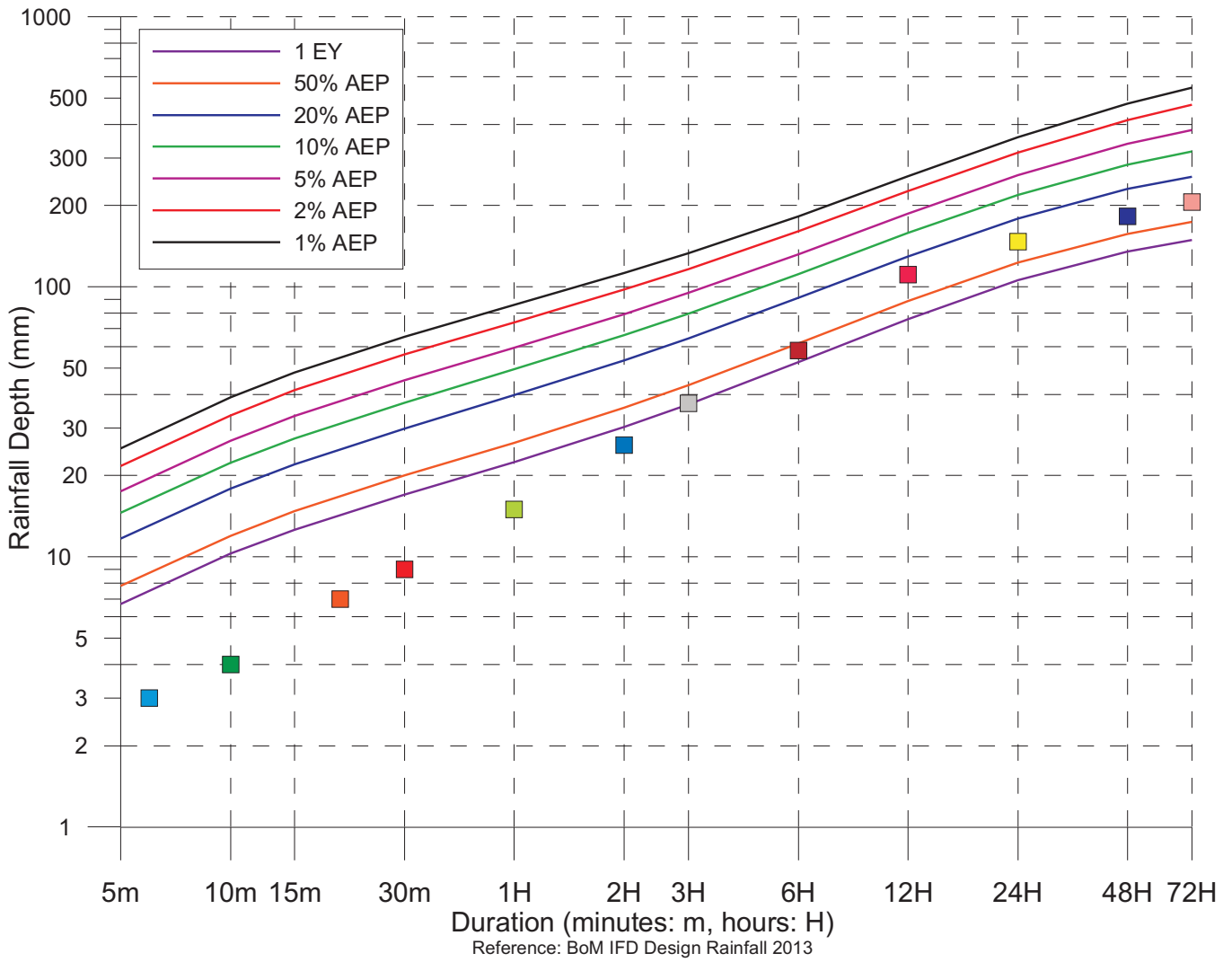
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>





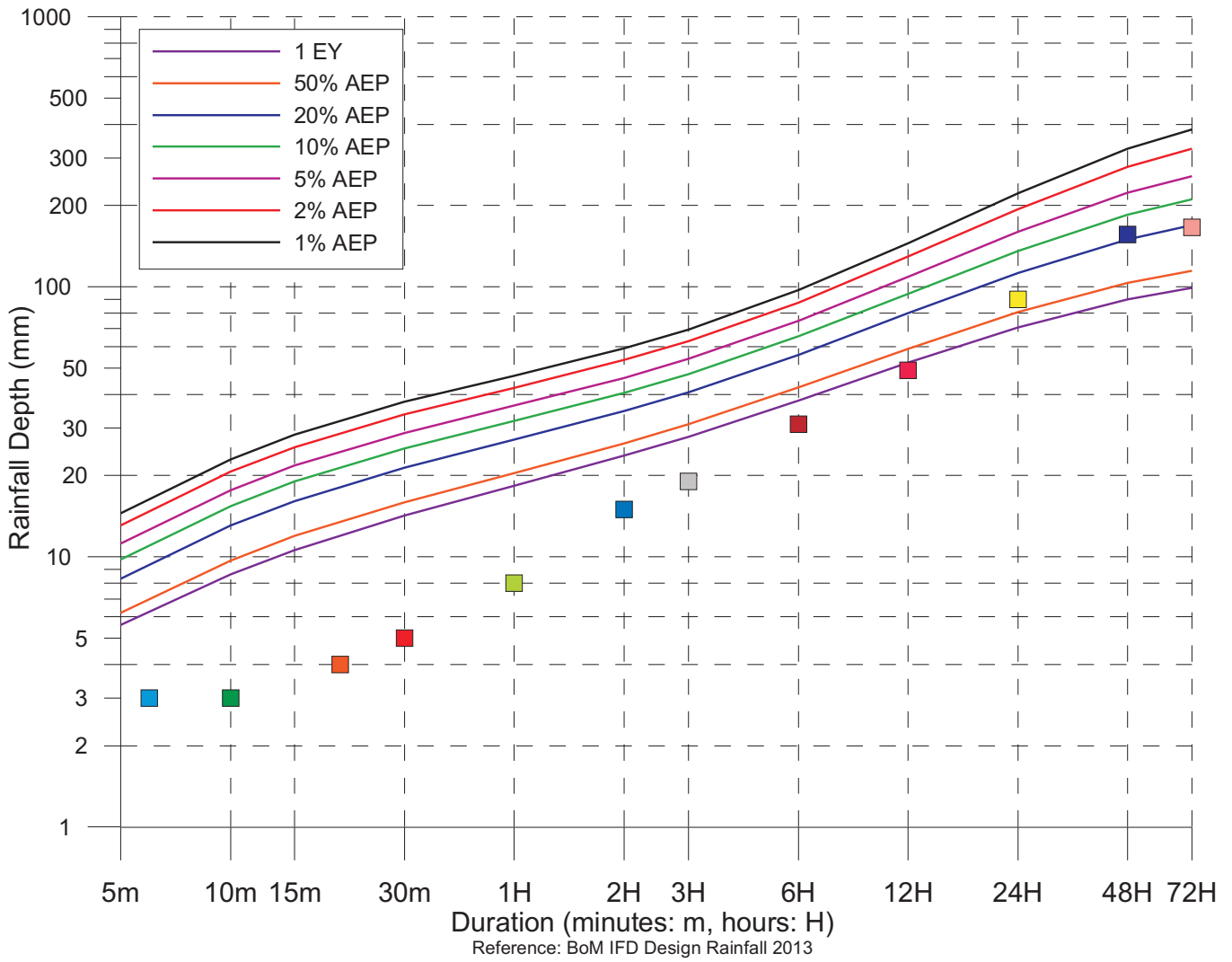
Burrill Lake Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	21:00_26/08/2015
10m	6.0	21:00_26/08/2015
20m	7.0	04:38_25/08/2015
30m	10.0	04:24_25/08/2015
1H	15.0	04:18_25/08/2015
2H	25.0	04:18_25/08/2015
3H	34.0	03:20_25/08/2015
6H	62.0	02:38_25/08/2015
12H	101.0	02:20_25/08/2015
24H	134.0	22:20_24/08/2015
48H	188.0	02:20_24/08/2015
72H	213.0	02:20_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Lake Tabourie Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	3.0	20:12_25/08/2015
10m	4.0	12:46_25/08/2015
20m	7.0	12:46_25/08/2015
30m	9.0	12:46_25/08/2015
1H	15.0	12:46_25/08/2015
2H	26.0	12:08_25/08/2015
3H	37.0	11:04_25/08/2015
6H	58.0	08:02_25/08/2015
12H	111.0	02:12_25/08/2015
24H	147.0	21:34_24/08/2015
48H	182.0	06:24_24/08/2015
72H	206.0	06:24_24/08/2015

