



# Allunga Exposure Laboratory

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 Tel: 61-7-4778-1697 Fax: 61-7-4422-0009 1209-1231 Flinders Hwy Brookhill Qld 4811

## 2016 Overview: Daily Weather Record

	Temperature (°C)		Dew Point		Relative Humidity %		Rain	Evap	Wet	Sun	Global Radiation (MJ/m <sup>2</sup> )		UV-R
	Ambient		9am	9pm	9am	9pm	mm	mm	Time	Shine	Horiz	19°N	Horiz
	Max	Min							Hours	Hours			
January	32.6	25.4	21.7	21.2	64	72	87.6	299.4	216.5	295.9	738.6	695.9	40.6
February	33.4	25.5	22.4	22.8	68	76	137.5	217.4	206.3	267.1	668.7	657.8	34.5
March	32.1	24.1	20.9	21.7	77	79	558.2	199.8	261.1	255.1	648.1	673.1	34.4
April	31.1	22.0	18.1	19.5	65	71	22.0	223.0	169.4	257.7	531.1	596.5	28.6
May	29.8	21.2	18.5	19.3	69	75	0.0	189.8	251.1	259.6	505.7	577.7	25.2
June	27.2	17.0	17.4	16.9	69	82	58.0	182.4	259.5	253.0	494.6	569.7	21.3
July	25.6	14.5	12.5	14.4	63	72	13.5	184.8	187.8	262.3	518.1	586.6	22.9
August	26.8	16.6	13.6	16.5	63	78	15.0	188.0	201.9	269.2	587.9	645.3	27.9
September	29.9	21.6	17.1	19.1	65	76	25.7	198.2	201.2	265.2	638.8	654.2	34.2
October	31.2	22.0	18.9	19.7	60	76	11.0	297.0	204.6	301.6	743.6	732.8	40.6
November	33.2	23.9	20.6	21.2	60	75	22.5	308.8	205.5	277.5	765.0	710.7	39.9
December	32.5	24.7	21.0	21.9	63	74	44.0	298.0	172.7	332.6	775.7	734.5	41.3
<b>Average</b>	<b>30.5</b>	<b>21.5</b>	<b>18.6</b>	<b>19.5</b>	<b>65.5</b>	<b>75.5</b>	<b>82.9</b>	<b>232.2</b>	<b>211.5</b>	<b>274.7</b>	<b>634.7</b>	<b>652.9</b>	<b>32.6</b>
<b>Total</b>							<b>995.0</b>	<b>2786.6</b>	<b>2537.6</b>	<b>3296.8</b>	<b>7615.9</b>	<b>7834.8</b>	<b>391.34</b>

For Langleys divide MJ/m<sup>2</sup> by 0.0418 UV-R = UV-A + UV-B (290-385 nm)

UV data recorded at AEL with Kipp & Zonen CUV5 Pyranometer

Sunshine hours are calculated the total time direct solar irradiance exceeds 120 W/m<sup>2</sup>  
 (International Meteorological Organisation)

Wet Time hours: Duration each day exposed surfaces are wet. Condensation is primary source of moisture.

**182,173 187,409 Total Langleys**  
**15,018.2 15,557.3 Average Langleys per month**



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## January 2016 Daily Weather Record

Date	Temperature (°C)		Dew Point		Relative Humidity %		Rain mm	Evap mm	Wet Hr	Sun Shine Hours	Global Radiation (MJ/m <sup>2</sup> )		UV-R	Remarks
	Max	Min	9am	9pm	9am	9pm					Horiz	19°N		
1	31.1	24.5	20	21	60	70	0.0	8.6	3.7	7.5	21.0	19.9	1.16	Fine, Lt Cloud
2	30.5	25.8	22	22	61	72	0.0	8.6	10.1	2.8	13.0	12.4	0.72	Cloud, O/N Storm
3	31.8	24.6	22	23	70	88	25.0	8.0	9.2	10.1	26.8	25.3	1.45	Rain, Fine
4	32.8	24.3	23	22	66	72	4.0	9.4	8.2	11.5	27.4	25.7	1.49	Fine, O/N Shower
5	37.7	26.2	24	22	48	73	0.0	9.2	6.9	12.6	29.0	27.2	1.58	Fine
6	38.3	23.6	22	20	26	67	0.0	12.0	5.4	12.8	29.6	27.6	1.60	Fine
7	34.4	22.8	22	21	47	69	0.0	10.0	6.9	12.3	28.4	26.9	1.54	Fine
8	33.0	26.4	23	21	66	67	0.0	10.8	6.3	11.9	28.1	26.5	1.59	Fine
9	32.7	27.5	23	21	66	70	0.0	12.0	8.2	9.8	22.9	21.7	1.26	Fine, Lt Cloud
10	29.8	23.2	22	23	91	70	12.0	11.0	13.6	3.1	12.1	11.9	0.69	Cloud, Showers
11	31.1	25.0	22	21	61	69	0.5	5.4	9.5	12.6	28.4	26.7	1.55	Fine
12	31.9	24.9	22	21	57	69	0.0	8.6	3.2	12.2	29.1	27.0	1.59	Fine
13	32.1	23.6	21	21	61	72	0.0	11.0	8.6	12.2	28.1	26.3	1.55	Fine
14	31.7	24.9	21	18	60	59	0.0	11.2	3.5	12.3	27.4	25.6	1.51	Fine
15	32.1	25.2	18	19	66	65	0.0	10.4	6.6	11.5	27.8	26.0	1.52	Fine
16	32.5	26.4	21	20	65	70	0.0	9.0	3.8	11.8	27.4	25.8	1.47	Fine
17	31.9	25.0	21	19	62	63	0.2	11.0	5.6	9.9	24.3	22.9	1.33	Fine, O/N Rain
18	31.5	24.0	23	24	75	93	13.5	8.8	11.3	10.5	23.1	22.0	1.27	Shower, Fine
19	32.5	25.3	23	22	57	82	1.0	9.0	8.6	11.1	27.4	25.7	1.48	Fine
20	32.4	25.3	22	22	55	88	0.0	11.0	6.8	11.6	26.1	24.6	1.44	Fine
21	32.9	25.2	21	23	62	81	0.0	12.6	7.7	11.8	27.8	26.0	1.49	Fine
22	31.5	23.7	22	21	53	79	0.0	11.0	3.0	12.1	28.6	26.8	1.55	Fine
23	32.8	24.9	23	22	52	71	0.0	11.0	5.8	12.3	28.3	26.5	1.55	Fine
24	33.1	26.9	20	21	67	66	0.0	9.8	7.4	6.6	23.6	22.4	1.29	Fine, Lt Cloud
25	33.2	28.0	20	21	62	67	0.0	10.4	0.0	8.8	24.3	23.0	1.37	Fine, Lt Cloud
26	31.9	25.0	22	21	87	64	1.4	9.0	7.1	6.3	18.4	17.5	1.03	Fine, Lt Cloud
27	33.5	26.5	22	20	71	63	0.0	7.0	8.0	7.2	18.8	18.0	1.06	Fine, Lt Cloud
28	33.3	26.8	20	20	71	63	0.0	9.8	5.6	4.9	18.5	17.5	1.03	Fine, Lt Cloud
29	33.6	28.6	21	21	73	69	0.0	7.4	5.9	4.6	11.7	11.2	0.74	Cloud, Fine
30	32.2	24.6	22	23	80	90	28.5	8.8	10.7	7.4	19.0	17.8	1.04	Rain, Fine
31	31.6	28.6	22	22	77	83	1.5	7.6	9.3	3.8	12.2	11.7	0.69	Shower, Cloud

Avg	Temperature C°				Humidity		Rain mm	Evap. mm	Wet Hr	Sun Hr	Radiation		
	Max	Min	Dew	Point	am	pm					Horiz	19° N	UV-R
Avg	32.6	25.4	21.7	21.2	64	72		9.7	7.0	9.5	23.8	22.4	1.31
Total							87.6	299.4	216.5	295.9	738.6	695.9	40.64
											17,667	16,647	Total Langleys
											736	694	Avg. Langleys



