

Supporting Information for “Streamflow Flash Droughts and the Highly Responsive Behaviour of Streamflows to Drying”

Pallavi Goswami^{1,2}, Ailie J. E. Gallant^{1,2,3,4}, Ulrike Bende-Michl⁵

¹School of Earth, Atmosphere and Environment, Monash University, Clayton, Kulin Nations, Victoria,
Australia

²National Environmental Science Program Climate Systems Hub, Clayton, Kulin Nations, Victoria,
Australia

³Australian Research Council Centre of Excellence for Climate Extremes, Clayton, Kulin Nations,
Victoria, Australia

⁴Australian Research Council Centre of Excellence for 21st Century Weather, Clayton, Kulin Nations,
Victoria, Australia

⁵Bureau of Meteorology, Kulin Nations, Victoria, Australia

Contents of this file:

1. Tables S1 and S2
2. Figure S1

Corresponding author: Pallavi Goswami, pallavi.goswami1@monash.edu

Table S1. Details of the gauges and their associated catchments used in the study

Gauge ID	Site Name	Jurisdiction (state)	Area km ²	Degree east	Degree south	Start date	End date
222202	Brodrribb Riber River at Sardine Creek	VIC	648.1	148.55	37.512	1/1/1950	28/2/2022
238230	Stokos River at Teakettle	VIC	197	141.41	37.87	19/11/1974	28/2/2022
130004A	Stokos River at Old Stn	QLD	391.6	150.8206	23.8191	3/10/1963	28/2/2022
235224	Gellibrand River at Burrupa	VIC	1042	143.25	38.7	22/3/1969	28/2/2022
141008A	Eudlo Creek at Kiels Mountain	QLD	55.5	153.02	26.66	6/1/1982	13/5/2021
146012A	Curumbin Creek at Nicolls Bridge	QLD	29	153.423	28.1788	21/2/1970	28/2/2022
235203	Curdies River River at Curdie	VIC	721.3	142.96	38.445	25/1/1975	28/2/2022
212260	Kowmung River at Cedar Ford	NSW	713	150.2438	33.9473	19/5/1968	28/2/2022
235234	Love Creek at Gellibrand	VIC	76.6	143.57	38.483	3/5/1979	28/2/2022
116015A	Blunder Creek at Woorooro	QLD	127.4	145.4374	17.7362	22/10/1966	28/2/2022
221208	Wingan River at Wingan Inlet National Park	VIC	423.2	149.49	37.689	24/6/1979	28/2/2022
124002A	StHelens Creek at Calen	QLD	120.5	148.7586	20.9075	8/2/1973	28/2/2022
224213	Dargo River at Lower Dargo Rd	VIC	669.7	147.2713	37.4937	25/5/1973	28/2/2022
227211	Agnes River at Toora	VIC	64.9	146.37	38.64	15/11/1960	28/2/2022
138903A	Tinana Creek at Bauple East	QLD	784.3	152.72	25.82	8/7/1981	28/2/2022
136202D	Barambah Creek at Litzows	QLD	646.6	152.0438	26.3012	2/10/1964	28/2/2022
225110A	Jordan River at D/S Johnsons Creek	VIC	132.1	146.3185	37.6835	1/9/1981	28/2/2022
143009A	Brisbane River at Gregors Creek	QLD	3875.5	152.4087	26.9964	8/2/1962	28/2/2022