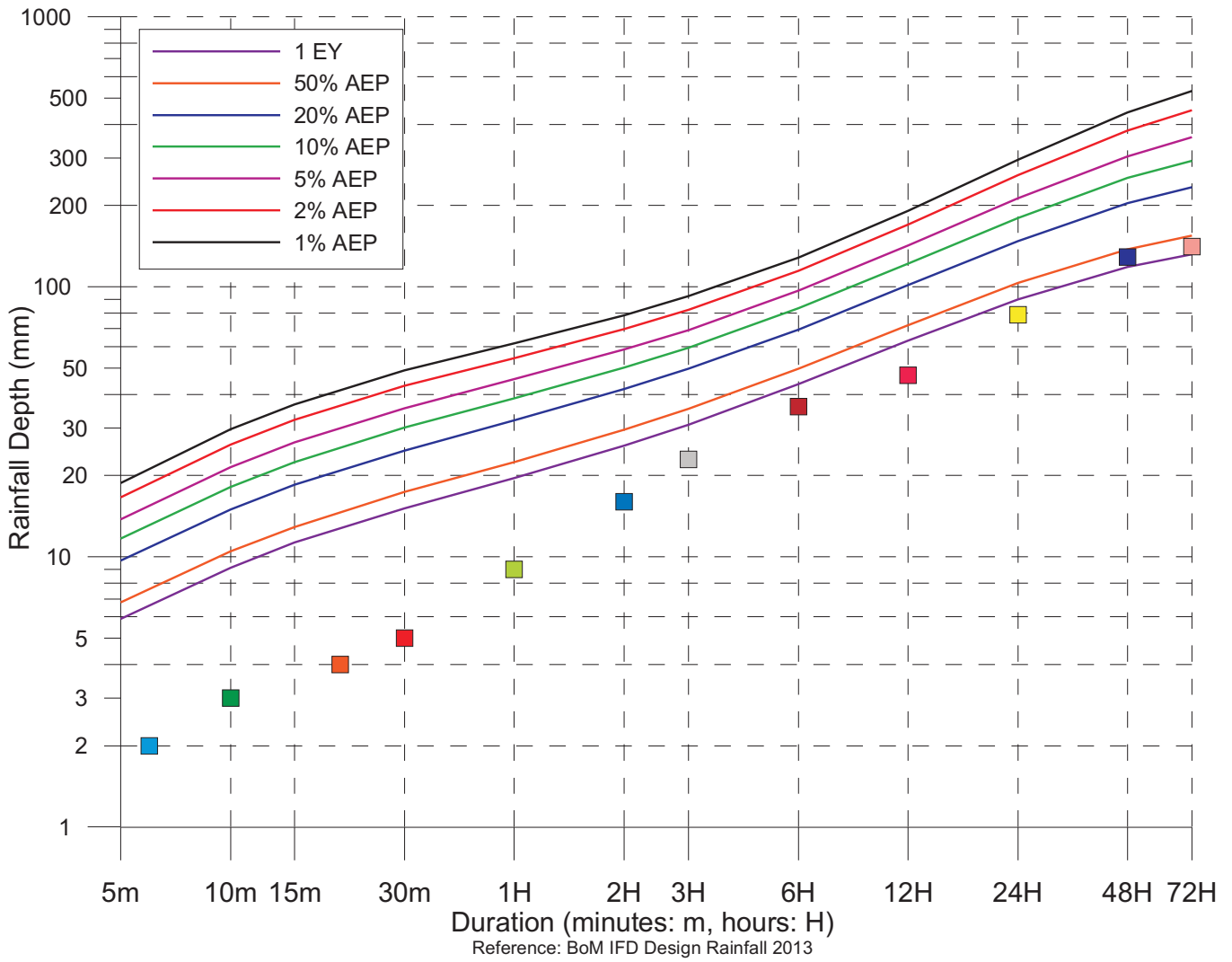
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Majors Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	3.0	11:52_17/08/2015
10m	3.0	18:24_25/08/2015
20m	4.0	17:54_24/08/2015
30m	5.0	17:54_24/08/2015
1H	8.0	17:48_24/08/2015
2H	15.0	17:42_24/08/2015
3H	19.0	14:34_25/08/2015
6H	31.0	17:42_24/08/2015
12H	49.0	13:56_25/08/2015
24H	90.0	11:00_25/08/2015
48H	156.0	14:52_24/08/2015
72H	166.0	04:28_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

