



Informe Solarimétrico II Semestre 2018

Oficina de Servicios Climatológicos

Dirección Meteorológica de Chile
Subdepartamento de Climatología y Meteorología Aplicada

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: JULY Year: 2018 Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°27' S
Longitude	70°19'W	68°54' W	70°26' W	70°42' W
Elevation	58 m	2270 m	135 m	520 m
Station	ARICA	CALAMA	ANTOFAGASTA	QUINTA NORMAL
Date				
1	10.39	.	13.96	3.27
2	11.45	.	15.00	1.81
3	8.28	.	9.28	6.08
4	7.06	.	10.70	5.53
5	10.10	.	11.04	2.15
6	5.80	.	9.40	2.83
7	4.76	.	14.12	4.23
8	4.79	.	12.27	10.53
9	10.25	.	14.70	11.27
10	11.36	.	13.90	11.29
11	5.34	.	10.97	1.67
12	7.61	.	13.11	8.13
13	5.82	.	15.12	9.44
14	9.62	.	13.85	10.26
15	6.50	.	14.96	10.35
16	5.60	.	13.51	4.87
17	5.07	.	6.43	6.89
18	8.64	.	5.64	6.07
19	6.57	.	5.37	5.81
20	5.23	.	15.92	10.94
21	4.99	.	8.84	12.04
22	5.62	.	5.76	9.40
23	5.59	.	4.73	11.98
24	9.35	.	10.17	12.45
25	8.65	.	8.24	11.97
26	7.58	.	12.15	11.85
27	6.16	.	10.56	10.87
28	6.79	.	15.79	2.46
29	8.16	.	14.59	12.89
30	8.83	.	14.89	11.67
31	5.13	.	13.25	12.68
TT Monthly Totals	227.10	.	358.21	253.67
 Daily Means	7.33	.	14.57	8.18
SS Monthly Totals				
 Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: JULY Year: 2018 Country: CHILE

Daily Totals				
Latitude	41°25' S	45°35' S		
Longitude	73°05' W	72°07' W		
Elevation	85 m	310 m		
Station	PUERTO MONTT	COYHAIQUE		
Date				
1	9.63	3.45		
2	9.48	3.07		
3	5.85	3.69		
4	2.40	4.23		
5	2.98	1.47		
6	3.28	3.67		
7	6.89	3.87		
8	9.67	1.37		
9	7.54	3.95		
10	2.93	2.28		
11	3.83	2.70		
12	1.07	3.21		
13	1.44	2.25		
14	7.26	0.16		
15	6.33	3.63		
16	8.38	.		
17	8.71	0.34		
18	7.14	0.85		
19	10.41	4.25		
20	5.46	2.32		
21	3.95	0.58		
22	7.78	4.32		
23	11.10	3.15		
24	11.55	4.93		
25	6.59	4.40		
26	9.47	3.08		
27	4.00	4.55		
28	4.08	1.55		
29	4.64	3.14		
30	5.88	4.11		
31	.	0.49		
TT Monthly Totals	.	.		
Daily Means	6.32	2.83		
SS Monthly Totals				
Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: AUGUST Year: 2018 Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°27' S
Longitude	70°19'W	68°54' W	70°26' W	70°42' W
Elevation	58 m	2270 m	135 m	520 m
Station	ARICA	CALAMA	ANTOFAGASTA	QUINTA NORMAL
Date				
1	7.66	.	14.57	12.57
2	11.05	.	3.94	10.62
3	7.23	.	15.98	3.68
4	6.04	.	15.43	12.45
5	12.82	.	16.42	10.96
6	11.02	.	16.51	7.65
7	10.66	.	12.37	4.14
8	13.05	.	16.61	10.82
9	12.75	.	15.36	14.33
10	7.76	.	16.11	12.89
11	7.73	.	5.19	12.14
12	6.19	.	13.13	12.36
13	8.47	.	13.47	11.04
14	13.60	.	17.55	14.62
15	10.22	.	16.26	14.95
16	16.50	.	17.02	15.06
17	13.50	.	16.38	14.42
18	11.35	.	16.43	8.09
19	11.98	.	16.34	6.82
20	16.41	.	17.67	16.01
21	15.24	.	18.06	15.28
22	11.32	.	13.65	15.41
23	9.29	.	8.78	5.17
24	9.45	.	17.71	7.01
25	12.80	.	19.40	16.74
26	17.75	.	19.38	16.53
27	15.66	.	18.16	16.77
28	11.19	.	18.97	14.16
29	9.54	.	13.57	13.81
30	11.76	.	15.81	15.79
31	12.61	.	18.75	8.42
TT Monthly Totals	352.59	.	474.99	370.73
 Daily Means	11.37	.	19.58	11.96
SS Monthly Totals				
 Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: AUGUST Year: 2018 Country: CHILE