112102A	Liverpool Creek at Upper Japoonvale	QLD	77.8	145.9052	17.7152	27/5/1970	28/2/2022
236205	Merri River at Woodford	VIC	893.1	142.48	38.316	18/6/1965	28/2/2022
221207	Errinundra River at Errinundra	VIC	159.2	148.9137	37.4471	22/2/1968	28/2/2022
318191	Break O'Day River at at Killymoon	TAS	186.9	148.0567	41.5967	6/11/1983	28/2/2022
221209	Cann(East Branch River at Weeragua	VIC	147	149.21	37.356	25/10/1972	28/2/2022
224214	Wentworth River at Tabberabbera	Vic	438.9	147.3929	37.4946	15/8/1974	28/2/2022
304499	Tyenna River at Newbury	TAS	210.2	146.7105	42.707	19/3/1965	28/2/2022
234201	Woody Yaloak River at Cressy (Yarima)	VIC	1166.5	143.64	38.012	5/5/1963	28/2/2022
238208	Jimmy Creek at Jimmy Creek	VIC	23.3	142.5082	37.3738	27/1/1950	28/2/2022
215207	Shoalhaven river at Fossickers Flat	NSW	4659.9	150.1833	34.8217	16/7/1977	28/2/2022
145010A	Running Creek at 5.8KM Deickmans Bridge	QLD	129	152.8913	28.2462	28/11/1965	28/2/2022
318181	South Esk River at above Macquarie River	TAS	3285.1	147.2033	41.5983	21/12/1956	28/2/2022
225219	Macalister River at Glencairn	VIC	570.4	146.5662	37.5161	9/4/1967	28/2/2022
302200	Swan river at The Grange	TAS	455.5	148.075	42.0467	30/5/1964	28/2/2022
237206	Eumeralla River at Codrington	VIC	474	141.94	38.258	21/11/1973	28/2/2022
221211	Combienbar River at Combienbar	VIC	181.8	148.98	37.44	13/8/1974	28/2/2022
222206	Buchan River at Buchan	VIC	850.2	148.1746	37.4946	1/1/1950	28/2/2022
111005A	Mulgrave River at The Fisheries	QLD	358.2	145.7248	17.1832	30/10/1966	28/2/2022
145101D	Albert River at Lumeah Number 2	QLD	165.9	153.0455	28.053	17/3/1954	28/2/2022
314213	Black River at South Forest	TAS	318.5	145.2975	40.8725	30/5/1968	28/2/2022
237207	Surry River at Heathmere	VIC	312.4	141.66	38.243	25/9/1975	28/2/2022
227225	Tarra River at Fischers	VIC	20.7	146.5551	38.4688	25/4/1968	28/2/2022
225213	Aberfeldy River at Beardmore	VIC	312.5	146.43	37.854	29/6/1963	28/2/2022
130324A	Dawson River at Utopia Downs	QLD	6026	149.3299	25.7447	19/6/1966	28/2/2022
116011A	Millstream River at Ravenshoe	QLD	90.1	145.4775	17.605	23/3/1962	28/2/2022
221212	Bemm River at Princes HWY	VIC	731.2	148.9	37.606	2/5/1975	28/2/2022
138110A	Mary River at Bellbird Ck	QLD	486	152.7	26.63	2/10/1959	28/2/2022
307473	Davey River at D/S Crossing Rv	TAS	698.6	145.95	43.1412	28/2/1964	28/2/2022
314207	Leven River at at Bannons Bridge	TAS	499.3	146.09	41.2512	20/6/1963	28/2/2022
146095A	Tallebudgera Creek at Tallebudgera Ck Rd	QLD	55.8	153.4038	28.1492	5/6/1970	28/2/2022