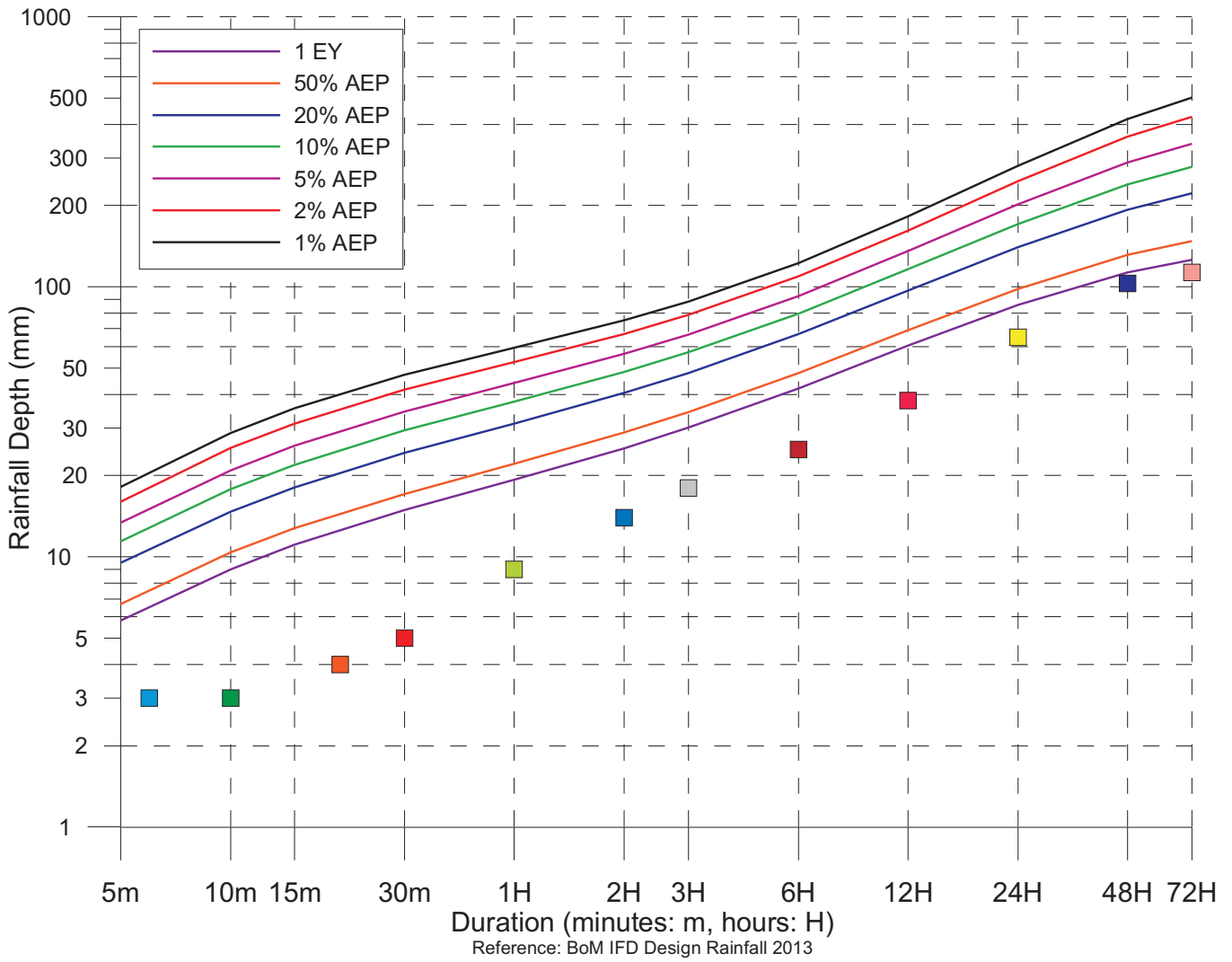




Araluen Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	2.0	08:32_26/08/2015
10m	3.0	20:36_24/08/2015
20m	4.0	20:36_24/08/2015
30m	5.0	19:22_24/08/2015
1H	9.0	19:06_24/08/2015
2H	16.0	18:06_24/08/2015
3H	23.0	17:58_24/08/2015
6H	36.0	17:46_24/08/2015
12H	47.0	17:46_24/08/2015
24H	79.0	17:26_24/08/2015
48H	129.0	14:00_24/08/2015
72H	141.0	07:16_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

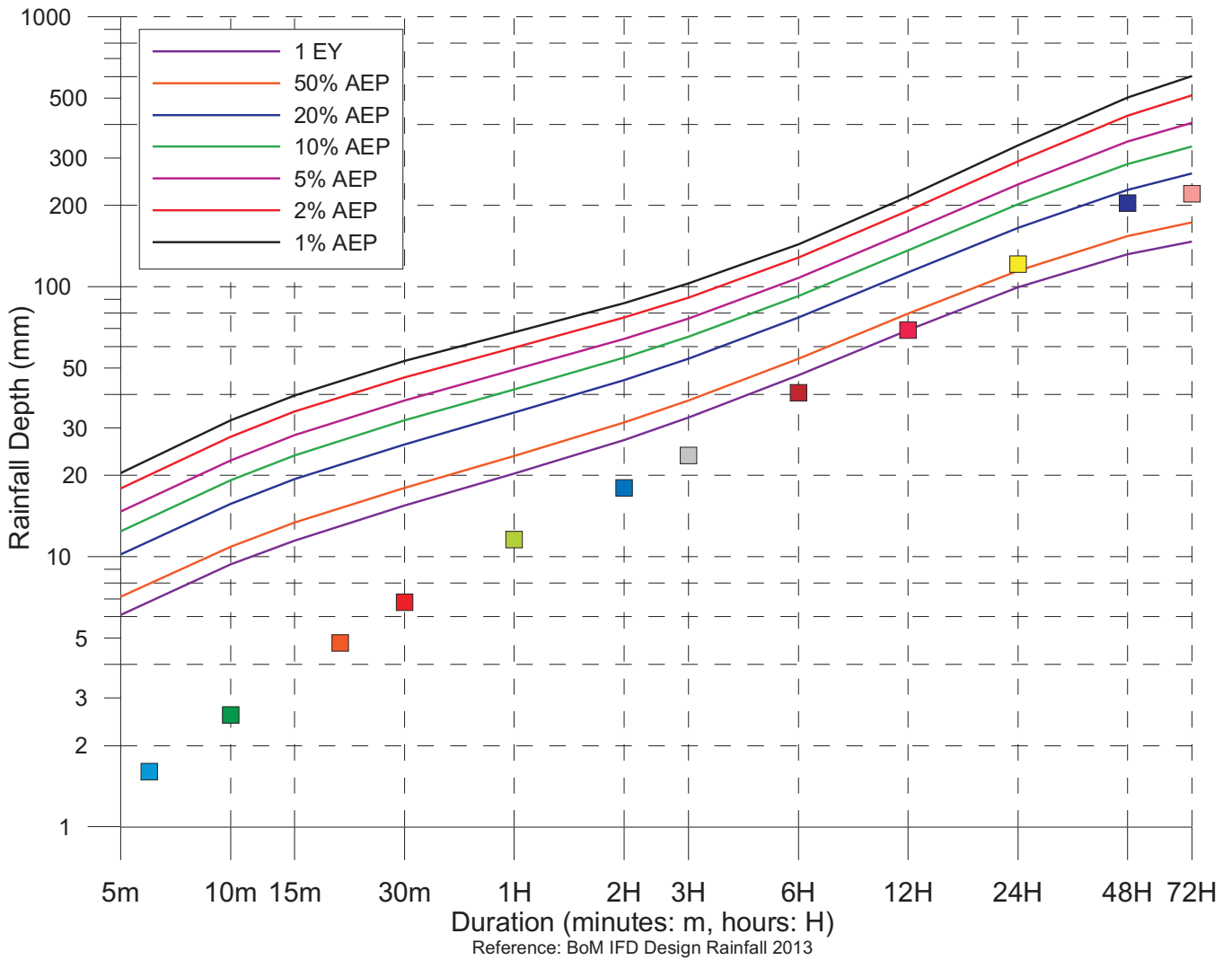




Bettowynd Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	3	06:30_26/08/2015
10m	3	06:30_26/08/2015
20m	4	18:10_24/08/2015
30m	5	18:10_24/08/2015
1H	9	17:48_24/08/2015
2H	14	17:48_24/08/2015
3H	18	17:48_24/08/2015
6H	25	17:48_24/08/2015
12H	38	15:14_24/08/2015
24H	65	17:48_24/08/2015
48H	103	15:14_24/08/2015
72H	113	01:36_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