Daily Totals				
Latitude	41°25' S	45°35' S		
Longitude	73°05' W	72°07' W		
Elevation	85 m	310 m		
Station	PUERTO MONTT	COYHAIQUE		
Date				
1	12.20	5.22		
2	6.55	0.59		
3	6.44	1.66		
4	2.31	4.22		
5	2.92	3.75		
6	0.90	2.42		
7	8.65	4.63		
8	11.07	4.73		
9	3.07	1.44		
10	11.59	3.52		
11	5.69	1.26		
12	8.00	1.84		
13	11.01	6.27		
14	13.20	3.09		
15	10.73	3.10		
16	4.83	6.29		
17	6.23	0.30		
18	11.33	7.15		
19	15.17	7.62		
20	15.44	7.61		
21	12.97	7.66		
22	1.68	3.75		
23	7.34	4.75		
24	7.08	3.30		
25	5.77	0.33		
26	7.25	9.13		
27	6.52	4.95		
28	2.68	0.90		
29	16.37	3.94		
30	17.09	6.60		
31	16.46	10.01		
TT Monthly Totals	268.52	132.01		
Daily Means	8.66	4.26		
SS Monthly Totals				
Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: SEPTEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°27' S
Longitude	70°19'W	68°54' W	70°26' W	70°42' W
Elevation	58 m	2270 m	135 m	520 m
Station	ARICA	CALAMA	ANTOFAGASTA	QUINTA NORMAL
Date				
1	14.23	.	19.58	4.70
2	13.18	.	20.79	16.11
3	13.48	.	20.11	17.96
4	19.17	.	19.23	18.17
5	13.71	.	21.26	18.72
6	13.60	.	18.98	12.11
7	14.85	.	20.32	16.61
8	14.39	.	21.31	18.34
9	15.00	.	20.39	19.10
10	10.83	.	21.31	18.62
11	12.56	.	9.32	19.66
12	11.78	.	17.62	16.67
13	15.74	.	19.49	9.18
14	19.90	.	20.95	19.34
15	14.92	.	16.08	19.03
16	15.24	.	23.86	2.25
17	15.48	.	20.82	19.34
18	14.06	.	21.31	7.39
19	16.04	.	23.76	8.87
20	17.14	.	23.31	7.87
21	16.98	.	23.50	6.16
22	19.60	.	22.67	22.21
23	20.25	.	21.39	20.81
24	18.58	.	21.21	19.76
25	19.02	.	23.89	9.40
26	20.13	.	24.08	9.58
27	17.50	.	22.88	6.11
28	21.42	.	13.57	5.24
29	16.91	.	23.31	6.74
30	15.54	.	24.17	5.93
31				
TT Monthly Totals	481.23	.	620.47	401.96
 Daily Means	16.21	.	20.72	13.40
SS Monthly Totals				
 Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: SEPTEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	41°25' S	45°35' S		
Longitude	73°05' W	72°07' W		
Elevation	85 m	310 m		
Station	PUERTO MONTT	COYHAIQUE		
Date				
1	6.66	2.75		
2	14.98	8.38		
3	8.54	2.06		
4	11.93	4.36		
5	10.00	0.95		
6	6.11	5.20		
7	10.18	10.27		
8	18.49	10.17		
9	18.65	10.61		
10	8.84	13.14		
11	13.77	3.94		
12	10.32	4.73		
13	14.94	5.70		
14	9.10	7.44		
15	18.07	7.96		
16	3.72	9.09		
17	14.80	5.54		
18	6.49	7.42		
19	7.67	9.29		
20	9.92	0.61		
21	2.54	6.61		
22	8.78	1.60		
23	11.31	6.92		
24	18.67	3.81		
25	17.83	8.98		
26	13.77	5.76		
27	6.36	8.75		
28	7.17	6.47		
29	10.40	6.07		
30	9.85	11.32		
31				
TT Monthly Totals	329.87	195.89		
Daily Means	11.00	6.53		
SS Monthly Totals				
Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: OCTOBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°27' S
Longitude	70°19'W	68°54' W	70°26' W	70°42' W
Elevation	58 m	2270 m	135 m	520 m
Station	ARICA	CALAMA	ANTOFAGASTA	QUINTA NORMAL
Date				
1	17.97	.	0.37	3.85
2	18.53	.	.	23.75
3	17.17	.	10.78	23.59
4	21.34	.	21.76	.
5	19.95	.	19.80	22.10
6	18.05	.	7.67	23.93
7	21.82	.	21.85	24.18
8	19.45	.	22.91	15.42
9	20.76	.	24.43	17.39
10	13.15	.	24.92	13.73
11	9.80	.	6.60	9.18
12	15.91	.	8.70	19.59
13	12.86	.	20.31	16.70
14	18.00	.	22.90	17.03
15	17.90	.	26.20	25.84
16	21.83	.	26.92	25.73
17	15.37	.	26.22	5.30
18	19.37	.	25.00	22.87
19	18.77	.	24.38	25.14
20	16.63	.	21.33	26.46
21	13.78	.	13.32	27.22
22	21.93	.	24.68	25.81
23	23.91	.	28.16	20.44
24	19.30	.	24.65	17.03
25	18.39	.	26.64	18.99
26	21.09	.	22.84	15.78
27	21.64	.	24.01	26.28
28	19.03	.	22.67	22.21
29	17.32	.	23.88	14.41
30	20.72	.	28.33	13.06
31	23.09	.	26.37	22.66
TT Monthly Totals	574.83	.	.	.
 Daily Means	18.54	.	20.95	19.52
SS Monthly Totals				
 Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: OCTOBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	41°25' S	45°35' S		
Longitude	73°05' W	72°07' W		
Elevation	85 m	310 m		
Station	PUERTO MONTT	COYHAIQUE		
Date				
1	5.74	10.75		
2	16.58	11.84		
3	15.30	7.24		
4	22.67	15.88		
5	22.80	14.06		
6	7.61	11.60		
7	4.82	12.17		
8	11.55	10.05		
9	14.42	12.48		
10	24.59	16.43		
11	16.92	17.63		
12	14.48	15.39		
13	19.76	8.60		
14	9.75	7.26		
15	13.90	13.05		
16	3.89	8.47		
17	11.26	3.23		
18	21.67	3.61		
19	19.70	4.83		
20	17.54	11.30		
21	15.56	13.50		
22	26.82	15.59		
23	19.21	18.71		
24	8.91	21.20		
25	21.94	20.99		
26	9.18	9.45		
27	11.41	19.21		
28	10.08	10.64		
29	7.60	21.66		
30	21.94	19.82		
31	28.27	22.72		
TT Monthly Totals	475.88	409.34		
Daily Means	15.35	13.20		
SS Monthly Totals				
Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: NOVEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°27' S
Longitude	70°19'W	68°54' W	70°26' W	70°42' W
Elevation	58 m	2270 m	135 m	520 m
Station	ARICA	CALAMA	ANTOFAGASTA	QUINTA NORMAL
Date				
1	16.95	.	19.43	28.15
2	18.47	.	24.07	6.53
3	22.98	.	27.79	26.53
4	25.51	.	28.25	29.45
5	25.35	.	28.24	29.92
6	25.02	.	27.92	28.68
7	23.44	.	30.06	29.92
8	20.93	.	29.02	29.78
9	21.10	.	25.80	29.61
10	22.83	.	25.99	25.66
11	19.93	.	27.58	30.48
12	22.23	.	29.49	28.79
13	21.05	.	30.07	9.49
14	18.33	.	30.04	23.00
15	19.27	.	30.21	29.71
16	24.22	.	28.84	30.39
17	26.04	.	30.02	30.61
18	20.57	.	26.32	30.16
19	21.77	.	23.54	31.49
20	20.87	.	27.42	31.11
21	25.49	.	30.19	31.10
22	23.71	.	27.66	30.86
23	23.46	.	28.08	29.90
24	19.72	.	27.03	29.88
25	24.30	.	25.92	30.64
26	24.96	.	28.14	30.78
27	22.23	.	30.05	31.13
28	25.20	.	28.16	31.35
29	26.96	.	30.38	30.63
30	25.38	.	28.18	30.60
31		.		
TT Monthly Totals	678.28	.	833.89	846.34
Daily Means	22.61	.	27.80	28.21
SS Monthly Totals				
Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: NOVEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	41°25' S	45°35' S		
Longitude	73°05' W	72°07' W		
Elevation	85 m	310 m		
Station	PUERTO MONTT	COYHAIQUE		
Date				
1	11.36	20.62		
2	9.67	19.82		
3	7.22	13.37		
4	.	12.50		
5	.	12.75		
6	.	23.97		
7	27.53	22.73		
8	6.38	14.98		
9	7.37	19.96		
10	16.57	14.89		
11	21.14	16.20		
12	29.55	23.31		
13	7.86	23.17		
14	8.83	14.73		
15	31.16	15.52		
16	14.43	18.42		
17	15.87	22.01		
18	11.35	16.29		
19	11.07	10.71		
20	12.80	8.76		
21	3.50	6.36		
22	22.16	13.38		
23	20.85	20.40		
24	29.75	20.40		
25	30.24	24.31		
26	30.74	24.31		
27	24.66	24.07		
28	21.89	25.25		
29	6.90	25.25		
30	30.75	24.22		
31				
TT Monthly Totals	.	552.69		
Daily Means	17.47	18.42		
SS Monthly Totals				
Daily Means				
Types of Instruments	PYRANOMETER PSP EPPLEY	PYRANOMETER PSP EPPLEY	PYRANOMETER PSP EPPLEY	PYRANOMETER PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: DECEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°27' S
Longitude	70°19'W	68°54' W	70°26' W	70°42' W
Elevation	58 m	2270 m	135 m	520 m
Station	ARICA	CALAMA	ANTOFAGASTA	QUINTA NORMAL
Date				
1	32.16	.	30.36	23.61
2	30.94	.	30.99	29.25
3	31.49	.	30.24	27.44
4	14.83	.	29.30	29.24
5	27.79	.	31.27	8.24
6	31.16	.	31.29	26.72
7	31.32	.	31.53	31.70
8	19.57	.	31.40	31.13
9	13.89	.	30.47	24.96
10	10.51	.	31.11	32.81
11	19.36	.	30.75	31.94
12	19.30	.	30.96	29.94
13	9.22	.	29.72	30.58
14	14.99	.	29.58	32.32
15	18.63	.	25.60	24.12
16	19.58	.	21.21	32.31
17	32.81	.	26.92	32.41
18	29.04	.	28.48	31.95
19	9.60	.	28.56	31.64
20	19.89	.	31.04	31.34
21	17.39	.	28.31	32.79
22	13.71	.	31.28	32.08
23	32.33	.	30.09	31.88
24	26.70	.	28.00	31.96
25	22.25	.	28.60	31.61
26	17.99	.	28.38	32.14
27	27.75	.	24.96	31.79
28	24.91	.	27.96	32.41
29	24.06	.	27.65	32.73
30	9.24	.	28.03	32.85
31
TT Monthly Totals	652.42	.	874.06	895.89
 Daily Means	21.75	.	29.14	29.86
SS Monthly Totals				
 Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: DECEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	41°25' S	45°35' S		
Longitude	73°05' W	72°07' W		
Elevation	85 m	310 m		
Station	PUERTO MONTT	COYHAIQUE		
Date				
1	32.16	25.88		
2	30.94	25.89		
3	31.49	23.48		
4	14.83	23.48		
5	27.79	27.25		
6	31.16	27.26		
7	31.32	26.63		
8	19.57	26.63		
9	13.89	21.93		
10	10.51	19.69		
11	19.36	16.80		
12	19.30	18.48		
13	9.22	18.49		
14	14.99	21.84		
15	18.63	21.85		
16	19.58	18.50		
17	32.81	27.90		
18	29.04	27.91		
19	9.60	19.06		
20	19.89	27.59		
21	17.39	27.60		
22	13.71	27.48		
23	32.33	12.54		
24	26.70	18.27		
25	22.25	25.90		
26	17.99	25.91		
27	27.75	25.50		
28	24.91	19.96		
29	24.06	12.50		
30	9.24	8.88		
31	8.75	14.98		
TT Monthly Totals	661.17	686.06		
Daily Means	21.33	22.13		
SS Monthly Totals				
Daily Means				
Types of	PYRANOMETER	PYRANOMETER	PYRANOMETER	PYRANOMETER
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: JULY		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	18°21' S	20°32' S	22°28' S	23°26' S	
Longitude	70°19'W	72°10' W	68°55' W	70°26' W	
Elevation	58 m	52 m	270 m	135 m	
Station	ARICA	IQUIQUE	CALAMA	ANTOFAGASTA	
Date					
1	5.2	6.9	.	7.9	
2	6.9	10.0	.	8.5	
3	3.7	8.1	.	3.6	
4	3.1	6.3	.	4.0	
5	3.6	9.6	.	4.2	
6	1.9	5.1	.	2.2	
7	1.2	0.0	.	6.4	
8	1.1	0.0	.	4.8	
9	5.2	7.8	.	6.4	
10	5.4	9.5	.	5.7	
11	0.0	0.7	.	2.8	
12	0.5	2.5	.	4.5	
13	0.4	4.6	.	7.2	
14	4.6	9.8	.	5.8	
15	1.3	7.0	.	7.0	
16	0.0	2.4	.	6.2	
17	0.0	7.3	.	0.0	
18	2.0	0.1	.	0.3	
19	0.9	0.2	.	1.2	
20	0.6	4.1	.	9.8	
21	0.8	2.5	.	1.6	
22	0.0	0.0	.	0.3	
23	0.0	1.0	.	0.0	
24	1.3	5.2	.	2.3	
25	3.6	0.6	.	1.3	
26	0.2	4.0	.	4.8	
27	0.0	5.8	.	4.1	
28	0.0	8.5	.	9.1	
29	2.2	6.3	.	7.1	
30	2.1	7.3	.	6.7	
31	2.1	7.3	.	6.7	
TT Monthly Totals					
Daily Means					
SS Monthly Totals	59.9	150.5	.	142.5	
Daily Means	1.9	4.9	.	4.6	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: JULY		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	27°15'S	27°10' S	29°57' S	33°23' S	
Longitude	70°46'W	109°26' W	71°22' W	70°47' W	
Elevation	204 m	47 m	25 m	474 m	
Station	CALDERA	ISLA DE PASCUA	LA SERENA	PUDAHUEL	
Date					
1	9.1	7.5	8.4	.	
2	8.8	2.9	6.8	.	
3	7.7	7.5	6.3	.	
4	6.5	4.8	4.2	.	
5	9.3	1.7	6.0	.	
6	8.9	0.1	8.9	.	
7	5.2	0.5	9.5	.	
8	5.2	7.8	4.1	.	
9	3.5	5.0	0.0	.	
10	1.0	5.5	0.0	.	
11	6.3	8.9	6.4	.	
12	6.9	0.0	7.6	.	
13	6.2	8.5	3.1	.	
14	3.6	5.9	0.0	.	
15	7.4	8.5	8.5	.	
16	4.3	9.0	0.0	.	
17	5.0	4.2	0.0	.	
18	0.0	0.1	2.7	.	
19	7.6	0.7	9.1	.	
20	9.5	0.3	9.5	.	
21	4.3	5.9	9.3	.	
22	7.4	7.9	8.0	.	
23	3.4	2.5	8.5	.	
24	6.0	7.9	7.2	.	
25	7.8	4.3	6.8	.	
26	0.0	6.3	0.0	.	
27	8.3	3.8	4.5	.	
28	9.6	4.1	9.6	.	
29	7.3	7.8	9.8	.	
30	8.3	5.7	9.5	.	
31	8.3	5.7	9.5	.	
TT Monthly Totals					
Daily Means					
SS Monthly Totals	192.7	151.3	183.8	.	
Daily Means	6.2	4.9	5.9	.	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: JULY Year: 2018 Country: CHILE