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## February 2016 Daily Weather Record

Date	Temperature (°C)				Relative Humidity %		Rain mm	Evap mm	Wet Time Hours	Sun Shine Hours	Global Radiation (MJ/m <sup>2</sup> )			Remarks	
	Ambient		Dew Point		9am	9pm					UV-R				
	Max	Min	9am	9pm							Horiz	19°N	Horiz		
1	32.3	25.7	23	24	82	75	18.5	6.6	11.5	8.4	24.9	24.3	1.32	Fine, Rain	
2	32.6	27.9	23	23	76	70	0.0	7.0	8.7	9.8	24.9	24.5	1.35	Fine	
3	32.8	28.2	22	24	78	76	1.5	7.8	7.3	4.3	13.0	12.7	0.00	Fine, Lt Cloud	
4	33.2	27.9	23	24	81	77	0.0	3.8	9.7	2.7	14.3	14.4	0.70	Fine, Lt Cloud	
5	33.6	26.8	26	25	84	94	3.5	5.0	9.5	4.3	19.4	19.2	1.01	Fine, O/N Rain	
6	31.6	26.0	25	24	77	84	10.5	5.4	12.4	7.8	22.0	21.4	1.15	Fine, Lt Cloud	
7	33.7	27.9	24	24	77	82	0.0	5.4	9.6	7.7	19.7	19.5	1.05	Fine, Lt Cloud	
8	32.6	27.0	24	24	74	84	4.0	6.0	8.2	8.5	20.8	20.4	1.09	Fine, O/N Rain	
9	31.8	23.7	25	23	60	75	48.5	4.4	11.6	9.3	25.5	24.9	1.35	Rian, Fine	
10	31.7	24.5	23	24	59	79	0.0	8.6	0.8	10.8	22.2	21.8	1.15	Fine, Lt cloud	
11	31.2	24.6	21	23	60	67	0.0	9.4	8.4	6.8	17.2	17.0	0.89	Fine, Lt cloud	
12	32.2	23.6	22	23	58	62	0.0	5.0	6.1	11.6	26.0	25.6	1.35	Fine	
13	32.1	24.2	20	21	64	67	0.0	8.0	0.0	11.8	26.6	26.2	1.39	Fine	
14	32.3	23.1	22	22	60	72	0.0	8.0	5.3	11.9	27.7	27.1	1.51	Fine	
15	35.3	22.8	20	21	66	68	0.0	8.0	3.7	12.1	27.7	26.8	1.49	Fine	
16	34.9	23.3	23	22	66	74	0.0	10.0	10.2	12.0	27.8	27.3	1.45	Fine	
17	37.7	24.0	23	20	74	70	0.0	7.2	9.7	11.0	25.9	25.3	1.33	Fine	
18	35.7	27.7	22	22	54	73	0.0	9.6	7.1	7.7	23.7	23.2	1.26	Fine	
19	34.8	28.2	23	23	65	76	0.0	8.0	0.0	11.4	26.4	25.8	1.44	Fine	
20	34.7	27.5	25	24	74	88	0.0	8.0	10.6	11.0	25.1	24.5	1.30	Fine	
21	33.3	27.3	20	23	68	88	3.0	9.8	6.4	7.8	22.2	21.7	1.16	Fine, Cloud, Rain	
22	31.4	25.8	20	23	71	72	0.0	9.4	5.5	2.5	14.8	14.7	0.78	Fine	
23	33.2	24.8	19	22	63	83	8.0	6.0	2.4	9.7	23.4	23.3	1.25	Fine	
24	32.3	22.7	21	21	57	71	0.0	8.0	4.7	9.5	18.9	18.8	0.98	Fine	
25	32.7	24.8	21	22	61	75	0.0	7.2	2.8	10.9	25.5	25.2	1.33	Fine	
26	34.2	23.9	22	22	65	72	0.5	10.2	8.3	11.8	25.0	24.9	1.30	Fine	
27	36.8	23.4	24	22	77	80	0.0	8.0	9.0	12.0	27.0	26.8	1.42	Fine	
28	34.5	26.7	21	23	61	83	0.0	9.6	6.9	11.8	26.0	25.7	1.37	Fine	
29	34.8	27.2	21	23	66	79	0.0	8.0	9.9	10.2	25.1	24.9	1.34	Fine	
	Temperature C°				Humidity		Rain	Evap.	Radiation						
	Max	Min	Dew	Point	am	pm	mm	mm	Wet Hr	Sun Hr	Horiz	19° N	UV-R		
Avg	33.4	25.6	22.3	22.8	68	76		7.5	7.1	9.2	23.1	22.7	1.19		
Total							98.0	217.4	206.3	267.1	668.7	657.8	34.50		

15,995 15,734 Total Langleys  
 666 656 Avge. Langleys



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## March 2016 Daily Weather Record

Date	Temperature (°C)		Dew Point		Relative Humidity %		Rain mm	Evap mm	Wet Hr	Sun Shine Hours	Global Radiation (MJ/m <sup>2</sup> )		UV-R	Remarks
	Max	Min	9am	9pm	9am	9pm					Horiz	19°N		
1	35.2	22.3	20	25	85	83	65.0	5.4	14.7	8.7	16.3	16.5	0.85	Fine, Cloud, O/N Rain
2	34.9	24.9	22	24	67	78	0.0	8.6	9.5	9.5	25.4	25.6	1.26	Fine
3	32.2	25.5	24	24	75	78	0.4	7.4	8.8	9.1	23.7	24.2	1.02	Fine
4	32.3	21.9	24	21	93	85	55.5	5.0	12.4	6.8	20.3	20.8	1.05	Fine, Rain
5	31.1	23.5	20	20	98	84	64.5	3.4	5.0	6.4	19.2	19.6	0.95	Fine, Cloud, O/N Rain
6	30.0	23.8	22	23	96	82	40.5	4.8	12.1	6.2	18.2	18.7	0.96	Showers, Fine
7	30.2	24.3	21	22	81	79	0.8	4.6	10.4	8.0	19.7	20.1	1.06	Fine, Lt Cloud
8	30.9	25.7	21	20	74	69	0.0	6.6	9.6	5.9	21.5	21.7	1.16	Fine, Cloud, O/N Rain
9	30.7	25.7	21	21	87	92	25.0	6.6	12.0	8.5	21.7	22.3	1.27	Fine, O/N Rain
10	31.3	24.2	22	22	96	85	87.5	2.8	8.4	8.8	24.9	25.4	1.32	Fine, O/N Rain
11	32.1	25.0	23	22	73	72	3.5	4.2	6.1	6.6	24.6	25.2	1.36	Showers, Fine
12	30.2	24.7	22	23	75	91	9.5	8.2	4.6	4.9	20.2	20.9	1.10	Fine, Cloud, Rain
13	31.8	25.0	19	22	65	76	1.5	8.6	13.3	8.7	23.5	24.5	1.20	Fine
14	33.5	24.8	18	20	74	72	0.0	9.2	4.0	10.1	24.2	25.2	1.33	Fine
15	37.6	24.4	19	21	81	92	38.5	9.6	10.1	5.0	19.4	19.4	1.02	Fine, Cloud, Rain
16	35.4	23.9	23	23	98	88	124.5	0.6	18.4	0.0	7.4	7.7	0.40	Overcast, Rain
17	36.0	23.3	20	24	94	87	29.5	3.2	13.8	6.5	24.4	25.6	1.26	Rain, Fine
18	35.1	23.6	20	24	76	76	4.0	6.0	13.0	6.7	21.0	21.0	1.10	Rain, Fine
19	31.7	23.6	23	23	77	73	0.0	4.0	0.0	10.6	19.2	20.1	1.04	Fine
20	32.5	25.3	20	20	78	71	0.0	8.8	6.4	10.0	23.1	24.3	1.12	Fine
21	31.4	26.1	21	20	74	84	0.0	6.6	0.0	9.5	21.8	22.9	1.09	Fine
22	30.8	25.6	20	22	84	72	5.5	6.8	0.0	8.5	18.8	19.9	1.05	Fine, Lt Cloud, Shower
23	31.3	24.0	20	20	78	77	2.5	7.4	5.6	7.7	14.8	15.6	0.77	Fine, Lt Cloud, Shower
24	31.0	25.2	19	21	71	72	0.0	6.6	10.7	8.4	20.3	21.3	1.05	Fine
25	30.4	23.6	19	20	65	66	0.0	8.0	10.6	10.6	21.1	22.4	1.12	Fine
26	30.0	22.9	19	20	60	70	0.0	8.0	6.9	11.2	21.8	23.3	1.27	Fine
27	30.1	23.7	19	20	61	71	0.0	7.4	10.7	11.1	21.9	23.4	1.24	Fine
28	30.7	23.2	21	21	64	78	0.0	8.6	8.4	11.4	23.1	24.7	1.23	Fine
29	31.6	22.7	22	22	68	81	0.0	7.6	8.8	11.3	23.5	25.0	1.34	Fine
30	31.3	22.6	22	22	64	73	0.0	7.2	6.8	7.5	20.4	21.9	1.15	Fine, Lt Cloud
31	32.4	23.2	22	21	64	84	0.0	8.0	0.0	10.9	22.7	24.0	1.26	Fine