132001A	Calliope River at Castlehope	QLD	1287.9	151.1	23.99	1/1/1950	28/2/2022
113004A	Cochable Creek at Powerline	QLD	95.5	145.6287	17.7396	23/12/1966	28/2/2022
306119	Huon River above Frying PanCreek	TAS	1823.9	146.84	43.0367	1/1/1950	1/7/2016
227236	Powlett River at D/S Foster Ck Junction	VIC	225.4	145.71	38.559	20/5/1979	28/2/2022
116010A	Blencoe Creek at Blencoe Falls	QLD	223.7	145.5369	18.2044	2/10/1960	28/2/2022
114001A	Murray River at Upper Murray	QLD	155.8	145.8054	18.1069	28/5/1970	28/2/2022
111007A	Mulgrave River at Peets Br	QLD	522.8	145.76	17.13	2/3/1972	28/2/2022
227237	Franklin River at Toora	VIC	75.3	146.31	38.63	10/6/1979	28/2/2022
140002A	Teewah Creek at Coops Coner Tm	QLD	57.8	153.0426	26.0572	19/9/1974	28/2/2022
108002A	Daintree River at Bairds	QLD	907.3	145.2819	16.1788	27/9/1968	28/2/2022
145107A	Canungra Creek at Main Rd Bridge	QLD	102.3	153.1587	27.9962	26/1/1973	28/2/2022
318076	North Esk River at Ballroom	TAS	379.8	147.3843	41.4937	1/1/1950	28/2/2022
227200	Tarra River at Yarram	VIC	223.2	146.68	38.538	5/3/1965	28/2/2022
112002A	Fisher Creek at Nerada	QLD	16.2	145.908	17.5645	1/1/1950	28/2/2022
235210	Lardner Creek at Gellibrand	VIC	53.9	143.54	38.535	20/6/1964	28/2/2022
227226	Tarwin River East Branch at Dumbalk North	VIC	129.7	146.1606	38.4994	25/4/1970	28/2/2022
222217	Rodger River at Jacksons Crossing	VIC	429.1	148.36	37.41	4/6/1976	28/2/2022
314212	Cam River U/S Somerset WS	TAS	225.6	145.8367	41.06	21/3/1968	28/2/2022
224201	Wonnangatta R River at Waterford	VIC	1974.4	147.17	37.49	12/12/1965	28/2/2022
224206	Wonnangatta River at Crooked River	VIC	1099.5	147.0888	37.4062	11/3/1960	28/2/2022
235211	Kennedys Creek at Kennedys Ck	VIC	263.7	143.26	38.588	19/6/1964	28/2/2022
146010A	Coomera River at Army Camp	QLD	96.6	153.1931	28.0256	3/10/1962	28/2/2022
227202	Tarwin River at Meeniyen	VIC	1071.2	145.99	38.582	23/6/1955	28/2/2022
223202	Tambo River at Swifts Creek	VIC	899.3	147.7287	37.2677	1/1/1950	28/2/2022
314214	Duck River at Scotchtown Road	TAS	346.3	145.1183	40.8733	24/4/1966	28/2/2022
236212	BruCreeknell Creek at Cudgee	VIC	225.4	142.65	38.346	24/1/1975	28/2/2022
130302A	Dawson River at Taroom	QLD	15850.7	149.79	25.64	1/1/1950	28/2/2022
237202	Fitzroy River at Heywood	VIC	268.1	141.62	38.126	12/10/1968	28/2/2022
221210	Genoa River at The Gorge	VIC	844.1	149.5195	37.417	24/8/1972	28/2/2022
112101B	South Johnstone River at Upstream Central Mill	QLD	397.7	145.9791	17.6089	2/10/1974	28/2/2022