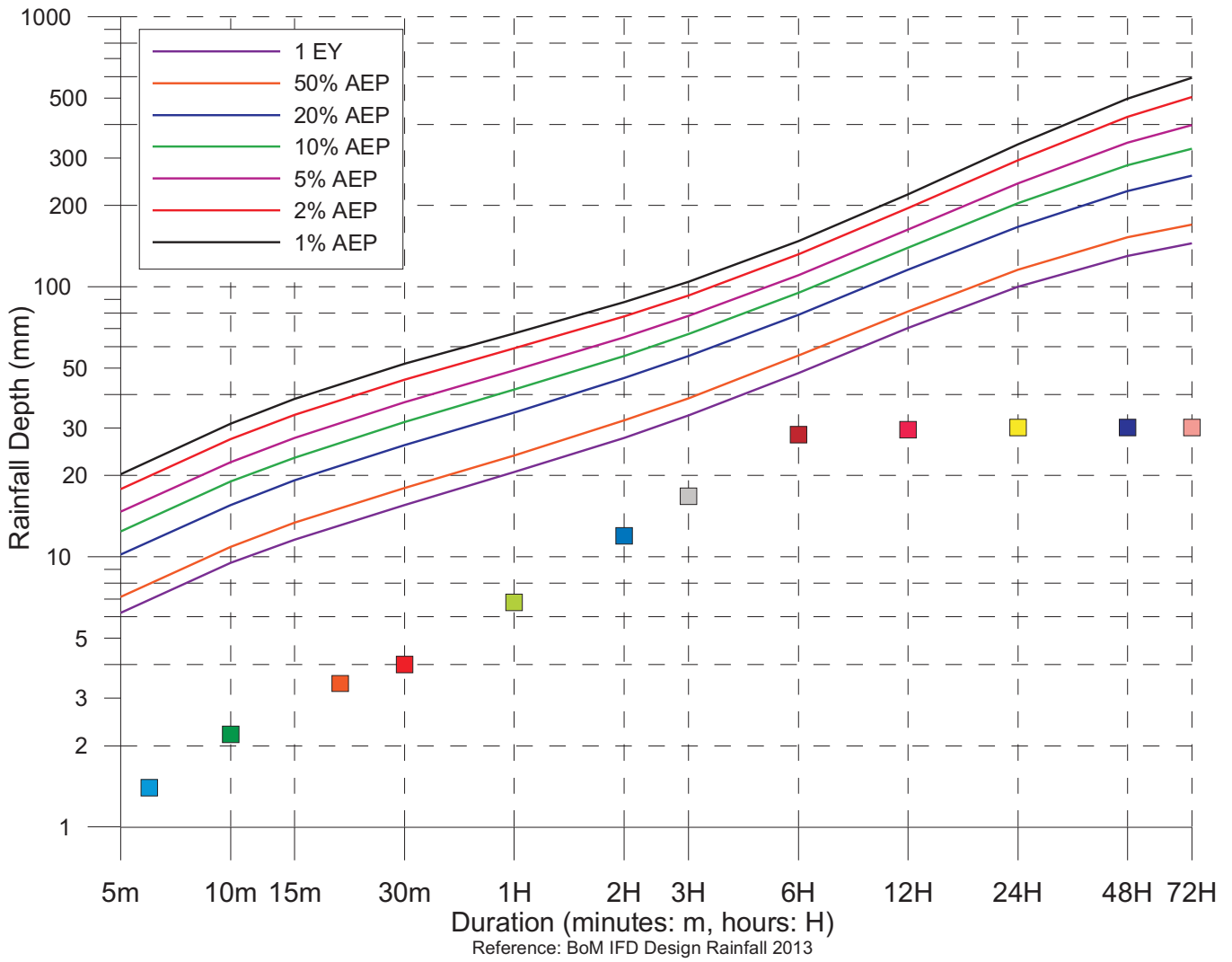




McGregors Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.6	08:26_26/08/2015
10m	2.6	16:50_25/08/2015
20m	4.8	16:50_25/08/2015
30m	6.8	16:50_25/08/2015
1H	11.6	16:32_25/08/2015
2H	18.0	15:20_25/08/2015
3H	23.8	17:36_24/08/2015
6H	40.4	14:48_25/08/2015
12H	69.2	13:48_25/08/2015
24H	121.0	06:56_25/08/2015
48H	203.6	14:08_24/08/2015
72H	221.0	23:28_23/08/2015

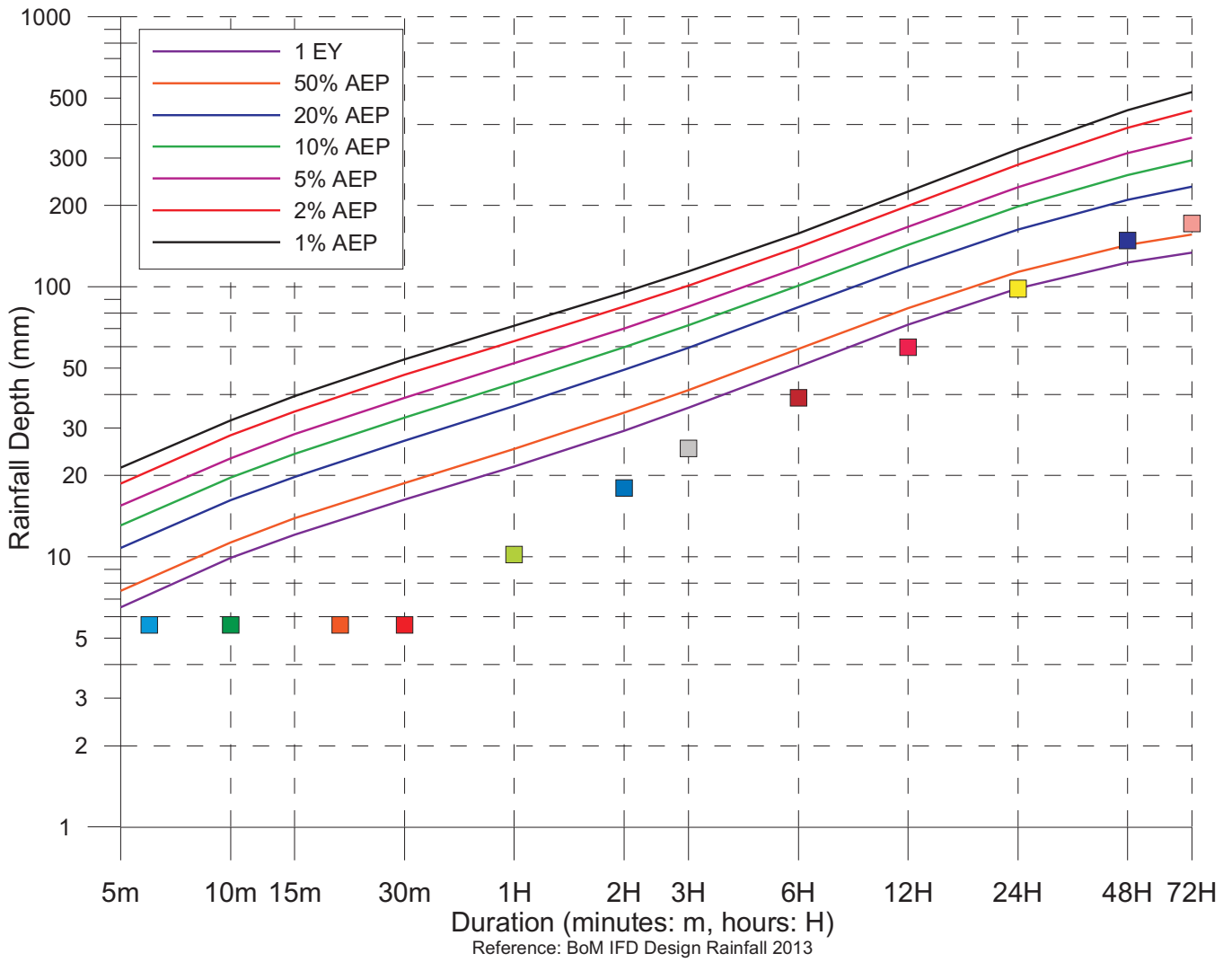
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>