Avge	Temperature C°				Humidity		Rain mm	Evap. mm	Wet Hr	Sun Hr	Radiation		
	Max	Min	Dew Point		am	pm					Horiz	19° N	UV-R
	32.1	24.1	20.9	21.7	77	79		6.4	8.4	8.2	20.9	21.7	1.11
Total							558.2	199.8	261.1	255.1	648.1	673.1	34.39
											15,503	16,100	Total Langleys
											646	671	Avg. Langleys



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## April 2016 Daily Weather Record

Date	Temperature (°C)				Relative Humidity %		Rain mm	Evap mm	Wet Time Hours	Sun Shine Hours	Global Radiation (MJ/m <sup>2</sup> )			Remarks
	Ambient		Dew Point		9am	9pm					UV-R			
	Max	Min	9am	9pm							Horiz	19°N	Horiz	
1	32.2	24.1	19	22	64	79	0.0	8.6	4.3	11.2	20.7	22.7	1.09	Fine
2	32.3	24.1	20	21	66	75	0.0	8.6	7.2	10.7	21.4	23.4	1.12	Fine
3	31.9	23.2	20	20	53	67	0.0	8.0	11.5	11.1	22.1	24.4	1.18	Fine
4	32.2	21.0	20	18	60	63	0.0	9.4	2.2	10.6	20.7	23.3	1.09	Fine
5	31.3	21.7	19	21	58	75	0.0	9.6	5.9	10.4	20.7	23.1	1.11	Fine
6	32.2	20.7	20	21	57	76	0.0	8.8	6.6	11.1	21.0	23.4	1.10	Fine
7	30.9	24.7	20	21	68	78	0.0	7.8	5.8	4.3	14.3	16.1	0.75	Fine, Cloud
8	31.3	21.7	20	21	51	73	0.0	4.6	11.2	10.3	20.4	22.9	1.10	Fine
9	31.6	21.0	19	20	57	72	0.0	10.6	9.1	7.1	18.3	20.6	1.01	Fine, Lt Cloud
10	30.6	22.4	19	21	79	71	1.5	6.2	8.5	2.8	16.2	18.2	0.85	Fine, Shower
11	31.2	23.7	18	20	75	77	0.0	4.0	4.0	6.3	15.2	17.2	0.79	Fine, Lt Cloud
12	31.9	22.3	19	21	57	22	0.0	8.0	12.0	11.0	20.4	22.9	1.08	Fine
13	32.3	21.9	20	21	78	83	0.0	7.0	0.0	10.1	18.8	21.0	1.03	Fine
14	27.6	22.3	20	22	94	80	12.0	9.4	13.5	0.4	6.2	7.2	0.37	Overcast, Rain
15	30.5	22.4	19	20	78	88	7.5	3.6	11.4	4.6	15.2	17.2	0.83	Rain, Cloud, Fine
16	29.8	22.4	19	20	69	78	0.5	5.0	4.0	9.1	17.3	19.6	0.94	Fine, Lt Cloud
17	30.6	20.7	16	20	64	74	0.0	6.2	7.4	9.6	16.2	18.4	0.76	Fine, Lt Cloud
18	30.6	21.4	17	21	67	78	0.0	6.6	6.2	8.8	18.3	20.7	1.00	Fine, Lt Cloud
19	30.1	21.8	18	21	65	76	0.0	6.2	10.5	7.8	18.7	21.0	1.02	Fine, Lt Cloud
20	31.8	22.6	17	19	66	69	0.0	8.0	4.6	10.2	18.4	20.7	0.98	Fine, Lt Cloud
21	31.1	22.7	15	16	63	60	0.0	8.0	0.0	9.6	19.0	21.3	0.98	Fine, Lt Cloud
22	31.0	20.9	14	17	62	67	0.0	8.0	0.0	10.2	18.0	20.3	0.95	Fine, Lt Cloud
23	30.7	20.5	15	14	66	55	0.0	6.0	0.0	10.3	19.5	21.9	1.06	Fine, Lt Cloud
24	31.3	19.8	14	15	66	59	0.0	7.4	0.0	10.3	18.4	20.7	1.01	Fine, Lt Cloud
25	31.0	21.9	16	17	53	66	0.0	9.6	0.0	10.5	19.2	21.5	1.05	Fine, Lt Cloud
26	30.4	21.4	15	18	52	67	0.0	10.0	0.0	10.4	18.6	20.8	0.97	Fine, Lt Cloud
27	30.3	20.5	19	19	60	69	0.0	7.6	3.6	5.2	12.5	14.1	0.70	Fine, Cloud
28	30.9	20.6	18	19	66	74	0.0	5.4	5.5	10.0	16.8	19.3	0.93	Fine, Lt Cloud
29	30.9	23.0	19	20	69	81	0.5	8.2	8.7	7.5	14.8	17.0	0.94	Fine, Cloud
30	31.0	21.3	18	20	68	79	0.0	6.6	5.7	6.2	13.6	15.4	0.78	Fine, Cloud

	Temperature C°				Humidity		Rain mm	Evap. mm	Wet Hr	Sun Hr	Radiation		
	Max	Min	Dew Point		am	pm					Horiz	19° N	UV-R
Avg	31.1	22.0	18.1	19.5	65	71		7.4	5.6	8.6	17.7	19.9	0.95
Total							22.0	223.0	169.4	257.7	531.1	596.5	28.57
											12,704	14,268	Total Langleys
											529	594	Avg. Langleys



# Allunga Exposure Laboratory

W: [www.allunga.com.au](http://www.allunga.com.au) E: [test@allunga.com.au](mailto:test@allunga.com.au) Latitude: 19°S Longitude: 147°E  
 Tel: 61-7-4778-1697 Fax: 61-7-4422-0009 1209-1231 Flinders Hwy Brookhill Qld 4811