235202	Gellibrand River River at Upper Gelliberand	VIC	52.7	143.66	38.564	1/1/1950	28/2/2022
116013A	Millstream river at Archer Creek	QLD	309.3	145.3411	17.6513	26/12/1961	28/2/2022
221201	Cann(West Branch River at Weeragua	VIC	323.2	149.2	37.373	23/2/1957	28/2/2022
235205	Arkins Creek West Branch at Wyelangta	VIC	4.5	143.4437	38.6382	14/2/1958	28/2/2022
227231	Bass River at Glen Forbes South	VIC	240.2	145.51	38.467	31/3/1973	28/2/2022
305202	Snug Rivulet at U/S Snug Tiers Rd Bridge	TAS	18.3	147.2367	43.0708	14/2/1975	28/2/2022
319204	Pipers River D/S Yarrow Creek	TAS	299.5	147.11	41.0667	28/4/1972	28/2/2022
317200	Rubican River at Tidal Limit	TAS	257.5	146.5667	41.2567	24/6/1967	28/2/2022
145011A	Teviot Brook at Croftby	QLD	85.1	152.5712	28.148	9/2/1966	28/2/2022
237205	Darlot Creek at Homerton Br	VIC	713.7	141.77	38.15	8/11/1969	28/2/2022
125005A	BlaCreeks Creek at Whitefords	QLD	506.8	148.8351	21.3228	14/12/1973	28/2/2022
405234	Seven Creeks River at D/S of Polly McQuinn Weir	VIC	149.6	145.68	36.888	24/6/1965	28/2/2022
403217	Rose River at Matong North	VIC	180.3	146.5832	36.8243	2/5/1968	28/2/2022
G8140040	Daly River at Mount Nancar	NT	47651.5	130.7358	13.8308	8/12/1969	28/2/2022
422306A	Swan Creek at Swanfels	QLD	82.6	152.2832	28.1643	1/1/1950	28/2/2022
607220	Warren River at Barker Rd Crossing	WA	4103.5	115.8994	34.5217	18/5/1966	28/2/2022
403214	Happy Valley Creek at Rosewhite	VIC	138	146.8199	36.5776	30/6/1961	28/2/2022
701009	Irwin River at Mountain Bridge	WA	5223.6	115.0351	29.238	10/12/1982	28/2/2022
611004	Preston River at Boyanup Bridge	WA	817.9	115.734	33.479	2/5/1980	28/2/2022
422334A	Kings Creek at Aides Bridge	QLD	648.1	151.8624	27.9262	17/4/1969	28/2/2022
G8170002	Adelaide River at Railway Bridge	NT	638.4	131.1083	13.2413	29/10/1964	28/2/2022
G8150180	Finniss River at Gitchams	NT	1040.8	130.7621	12.9696	4/4/1969	28/2/2022
404207	Holland Creek at Kelceera	VIC	448	146.059	36.6115	11/5/1960	28/2/2022
410731	Gudgenby River at Tennent	ACT	671.6	149.0662	35.5749	14/11/1964	28/2/2022
405231	King Parrot Creek at Flowerdale	VIC	179.3	145.29	37.347	1/1/1975	28/2/2022
616013	Helena River at Ngangaguringuring	WA	316.2	116.4032	31.9387	29/3/1972	6/10/2017
401216	Big River at Jokers Creek	VIC	356.8	147.4725	36.9325	1/1/1950	28/2/2022
405217	Yea River at Devlins Bridge	VIC	360.6	145.4732	37.3837	19/4/1975	28/2/2022
401220	Tallangatta Creek at McCallums	VIC	450.5	147.34	36.213	28/7/1977	28/2/2022