Daily Totals				
Latitude	33°27' S	33°37' S	33°39' S	34°58' S
Longitude	70°42' W	78°50' W	71°36' W	71°12' W
Elevation	520 m	30 m	74 m	225 m
Station	QUINTA NORMAL	ROBINSON CRUSOE	SANTO DOMINGO	CURICO
Date				
1	0.0	3.9	0.0	0.2
2	0.6	0.0	1.1	5.2
3	1.6	0.6	0.0	0.5
4	0.0	1.2	0.0	0.0
5	0.8	0.8	0.0	0.0
6	0.7	0.5	4.4	1.6
7	6.1	2.5	6.2	8.8
8	7.2	7.0	6.1	5.2
9	7.5	7.1	1.0	4.7
10	0.0	5.9	0.0	0.0
11	5.0	2.5	4.9	5.0
12	4.1	5.6	2.4	2.2
13	6.5	4.9	6.1	4.9
14	6.4	5.3	1.9	1.9
15	2.4	2.8	4.8	4.9
16	1.8	2.1	6.9	1.8
17	2.9	6.9	4.2	0.9
18	2.3	4.7	6.2	1.0
19	7.0	4.7	5.2	0.6
20	7.4	3.4	6.9	7.4
21	4.7	2.9	3.1	0.0
22	7.4	3.8	6.5	7.1
23	7.8	6.0	7.0	8.0
24	7.7	7.6	6.6	8.2
25	7.5	0.0	4.7	7.3
26	6.3	0.1	0.0	4.9
27	0.0	0.1	0.0	0.0
28	7.8	1.9	6.6	8.8
29	6.3	1.6	7.8	6.9
30	7.8	1.7	7.4	6.5
31	7.8	1.7	7.4	6.5
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	141.4	99.8	125.4	121.0
 Daily Means	4.6	3.2	4.0	3.9
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: JULY		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	36°36' S	36°46' S	38°45' S	39°41' S	
Longitude	72°26' W	73°03' W	72°38' W	73°04' W	
Elevation	124 m	12 m	114 m	19 m	
Station	CHILLAN	CONCEPCION	TEMUCO	VALDIVIA	
Date					
1	.	0.0	.	0.0	
2	.	0.4	.	1.7	
3	.	0.0	.	1.1	
4	.	1.0	.	0.0	
5	.	0.1	.	0.0	
6	.	0.9	.	0.6	
7	.	4.2	.	6.4	
8	.	8.7	.	6.9	
9	.	7.4	.	0.5	
10	.	0.0	.	0.0	
11	.	7.3	.	1.8	
12	.	0.2	.	0.0	
13	.	0.3	.	0.0	
14	.	5.7	.	6.1	
15	.	7.5	.	1.7	
16	.	8.6	.	3.2	
17	.	7.8	.	3.0	
18	.	7.2	.	0.0	
19	.	8.3	.	6.4	
20	.	6.2	.	1.9	
21	.	1.0	.	1.2	
22	.	8.0	.	7.4	
23	.	9.3	.	5.9	
24	.	9.1	.	3.3	
25	.	7.7	.	0.0	
26	.	2.2	.	0.0	
27	.	0.7	.	0.1	
28	.	7.9	.	1.4	
29	.	5.4	.	1.4	
30	.	9.2	.	4.0	
31	.	9.2	.	4.0	
TT Monthly Totals					
Daily Means					
SS Monthly Totals	.	151.5	.	70.0	
Daily Means	.	4.9	.	2.3	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: JULY		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	41°26' S	45°35' S	53°08' S		
Longitude	73°07' W	72°07' W	70°58' W		
Elevation	81 m	310 m	37 m		
Station					
Date	PUERTO MONTT	COYHAIQUE	PUNTA ARENAS		
1	4.8	2.8	6.6		
2	5.0	0.3	2.6		
3	1.6	0.3	4.8		
4	0.0	1.5	0.0		
5	0.0	0.0	0.0		
6	0.4	3.7	0.0		
7	1.5	1.5	2.1		
8	5.9	0.0	0.2		
9	4.4	2.0	0.0		
10	0.0	1.0	6.0		
11	0.1	0.6	0.0		
12	0.0	2.2	6.6		
13	0.0	0.0	6.8		
14	2.0	0.0	7.1		
15	1.8	2.0	8.0		
16	2.7	0.0	5.1		
17	5.4	0.0	6.5		
18	2.5	0.0	5.5		
19	6.4	3.7	4.3		
20	2.3	2.3	0.5		
21	1.8	0.7	0.8		
22	4.9	2.6	0.0		
23	7.5	1.6	1.3		
24	5.1	4.8	7.0		
25	1.4	4.1	3.6		
26	4.1	2.0	7.5		
27	0.3	3.4	1.4		
28	0.0	0.8	4.7		
29	2.4	3.4	3.7		
30	3.6	3.6	0.0		
31	3.6	3.6	0.0		
TT Monthly Totals					
 Daily Means					
SS Monthly Totals	81.5	54.5	102.7		
 Daily Means	2.6	1.8	3.3		
Types of	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH		
Instruments	CAMPBELL	CAMPBELL	CAMPBELL		
	STOKES	STOKES	STOKES		