## May 2016 Daily Weather Record

Date	Temperature (°C)		Dew Point		Relative Humidity %		Rain	Evap	Wet	Sun	Global Radiation (MJ/m <sup>2</sup> )			Remarks
	Ambient						mm	mm	Time	Shine	UV-R			
	Max	Min	9am	9pm	9am	9pm			Hours	Hours	Horiz	19°N	Horiz	
1	31.4	21.5	17	19	65	72	0.0	7.6	5.7	8.0	16.3	17.6	0.79	Fine
2	31.0	22.3	18	19	69	80	0.0	5.4	8.1	10.3	19.0	21.3	0.92	Fine
3	31.4	22.2	17	19	68	79	0.0	5.4	0.0	10.5	19.9	22.7	1.01	Fine
4	31.3	22.7	18	19	67	76	0.0	4.8	12.3	10.2	20.1	22.5	0.91	Fine
5	31.6	21.2	18	18	63	69	0.0	5.4	10.1	10.4	20.5	23.1	1.02	Fine
6	30.8	24.0	19	18	67	66	0.0	8.0	5.4	8.5	18.6	21.3	0.90	Fine
7	30.5	23.3	18	20	63	69	0.0	6.6	10.6	9.2	18.4	21.4	0.91	Fine
8	29.8	23.0	19	20	66	71	0.0	8.0	10.2	10.3	19.9	22.6	0.92	Fine
9	28.6	24.2	19	20	64	78	0.0	5.0	9.7	7.8	17.0	18.9	0.84	Fine, Lt Cloud
10	31.3	23.3	20	22	71	85	0.0	2.4	12.1	6.5	14.7	16.6	0.82	Fine, Lt Cloud
11	28.6	24.7	20	21	72	73	0.0	9.0	10.9	9.0	16.6	19.5	0.87	Fine, Lt Cloud
12	28.1	18.5	19	18	70	79	0.0	8.0	11.7	8.3	18.0	21.2	0.90	Fine, Lt Cloud
13	29.8	15.4	21	19	78	85	0.0	8.0	9.3	7.9	16.6	19.6	0.88	Fine, Lt Cloud
14	29.4	18.2	20	21	76	80	0.0	7.6	9.0	8.6	16.4	19.4	0.85	Mist,Fine, Lt Cloud
15	29.3	17.8	19	20	71	78	0.0	6.2	10.1	9.9	18.2	21.3	0.91	Fine
16	30.0	17.2	20	18	74	70	0.0	6.0	10.5	9.9	13.0	15.5	0.65	Cloud, Fine
17	30.0	21.1	20	19	64	66	0.0	4.6	8.0	8.2	14.9	17.2	0.78	Cloud, Fine
18	29.1	18.6	17	17	58	65	0.0	8.0	0.0	8.7	16.1	18.7	0.82	Cloud, Fine
19	29.8	19.2	16	20	55	84	0.0	5.4	5.3	5.7	13.7	15.5	0.67	Cloud, Fine
20	30.4	20.1	17	19	60	67	0.0	5.4	4.4	8.9	13.7	16.1	0.65	Cloud, Fine
21	30.3	24.6	21	19	74	71	0.0	9.2	0.0	10.0	19.5	22.6	0.91	Fine
22	28.4	23.6	19	20	68	83	0.0	8.0	8.3	8.8	16.4	19.2	0.86	Fine, Lt Cloud
23	27.2	23.1	19	22	72	88	0.0	4.2	12.3	7.0	12.6	14.0	0.66	Fine, Lt Cloud
24	28.8	21.1	18	20	68	69	0.0	3.6	6.7	6.0	12.9	14.2	0.71	Fine, Lt Cloud
25	29.1	21.2	19	20	69	74	0.0	4.0	6.4	6.3	14.4	16.0	0.73	Fine, Lt Cloud
26	29.3	18.6	17	18	62	61	0.0	6.0	11.7	9.5	14.7	16.0	0.74	Fine, Lt Cloud
27	30.0	20.2	17	19	70	83	0.0	4.6	8.8	8.3	17.0	19.8	0.89	Fine, Lt Cloud
28	31.7	21.1	16	19	61	82	0.0	5.0	3.5	5.3	12.8	14.4	0.68	Fine, Lt Cloud
29	30.5	20.0	17	19	68	73	0.0	7.0	11.1	6.3	13.3	14.9	0.71	Fine, Lt Cloud
30	27.4	23.3	21	18	92	79	0.0	5.2	7.0	7.3	14.5	15.8	0.51	Fine, Lt Cloud
31	28.9	22.4	19	19	81	80	0.0	6.2	11.9	8.0	15.9	18.5	0.80	Fine, Lt Cloud
	Temperature C°		Dew Point		Humidity		Rain	Evap.	Wet Hr	Sun Hr	Radiation			
	Max	Min	Dew	Point	am	pm	mm	mm			Horiz	19° N	UV-R	
Avg	29.8	21.2	18.5	19.3	69	75		6.1	8.1	8.4	16.3	18.6	0.81	
Total							0.0	189.8	251.1	259.6	505.7	577.7	25.22	

**12,096 13,818 Total Langleys**  
**504 576 Avge. Langleys**



# Allunga Exposure Laboratory

W: [www.allunga.com.au](http://www.allunga.com.au) E: [test@allunga.com.au](mailto:test@allunga.com.au) Latitude: 19°S Longitude: 147°E  
 Tel: 61-7-4778-1697 Fax: 61-7-4422-0009 1209-1231 Flinders Hwy Brookhill Qld 4811

## June 2016 Daily Weather Record

Date	Temperature (°C)		Dew Point		Relative Humidity %		Rain mm	Evap mm	Wet Time Hours	Sun Shine Hours	Global Radiation (MJ/m <sup>2</sup> )			Remarks
	Max	Min	9am	9pm	9am	9pm					Horiz	19°N	Horiz	
1	29.8	18.9	20	19	65	96	6.5	6.2	9.8	1.2	6.3	6.9	0.38	Overcast, O/N Rain
2	29.3	18.6	20	18	67	90	1.0	6.6	11.0	10.2	16.5	18.5	0.68	Fine, Lt cloud
3	29.3	19.0	20	20	68	90	0.0	6.6	11.4	10.5	17.9	20.6	0.70	Fine, Lt cloud
4	27.3	20.7	21	19	70	85	0.0	8.2	10.7	7.7	13.6	15.1	0.55	Fine, Lt cloud
5	25.9	15.8	20	16	73	87	0.0	7.2	9.0	6.1	14.4	16.1	0.65	Fine, Lt cloud
6	28.1	11.9	19	13	69	79	0.0	6.0	10.5	10.2	19.7	22.4	0.83	Fine
7	28.8	13.4	18	15	63	92	5.5	5.0	9.8	6.7	17.3	18.6	0.66	Fine, Lt Cloud, Rain
8	28.4	14.6	19	16	72	86	0.0	5.8	10.4	10.0	18.0	20.3	0.75	Fine, Lt Cloud
9	29.0	16.1	18	17	74	84	0.0	8.0	8.3	10.6	17.9	20.5	0.76	Fine, Lt Cloud
10	29.8	17.0	20	18	77	72	0.0	5.6	10.4	10.7	19.9	23.7	0.87	Fine
11	29.6	17.6	19	17	70	86	0.0	6.6	9.9	10.9	19.5	23.5	0.88	Fine
12	28.4	19.8	20	16	62	85	0.0	8.2	7.5	10.7	19.5	23.4	0.82	Fine
13	23.5	18.8	21	19	93	81	0.0	8.4	11.6	10.7	19.3	23.2	0.85	Fine
14	27.0	19.4	20	18	78	83	0.0	6.2	8.0	10.8	19.5	23.2	0.83	Fine
15	28.6	21.5	17	19	61	88	0.0	4.0	5.6	7.3	17.9	20.5	0.74	Fine
16	27.5	19.3	18	18	67	87	0.0	8.0	4.8	7.0	16.5	18.7	0.65	Fine, Lt Cloud
17	27.8	21.1	16	19	71	78	1.0	4.6	11.1	10.3	18.4	20.5	0.77	Fine, Lt Cloud
18	28.0	18.6	17	19	70	62	11.0	4.6	11.5	3.1	10.6	11.4	0.51	Cloud, Rain
19	23.8	17.8	18	18	66	69	33.0	10.0	12.5	10.4	18.3	20.6	0.78	Fine, O/N Rain
20	28.3	12.4	16	16	78	75	0.0	5.8	11.3	10.5	18.1	21.8	0.82	Fine
21	26.2	13.3	16	16	76	79	0.0	5.4	11.3	10.3	18.1	21.7	0.79	Fine
22	25.4	12.4	17	14	85	77	0.0	6.6	13.2	10.4	19.0	22.7	0.80	Fine
23	25.8	11.3	13	15	69	81	0.0	6.2	8.7	10.4	18.9	22.7	0.85	Fine
24	26.3	15.9	15	15	65	79	0.0	3.4	6.1	3.3	9.8	10.2	0.47	Fine, Cloud
25	25.4	19.8	12	16	50	77	0.0	6.2	0.0	9.2	18.2	21.4	0.76	Fine
26	26.1	14.4	14	17	66	82	0.0	3.8	7.8	1.1	9.6	9.9	0.40	Overcast
27	25.9	17.3	13	15	57	72	0.0	5.4	1.2	9.7	17.7	21.0	0.74	Fine, Lt Cloud
28	26.3	17.9	15	16	63	75	0.0	6.8	3.5	9.5	18.2	21.5	0.79	Fine
29	24.4	17.2	15	15	66	82	0.0	3.2	6.6	4.9	9.0	9.3	0.42	Fine, Cloud
30	26.3	18.4	16	17	73	93	0.0	3.8	6.0	8.6	17.0	19.8	0.75	Fine, Lt Cloud