Gauge ID	Site Name	Jurisdiction (state)	Area km ²	Degree east	Degree south	Start date	End date
403213	Fifteen Mile Creek at Greta South	VIC	230.9	146.2438	36.6195	17/12/1958	28/2/2022
401210	Snowy Creek at Below Granite Flat	VIC	415.7	147.4135	36.5685	26/3/1953	28/2/2022
925001A	Wenlock river at Moreton	QLD	3290.3	142.6377	12.4537	20/4/1958	28/2/2022
405245	Ford Creek at Mansfield	VIC	115.4	146.0538	37.0388	15/7/1970	28/2/2022
405251	Brankeet Creek at Ancona	VIC	121.8	145.7837	36.9689	18/10/1973	28/2/2022
607013	Lefroy Brook River at Rainbow Trail	WA	248.5	116.016	34.4275	19/4/1979	28/2/2022
422321B	Spring Creek at Killarney	QLD	31.6	152.3331	28.3538	3/10/1972	8/10/2019
405263	Goulburn River at U/S of Snake Creek Junction	VIC	328.9	146.2472	37.4628	10/5/1975	14/12/2011
402217	Flaggy Creek at Myrtleford Road Bridge	VIC	26.3	146.8763	36.3863	29/4/1970	8/11/2010
G8140063	Douglas River at D/S Old Douglas H/S	NT	831.1	131.3396	13.798	7/9/1957	28/2/2022
G8200045	South Alligator River at El Sherana	NT	1231.4	132.5196	13.5245	19/8/1958	8/6/2010
405264	Big River at D/S of Frenchman Creek Junction	VIC	335.4	146.076	37.5213	22/3/1975	28/2/2022
405218	Jamieson River at Gerrang Bridge	VIC	364.2	146.1876	37.2912	21/2/1959	28/2/2022
405214	Delatite River at Tonga Br	VIC	357.4	146.11	37.159	22/3/1957	28/2/2022
A5030502	Scott Creek at Scott Bottom	SA	29	138.6734	35.0991	29/3/1969	28/2/2022
403222	Buffalo River at Abbeyard	VIC	415	146.7012	36.9107	2/7/1965	28/2/2022
405228	Hughes Creek at Tarcombe Rd	VIC	474.8	145.28	36.95	16/5/1975	28/2/2022
G8140067	Daly River at U/S Dorisvale Crossing	NT	33226.6	131.5737	14.3633	2/1/1965	28/2/2022
405241	Rubicon River at Rubicon	VIC	127.9	145.83	37.291	14/12/1973	28/2/2022
410713	Paddy's River at Riverlea	ACT	224.4	148.9656	35.3843	31/3/1957	28/2/2022
401208	Cudgewa Creek at Berrigama	VIC	351.1	147.6778	36.2137	30/10/1965	28/2/2022
401212	Nariel Creek at Upper Nariel	VIC	251.6	147.8285	36.446	14/4/1954	28/2/2022
410730	Cotter River at Gingera	ACT	130	148.8212	35.5917	5/7/1963	28/2/2022
402204	Yackandandah Creek at Osbornes Flat	VIC	284.1	146.9061	36.3038	5/6/1967	28/2/2022
405205	Murrindindi River at Murrindindi above Colwells	VIC	105.8	145.5639	37.4139	9/6/1975	28/2/2022
919005A	Rifle Creek at Fonthill	QLD	368.4	145.2267	16.6788	3/9/1968	28/2/2022
401217	Gibbo River at Gibbo Park	VIC	389.8	147.7088	36.7562	28/7/1971	28/2/2022
410761	Murrumbidgee River below Lobbs Hole Creek	ACTNSW	5158.3	149.1012	35.5399	14/11/1974	28/2/2022
405227	Big River at Jamieson	VIC	626.9	146.057	37.367	20/8/1970	28/2/2022
609002	Scott River at Brennans Ford	WA	640.9	115.3022	34.2761	19/4/1969	28/2/2022
405219	Goulburn River at Dohertys	VIC	700.2	146.1296	37.3304	14/12/1967	28/2/2022
405215	Howqua River at Glen Esk	VIC	374	146.2071	37.2296	21/2/1974	28/2/2022
403221	Reedy Creek at Woolshed	VIC	205.5	146.6012	36.3113	13/11/1964	28/2/2022
G8140001	Katherine River at Railway Bridge	NT	8356.8	132.2567	14.4633	18/12/1961	28/2/2022
402206	Running Creek at Running Creek	VIC	128.1	147.0448	36.5402	25/7/1975	28/2/2022
406250	Coliban River at Springhill-Tylden Rd	VIC	77.5	144.37	37.32	1/10/1983	28/2/2022
410734	Queanbeyan River at Tinderry	ACT	563.7	149.3498	35.6138	4/8/1966	28/2/2022
405209	Acheron River at Taggerty	VIC	629.4	145.7138	37.3177	14/12/1973	28/2/2022
917107A	Elizabeth Creek at Mount Surprise	QLD	528.1	144.3065	18.1337	24/7/1968	28/2/2022
407214	Creswick Creek at Clunes	VIC	299.9	143.7887	37.2967	1/1/1950	28/2/2022
401203	Mitta Mitta River at Hinnomunjie	VIC	1518.8	147.6074	36.9476	5/6/1954	28/2/2022
607004	Perup River at Quabicup Hill	WA	661.3	116.4585	34.3311	15/5/1974	28/2/2022
422394A	Condamine River at Elbow Valley	QLD	328.4	152.1414	28.3714	3/12/1972	28/2/2022
403232	Morses Creek at Wandiligong	VIC	124.1	146.9787	36.7515	1/12/1972	28/2/2022
G8190001	West Alligator River at Upstream Arnhem Highway	NT	245.8	132.1739	12.7911	17/7/1976	20/1/2011