Burra Creek Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.4	05:40_02/08/2015
10m	2.2	05:36_02/08/2015
20m	3.4	05:30_02/08/2015
30m	4.0	18:46_24/08/2015
1H	6.8	04:46_02/08/2015
2H	12.0	03:54_02/08/2015
3H	16.8	02:50_02/08/2015
6H	28.4	01:10_02/08/2015
12H	29.6	00:50_02/08/2015
24H	30.2	00:50_02/08/2015
48H	30.2	00:50_02/08/2015
72H	30.2	00:50_02/08/2015

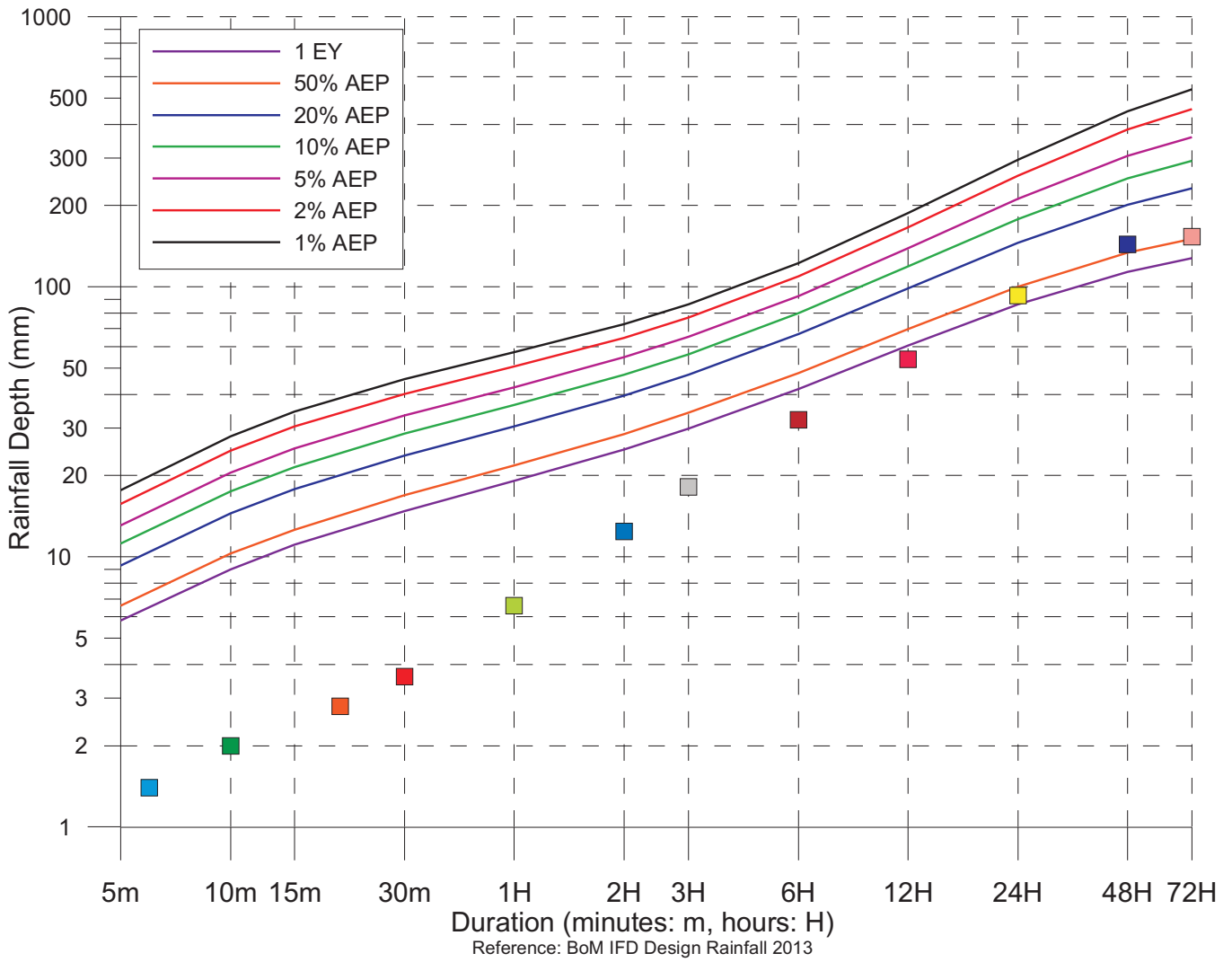
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Moruya Airport Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.6	14:58_25/08/2015
10m	5.6	14:58_25/08/2015
20m	5.6	14:58_25/08/2015
30m	5.6	14:58_25/08/2015
1H	10.2	14:28_25/08/2015
2H	18.0	14:28_25/08/2015
3H	25.2	13:28_25/08/2015
6H	38.8	10:28_25/08/2015
12H	59.8	06:58_25/08/2015
24H	98.4	06:58_25/08/2015
48H	148.4	13:58_24/08/2015
72H	171.6	21:58_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