Avge	Temperature C°		Dew Point		Humidity		Rain mm	Evap. mm	Wet Hr	Sun Hr	Radiation		
	Max	Min	9am	9pm	am	pm					Horiz	19° N	UV-R
	27.2	17.0	17.4	16.9	69	82		6.1	8.7	8.4	16.5	19.0	0.71
Total							58.0	182.4	259.5	253.0	494.6	569.7	21.25

**11,831 13,627 Total Langleys**  
**493 568 Avge. Langleys**



# Allunga Exposure Laboratory

W: [www.allunga.com.au](http://www.allunga.com.au) E: [test@allunga.com.au](mailto:test@allunga.com.au) Latitude: 19°S Longitude: 147°E  
 Tel: 61-7-4778-1697 Fax: 61-7-4422-0009 1209-1231 Flinders Hwy Brookhill Qld 4811

## July 2016 Daily Weather Record

Date	Temperature (°C)		Dew Point		Relative Humidity %		Rain	Evap	Wet	Sun	Global Radiation (MJ/m <sup>2</sup> )			Remarks
	Max	Min	9am	9pm	9am	9pm	mm	mm	Time	Shine	Horiz	19°N	Horiz	
1	25	13	10	14	54	75	0.0	2.4	3.5	8.7	17.3	19.8	0.78	Fine
2	25	12	6	11	43	58	0.0	4.6	6.4	10.6	19.1	21.9	0.85	Fine
3	26	16	12	13	64	61	0.0	9.6	4.0	5.6	9.9	10.8	0.55	Fine, Cloud
4	26	18	14	12	62	57	5.5	4.6	8.9	5.7	14.4	15.7	0.61	Shower
5	26	16	13	13	65	71	0.0	7.6	5.1	6.2	17.1	18.8	0.57	Fine, Lt Cloud
6	26	17	14	15	69	78	0.0	7.0	6.2	9.4	17.3	19.9	0.66	Fine, Lt Cloud
7	27	15	13	14	66	67	0.0	8.8	6.7	7.9	16.0	18.0	0.65	Fine, Lt Cloud
8	27	15	14	16	63	75	0.0	6.4	4.5	10.5	18.5	21.7	0.73	Fine, Lt Cloud
9	27	18	14	15	60	70	0.0	8.0	0.0	8.8	16.5	18.8	0.68	Fine, Lt Cloud
10	26	17	15	18	70	87	0.0	6.4	7.3	8.0	14.5	16.3	0.62	Fine, Lt Cloud
11	25	18	16	18	70	84	0.0	4.6	9.7	7.4	16.4	18.3	0.63	Fine, Lt Cloud
12	26	20	17	17	74	81	0.0	5.0	3.0	10.7	17.2	20.1	0.79	Fine
13	28	18	18	17	84	73	0.0	4.4	12.0	7.9	17.6	19.8	0.71	Fine, Lt Cloud
14	27	14	10	14	51	75	0.0	5.8	7.0	10.8	19.8	23.2	0.83	Fine
15	25	12	9	16	56	82	0.0	4.8	9.9	10.7	16.3	19.0	0.81	Fine, Lt Cloud
16	25	18	14	17	73	80	8.0	5.4	11.3	3.3	10.4	10.9	0.50	Fine, Cloud, Shower
17	26	13	15	13	70	66	0.0	4.2	7.6	10.3	19.2	22.3	0.83	Fine
18	25	10	0	12	28	64	0.0	5.2	3.0	11.0	20.2	23.6	0.83	Fine
19	26	12	11	16	58	77	0.0	6.0	0.0	9.3	14.7	16.7	0.64	Fine, Lt Cloud
20	25	16	13	14	66	63	0.0	4.8	1.0	0.4	9.8	9.8	0.43	Overcast
21	25	14	10	14	51	73	0.0	7.0	0.0	9.4	17.2	19.6	0.69	Fine
22	25	14	12	15	60	70	0.0	7.2	0.0	6.7	18.0	19.7	0.77	Fine
23	25	13	12	11	62	64	0.0	5.6	5.7	10.7	18.4	21.3	0.72	Fine
24	24	11	8	12	47	68	0.0	6.0	4.6	11.0	20.5	23.8	0.84	Fine
25	25	14	13	14	64	68	0.0	6.2	8.5	3.5	12.7	13.3	0.89	Cloud
26	24	15	14	13	68	73	0.0	6.8	3.5	10.3	17.9	20.4	0.89	Fine, Lt Cloud
27	24	10	14	13	72	77	0.0	7.2	10.3	9.7	16.4	18.6	0.84	Fine, Lt Cloud
28	25	9	12	12	65	69	0.0	4.4	9.9	10.7	19.4	22.3	0.78	Fine
29	24	11	12	12	63	65	0.0	6.2	8.6	9.2	20.1	22.6	0.88	Fine
30	26	14	16	17	76	86	0.0	5.4	10.2	7.0	14.5	15.8	0.92	Fine, Smoke Haze
31	27	17	16	18	70	68	0.0	7.2	9.4	10.9	20.8	23.8	0.93	Fine

Avgge	Temperature C°				Humidity		Rain	Evap.	Radiation				
	Max	Min	Dew	Point	am	pm	mm	mm	Wet Hr	Sun Hr	Horiz	19° N	UV-R
	25.6	14.5	12.5	14.4	63	72		6.0	6.1	8.5	16.7	18.9	0.74
Total							13.5	184.8	187.8	262.3	518.1	586.6	22.85

**12,393 14,031 Total Langleys**  
**516 585 Avg. Langleys**





# Allunga Exposure Laboratory

W: [www.allunga.com.au](http://www.allunga.com.au) E: [test@allunga.com.au](mailto:test@allunga.com.au) Latitude: 19°S Longitude: 147°E  
 Tel: 61-7-4778-1697 Fax: 61-7-4422-0009 1209-1231 Flinders Hwy Brookhill Qld 4811