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: AUGUST		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	18°21' S	20°32' S	22°28' S	23°26' S	
Longitude	70°19'W	72°10' W	68°55' W	70°26' W	
Elevation	58 m	52 m	270 m	135 m	
Station	ARICA	IQUIQUE	CALAMA	ANTOFAGASTA	
Date					
1	1.3	7.0	.	6.2	
2	4.1	3.7	.	0.0	
3	1.4	2.5	.	9.0	
4	0.8	0.1	.	8.4	
5	4.1	10.4	.	9.6	
6	3.2	5.4	.	8.3	
7	4.8	7.7	.	5.8	
8	5.2	5.1	.	8.0	
9	6.2	7.8	.	6.0	
10	0.0	4.0	.	6.8	
11	0.7	6.2	.	0.0	
12	0.1	1.2	.	4.3	
13	0.4	7.2	.	5.1	
14	6.0	7.1	.	8.6	
15	3.8	0.9	.	7.3	
16	9.2	8.5	.	8.3	
17	4.8	8.4	.	6.6	
18	3.7	6.4	.	6.9	
19	4.5	0.0	.	7.5	
20	8.4	8.1	.	6.9	
21	8.3	9.9	.	7.3	
22	3.5	5.9	.	3.5	
23	1.6	4.2	.	0.4	
24	1.8	4.7	.	8.0	
25	5.5	2.0	.	8.3	
26	9.2	6.4	.	8.3	
27	5.1	10.4	.	6.4	
28	2.1	10.1	.	6.8	
29	1.7	5.6	.	3.4	
30	2.6	6.5	.	4.8	
31	2.6	6.5	.	4.8	
TT Monthly Totals					
Daily Means					
SS Monthly Totals	116.7	179.9	.	191.6	
Daily Means	3.8	5.8	.	6.2	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: AUGUST Year: 2018 Country: CHILE

Daily Totals				
Latitude	27°15'S	27°10' S	29°57' S	33°23' S
Longitude	70°46'W	109°26' W	71°22' W	70°47' W
Elevation	204 m	47 m	25 m	474 m
Station	CALDERA	ISLA DE PASCUA	LA SERENA	PUDAHUEL
Date				
1	6.2	7.5	5.2	.
2	5.7	7.4	3.5	.
3	9.2	8.0	7.6	.
4	5.2	3.5	8.8	.
5	2.2	9.1	5.3	.
6	9.6	8.8	7.3	.
7	9.9	2.7	9.2	.
8	10.0	6.4	10.2	.
9	0.8	3.4	3.8	.
10	0.8	7.5	4.4	.
11	0.0	9.2	0.0	.
12	0.0	8.1	3.6	.
13	7.1	8.8	9.8	.
14	8.1	3.8	9.9	.
15	3.0	0.0	3.4	.
16	2.0	0.0	2.5	.
17	0.0	0.0	1.8	.
18	5.7	8.3	5.3	.
19	2.8	5.3	9.6	.
20	6.6	7.8	7.0	.
21	8.4	6.8	6.4	.
22	7.3	7.5	4.6	.
23	6.5	5.1	7.4	.
24	10.1	0.5	10.6	.
25	9.1	4.2	10.1	.
26	4.7	8.8	1.2	.
27	4.9	6.4	0.5	.
28	6.6	8.6	0.0	.
29	0.0	5.8	1.2	.
30	1.2	1.6	0.0	.
31	1.2	1.6	0.0	.
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	154.9	172.5	160.2	.
 Daily Means	5.0	5.6	5.2	.
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: AUGUST		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	33°27' S	33°37' S	33°39' S	34°58' S	
Longitude	70°42' W	78°50' W	71°36' W	71°12' W	
Elevation	520 m	30 m	74 m	225 m	
Station					
Date	QUINTA NORMAL	ROBINSON CRUSOE	SANTO DOMINGO	CURICO	
1	5.7	0.0	4.6	3.4	
2	0.0	0.5	0.0	0.8	
3	7.2	2.4	7.4	8.2	
4	5.2	3.7	8.7	1.1	
5	1.3	1.1	1.0	0.0	
6	0.0	0.0	0.0	0.0	
7	5.6	7.9	7.5	5.9	
8	8.1	6.7	8.4	9.1	
9	5.7	2.3	3.9	4.6	
10	6.6	4.0	5.0	6.0	
11	6.6	2.1	2.1	2.6	
12	2.9	4.2	1.2	5.7	
13	8.0	4.7	7.0	5.2	
14	8.2	7.1	9.0	9.0	
15	8.5	7.8	8.9	9.1	
16	8.0	3.0	5.8	8.0	
17	0.8	4.6	2.0	0.5	
18	0.8	6.5	7.5	5.4	
19	8.3	7.5	8.6	8.9	
20	8.2	8.3	4.6	9.6	
21	7.5	7.6	0.0	9.1	
22	0.0	4.0	0.0	0.0	
23	2.8	5.9	2.7	1.8	
24	8.5	7.8	9.1	6.5	
25	8.4	7.1	9.6	6.8	
26	8.6	8.5	8.9	7.3	
27	6.2	7.5	0.0	4.8	
28	6.0	1.1	6.6	0.0	
29	6.8	0.0	2.6	0.0	
30	2.6	3.8	1.0	0.8	
31	2.6	3.8	1.0	0.8	
TT Monthly Totals					
 Daily Means					
SS Monthly Totals					
 Daily Means					
Types of					
Instruments					
STOKES					

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: AUGUST Year: 2018 Country: CHILE

Daily Totals				
Latitude	36°36' S	36°46' S	38°45' S	39°41' S
Longitude	72°26' W	73°03' W	72°38' W	73°04' W
Elevation	124 m	12 m	114 m	19 m
Station	CHILLAN	CONCEPCION	TEMUCO	VALDIVIA
Date				
1	.	9.4	.	8.8
2	.	0.0	.	0.0
3	.	6.1	.	3.2
4	.	0.0	.	0.0
5	.	0.0	.	0.0
6	.	0.0	.	0.0
7	.	9.2	.	3.6
8	.	9.0	.	3.5
9	.	2.1	.	0.0
10	.	7.4	.	3.6
11	.	2.9	.	0.0
12	.	1.2	.	6.8
13	.	8.0	.	8.0
14	.	8.3	.	3.5
15	.	8.6	.	3.1
16	.	1.9	.	0.0
17	.	1.3	.	2.2
18	.	9.6	.	5.1
19	.	10.3	.	9.0
20	.	10.1	.	5.3
21	.	1.2	.	5.2
22	.	0.0	.	0.1
23	.	4.0	.	6.5
24	.	9.0	.	2.0
25	.	10.1	.	0.0
26	.	9.6	.	4.5
27	.	4.4	.	1.9
28	.	5.4	.	0.0
29	.	0.0	.	0.0
30	.	1.6	.	8.1
31	.	1.6	.	8.1
TT Monthly Totals				
Daily Means				
SS Monthly Totals	.	152.3	.	102.1
Daily Means	.	4.9	.	3.3
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: AUGUST Year: 2018 Country: CHILE