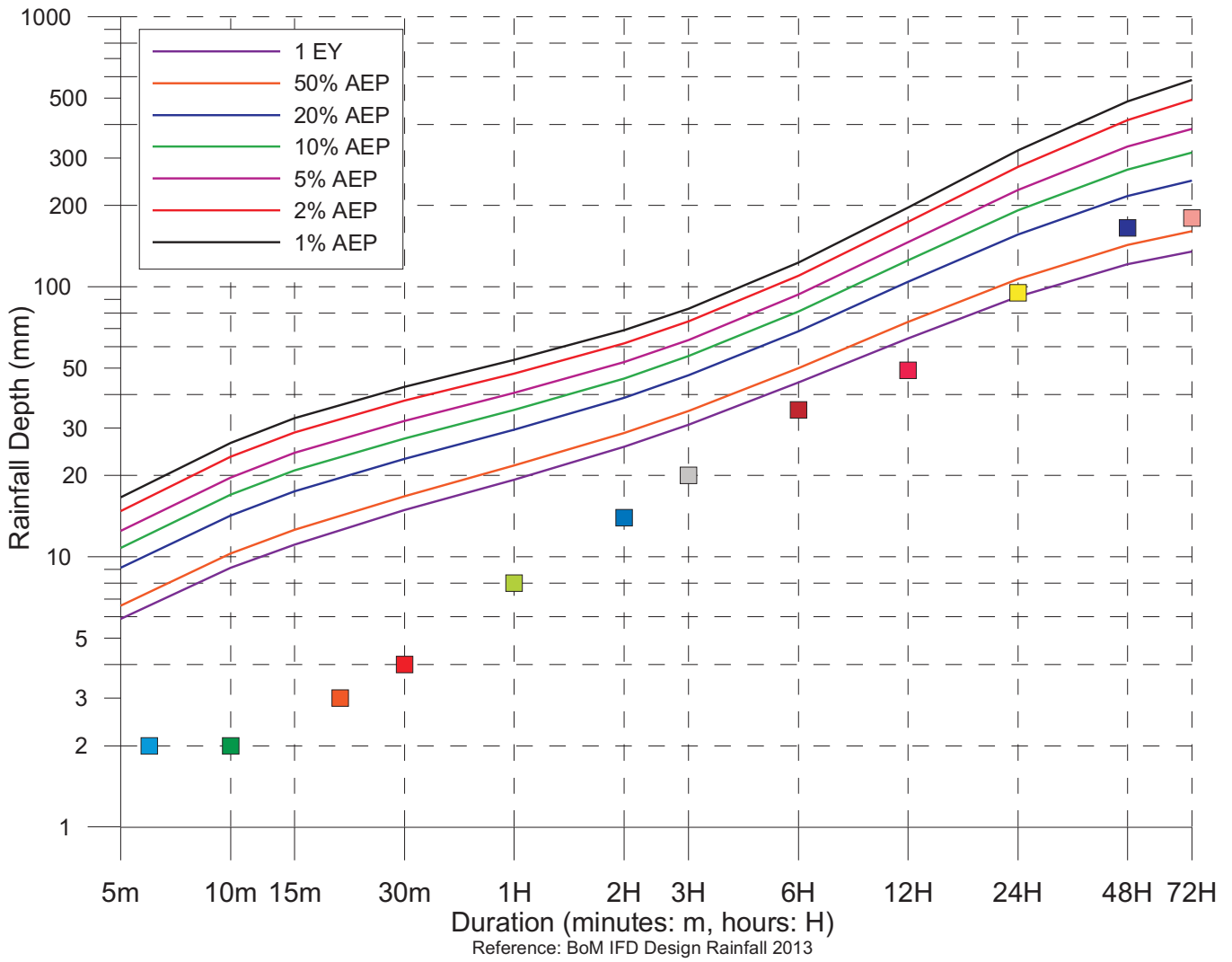




Bendethera Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	1.4	22:36_23/08/2015
10m	2.0	22:36_23/08/2015
20m	2.8	22:32_23/08/2015
30m	3.6	15:38_25/08/2015
1H	6.6	15:24_25/08/2015
2H	12.4	14:42_25/08/2015
3H	18.2	13:18_25/08/2015
6H	32.2	11:10_25/08/2015
12H	54.0	06:22_25/08/2015
24H	93.0	18:20_24/08/2015
48H	143.4	13:50_24/08/2015
72H	153.4	22:32_23/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>

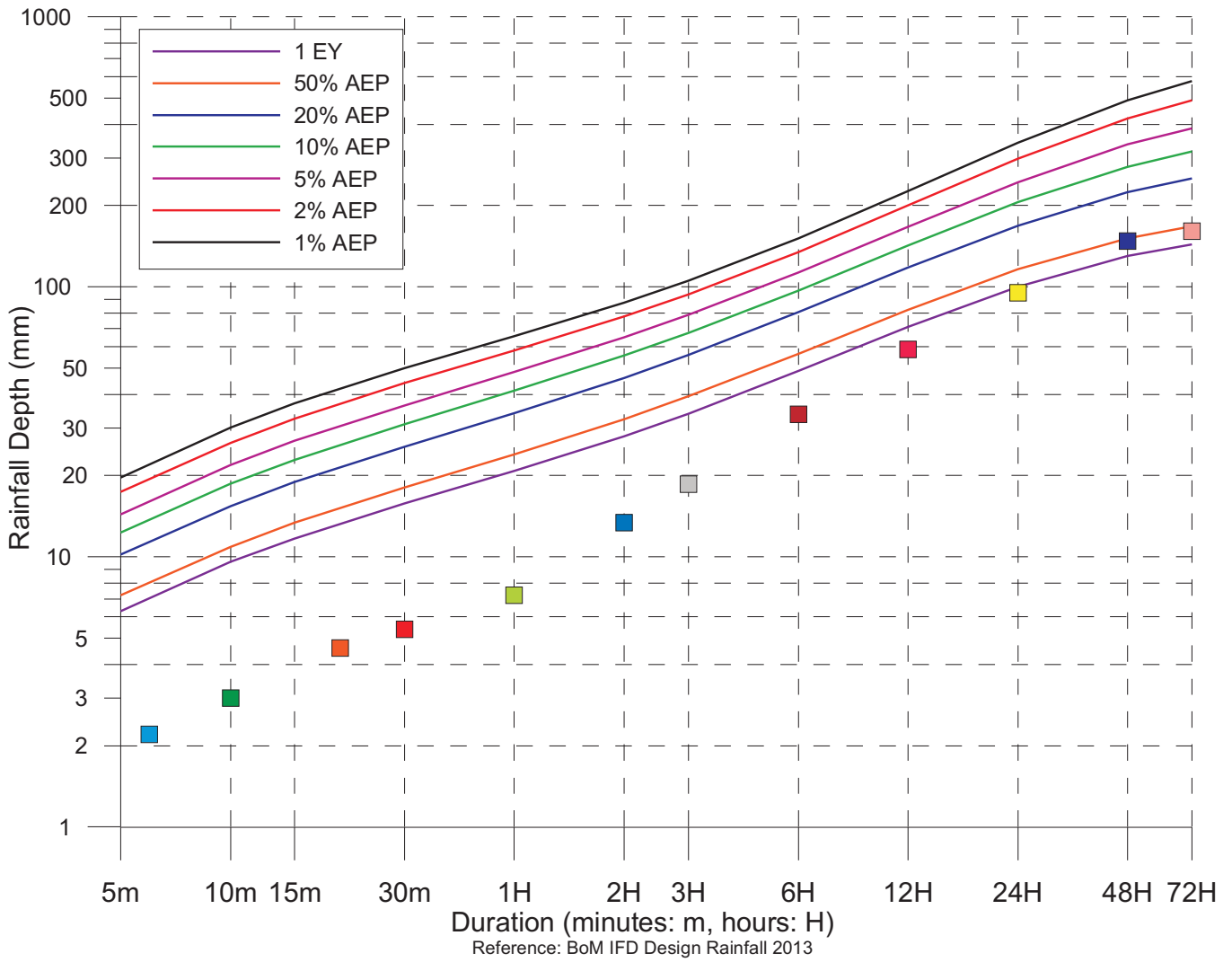




Plumwood Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	2.0	19:20_25/08/2015
10m	2.0	19:20_25/08/2015
20m	3.0	21:20_24/08/2015
30m	4.0	21:20_24/08/2015
1H	8.0	18:28_24/08/2015
2H	14.0	17:08_24/08/2015
3H	20.0	16:50_24/08/2015
6H	35.0	17:02_24/08/2015
12H	49.0	05:16_25/08/2015
24H	95.0	16:50_24/08/2015
48H	165.0	15:46_24/08/2015
72H	180.0	04:32_24/08/2015