## August 2016 Daily Weather Record

Date	Temperature (°C)		Dew Point		Relative Humidity %		Rain	Evap	Wet	Sun	Global Radiation (MJ/m <sup>2</sup> )			Remarks
	Max	Min	9am	9pm	9am	9pm	mm	mm	Time	Shine	Horiz	19°N	Horiz	
1	26	15	16	16	77	72	0.0	6.6	0.0	8.7	18.4	20.4	0.88	Fine
2	26	14	14	18	67	79	0.0	5.6	4.8	6.9	12.4	13.9	0.55	Fine, Cloud
3	25	20	17	17	78	78	0.0	6.2	9.9	4.3	9.2	9.9	0.46	Fine, Cloud
4	27	20	16	17	64	84	0.0	5.2	0.0	9.3	19.0	21.4	0.95	Fine
5	26	13	15	16	72	76	0.0	5.4	13.3	9.7	18.3	20.7	0.93	Fine
6	25	19	16	17	77	90	0.5	5.8	5.7	2.8	9.9	10.7	0.48	Fine, Cloud
7	27	16	18	20	75	95	0.0	3.2	11.4	10.0	20.1	22.5	0.97	Fine
8	29	20	20	20	79	88	0.0	4.8	13.5	8.2	19.7	21.6	0.93	Fine, Lt Cloud
9	27	17	-6	-5	19	19	0.0	9.4	4.0	11.0	22.3	25.2	1.04	Fine
10	24	10	-3	11	21	65	0.0	9.6	0.0	10.8	22.0	24.7	0.99	Fine
11	24	12	13	14	67	75	0.0	6.4	1.6	10.8	20.5	23.1	0.93	Fine
12	28	11	15	18	72	93	0.0	3.4	2.2	10.2	21.1	23.4	0.97	Fine
13	28	11	17	18	75	86	0.0	5.6	13.7	10.0	21.5	23.8	1.01	Fine, O/N Shower
14	26	16	16	17	73	80	5.5	4.0	13.5	10.0	21.7	24.0	1.02	Fine, O/N Shower
15	25	15	16	14	73	78	8.5	6.2	12.3	9.8	21.7	23.9	1.04	Mist, Fine
16	26	16	14	16	68	74	0.0	6.6	7.5	10.6	18.7	20.9	0.95	Fine
17	27	17	17	18	65	81	0.0	4.0	0.1	10.4	19.0	21.0	0.94	Fine
18	28	15	18	19	69	83	0.0	5.8	12.8	9.4	20.3	22.3	1.02	Fine
19	29	18	-3	17	16	73	0.0	6.6	0.0	9.3	21.5	23.4	1.04	Fine
20	25	20	15	16	67	70	0.0	7.6	0.0	2.2	10.1	11.0	0.51	Fine, Cloud
21	25	19	5	14	37	63	0.0	7.0	0.0	0.0	7.3	7.9	0.33	Overcast
22	27	18	15	18	63	78	0.5	5.8	0.0	8.1	18.9	20.4	0.96	Fine
23	27	20	17	19	69	86	0.0	6.0	6.5	8.0	19.9	21.4	0.91	Fine
24	28	17	18	19	73	83	0.0	5.6	9.9	9.1	17.5	19.1	0.87	Fine
25	26	18	11	15	46	73	0.0	7.0	8.2	7.6	19.7	21.0	0.95	Fine
26	27	15	13	14	51	64	0.0	6.8	8.4	10.8	23.2	25.1	1.08	Fine
27	27	14	14	16	56	73	0.0	7.6	3.5	10.9	22.7	24.7	1.05	Fine
28	29	19	17	19	66	91	0.0	4.8	8.5	10.7	22.9	24.7	1.03	Fine
29	28	19	20	21	81	86	0.0	4.8	10.9	8.4	23.8	25.2	1.07	Fine
30	29	22	20	21	74	91	0.0	8.0	9.1	10.4	22.9	24.6	1.05	Fine
31	30	19	11	20	62	79	0.0	6.6	10.6	10.8	21.7	23.4	1.02	Fine

	Temperature C°				Humidity		Rain	Evap.	Radiation				
	Max	Min	Dew Point	Point	am	pm	mm	mm	Wet Hr	Sun Hr	Horiz	19° N	UV-R
Avg	26.8	16.6	13.6	16.5	63	78		6.1	6.5	8.7	19.0	20.8	0.90
Total							15.0	188.0	201.9	269.2	587.9	645.3	27.93

**14,063 15,436 Total Langleys**  
**586 643 Average Langleys**



# Allunga Exposure Laboratory

W: [www.allunga.com.au](http://www.allunga.com.au) E: [test@allunga.com.au](mailto:test@allunga.com.au) Latitude: 19°S Longitude: 147°E  
 Tel: 61-7-4778-1697 Fax: 61-7-4422-0009 1209-1231 Flinders Hwy Brookhill Qld 4811

## September 2016 Daily Weather Record

Date	Temperature (°C)		Dew Point		Relative Humidity %		Rain	Evap	Wet	Sun	Global Radiation (MJ/m <sup>2</sup> )			Remarks
	Ambient						mm	mm	Time	Shine	UV-R			
	Max	Min	9am	9pm	9am	9pm			Hours	Hours	Horiz	19°N	Horiz	
1	29	23	21	23	78	87	0.0	6.8	10.1	8.2	18.5	19.8	0.95	Fine
2	29	23	23	23	83	89	0.0	6.0	10.8	5.4	12.0	12.3	0.56	Fine, Cloud
3	27	21	16	20	73	90	0.0	4.8	8.6	7.2	18.9	20.3	0.98	Fine, Lt Cloud
4	27	21	21	21	91	82	3.0	6.0	9.1	8.9	22.1	23.7	1.18	Fine, O/N Shower
5	29	22	21	21	71	84	0.5	1.4	7.6	9.5	19.1	20.4	1.05	Fine
6	29	21	20	22	70	85	0.0	6.4	9.7	9.6	21.9	22.4	1.05	Fine
7	29	22	22	22	77	83	0.0	4.8	10.3	9.2	18.7	19.8	0.96	Fine
8	30	24	21	22	79	85	0.0	7.8	4.1	9.4	22.3	23.1	1.15	Fine
9	31	20	22	23	76	90	0.0	8.0	11.6	8.0	21.5	22.3	1.03	Fine
10	30	23	21	19	71	75	0.0	4.6	13.9	10.1	22.1	22.7	1.06	Fine
11	29	23	19	20	65	76	0.0	4.0	2.5	10.4	22.5	23.0	1.14	Fine
12	29	24	19	20	65	93	0.3	11.2	6.2	6.4	18.5	18.8	0.90	Fine, Lt Cloud
13	28	21	21	20	76	76	18.5	5.6	13.4	7.0	16.2	16.5	0.73	Fine, Storm, Shower
14	27	21	18	21	73	82	0.5	5.0	9.6	4.2	16.1	16.4	0.80	Fine, Shower
15	29	22	20	21	74	85	0.0	5.0	8.7	10.5	21.0	21.3	1.02	Fine
16	31	23	8	19	33	79	0.5	6.4	3.5	8.5	20.1	20.3	0.91	Fine
17	31	19	-1	14	21	60	0.0	10.4	0.0	11.3	26.4	26.9	1.37	Fine
18	28	15	14	15	56	68	0.0	8.0	5.2	11.0	26.5	26.7	1.42	Fine
19	29	15	17	17	64	78	0.0	7.0	9.1	11.1	23.2	26.3	1.35	Fine
20	33	16	4	15	23	60	0.0	7.6	2.4	11.1	26.0	26.3	1.38	Fine
21	29	23	18	18	68	75	0.0	7.2	6.9	5.2	15.9	15.9	0.85	Fine, Lt Cloud
22	31	22	19	18	71	70	0.2	4.2	7.0	9.7	20.9	21.0	1.17	Fine
23	31	22	18	19	72	73	0.0	7.8	6.0	9.7	24.5	24.4	1.32	Fine
24	31	24	16	17	64	69	0.2	7.4	8.1	8.9	23.1	23.1	1.26	Fine
25	31	23	15	14	48	59	0.0	9.0	0.0	8.5	23.7	23.6	1.29	Fine
26	33	21	15	16	55	61	0.0	5.0	0.0	9.9	25.3	25.3	1.31	Fine
27	33	23	15	16	51	65	0.0	8.6	0.0	10.0	24.6	24.8	1.33	Fine
28	31	23	14	16	46	54	0.0	7.6	0.0	9.4	23.3	23.2	1.28	Fine
29	30	24	17	20	83	67	1.8	9.8	9.1	6.7	18.4	18.4	1.04	Fine, Lt Cloud
30	34	24	18	20	65	87	0.2	4.8	7.7	10.2	25.5	25.2	1.33	Fine

