



DIRECCIÓN METEOROLÓGICA DE CHILE

INFORME SOLARIMÉTRICO

II SEMESTRE 2005



SUBDIRECCIÓN DE CLIMATOLOGÍA Y MET APLICADA

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

Month: JULY Year: 2005 Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°23' S
Longitude	70°19' W	68°54' W	70°26' W	70°47' W
Elevation	58 m	2270 m	135 m	475 m
Station	ARICA	CALAMA	ANTOFAGASTA	PUDAHUEL
Date				
1	.	17.20	15.77	7.83
2	.	17.12	15.64	3.99
3	.	17.20	16.18	5.72
4	.	17.59	15.58	10.15
5	.	17.68	15.31	5.33
6	.	17.66	14.20	8.78
7	.	17.84	12.56	2.94
8	.	17.91	15.82	8.83
9	.	17.99	16.67	9.95
10	.	18.10	13.93	10.33
11	.	18.13	10.84	10.34
12	.	17.84	16.59	7.02
13	.	17.75	16.02	7.34
14	.	17.74	9.98	2.08
15	.	17.80	11.20	9.82
16	.	18.32	17.99	6.71
17	.	18.69	17.57	10.86
18	.	18.69	17.64	11.97
19	.	18.67	15.86	9.87
20	.	18.38	11.32	1.78
21	.	18.88	17.60	8.44
22	.	19.10	18.25	11.71
23	.	19.30	18.50	11.64
24	.	18.91	17.99	12.18
25	.	18.77	16.59	12.47
26	.	18.95	15.24	11.19
27	.	18.58	16.11	9.28
28	.	18.98	14.80	3.31
29	.	19.19	12.23	6.37
30	.	19.38	13.02	4.28
31	.	19.63	15.69	3.13
TT Monthly Totals	.	567.97	472.67	245.63
 Daily Means	.	18.32	15.25	7.92
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: JULY Year: 2005 Country: CHILE

Daily Totals				
Latitude	34°58' S	36°46' S	41°25' S	45°35' S
Longitude	71°14' W	73°03' W	73°05' W	72°07' W
Elevation	228 m	12 m	85 m	310 m
Station	CURICO	CONCEPCION	PUERTO MONTT	COYHAIQUE
Date				
1	8.16	1.49	1.50	3.77
2	2.92	4.96	2.50	1.80
3	3.37	4.83	3.11	4.73
4	5.51	7.58	2.60	6.71
5	2.85	4.56	6.00	2.49
6	5.19	5.01	4.93	5.28
7	2.73	1.24	1.56	2.61
8	8.78	7.10	5.33	4.35
9	5.91	7.08	1.18	6.71
10	7.76	7.53	5.17	3.81
11	6.04	6.64	5.08	3.61
12	6.12	1.53	1.37	2.65
13	2.02	5.13	2.75	5.28
14	4.01	6.77	7.43	6.11
15	7.40	7.97	3.74	3.85
16	4.89	5.09	3.05	5.71
17	6.58	7.80	3.11	5.44
18	7.97	8.30	4.96	5.86
19	4.76	4.84	4.12	3.26
20	2.70	2.90	1.76	3.87
21	8.27	8.07	6.19	3.20
22	7.68	8.54	7.07	6.26
23	10.43	8.69	7.01	6.43
24	10.75	8.37	7.18	6.99
25	10.37	7.84	6.25	2.67
26	8.75	2.06	4.64	4.83
27	3.09	3.01	3.29	2.56
28	2.59	2.17	0.90	1.29
29	4.35	0.84	3.43	4.89
30	2.07	1.62	2.01	3.91
31	2.72	2.04	6.43	5.53
TT Monthly Totals	176.78	161.62	125.67	136.45
 Daily Means	5.70	5.21	4.05	4.40
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: JULY