Daily Totals				
Latitude	41°26' S	45°35' S	53°08' S	
Longitude	73°07' W	72°07' W	70°58' W	
Elevation	81 m	310 m	37 m	
Station	PUERTO MONTT	COYHAIQUE	PUNTA ARENAS	
Date				
1	3.8	3.9	3.3	
2	1.5	0.4	0.0	
3	2.9	0.0	5.3	
4	0.0	2.3	6.5	
5	0.0	3.6	2.2	
6	0.0	0.0	0.0	
7	3.4	5.7	0.6	
8	6.4	5.9	0.0	
9	0.1	1.7	3.8	
10	4.8	5.7	6.9	
11	2.6	2.5	4.1	
12	6.6	0.7	4.3	
13	6.9	5.8	4.2	
14	5.1	4.5	5.5	
15	6.6	1.7	3.1	
16	0.0	4.4	7.9	
17	1.0	0.6	6.9	
18	7.0	7.0	8.2	
19	8.4	5.5	5.9	
20	8.4	5.6	0.7	
21	5.9	6.4	6.6	
22	0.2	0.8	0.0	
23	5.4	6.6	4.8	
24	1.4	0.6	0.0	
25	0.0	0.3	0.0	
26	0.4	6.9	0.0	
27	2.2	3.7	3.5	
28	0.0	0.0	7.6	
29	8.1	6.0	8.2	
30	9.4	6.9	6.9	
31	9.4	6.9	6.9	
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	117.9	112.6	123.9	
 Daily Means	3.8	3.6	4.0	
Types of	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH	
Instruments	CAMPBELL	CAMPBELL	CAMPBELL	
	STOKES	STOKES	STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: SEPTEMBER		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	18°21' S	20°32' S	22°28' S	23°26' S	
Longitude	70°19'W	72°10' W	68°55' W	70°26' W	
Elevation	58 m	52 m	270 m	135 m	
Station	ARICA	IQUIQUE	CALAMA	ANTOFAGASTA	
Date					
1	5.9	10.8	.	8.5	
2	5.2	5.9	.	9.0	
3	4.4	3.5	.	8.5	
4	9.7	8.9	.	6.6	
5	5.6	9.1	.	6.3	
6	4.7	10.3	.	6.0	
7	5.8	4.6	.	8.5	
8	5.1	10.8	.	8.7	
9	5.9	10.4	.	8.5	
10	0.7	7.4	.	7.2	
11	2.9	9.6	.	0.9	
12	1.8	2.9	.	5.6	
13	5.6	4.6	.	6.2	
14	9.8	9.4	.	8.0	
15	5.0	6.5	.	4.6	
16	5.6	6.7	.	10.3	
17	5.0	8.4	.	7.7	
18	3.0	7.0	.	7.8	
19	6.3	10.8	.	8.9	
20	6.3	9.1	.	8.9	
21	5.1	6.4	.	9.3	
22	7.0	4.1	.	8.7	
23	8.6	10.8	.	7.8	
24	6.7	9.2	.	6.4	
25	7.4	9.2	.	9.0	
26	8.0	8.7	.	9.7	
27	6.1	11.4	.	7.2	
28	9.7	11.5	.	9.1	
29	6.2	9.2	.	8.7	
30	6.2	9.2	.	8.7	
31					
TT Monthly Totals					
Daily Means					
SS Monthly Totals	175.3	246.4	.	231.3	
Daily Means	5.8	8.2	.	7.7	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: SEPTEMBER		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	27°15'S	27°10' S	29°57' S	33°23' S	
Longitude	70°46'W	109°26' W	71°22' W	70°47' W	
Elevation	204 m	47 m	25 m	474 m	
Station	CALDERA	ISLA DE PASCUA	LA SERENA	PUDAHUEL	
Date					
1	10.2	6.2	9.6	.	
2	10.0	6.8	9.8	.	
3	7.2	3.0	10.7	.	
4	0.0	5.8	0.0	.	
5	6.7	9.6	7.4	.	
6	6.1	9.6	5.9	.	
7	5.6	3.4	0.0	.	
8	5.7	9.6	1.5	.	
9	5.6	5.9	2.4	.	
10	4.1	2.0	0.0	.	
11	2.0	9.4	0.0	.	
12	0.6	0.2	0.4	.	
13	0.9	8.9	0.0	.	
14	0.5	6.9	0.0	.	
15	4.2	10.6	0.0	.	
16	10.7	9.2	10.5	.	
17	8.5	9.9	8.5	.	
18	7.3	11.1	7.1	.	
19	3.9	7.7	7.8	.	
20	10.3	2.1	10.2	.	
21	7.4	7.6	8.3	.	
22	2.6	5.7	3.4	.	
23	8.0	7.3	8.3	.	
24	5.5	7.7	9.9	.	
25	6.5	0.7	4.5	.	
26	5.5	0.0	1.2	.	
27	7.1	3.9	1.3	.	
28	6.2	0.0	8.6	.	
29	9.3	1.2	0.3	.	
30	9.3	1.2	0.3	.	
31					
TT Monthly Totals					
Daily Means					
SS Monthly Totals	177.5	173.2	137.9	.	
Daily Means	5.9	5.8	4.6	.	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: SEPTEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	33°27' S	33°37' S	33°39' S	34°58' S
Longitude	70°42' W	78°50' W	71°36' W	71°12' W
Elevation	520 m	30 m	74 m	225 m
Station	QUINTA NORMAL	ROBINSON CRUSOE	SANTO DOMINGO	CURICO
Date				
1	7.8	8.3	7.3	6.0
2	9.6	5.7	10.5	4.8
3	8.8	7.7	10.5	7.5
4	9.1	5.6	10.1	9.4
5	5.2	7.0	4.7	2.3
6	7.9	3.8	7.7	7.9
7	8.0	7.6	9.1	6.0
8	8.8	8.6	10.4	5.3
9	7.6	9.0	9.2	9.9
10	8.9	9.1	10.3	9.5
11	8.4	0.6	9.6	7.4
12	2.1	2.3	9.3	3.4
13	8.9	1.1	6.7	9.9
14	8.6	0.2	0.0	9.8
15	0.0	0.7	0.0	0.0
16	7.7	0.8	7.1	6.5
17	0.9	0.0	0.3	0.0
18	2.5	5.2	7.0	5.3
19	0.1	6.1	1.3	0.0
20	0.5	4.6	5.8	0.0
21	8.7	5.2	7.8	9.6
22	9.3	6.0	2.5	1.9
23	6.9	7.6	9.5	9.2
24	0.5	7.5	1.5	3.3
25	1.3	0.8	0.1	0.0
26	0.4	0.1	0.1	2.3
27	0.0	2.6	0.0	0.0
28	0.0	2.7	0.0	0.0
29	0.0	5.0	5.4	5.4
30	0.0	5.0	5.4	5.4
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	148.5	136.5	169.2	148.0
 Daily Means	5.0	4.6	5.6	4.9
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: SEPTEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	36°36' S	36°46' S	38°45' S	39°41' S
Longitude	72°26' W	73°03' W	72°38' W	73°04' W
Elevation	124 m	12 m	114 m	19 m
Station	CHILLAN	CONCEPCION	TEMUCO	VALDIVIA
Date				
1	.	9.5	.	5.0
2	.	8.8	.	1.8
3	.	9.8	.	4.3
4	.	10.0	.	6.5
5	.	0.5	.	3.3
6	.	9.7	.	6.6
7	.	10.6	.	5.6
8	.	10.4	.	10.2
9	.	10.2	.	10.7
10	.	9.9	.	5.2
11	.	7.7	.	3.1
12	.	10.5	.	10.3
13	.	10.4	.	10.4
14	.	9.9	.	1.3
15	.	9.6	.	7.3
16	.	0.0	.	0.0
17	.	0.0	.	9.0
18	.	4.4	.	2.4
19	.	3.5	.	0.7
20	.	0.0	.	2.3
21	.	1.4	.	0.0
22	.	5.3	.	2.3
23	.	10.5	.	6.9
24	.	8.1	.	6.1
25	.	6.2	.	8.7
26	.	0.5	.	2.6
27	.	0.1	.	0.3
28	.	1.9	.	0.0
29	.	1.7	.	3.0
30	.	1.7	.	3.0
31				
TT Monthly Totals				
Daily Means				
SS Monthly Totals	.	182.8	.	138.9
Daily Means	.	6.1	.	4.6
Types of	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH
Instruments	CAMPBELL	CAMPBELL	CAMPBELL	CAMPBELL
	STOKES	STOKES	STOKES	STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: SEPTEMBER		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	41°26' S	45°35' S	53°08' S		
Longitude	73°07' W	72°07' W	70°58' W		
Elevation	81 m	310 m	37 m		
Station	PUERTO MONTT	COYHAIQUE	PUNTA ARENAS		
Date					
1	0.9	0.0	4.2		
2	8.0	7.5	5.9		
3	2.2	3.0	3.1		
4	2.4	5.0	8.6		
5	3.5	2.2	9.1		
6	2.7	3.7	0.0		
7	4.9	8.5	2.9		
8	10.0	8.7	2.4		
9	9.8	9.0	0.8		
10	0.8	8.0	0.4		
11	8.8	6.0	5.1		
12	5.7	3.1	4.7		
13	6.1	1.4	6.0		
14	0.0	5.2	4.3		
15	7.9	3.0	5.9		
16	0.0	4.8	2.8		
17	3.2	4.1	0.6		
18	3.6	3.3	0.1		
19	3.6	7.8	5.5		
20	3.2	0.2	6.7		
21	0.0	2.5	8.6		
22	2.3	0.0	2.6		
23	6.2	3.2	7.4		
24	7.1	1.5	11.1		
25	7.0	4.3	11.3		
26	1.5	2.0	9.3		
27	0.9	2.4	0.6		
28	3.0	0.6	0.6		
29	2.1	0.6	3.8		
30	2.1	0.6	3.8		
31					
TT Monthly Totals					
 Daily Means					
SS Monthly Totals	119.5	112.2	138.2		
 Daily Means	4.0	3.7	4.6		
Types of	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH		
Instruments	CAMPBELL	CAMPBELL	CAMPBELL		
	STOKES	STOKES	STOKES		