	Temperature C°				Humidity		Rain	Evap.	Radiation				
	Max	Min	Dew	Point	am	pm	mm	mm	Wet Hr	Sun Hr	Horiz	19° N	UV-R
Avg.	29.9	21.6	17.1	19.1	65	76		6.6	6.7	8.8	21.3	21.81	0.99
Total							25.7	198.2	201.2	265.2	638.8	654.20	34.16

**15,280 15,648 Total Langleys**  
**637 652 Average Langleys**



# Allunga Exposure Laboratory

W: [www.allunga.com.au](http://www.allunga.com.au) E: [test@allunga.com.au](mailto:test@allunga.com.au) Latitude: 19°S Longitude: 147°E  
 Tel: 61-7-4778-1697 Fax: 61-7-4422-0009 1209-1231 Flinders Hwy Brookhill Qld 4811

## October 2016 Daily Weather Record

Date	Temperature (°C)		Dew Point		Relative Humidity %		Rain mm	Evap mm	Wet Time Hours	Sun Shine Hours	Global Radiation (MJ/m <sup>2</sup> )			Remarks
	Ambient		9am 9pm		9am 9pm						UV-R			
	Max	Min	9am	9pm	9am	9pm					Horiz	19°N	Horiz	
1	32	21	21	20	73	82	0.0	10.6	8.3	9.6	23.6	23.6	1.32	Fine
2	32	25	19	20	64	80	0.0	6.4	10.8	10.3	24.7	24.5	1.35	Fine
3	32	25	19	20	69	77	0.0	10.6	10.2	10.8	24.1	23.9	1.30	Fine
4	33	25	20	22	51	89	0.0	7.6	9.4	8.4	20.5	20.2	1.09	Fine, Lt Cloud
5	30	21	22	23	54	78	0.0	8.2	5.8	9.3	24.1	23.8	1.28	Fine
6	31	20	22	19	38	75	0.0	8.2	4.8	9.5	25.4	25.3	1.35	Fine
7	30	19	14	17	45	81	0.0	12.4	3.5	10.1	24.8	24.7	1.33	Fine
8	31	20	14	16	47	71	0.0	11.6	0.0	9.9	25.3	25.0	1.40	Fine
9	30	17	18	18	52	63	0.0	10.2	6.6	10.5	24.9	24.4	1.34	Fine
10	31	20	18	19	55	74	0.0	8.0	7.8	10.8	25.1	24.8	1.36	Fine
11	32	18	19	17	58	60	0.0	9.0	3.9	10.4	25.5	25.4	1.40	Fine
12	32	19	20	19	49	64	0.0	7.6	5.5	10.3	25.8	25.6	1.38	Fine
13	32	24	19	21	58	66	0.0	8.6	4.0	9.7	23.9	23.7	1.28	Fine
14	31	23	20	20	63	60	0.0	8.0	0.0	8.9	20.2	20.0	1.10	Fine, Lt Cloud
15	30	22	18	19	60	72	0.0	11.2	4.3	4.9	14.7	14.6	0.74	Fine, Cloud
16	31	20	17	19	57	75	0.0	8.0	5.2	10.6	25.5	25.3	1.38	Fine
17	31	23	19	20	69	77	0.0	8.6	6.1	10.7	24.8	24.5	1.35	Fine
18	32	22	19	18	64	72	0.0	8.4	4.6	10.5	25.2	24.9	1.37	Fine
19	32	23	18	20	58	74	0.0	9.6	5.6	11.0	23.9	23.4	1.25	Fine
20	32	25	19	21	63	75	0.0	11.0	4.9	12.0	25.7	25.1	1.34	Fine
21	32	24	20	21	70	83	0.0	11.6	9.7	12.1	26.2	25.6	1.36	Fine
22	31	24	19	19	50	71	0.0	12.0	5.8	12.0	25.1	24.6	1.36	Fine
23	33	23	20	20	72	88	3.5	10.0	11.2	6.5	14.9	14.6	0.77	Cloud, Shower
24	29	21	18	19	68	93	7.5	6.8	10.4	3.1	12.9	13.0	0.70	Cloud, Shower
25	31	19	17	18	56	76	0.0	8.4	7.5	7.5	27.4	26.7	1.45	Fine
26	31	22	18	20	65	77	0.0	10.4	5.9	10.8	27.0	26.4	1.39	Fine
27	31	23	19	21	54	74	0.0	11.6	3.8	10.4	27.2	26.5	1.40	Fine
28	31	22	19	20	75	86	0.0	9.4	11.2	9.6	26.9	26.7	1.37	Fine
29	31	25	21	22	74	85	0.0	11.2	10.4	10.5	24.6	24.0	1.30	Fine
30	31	24	20	21	69	81	0.0	11.0	9.1	10.8	27.1	26.1	1.42	Fine
31	31	24	20	21	60	76	0.0	10.8	8.3	10.1	26.6	25.8	1.41	Fine

	Temperature C°				Humidity		Rain mm	Evap. mm		Wet Hr	Sun Hr	Radiation		
	Max	Min	Dew Point		am	pm						Horiz	19° N	UV-R
Avg	31.2	22.0	18.9	19.7	60	76		9.6	6.6	9.7		24.0	23.64	0.99
Total							11.0	297.0	204.6	301.6		743.6	732.8	40.63

**17,787 17,530 Total Langley's**  
**741 730 Average Langley's**



# Allunga Exposure Laboratory

W: [www.allunga.com.au](http://www.allunga.com.au) E: [test@allunga.com.au](mailto:test@allunga.com.au) Latitude: 19°S Longitude: 147°E  
 Tel: 61-7-4778-1697 Fax: 61-7-4422-0009 1209-1231 Flinders Hwy Brookhill Qld 4811