Year: 2005

Country: CHILE

		Daily Totals		
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station	PUNTA ARENAS			
Date				
1	0.46			
2	2.60			
3	2.33			
4	2.70			
5	2.85			
6	4.50			
7	1.11			
8	1.87			
9	1.49			
10	1.47			
11	0.91			
12	1.46			
13	3.19			
14	1.29			
15	3.04			
16	3.13			
17	1.51			
18	1.10			
19	0.77			
20	3.33			
21	1.31			
22	1.43			
23	1.49			
24	3.29			
25	2.85			
26	3.46			
27	5.13			
28	1.35			
29	1.16			
30	4.30			
31	1.24			
TT Monthly Totals	68.12			
Daily Means	2.20			
SS Monthly Totals				
Daily Means				
Types of Instruments	PYRANOMETER PSP EPPLEY			

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

Month: AUGUST

Year: 2005

Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°23' S
Longitude	70°19' W	68°54' W	70°26' W	70°47' W
Elevation	58 m	2270 m	135 m	475 m
Station	ARICA	CALAMA	ANTOFAGASTA	PUDAHUEL
Date				
1	.	19.91	14.58	1.66
2	.	19.95	16.96	4.61
3	.	19.88	16.86	4.48
4	.	19.63	17.60	7.45
5	.	20.13	10.86	13.47
6	.	20.28	9.79	12.63
7	.	20.34	17.48	13.89
8	.	20.24	16.48	13.39
9	.	20.46	16.96	13.11
10	.	20.62	15.14	7.42
11	.	20.73	16.12	12.13
12	.	20.97	18.84	7.85
13	.	21.19	17.11	4.19
14	.	21.18	20.31	7.49
15	.	21.30	18.88	3.09
16	.	21.27	18.82	4.94
17	.	21.54	17.68	7.91
18	.	21.92	18.97	12.23
19	.	22.19	21.00	14.84
20	.	21.94	16.91	12.48
21	.	22.32	18.02	9.21
22	.	20.93	17.28	2.67
23	.	21.98	22.01	10.67
24	.	22.49	20.85	14.90
25	.	22.33	21.02	13.30
26	.	22.63	20.27	2.57
27	.	22.83	19.91	2.80
28	.	23.22	21.58	3.07
29	.	23.26	17.41	11.38
30	.	23.19	15.25	11.78
31	.	23.24	23.57	16.98
TT Monthly Totals	.	664.12	554.53	278.55
 Daily Means	.	21.42	17.89	8.99
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: AUGUST

Year: 2005

Country: CHILE

Daily Totals				
Latitude	34°58' S	36°46' S	41°25' S	45°35' S
Longitude	71°14' W	73°03' W	73°05' W	72°07' W
Elevation	228 m	12 m	85 m	310 m
Station	CURICO	CONCEPCION	PUERTO MONTT	COYHAIQUE
Date				
1	1.59	3.44	5.45	1.83
2	1.84	.	5.83	5.85
3	0.51	.	2.08	1.52
4	3.12	.	7.02	5.52
5	11.93	.	3.12	4.53
6	11.86	.	9.30	9.00
7	11.94	.	10.01	7.44
8	11.04	.	5.07	6.91
9	10.42	3.09	0.83	2.69
10	4.17	.	7.04	7.22
11	5.85	.	1.69	7.63
12	4.03	.	7.66	5.30
13	4.01	8.28	8.73	7.97
14	4.61	10.68	10.13	9.80
15	4.00	5.30	2.56	9.50
16	3.99	2.83	2.95	7.46
17	6.28	7.22	2.12	6.43
18	4.58	6.74	9.29	9.25
19	12.48	10.02	5.97	8.67
20	8.78	3.86	5.73	5.42
21	8.58	4.97	2.83	1.97
22	3.03	8.44	6.07	6.66
23	8.97	11.63	4.85	6.51
24	12.61	11.14	7.39	6.98
25	6.97	4.20	2.56	2.94
26	1.83	1.51	2.39	7.95
27	3.28	10.21	7.13	7.97
28	1.94	6.36	6.32	10.18
29	6.07	6.88	10.60	7.94
30	14.30	12.27	14.07	10.66
31	0.00	12.77	14.34	12.97
TT Monthly Totals	194.59	.	191.12	212.69
 Daily Means	6.28	.	6.17	6.86
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: AUGUST