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: OCTOBER		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	18°21' S	20°32' S	22°28' S	23°26' S	
Longitude	70°19'W	72°10' W	68°55' W	70°26' W	
Elevation	58 m	52 m	270 m	135 m	
Station	ARICA	IQUIQUE	CALAMA	ANTOFAGASTA	
Date					
1	6.3	6.6	.	1.9	
2	7.1	7.2	.	8.0	
3	4.2	0.8	.	1.6	
4	8.5	9.6	.	7.0	
5	9.1	5.1	.	7.4	
6	8.5	7.4	.	0.2	
7	9.9	11.2	.	7.5	
8	7.1	5.2	.	7.2	
9	7.7	9.3	.	8.7	
10	0.9	1.6	.	8.4	
11	0.9	0.0	.	0.0	
12	1.7	1.3	.	0.4	
13	0.4	9.3	.	3.3	
14	5.0	10.0	.	6.5	
15	5.9	8.5	.	9.6	
16	7.8	8.8	.	9.6	
17	2.6	11.1	.	9.3	
18	5.2	9.8	.	7.5	
19	4.8	8.7	.	7.2	
20	3.6	4.0	.	3.7	
21	2.5	3.5	.	2.8	
22	7.4	9.5	.	7.6	
23	9.3	10.7	.	10.5	
24	5.6	9.1	.	8.1	
25	4.1	11.5	.	8.1	
26	7.3	11.5	.	5.9	
27	7.2	6.4	.	7.0	
28	4.7	2.9	.	7.1	
29	2.8	7.0	.	5.8	
30	7.1	10.4	.	11.2	
31	7.1	10.4	.	11.2	
TT Monthly Totals					
Daily Means					
SS Monthly Totals	172.3	228.4	.	200.3	
Daily Means	5.6	7.4	.	6.5	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: OCTOBER		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	27°15'S	27°10' S	29°57' S	33°23' S	
Longitude	70°46'W	109°26' W	71°22' W	70°47' W	
Elevation	204 m	47 m	25 m	474 m	
Station	CALDERA	ISLA DE PASCUA	LA SERENA	PUDAHUEL	
Date					
1	10.5	9.0	11.3	.	
2	9.9	8.6	10.6	.	
3	2.7	9.8	7.8	.	
4	7.0	4.9	1.4	.	
5	3.7	7.5	3.4	.	
6	1.7	1.3	4.3	.	
7	7.8	9.0	5.0	.	
8	10.2	4.3	1.0	.	
9	9.8	9.2	4.4	.	
10	5.2	9.8	3.7	.	
11	0.4	10.9	0.9	.	
12	4.1	6.7	7.2	.	
13	0.0	6.5	4.8	.	
14	10.8	7.5	11.5	.	
15	6.6	7.6	1.9	.	
16	2.9	6.2	1.2	.	
17	7.7	4.1	6.9	.	
18	9.3	6.5	11.9	.	
19	11.1	7.2	10.5	.	
20	6.2	10.5	10.4	.	
21	5.5	10.8	11.5	.	
22	1.6	9.7	5.1	.	
23	5.5	9.4	0.3	.	
24	6.4	6.7	11.0	.	
25	10.2	9.7	10.4	.	
26	10.9	2.7	9.5	.	
27	9.1	0.0	7.7	.	
28	0.0	0.2	4.3	.	
29	5.4	9.2	0.0	.	
30	7.8	1.5	2.3	.	
31	7.8	1.5	2.3	.	
TT Monthly Totals					
Daily Means					
SS Monthly Totals	197.8	208.5	184.5	.	
Daily Means	6.4	6.7	6.0	.	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: OCTOBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	33°27' S	33°37' S	33°39' S	34°58' S
Longitude	70°42' W	78°50' W	71°36' W	71°12' W
Elevation	520 m	30 m	74 m	225 m
Station	QUINTA NORMAL	ROBINSON CRUSOE	SANTO DOMINGO	CURICO
Date				
1	10.4	7.1	8.0	9.9
2	8.8	0.8	11.2	9.5
3	9.9	5.5	11.5	8.0
4	9.7	8.5	10.0	8.6
5	9.8	9.8	4.7	7.1
6	8.7	4.5	6.8	5.7
7	3.0	3.0	0.0	0.0
8	7.2	6.0	1.3	4.0
9	2.7	4.0	6.4	10.8
10	0.4	6.0	0.3	0.9
11	7.1	3.4	5.8	5.0
12	5.4	1.4	1.1	2.0
13	6.0	6.0	7.6	7.6
14	10.2	6.1	9.8	11.1
15	10.3	1.6	6.1	6.5
16	0.0	0.5	0.1	2.2
17	8.4	8.0	8.5	6.4
18	9.1	6.5	10.7	10.7
19	10.5	7.2	11.4	10.5
20	10.2	10.5	10.9	10.5
21	10.9	5.7	10.9	10.1
22	9.0	3.5	9.7	7.4
23	5.0	0.0	1.7	0.0
24	5.6	8.4	5.7	6.8
25	3.6	9.9	7.8	9.1
26	9.9	3.3	9.1	11.4
27	6.9	10.1	10.6	4.5
28	2.6	0.0	2.2	3.7
29	1.5	5.8	1.0	0.0
30	7.6	2.4	9.2	9.5
31	7.6	2.4	9.2	9.5
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	218.0	157.9	209.3	209.0
 Daily Means	7.0	5.1	6.8	6.7
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: OCTOBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	36°36' S	36°46' S	38°45' S	39°41' S
Longitude	72°26' W	73°03' W	72°38' W	73°04' W
Elevation	124 m	12 m	114 m	19 m
Station	CHILLAN	CONCEPCION	TEMUCO	VALDIVIA
Date				
1	.	11.4	.	3.3
2	.	11.4	.	7.6
3	.	11.7	.	10.8
4	.	8.0	.	.
5	.	6.6	.	8.5
6	.	2.7	.	0.0
7	.	0.0	.	0.0
8	.	4.1	.	2.3
9	.	12.4	.	8.7
10	.	11.1	.	11.4
11	.	11.0	.	7.4
12	.	2.9	.	1.0
13	.	11.9	.	7.8
14	.	11.5	.	1.8
15	.	1.5	.	4.5
16	.	0.9	.	0.9
17	.	1.2	.	3.7
18	.	10.4	.	9.5
19	.	12.0	.	9.8
20	.	12.1	.	7.8
21	.	12.5	.	7.9
22	.	10.4	.	11.8
23	.	1.0	.	4.3
24	.	8.3	.	4.9
25	.	10.8	.	5.3
26	.	11.8	.	0.2
27	.	7.3	.	0.9
28	.	0.0	.	1.7
29	.	2.5	.	2.3
30	.	5.9	.	1.2
31	.	5.9	.	1.2
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	.	231.2	.	.
 Daily Means	.	7.5	.	5.0
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: OCTOBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	41°26' S	45°35' S	53°08' S	
Longitude	73°07' W	72°07' W	70°58' W	
Elevation	81 m	310 m	37 m	
Station				
Date	PUERTO MONTT	COYHAIQUE	PUNTA ARENAS	
1	0.8	6.4	4.6	
2	6.0	6.9	6.3	
3	5.8	4.7	10.6	
4	9.6	10.3	0.9	
5	9.8	6.2	0.4	
6	0.2	5.9	0.4	
7	0.0	4.1	11.5	
8	3.0	5.9	3.4	
9	5.0	9.8	6.4	
10	10.9	7.4	6.3	
11	4.3	8.7	3.0	
12	4.1	6.0	6.8	
13	6.8	3.6	7.8	
14	0.0	4.0	5.8	
15	3.9	5.5	3.8	
16	0.0	3.1	6.5	
17	5.2	0.0	11.9	
18	10.1	0.0	12.9	
19	7.0	0.0	12.9	
20	7.8	6.2	11.3	
21	7.1	5.2	4.2	
22	9.7	7.0	13.0	
23	8.7	9.0	13.0	
24	0.1	10.3	13.4	
25	8.1	9.5	8.2	
26	0.3	1.9	0.0	
27	0.0	9.7	10.7	
28	4.4	2.0	5.0	
29	1.7	9.9	9.3	
30	3.1	9.5	12.6	
31	3.1	9.5	12.6	
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	146.6	188.2	235.5	
 Daily Means	4.7	6.1	7.6	
Types of	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH	
Instruments	CAMPBELL	CAMPBELL	CAMPBELL	
	STOKES	STOKES	STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: NOVEMBER		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	18°21' S	20°32' S	22°28' S	23°26' S	
Longitude	70°19'W	72°10' W	68°55' W	70°26' W	
Elevation	58 m	52 m	270 m	135 m	
Station	ARICA	IQUIQUE	CALAMA	ANTOFAGASTA	
Date					
1	3.0	5.0	.	6.1	
2	5.9	0.6	.	6.9	
3	8.0	9.8	.	9.7	
4	11.4	11.2	.	9.6	
5	10.5	12.0	.	9.4	
6	10.0	11.0	.	7.5	
7	8.0	9.9	.	11.1	
8	6.3	6.9	.	10.8	
9	6.5	7.2	.	8.2	
10	6.6	11.3	.	8.5	
11	5.2	8.2	.	10.2	
12	7.4	11.7	.	10.4	
13	7.2	12.3	.	11.5	
14	5.1	4.9	.	10.7	
15	6.0	10.5	.	11.0	
16	8.3	10.2	.	11.0	
17	9.7	12.3	.	11.5	
18	6.3	9.5	.	7.4	
19	7.0	6.0	.	4.7	
20	6.8	7.5	.	7.9	
21	9.3	11.2	.	10.8	
22	7.9	10.6	.	7.5	
23	8.0	10.7	.	9.7	
24	6.7	7.0	.	8.1	
25	8.7	12.4	.	7.1	
26	8.6	9.0	.	7.9	
27	6.6	6.3	.	9.5	
28	8.9	12.4	.	8.6	
29	10.9	12.4	.	10.9	
30	10.9	12.4	.	10.9	
31					
TT Monthly Totals					
Daily Means					
SS Monthly Totals	231.7	282.4	.	275.1	
Daily Means	7.7	9.4	.	9.2	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: NOVEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	27°15'S	27°10' S	29°57' S	33°23' S
Longitude	70°46'W	109°26' W	71°22' W	70°47' W
Elevation	204 m	47 m	25 m	474 m
Station	CALDERA	ISLA DE PASCUA	LA SERENA	PUDAHUEL
Date				
1	6.4	12.2	9.8	.
2	8.9	11.3	10.4	.
3	4.3	5.8	9.2	.
4	6.3	6.0	8.3	.
5	7.1	6.4	11.8	.
6	4.9	8.7	5.1	.
7	3.3	8.8	2.8	.
8	3.3	5.6	3.6	.
9	5.2	5.3	10.3	.
10	6.9	6.0	8.9	.
11	10.5	3.3	8.4	.
12	11.4	10.1	9.9	.
13	12.4	6.0	12.7	.
14	12.0	11.5	12.8	.
15	9.3	11.8	11.4	.
16	5.1	2.8	7.4	.
17	9.0	3.0	12.7	.
18	10.1	6.0	12.8	.
19	5.8	10.1	9.0	.
20	6.4	10.2	8.0	.
21	5.9	11.8	6.4	.
22	7.0	8.1	10.9	.
23	3.8	3.7	5.6	.
24	1.6	2.5	5.9	.
25	0.0	11.5	5.4	.
26	4.6	10.0	7.1	.
27	0.1	11.3	3.0	.
28	3.9	12.2	0.0	.
29	6.2	12.1	5.1	.
30	6.2	12.1	5.1	.
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	187.9	246.2	239.8	.
 Daily Means	6.3	8.2	8.0	.
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: NOVEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	33°27' S	33°37' S	33°39' S	34°58' S
Longitude	70°42' W	78°50' W	71°36' W	71°12' W
Elevation	520 m	30 m	74 m	225 m