## November 2016 Daily Weather Record

Date	Temperature (°C)		Dew Point		Relative Humidity %		Rain	Evap	Wet	Sun	Global Radiation (MJ/m <sup>2</sup> )			Remarks
	Ambient		9am		9pm		mm	mm	Time	Shine	Horiz	19°N	Horiz	
	Max	Min	9am	9pm	9am	9pm			Hours	Hours				
1	31	23	20	21	66	78	0.0	10.0	8.8	9.2	29.2	26.9	1.45	Fine
2	33	25	21	22	62	85	0.0	10.6	10.2	10.0	27.6	25.5	1.38	Fine
3	32	26	22	23	62	85	0.0	7.6	9.6	10.8	27.9	25.8	1.43	Fine
4	32	26	21	23	67	84	0.0	9.6	7.2	9.8	22.7	20.7	1.17	Fine, Mist
5	32	25	20	21	83	76	0.0	8.8	11.0	9.6	23.9	22.1	1.22	Fine, Mist
6	34	23	20	21	63	66	0.0	8.6	8.7	9.2	28.7	26.6	1.45	Fine
7	35	24	19	22	56	83	0.0	8.0	5.6	10.1	28.6	26.5	1.41	Fine
8	33	24	21	23	51	89	0.0	11.0	9.5	10.4	29.1	26.8	1.50	Fine
9	33	25	21	22	52	77	0.0	10.2	10.3	10.3	27.6	25.4	1.40	Fine
10	34	25	21	22	58	64	0.0	14.0	5.0	10.8	27.8	25.5	1.43	Fine
11	36	27	22	23	66	67	0.0	12.0	6.1	10.5	29.1	27.0	1.49	Fine
12	35	27	22	23	67	63	0.0	9.8	5.4	9.7	24.3	22.2	1.32	Fine
13	34	25	20	22	63	62	0.0	7.6	4.8	10.4	27.9	25.9	1.40	Fine
14	36	23	18	20	43	71	0.0	9.0	0.0	8.8	22.2	20.5	1.19	Fine
15	35	22	18	19	52	69	0.0	11.6	3.6	10.8	29.4	26.9	1.53	Fine
16	32	20	20	18	59	70	0.0	12.0	5.7	10.3	27.3	25.2	1.37	Fine
17	33	23	20	19	54	74	0.0	11.8	4.5	10.5	27.7	25.6	1.42	Fine
18	32	19	20	20	49	72	0.0	9.6	0.0	10.7	27.2	25.2	1.38	Fine
19	32	22	20	19	62	75	0.0	11.6	6.6	9.2	25.6	24.0	1.30	Fine
20	32	24	20	20	53	70	0.0	10.8	6.1	10.0	29.0	26.6	1.48	Fine
21	32	23	21	21	45	73	0.0	12.0	3.0	10.8	29.1	26.7	1.46	Fine
22	33	22	21	22	50	76	0.0	12.0	4.2	10.1	29.1	26.9	1.49	Fine
23	33	23	22	22	62	73	0.0	9.4	7.4	10.5	28.8	26.4	1.43	Fine
24	34	21	21	22	61	74	0.0	9.0	5.8	6.1	14.3	14.1	0.65	Fine, Cloud
25	33	24	21	20	58	69	0.0	9.4	8.6	10.5	29.2	26.7	1.47	Fine
26	33	27	20	22	63	62	0.0	9.2	7.0	10.2	27.5	26.1	1.35	Fine
27	34	25	21	21	75	93	10.5	12.0	10.2	5.6	17.7	17.0	0.90	Cloud, Showers
28	33	25	23	21	69	83	5.0	11.2	11.0	3.4	16.6	16.4	0.87	Cloud, Showers
29	33	25	22	21	72	79	4.5	11.4	10.5	4.2	16.4	16.1	0.85	Cloud, Showers
30	34	23	21	20	67	80	2.5	9.0	9.1	5.0	13.5	13.4	0.74	Cloud, Showers

	Temperature C°		Humidity		Rain	Evap.	Radiation					
	Max	Min	Dew	Point	mm	mm	Wet Hr	Sun Hr	Horiz	19° N	UV-R	
Avg	33.2	23.9	20.6	21.2	60	75	10.3	6.9	9.3	25.5	23.69	0.99
Total					22.5	308.8	205.5	277.5	765.0	710.71	39.92	

**18,299** **17,000** Total Langleys  
**762** **708** Average Langleys



# Allunga Laboratory

W: [www.allunga.com.au](http://www.allunga.com.au) E: [test@allunga.com.au](mailto:test@allunga.com.au) Latitude: 19°S Longitude: 147°E  
 Tel: 61-7-4778-1697 Fax: 61-7-4422-0009 1209-1231 Flinders Hwy Brookhill Qld 4811

## December 2016 Daily Weather Record

Date	Temperature (°C)		Dew Point		Relative Humidity %		Rain	Evap	Wet	Sun	Global Radiation (MJ/m <sup>2</sup> )			Remarks
	Max	Min	9am	9pm	9am	9pm	mm	mm	Time	Shine	Horiz	19°N	Horiz	
1	33.4	25.2	23	24	57	85	0.0	8.6	7.5	11.4	25.5	24.2	1.50	Fine
2	35.4	23.1	24	23	62	81	0.0	7.0	6.6	9.1	23.0	22.0	1.00	Fine, Lt Cloud
3	33.5	22.7	23	21	54	72	0.0	8.8	4.5	10.0	21.2	20.3	0.77	Fine, Lt Cloud
4	32.7	24.2	20	22	59	77	0.0	8.2	8.2	12.5	26.5	25.0	1.59	Fine
5	31.8	25.0	22	23	60	78	0.0	10.4	7.6	8.0	20.2	19.4	1.07	Fine, Lt Cloud
6	32.0	25.1	24	25	55	87	0.0	6.4	8.0	7.3	20.8	20.1	1.15	Fine, Lt Cloud
7	32.1	25.3	23	24	57	80	0.0	5.8	5.2	12.4	21.3	20.0	1.30	Fine, Lt Cloud
8	32.7	25.7	21	22	61	72	0.0	11.2	5.3	11.2	22.4	21.3	1.10	Fine, Lt Cloud
9	33.8	23.2	21	21	56	68	0.0	1.0	2.0	11.2	22.8	21.6	1.07	Fine, Lt Cloud
10	33.8	26.8	20	22	61	73	0.0	9.6	4.9	7.5	22.4	21.6	1.10	Fine, Lt Cloud
11	30.1	23.9	22	23	63	84	6.0	7.2	8.4	12.2	27.5	25.9	1.48	Fine
12	32.0	23.7	22	21	70	67	1.5	9.4	9.7	12.4	29.2	27.4	1.51	Fine
13	29.7	23.2	20	18	79	76	15.5	12.4	11.2	9.0	22.6	21.6	1.19	Fine, O/N Rain
14	30.7	23.5	18	18	85	59	3.0	10.8	7.3	12.3	29.5	27.7	1.49	Fine
15	31.7	24.3	19	20	60	64	0.0	11.6	3.3	12.2	25.8	24.2	1.28	Fine
16	32.4	26.3	20	22	67	73	0.0	11.0	3.7	11.4	27.5	25.9	1.44	Fine
17	31.9	25.3	19	21	67	72	1.5	12.2	5.0	6.7	21.0	20.3	0.99	Fine, Shower
18	32.9	25.5	20	22	67	70	0.5	11.2	6.7	12.2	26.0	24.5	1.38	Fine
19	32.0	25.5	19	22	55	75	0.0	12.4	2.3	11.9	25.9	24.4	1.37	Fine
20	32.4	25.5	19	20	66	68	0.5	11.6	1.8	12.5	28.5	26.7	1.57	Fine
21	32.8	24.7	18	21	57	69	0.0	13.2	5.5	11.4	26.5	25.0	1.42	Fine
22	32.5	23.9	20	22	58	92	0.0	11.0	1.0	6.5	21.7	20.9	1.08	Fine, Lt Cloud
23	32.5	25.8	21	21	82	90	0.0	9.0	1.4	11.8	19.9	18.7	1.27	Fine, Lt Cloud
24	32.4	23.1	20	22	74	76	0.0	7.8	9.1	13.0	26.2	24.6	1.72	Fine
25	32.1	25.4	21	22	64	71	0.0	8.8	8.4	12.4	28.5	26.8	1.68	Fine
26	33.4	23.9	22	23	51	77	0.0	8.6	4.9	11.5	28.4	26.8	1.42	Fine
27	32.6	24.5	24	24	57	77	1.5	10.2	6.5	9.5	26.0	24.7	1.20	Fine
28	33.4	24.6	24	21	55	67	1.5	8.4	4.9	7.0	23.3	22.5	1.32	Fine, Lt Cloud
29	33.1	25.0	20	22	60	66	0.0	9.4	1.6	12.2	29.0	27.2	1.52	Fine
30	32.8	25.6	20	23	62	66	0.0	12.0	0.0	12.5	30.4	28.6	1.63	Fine
31	33.5	26.1	21	23	65	66	12.5	12.8	10.2	11.4	26.2	24.7	1.66	Fine

	Temperature C°		Humidity		Rain	Evap.	Radiation			UV-R		
	Max	Min	Dew	Point	mm	mm	Wet Hr	Sun Hr	Horiz		19° N	
Avg	32.5	24.7	21.0	21.9	63	74	9.6	5.6	10.7	25.0	23.7	1.33
Total					44.0	298.0	172.7	332.6	775.7	734.5	41.28	

**18,555 17,570 Total Langley's**  
**773 732 Avg. Langley's**