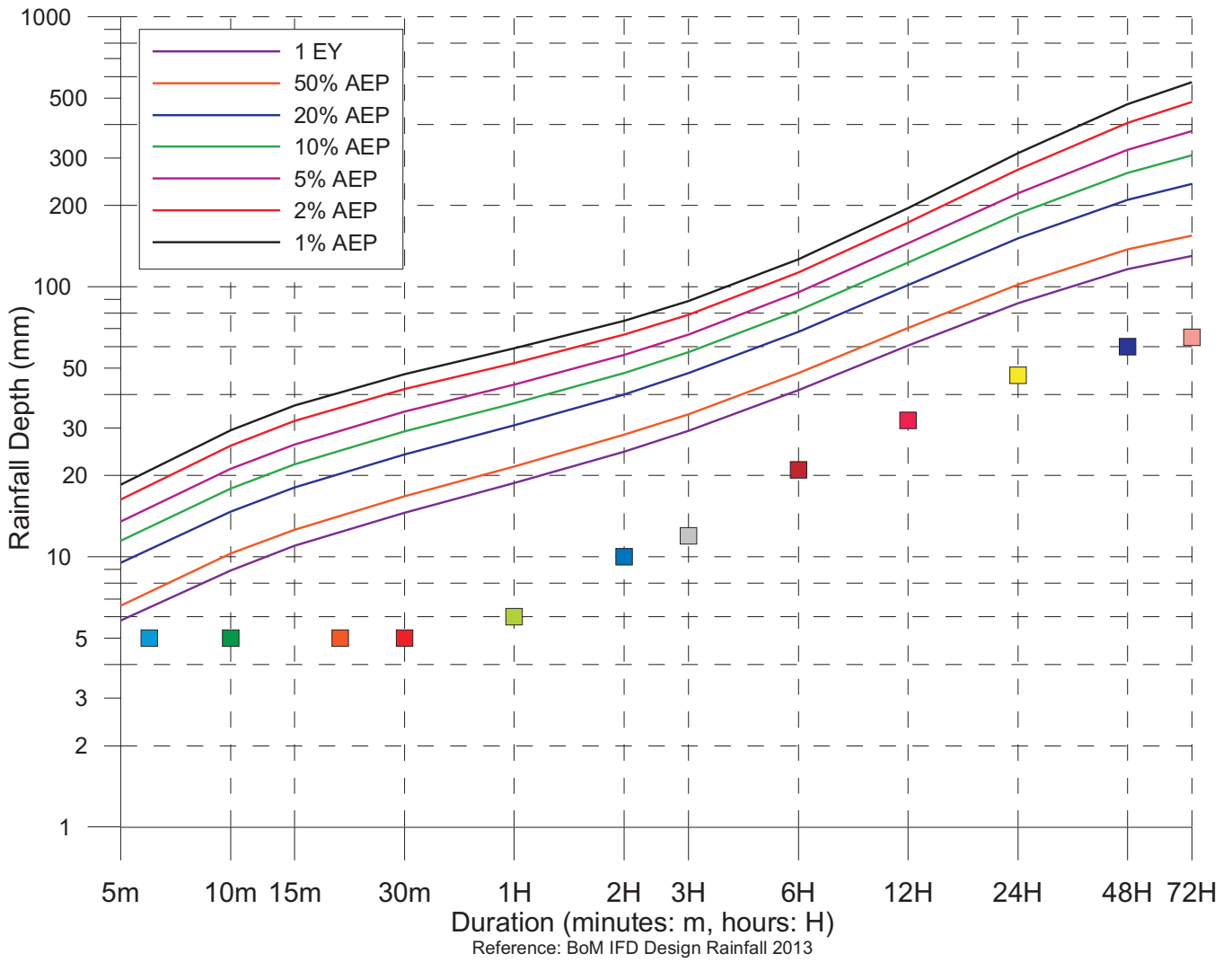
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>





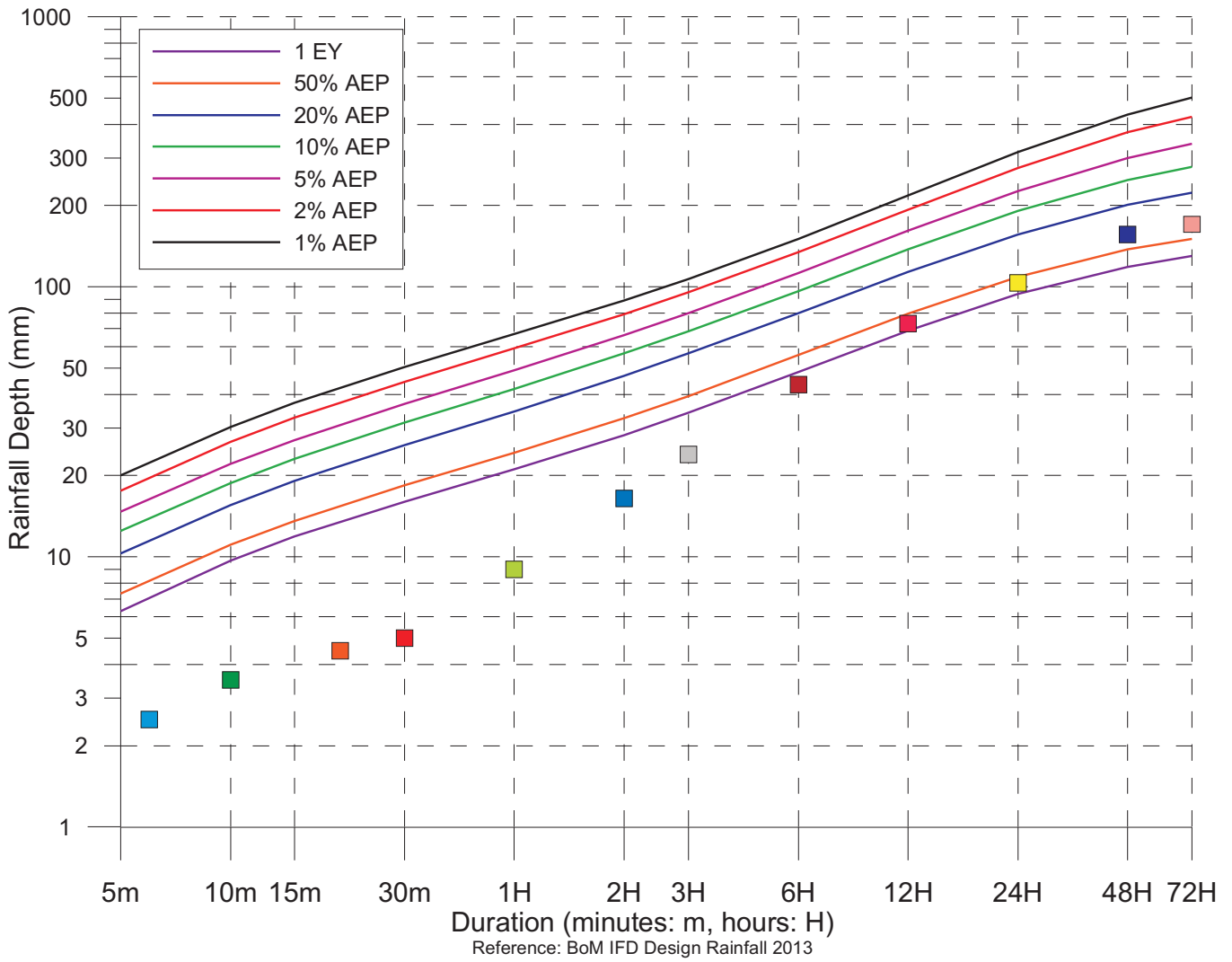
Eurobodalla Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	2.2	20:44_25/08/2015
10m	3.0	16:50_26/08/2015
20m	4.6	06:14_26/08/2015
30m	5.4	06:14_26/08/2015
1H	7.2	10:36_25/08/2015
2H	13.4	09:36_25/08/2015
3H	18.6	08:44_25/08/2015
6H	33.8	05:20_25/08/2015
12H	58.6	04:36_25/08/2015
24H	95.2	05:16_25/08/2015
48H	147.6	12:30_24/08/2015
72H	160.8	01:32_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
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Belowra Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	5.0	19:28_25/08/2015
10m	5.0	19:28_25/08/2015
20m	5.0	19:28_25/08/2015
30m	5.0	19:28_25/08/2015
1H	6.0	02:24_25/08/2015
2H	10.0	16:32_24/08/2015
3H	12.0	14:50_24/08/2015
6H	21.0	16:32_24/08/2015
12H	32.0	15:46_24/08/2015
24H	47.0	14:50_24/08/2015
48H	60.0	21:02_23/08/2015
72H	65.0	21:02_23/08/2015