VIC: Victoria, NSW: New South Wales, ACT: Australian Capital Territory, NT: Northern Territory, SA:

South Australia, QLD: Queensland, WA: Western Australia, TAS: Tasmania

Table S2. Data quality associated with the observations at each of the study gauges.

Gauge ID	No. of years of data	No. of 'Best available data' obs	No. of 'Good data' obs	No. of 'Poor data' obs	No. of 'Unreliable data' obs	No. of 'Gap filled data' obs
222202	72.16	24904	271	567	149	466
238230	47.28	16250	85	559	375	0
130004A	58.41	15874	4693	765	0	2
235224	52.94	17215	321	1343	429	29
141008A	39.35	13034	1084	255	0	0
146012A	52.02	17113	0	1649	0	239
235203	47.09	16379	364	248	211	0
212260	53.78	13437	4990	400	82	735
235234	42.83	14911	164	91	458	19
116015A	55.35	18494	5	1719	0	1
221208	42.68	14486	309	636	160	0
124002A	49.05	14159	3148	534	0	77
224213	48.76	16683	361	593	142	33
227211	61.29	21310	450	158	468	0
138903A	40.64	14265	285	296	0	0
136202D	57.41	19725	268	976	0	0
225110A	40.49	13350	481	145	4	811
143009A	60.05	20795	141	1000	0	0
112102A	51.76	13839	3458	1602	0	7
236205	56.70	19622	202	570	279	37
221207	54.02	17274	781	264	1215	197
318191	38.31	0	13716	41	214	24
221209	49.34	16156	889	927	52	0
224214	47.54	16017	249	459	521	119
304499	56.95	0	20282	384	135	0
234201	58.82	20055	104	988	338	0
238208	72.09	25323	283	194	528	3
215207	44.62	11808	3208	383	672	228
145010A	56.25	19339	0	1207	0	1
318181	65.19	0	23565	196	29	21
225219	54.89	18408	49	1351	215	27
302200	57.75	0	19507	7	360	1220
237206	48.27	17266	0	202	164	0
221211	47.55	16071	633	470	184	9
222206	72.16	18154	7134	836	233	0
111005A	55.33	16642	1790	1696	0	83
145101D	67.95	22500	7	2311	0	3
314213	53.75	0	19134	63	143	293
237207	46.43	15364	152	85	1358	0
227225	53.85	18871	197	206	366	28
225213	58.67	19683	213	1036	487	11
130324A	55.70	15084	3490	1767	0	3
116011A	59.94	20907	632	353	0	1
221212	46.83	15572	901	258	374	0
138110A	62.41	21710	204	882	0	0
307473	58.00	0	19969	502	516	199
314207	58.69	0	20853	74	300	212
146095A	51.73	17153	1	1589	0	154
132001A	72.16	22793	2524	1038	0	2
113004A	55.18	17771	497	1691	0	198
306119	66.50	0	23954	18	11	306
227236	42.78	14587	404	504	118	13
116010A	61.41	19775	709	1765	0	181
114001A	51.76	14812	2454	1632	0	7
111007A	49.99	16453	549	1255	0	4
227237	42.72	14886	488	70	161	0
140002A	47.44	16604	33	555	0	138
108002A	53.42	17153	677	1257	0	426
145107A	49.09	16789	9	1133	0	0
318076	72.16	0	26061	5	160	131
227200	56.99	18356	636	1028	744	51
112002A	72.16	25617	93	634	0	13
235210	57.69	20273	209	301	233	57
227226	51.85	18368	204	183	183	0
222217	45.74	16124	326	230	25	1
314212	53.94	0	18950	280	240	233
224201	56.21	13426	6494	325	283	5
224206	61.97	20991	585	656	403	0
235211	57.69	20345	55	498	112	64
146010A	59.41	20679	0	1018	0	2
227202	66.69	22395	626	870	434	33
223202	72.16	24404	869	595	487	2
314214	55.85	0	20049	4	270	77
236212	47.10	16153	199	80	771	0
130302A	72.16	23594	1483	1275	0	5
237202	53.38	18818	226	334	120	0
221210	49.51	16670	307	1088	21	0
112101B	47.41	14590	1218	1432	0	77
235202	72.16	24786	311	536	445	279
116013A	60.18	19782	822	1299	64	13
221201	65.01	22786	241	494	226	0