Year: 2005

Country: CHILE

		Daily Totals		
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station				
Date	PUNTA ARENAS			
1	0.72			
2	1.11			
3	4.67			
4	4.65			
5	3.03			
6	4.16			
7	3.82			
8	1.17			
9	0.95			
10	3.87			
11	3.34			
12	5.78			
13	4.25			
14	6.00			
15	6.40			
16	3.57			
17	5.89			
18	4.96			
19	6.06			
20	7.21			
21	3.11			
22	2.72			
23	3.56			
24	4.97			
25	1.85			
26	3.22			
27	2.57			
28	5.67			
29	5.99			
30	8.33			
31	9.43			
TT Monthly Totals	133.03			
Daily Means	4.29			
SS Monthly Totals				
Daily Means				
Types of Instruments	PYRANOMETER PSP EPPLEY			

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

Month: SEPTEMBER Year: 2005 Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°23' S
Longitude	70°19' W	68°54' W	70°26' W	70°47' W
Elevation	58 m	2270 m	135 m	475 m
Station	ARICA	CALAMA	ANTOFAGASTA	PUDAHUEL
Date				
1	.	23.49	24.03	15.56
2	.	23.96	22.14	10.15
3	.	23.80	23.56	4.15
4	.	23.70	22.56	8.78
5	.	23.85	20.25	7.08
6	.	24.02	22.05	15.81
7	.	24.22	23.77	18.03
8	.	22.72	22.84	17.75
9	.	24.11	20.12	3.71
10	.	24.55	18.91	12.79
11	.	24.80	17.09	19.74
12	.	20.73	21.75	19.90
13	.	4.91	4.06	19.24
14	.	16.01	23.43	19.24
15	.	25.23	22.92	19.91
16	.	24.57	23.95	20.10
17	.	26.37	26.01	20.40
18	.	26.71	23.75	19.49
19	.	26.07	19.06	18.17
20	.	26.07	22.70	12.53
21	.	26.23	22.44	13.07
22	.	26.62	20.40	14.26
23	.	22.62	17.80	12.84
24	.	25.56	25.92	20.81
25	.	27.44	27.37	21.21
26	.	27.25	25.66	21.87
27	.	27.35	25.45	8.02
28	.	27.45	23.56	12.97
29	.	28.03	28.03	18.73
30	.	29.16	26.51	19.59
31	.			
TT Monthly Totals	.	727.61	668.10	465.87
 Daily Means	.	24.25	22.27	15.53
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: SEPTEMBER Year: 2005 Country: CHILE

Daily Totals				
Latitude	34°58' S	36°46' S	41°25' S	45°35' S
Longitude	71°14' W	73°03' W	73°05' W	72°07' W
Elevation	228 m	12 m	85 m	310 m
Station	CURICO	CONCEPCION	PUERTO MONTT	COYHAIQUE
Date				
1	15.55	10.79	9.45	11.06
2	4.45	3.01	4.66	5.59
3	6.73	5.67	4.07	6.60
4	12.03	8.78	5.90	5.76
5	7.88	3.81	2.69	7.03
6	15.28	9.23	2.95	5.89
7	9.91	9.33	9.53	10.34
8	11.32	12.33	12.50	8.71
9	5.09	13.92	11.19	12.58
10	12.99	14.48	10.07	10.50
11	14.38	14.51	16.02	14.25
12	18.34	15.27	17.53	15.56
13	18.39	14.40	18.04	8.80
14	14.71	14.37	11.07	14.14
15	18.65	14.95	16.01	15.05
16	18.74	14.99	16.23	15.11
17	18.90	11.48	12.27	4.11
18	11.38	8.93	3.61	13.21
19	11.64	11.08	8.63	16.45
20	14.75	15.83	9.36	15.04
21	18.00	13.32	9.49	10.92
22	14.22	13.01	2.76	13.88
23	10.48	3.94	8.36	12.10
24	14.85	16.41	10.48	10.97
25	20.55	16.51	14.72	8.26
26	20.68	11.28	12.31	8.18
27	4.71	7.95	5.24	12.86
28	11.93	5.28	14.02	11.76
29	19.08	16.85	17.02	12.46
30	18.58	16.20	15.94	11.91
31				
TT Monthly Totals	414.16	347.92	312.12	329.09
 Daily Means	13.81	11.60	10.40	10.97
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: SEPTEMBER