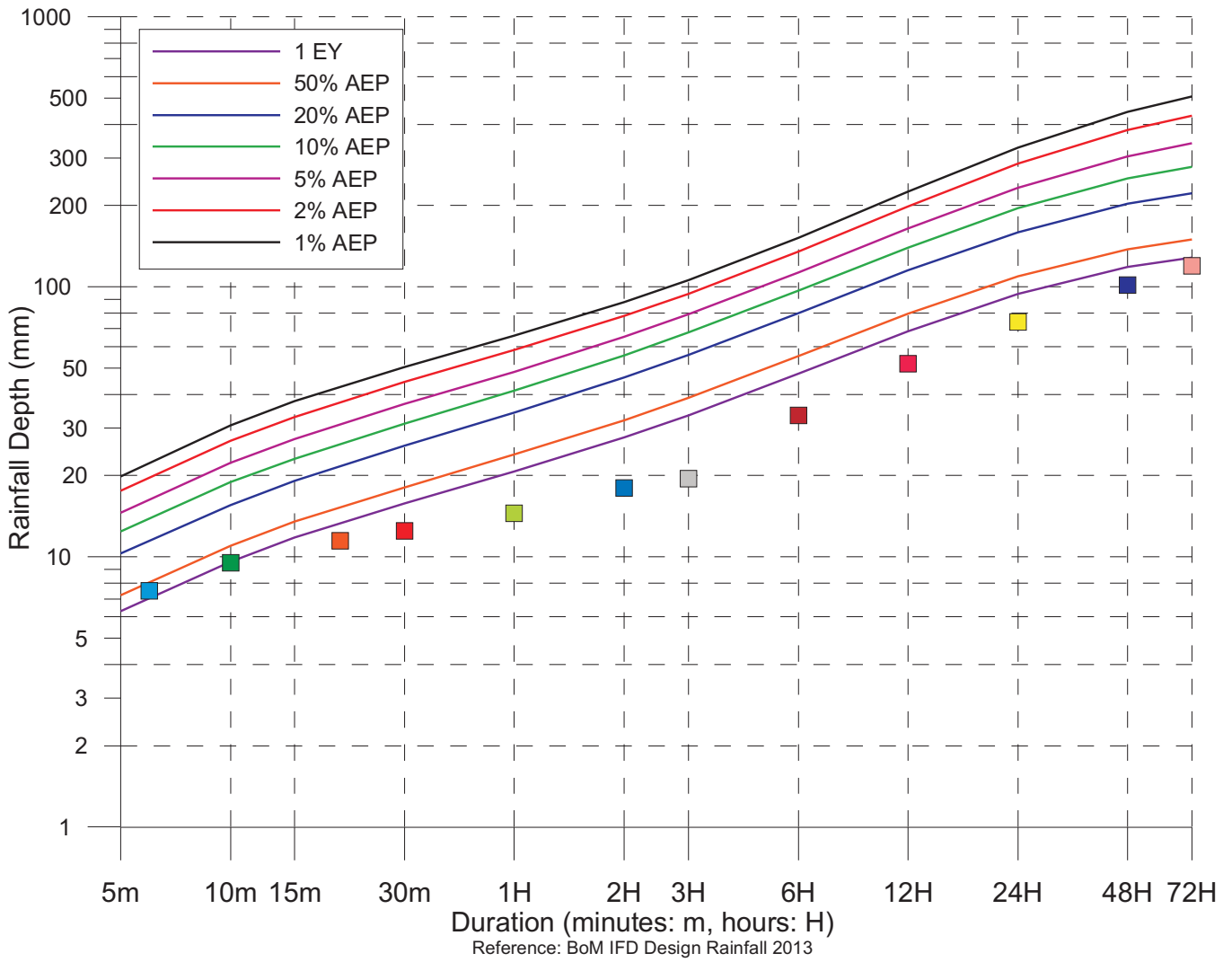
The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>



Barlows Bay Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	2.5	16:50_27/08/2015
10m	3.5	05:56_26/08/2015
20m	4.5	05:50_26/08/2015
30m	5.0	13:58_25/08/2015
1H	9.0	13:56_25/08/2015
2H	16.5	13:40_25/08/2015
3H	24.0	12:36_25/08/2015
6H	43.5	09:40_25/08/2015
12H	73.0	04:16_25/08/2015
24H	103.5	15:54_24/08/2015
48H	156.5	08:54_24/08/2015
72H	170.5	00:16_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
 - The term Annual Exceedance Probability (AEP) will be used for design events (rainfalls and floods) including and rarer (less frequent) than those with a 10% AEP.
 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
 For further information on the relationship between EY, AEP, ARI, and uses in engineering design, please refer to BoM Frequently Asked Questions under New AR&R probability terminology: <http://www.bom.gov.au/water/designRainfalls/ifd/ifd-faq.shtml>





Regatta Point Rainfall Intensity 01 August 2015 – 31 August 2015		
Duration (minutes: m) (hours: H)	Rainfall Depth (mm)	Time/Date
6m	7.5	16:38_27/08/2015
10m	9.5	16:36_27/08/2015
20m	11.5	16:34_27/08/2015
30m	12.5	16:36_27/08/2015
1H	14.5	16:34_27/08/2015
2H	18.0	16:34_27/08/2015
3H	19.5	16:34_27/08/2015
6H	33.5	09:54_25/08/2015
12H	52.0	04:54_25/08/2015
24H	74.0	16:14_24/08/2015
48H	101.5	15:44_24/08/2015
72H	120.0	19:34_24/08/2015

The Bureau of Meteorology (with reference to the Australian Rainfall and Runoff, Institute of Engineers 2013) states: AEP is defined as *The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.*
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 - Events that are more frequent than those with a 50% AEP will be expressed as X Exceedances per Year (EY).
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Appendix D

DPI Water water level stations local datum to AHD conversion table

Site Number	Site name	Latitude	Longitude	Datum	Conversion (m)
214003	Macquarie Rivulet @ Albion park	-34.5757	150.7062	Assumed datum	
214010	Minnamurra River @ Browns Lane	-34.6441	150.8062	Assumed datum	
215002	Shoalhaven River @ Warri Bridge	-35.3399	149.7385	AHD	584.655m
215004	Corang River @ Hockeys	-35.1473	150.0331	AHD	541.566m
215007	Mongarlowe River @ Monga	-35.5401	149.9276	Assumed datum	
215008	Shoalhaven River @ Kadoona	-35.7888	149.6406	Assumed datum	
215014	Bungonia CK @ Bungonia	-34.8176	149.9898	Assumed datum	
215016	Bomaderry CK @ Bomaderry	-34.8398	150.5870	AHD	25.822m
215018	Broughton Ck @ Broughton Vale	-34.7569	150.7166	Assumed datum	
215019	Jaspers Brush CK @ Jaspers Brush	-34.8015	150.6688	AHD	8.560m
216002	Clyde River @ Brooman	-35.4681	150.2394	Assumed datum	
216004	Currambene CK @ Falls Creek	-34.9684	150.6001	Assumed datum	
216009	Buckenbowra CK @ Buckenbowra	-35.7125	150.0354	AHD	179.583m
217006	Araluen CK @ Neringla Rd	-35.6568	149.8071	Assumed datum	
217007	Deua River @ Riverview	-35.9084	150.0054	AHD	2.230m
218001	Tuross River @ Tuross Vale	-36.2646	149.5103	AHD	933.490m
218005	Tuross River Downstream Wadbilli	-36.1959	149.7616	Assumed datum	
218007	Wadbilliga River @ Wadbilliga	-36.2570	149.6926	AHD	175.595m
218008	Tuross River @ Eurobodalla	-36.1289	150.0032	AHD	0.563m