Gauge ID	No. of years of data	No. of 'Best available data' obs	No. of 'Good data' obs	No. of 'Poor data' obs	No. of 'Unreliable data' obs	No. of 'Gap filled data' obs
235205	64.04	22426	659	187	115	4
227231	48.91	17059	200	487	121	0
305202	47.04	0	15828	212	1142	0
319204	49.84	0	17471	193	468	72
317200	54.68	0	19501	3	385	85
145011A	56.05	19178	222	1074	0	0
237205	52.31	18486	40	370	200	10
125005A	48.21	15538	1032	1039	0	0
405234	56.68	19417	70	618	177	422
403217	53.83	17899	155	1333	186	88
G8140040	52.22	898	17457	9	209	503
422306A	72.16	24133	1923	301	0	0
607220	55.78	18648	0	1691	37	0
403214	60.67	21680	79	291	90	19
701009	39.22	13596	0	480	191	59
611004	41.83	15033	0	204	37	4
422334A	52.87	16194	2269	769	0	79
G8170002	57.33	16882	2901	5	565	589
G8150180	52.90	13461	4875	0	379	609
404207	61.80	21718	116	575	158	7
410731	57.29	20163	102	244	129	288
405231	47.16	16718	110	237	144	17
616013	45.52	15407	0	1024	31	166
401216	72.16	25043	892	263	97	62
405217	46.86	16301	207	153	401	56
401220	44.59	15910	81	73	124	99
403213	63.20	21714	193	924	112	142
401210	68.93	24832	28	142	175	0
925001A	63.86	21159	338	572	0	1257
405245	51.62	17635	261	207	742	12
405251	48.36	16747	2	702	196	19
607013	42.86	15571	0	85	1	0
422321B	47.01	15414	1120	638	0	0
405263	36.60	12977	188	203	0	0
402217	40.53	14663	9	132	0	0
G8140063	64.48	12793	9722	3	508	525
G8200045	51.80	590	17281	0	0	1051
405264	46.94	15964	333	377	468	4
405218	63.02	21984	235	587	207	6
405214	64.94	23143	6	402	114	55
A5030502	52.92	17508	639	600	513	70
403222	56.66	20159	149	277	85	26
405228	46.79	15120	304	1060	600	7
G8140067	57.16	5993	13457	8	566	853
405241	48.21	17114	37	213	243	2
410713	64.91	21314	1898	229	5	265
401208	56.33	19503	572	293	207	1
401212	67.88	23766	271	386	334	36
410730	58.65	21035	51	305	0	33
402204	54.74	19357	62	435	118	21
405205	46.72	16341	261	165	269	31
919005A	53.49	17730	32	1307	0	468
401217	50.59	17414	200	558	293	14
410761	47.29	16442	487	249	0	96
405227	51.53	17595	394	691	96	45
609002	52.86	18997	0	273	39	0
405219	54.21	18318	486	625	268	104
405215	48.02	16323	92	872	210	43
403221	57.29	19847	135	806	103	36
G8140001	60.20	13658	7381	0	223	726
402206	46.60	16430	37	183	310	61
406250	38.41	13086	184	564	148	49
410734	55.57	19857	56	311	0	74
405209	48.21	17075	28	90	409	7
917107A	53.60	17835	28	825	0	890
407214	72.16	24264	637	1307	149	0
401203	67.73	23759	238	626	118	0
607004	47.79	16763	0	656	38	0
422394A	49.24	12503	4277	1191	0	14
403232	49.24	16495	141	768	300	283
G8190001	34.51	0	12109	0	0	497

'Best available data': The record set is the best available given the technologies, techniques and monitoring objectives at the time of classification.

'Good data': The record set is compromised in its ability to represent the parameter accurately.

'Poor data': The record set is an estimate.

'Unreliable data': The record set's ability to represent the monitored parameter accurately is not known.

'Gap filled data': The record set is not of release quality or contains missing data. Therefore these gaps in data are filled.