Station	QUINTA NORMAL	ROBINSON CRUSOE	SANTO DOMINGO	CURICO
Date				
1	0.0	0.3	3.1	0.0
2	9.8	10.3	5.9	5.7
3	10.5	9.6	12.4	8.5
4	11.0	9.8	12.6	12.0
5	11.0	11.0	12.5	8.9
6	11.2	10.8	12.1	12.6
7	11.2	9.7	11.2	12.9
8	11.1	9.1	11.0	12.3
9	8.0	6.4	4.6	9.4
10	11.1	6.3	4.5	8.0
11	10.3	6.1	11.1	11.2
12	2.3	3.6	10.7	11.1
13	8.5	5.5	11.3	7.8
14	8.8	7.3	13.1	7.8
15	11.2	3.5	11.9	10.3
16	11.1	8.4	12.4	8.9
17	11.4	5.9	12.3	8.1
18	11.3	9.4	12.9	11.5
19	10.4	9.0	11.6	12.3
20	11.4	6.0	12.5	13.1
21	11.3	4.4	11.2	11.1
22	11.2	6.7	12.6	9.7
23	11.3	10.1	12.0	12.4
24	11.4	10.1	12.1	12.4
25	10.7	7.6	12.3	10.7
26	11.4	7.7	12.8	13.3
27	11.4	0.7	12.8	13.4
28	11.4	2.6	0.7	12.5
29	11.3	1.8	3.8	13.1
30	11.3	1.8	3.8	13.1
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	304.3	201.5	303.8	314.1
 Daily Means	10.1	6.7	10.1	10.5
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: NOVEMBER		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	36°36' S	36°46' S	38°45' S	39°41' S	
Longitude	72°26' W	73°03' W	72°38' W	73°04' W	
Elevation	124 m	12 m	114 m	19 m	
Station	CHILLAN	CONCEPCION	TEMUCO	VALDIVIA	
Date					
1	.	.	.	0.0	
2	.	.	.	2.0	
3	.	.	.	0.0	
4	.	.	.	4.2	
5	.	.	.	9.6	
6	.	.	.	12.6	
7	.	.	.	13.0	
8	.	.	.	7.4	
9	.	.	.	0.8	
10	.	.	.	5.9	
11	.	.	.	4.5	
12	.	.	.	9.0	
13	.	.	.	5.2	
14	.	.	.	1.1	
15	.	.	.	11.6	
16	.	.	.	0.0	
17	.	.	.	8.0	
18	.	.	.	8.3	
19	.	.	.	6.8	
20	.	.	.	1.4	
21	.	.	.	0.0	
22	.	.	.	10.7	
23	.	.	.	12.5	
24	.	.	.	12.8	
25	.	.	.	14.2	
26	.	.	.	12.8	
27	.	.	.	12.2	
28	.	.	.	9.8	
29	.	.	.	4.6	
30	.	.	.	4.6	
31					
TT Monthly Totals					
Daily Means					
SS Monthly Totals	.	.	.	205.6	
Daily Means	.	.	.	6.9	
Types of	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH	
Instruments	CAMPBELL	CAMPBELL	CAMPBELL	CAMPBELL	
	STOKES	STOKES	STOKES	STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: NOVEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	41°26' S	45°35' S	53°08' S	
Longitude	73°07' W	72°07' W	70°58' W	
Elevation	81 m	310 m	37 m	
Station				
Date	PUERTO MONTT	COYHAIQUE	PUNTA ARENAS	
1	1.2	10.6	0.0	
2	0.7	9.3	4.1	
3	0.1	5.2	0.1	
4	4.9	4.8	4.2	
5	8.7	5.6	11.8	
6	12.5	11.6	8.9	
7	11.5	10.3	4.1	
8	2.1	4.9	11.7	
9	2.8	8.0	5.4	
10	7.1	6.2	13.2	
11	5.4	6.8	1.0	
12	11.5	11.7	6.1	
13	0.8	9.5	2.5	
14	0.3	6.2	11.9	
15	12.5	10.6	9.8	
16	0.5	7.2	11.6	
17	5.7	9.7	6.8	
18	0.7	6.3	11.6	
19	1.7	2.1	7.8	
20	1.9	0.4	5.6	
21	1.6	2.1	13.9	
22	10.8	8.1	6.6	
23	7.9	9.8	6.4	
24	13.1	8.0	9.5	
25	12.5	10.7	10.1	
26	10.1	8.0	3.1	
27	8.4	10.5	13.5	
28	6.6	9.4	14.9	
29	0.3	0.0	6.3	
30	0.3	0.0	6.3	
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	164.2	213.6	228.8	
 Daily Means	5.5	7.1	7.6	
Types of	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH	
Instruments	CAMPBELL	CAMPBELL	CAMPBELL	
	STOKES	STOKES	STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: DECEMBER		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	18°21' S	20°32' S	22°28' S	23°26' S	
Longitude	70°19'W	72°10' W	68°55' W	70°26' W	
Elevation	58 m	52 m	270 m	135 m	
Station	ARICA	IQUIQUE	CALAMA	ANTOFAGASTA	
Date					
1	4.9	12.5	.	12.0	
2	12.0	12.5	.	12.0	
3	10.5	12.4	.	11.2	
4	8.4	11.3	.	9.3	
5	7.9	12.6	.	12.0	
6	8.6	12.6	.	12.0	
7	12.0	12.1	.	11.5	
8	11.4	12.2	.	11.8	
9	10.8	12.5	.	9.9	
10	6.8	11.2	.	12.0	
11	9.8	11.0	.	11.5	
12	9.0	9.9	.	10.8	
13	9.4	10.5	.	10.9	
14	10.9	10.0	.	9.9	
15	10.7	12.3	.	8.7	
16	8.2	8.6	.	5.2	
17	10.3	12.3	.	9.1	
18	11.2	12.4	.	9.5	
19	7.4	9.5	.	8.6	
20	6.2	8.4	.	10.7	
21	7.5	8.0	.	9.4	
22	11.8	12.2	.	12.0	
23	7.7	10.2	.	11.2	
24	5.5	12.0	.	9.4	
25	5.7	11.2	.	8.6	
26	5.5	12.4	.	9.2	
27	6.0	12.2	.	7.7	
28	5.2	11.4	.	8.8	
29	7.6	10.8	.	10.2	
30	0.0	10.8	.	8.9	
31	0.0	10.8	.	8.9	
TT Monthly Totals					
Daily Means					
SS Monthly Totals	248.9	348.8	.	312.9	
Daily Means	8.0	11.3	.	10.1	
Types of	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH	
Instruments	CAMPBELL	CAMPBELL	CAMPBELL	CAMPBELL	
	STOKES	STOKES	STOKES	STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: DECEMBER		Year: 2018		Country: CHILE	
Daily Totals					
Latitude	27°15'S	27°10' S	29°57' S	33°23' S	
Longitude	70°46'W	109°26' W	71°22' W	70°47' W	
Elevation	204 m	47 m	25 m	474 m	
Station	CALDERA	ISLA DE PASCUA	LA SERENA	PUDAHUEL	
Date					
1	5.6	7.3	0.0	.	
2	8.8	12.0	3.9	.	
3	9.2	11.7	5.2	.	
4	10.6	13.0	9.7	.	
5	13.1	11.2	13.2	.	
6	12.7	8.9	13.0	.	
7	8.7	5.8	9.7	.	
8	12.4	1.3	12.9	.	
9	11.6	5.5	13.1	.	
10	7.5	12.8	13.1	.	
11	7.6	8.1	12.2	.	
12	9.0	13.0	12.1	.	
13	7.4	12.1	9.8	.	
14	12.7	7.5	13.1	.	
15	8.8	12.2	13.2	.	
16	9.1	11.6	11.3	.	
17	7.5	9.8	8.6	.	
18	10.3	8.9	9.4	.	
19	6.5	12.0	7.8	.	
20	0.0	10.1	4.0	.	
21	6.5	9.3	6.4	.	
22	7.8	7.5	5.9	.	
23	8.5	10.7	9.5	.	
24	5.3	7.5	0.0	.	
25	5.9	8.0	3.3	.	
26	3.3	7.7	5.0	.	
27	6.9	7.2	6.9	.	
28	6.5	12.0	7.0	.	
29	8.7	11.6	6.9	.	
30	9.0	9.4	12.5	.	
31	9.0	9.4	12.5	.	
TT Monthly Totals					
Daily Means					
SS Monthly Totals	256.5	295.1	271.2	.	
Daily Means	8.3	9.5	8.7	.	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: DECEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	33°27' S	33°37' S	33°39' S	34°58' S
Longitude	70°42' W	78°50' W	71°36' W	71°12' W
Elevation	520 m	30 m	74 m	225 m
Station	QUINTA NORMAL	ROBINSON CRUSOE	SANTO DOMINGO	CURICO
Date				
1	10.6	8.2	4.2	7.8
2	9.7	8.1	5.4	11.1
3	10.1	8.4	0.2	11.9
4	0.7	11.1	2.8	0.4
5	8.0	1.8	11.1	7.1
6	11.6	9.4	1.6	13.0
7	10.3	0.0	3.1	7.4
8	7.9	7.7	12.4	9.7
9	11.8	6.6	12.4	13.4
10	11.0	8.9	11.7	12.6
11	10.2	9.2	11.4	12.7
12	10.5	8.1	12.6	12.9
13	11.7	6.9	11.5	11.8
14	5.2	4.8	12.0	13.1
15	11.5	10.1	12.7	13.4
16	11.7	3.8	12.8	13.5
17	11.0	8.6	4.5	7.1
18	11.6	11.3	6.0	13.4
19	11.4	9.4	2.2	13.1
20	11.5	2.2	8.9	11.3
21	11.4	7.3	5.8	13.4
22	11.1	5.8	4.6	10.1
23	11.4	10.4	3.2	12.5
24	11.9	10.6	3.0	13.2
25	11.6	8.2	5.3	13.3
26	11.6	7.3	5.0	11.0
27	11.2	3.1	12.5	10.9
28	11.7	1.6	8.1	13.5
29	11.8	8.2	12.6	13.5
30	11.8	2.9	12.4	11.2
31	11.8	2.9	12.4	11.2
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	325.3	212.9	244.4	350.5
 Daily Means	10.5	6.9	7.9	11.3
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: DECEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	36°36' S	36°46' S	38°45' S	39°41' S
Longitude	72°26' W	73°03' W	72°38' W	73°04' W
Elevation	124 m	12 m	114 m	19 m
Station	CHILLAN	CONCEPCION	TEMUCO	VALDIVIA
Date				
1	.	12.6	.	12.6
2	.	12.4	.	13.0
3	.	6.4	.	12.8
4	.	5.2	.	11.2
5	.	10.9	.	11.4
6	.	11.6	.	12.0
7	.	0.0	.	12.1
8	.	3.3	.	0.0
9	.	10.4	.	0.0
10	.	7.9	.	0.0
11	.	13.3	.	9.9
12	.	11.4	.	0.0
13	.	1.7	.	0.0
14	.	12.7	.	10.6
15	.	12.6	.	9.4
16	.	13.1	.	5.2
17	.	12.8	.	11.8
18	.	13.5	.	11.9
19	.	12.3	.	4.6
20	.	12.8	.	10.2
21	.	13.1	.	10.4
22	.	11.8	.	12.2
23	.	13.0	.	13.8
24	.	14.0	.	13.3
25	.	12.6	.	11.0
26	.	5.8	.	6.4
27	.	12.7	.	9.9
28	.	13.0	.	10.1
29	.	7.4	.	6.3
30	.	12.3	.	12.1
31	.	12.3	.	12.1
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	.	324.9	.	276.3
 Daily Means	.	10.5	.	8.9
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES

WMO
 Total radiation (sun and sky) T,MJ/m2
 Duration of sunshine ss, hours

Month: DECEMBER Year: 2018 Country: CHILE

Daily Totals				
Latitude	41°26' S	45°35' S	53°08' S	
Longitude	73°07' W	72°07' W	70°58' W	
Elevation	81 m	310 m	37 m	
Station				
Date	PUERTO MONTT	COYHAIQUE	PUNTA ARENAS	
1	13.4	10.9	0.9	
2	14.4	9.0	5.2	
3	10.8	8.8	7.0	
4	3.1	5.5	11.6	
5	11.8	11.5	9.4	
6	12.8	8.5	8.5	
7	13.7	11.9	9.2	
8	2.5	11.6	7.0	
9	2.5	5.3	3.3	
10	4.0	10.5	4.5	
11	7.4	7.9	3.9	
12	1.7	5.0	0.1	
13	0.0	3.5	10.1	
14	10.4	9.9	0.9	
15	4.1	2.6	12.4	
16	7.2	8.3	14.0	
17	13.3	11.8	8.6	
18	11.2	5.2	3.7	
19	1.2	6.6	12.2	
20	7.0	11.6	6.7	
21	6.2	11.8	0.8	
22	0.5	2.1	7.3	
23	18.1	5.0	6.2	
24	8.7	5.2	5.2	
25	5.8	11.8	12.1	
26	6.2	11.1	0.3	
27	8.3	8.9	6.8	
28	7.7	2.9	3.5	
29	7.6	4.0	9.4	
30	0.0	2.8	1.4	
31	0.0	2.8	1.4	
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	221.6	234.3	193.6	
 Daily Means	7.1	7.6	6.2	
Types of	HELIOGRAPH	HELIOGRAPH	HELIOGRAPH	
Instruments	CAMPBELL	CAMPBELL	CAMPBELL	
	STOKES	STOKES	STOKES	