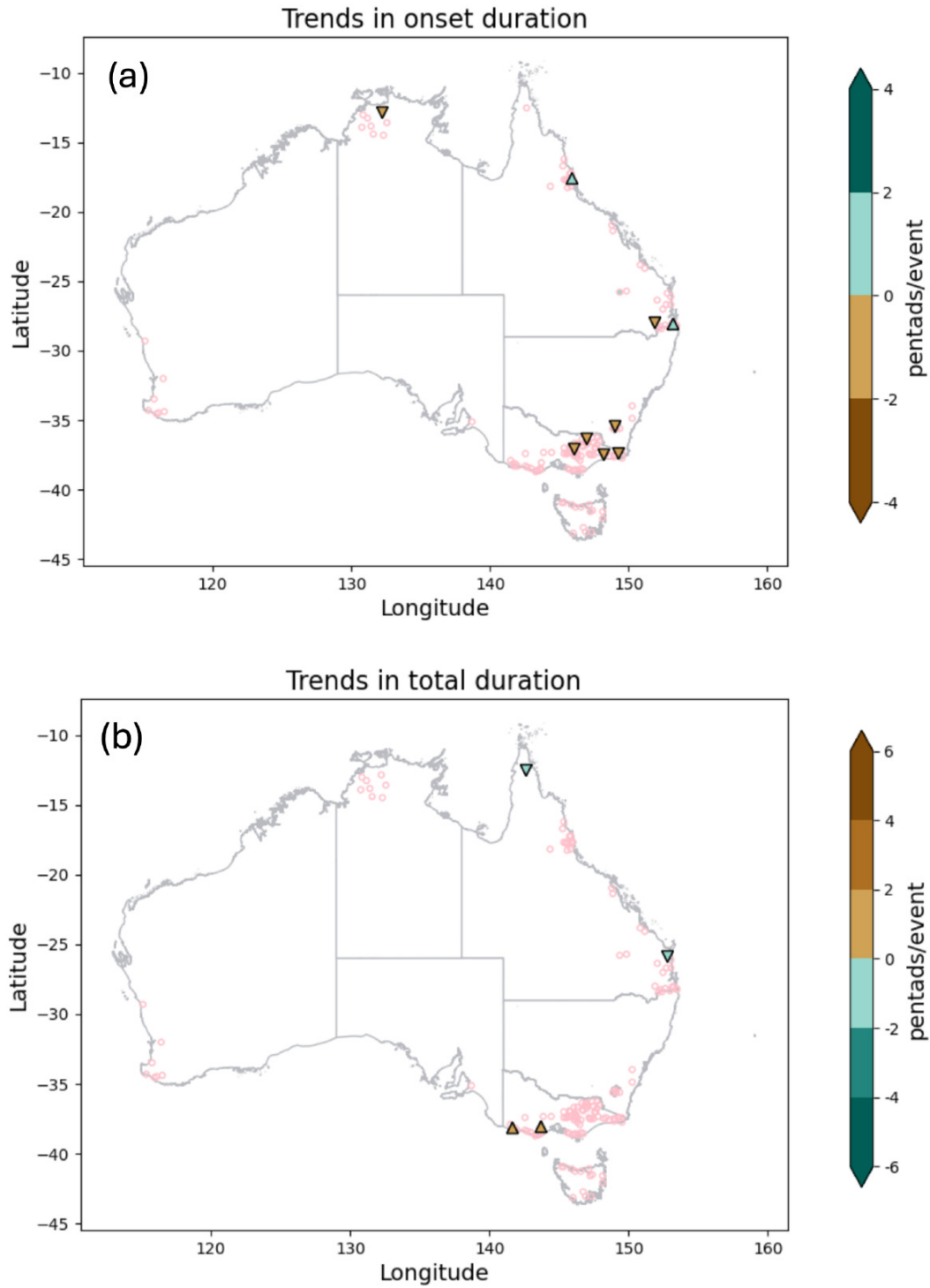


Fig-S1. Trends in (a) onset duration and (b) overall duration of SFDs at the study catchments as obtained from the Mann-Kendall trend test at 5% significance level. The trend is expressed in pentads per event, where one pentad is equal to 5 days. The catchments with pink coloured circles indicate no significant trend.