Year: 2005

Country: CHILE

		Daily Totals		
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station	PUNTA ARENAS			
Date				
1	9.17			
2	7.42			
3	2.73			
4	1.71			
5	5.11			
6	1.57			
7	8.80			
8	7.74			
9	6.00			
10	10.81			
11	11.24			
12	7.26			
13	11.61			
14	11.84			
15	2.90			
16	4.15			
17	10.09			
18	9.86			
19	6.64			
20	6.99			
21	4.81			
22	8.64			
23	14.41			
24	13.92			
25	7.86			
26	6.32			
27	7.68			
28	7.64			
29	15.14			
30	13.87			
31				
TT Monthly Totals	243.94			
Daily Means	8.13			
SS Monthly Totals				
Daily Means				
Types of Instruments	PYRANOMETER PSP EPPLEY			

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

Month: OCTOBER

Year: 2005

Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°23' S
Longitude	70°19' W	68°54' W	70°26' W	70°47' W
Elevation	58 m	2270 m	135 m	475 m
Station	ARICA	CALAMA	ANTOFAGASTA	PUDAHUEL
Date				
1	.	29.45	.	15.42
2	.	29.33	24.50	5.89
3	.	28.96	26.83	22.22
4	.	29.34	27.62	23.92
5	.	29.43	26.58	23.67
6	.	29.57	25.91	20.96
7	.	28.35	28.45	20.99
8	.	29.67	26.00	24.30
9	.	27.48	24.80	24.19
10	.	30.08	28.05	21.38
11	.	30.29	28.19	18.57
12	.	30.12	28.46	23.12
13	.	30.10	26.13	21.16
14	.	30.14	14.72	25.01
15	.	29.99	20.53	10.78
16	.	30.05	23.99	24.70
17	.	30.59	24.84	19.19
18	.	30.96	28.83	25.88
19	.	31.15	29.07	26.14
20	.	31.00	28.46	24.78
21	.	31.40	28.98	22.80
22	.	31.33	29.38	22.73
23	.	30.96	28.64	25.44
24	.	30.64	30.60	7.69
25	.	29.68	25.28	22.36
26	.	31.09	25.15	22.30
27	.	31.15	28.56	16.19
28	.	31.47	31.36	26.90
29	.	31.78	29.09	27.60
30	.	32.16	27.90	28.18
31	.	32.40	29.11	27.83
TT Monthly Totals	.	940.13	.	672.29
 Daily Means	.	30.33	26.87	21.69
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: OCTOBER Year: 2005 Country: CHILE

Daily Totals				
Latitude	34°58' S	36°46' S	41°25' S	45°35' S
Longitude	71°14' W	73°03' W	73°05' W	72°07' W
Elevation	228 m	12 m	85 m	310 m
Station	CURICO	CONCEPCION	PUERTO MONTT	COYHAIQUE
Date				
1	10.30	8.11	6.55	5.80
2	2.20	8.35	8.45	6.32
3	18.63	13.38	8.62	19.12
4	21.56	17.60	17.12	19.63
5	21.74	18.22	8.42	14.64
6	7.65	12.69	3.83	12.53
7	14.95	16.30	10.75	13.29
8	19.88	18.40	20.67	4.52
9	22.96	17.85	11.46	17.22
10	14.66	6.50	2.75	4.64
11	15.19	8.29	15.31	6.70
12	19.73	19.42	14.49	10.90
13	24.37	19.59	11.60	21.42
14	22.47	19.44	19.04	21.59
15	8.65	19.51	7.35	20.08
16	22.46	15.85	9.81	12.39
17	21.38	19.50	9.62	20.03
18	22.91	19.16	9.86	9.55
19	24.76	19.95	14.46	2.93
20	24.55	19.76	18.15	18.29
21	15.31	12.14	14.32	20.21
22	22.43	20.62	19.68	16.16
23	25.20	20.52	21.90	19.93
24	7.39	16.19	19.54	21.96
25	17.73	20.99	11.24	12.70
26	19.07	20.03	15.56	22.36
27	14.30	14.71	10.71	24.71
28	7.98	17.02	12.80	12.73
29	21.99	21.67	10.56	21.40
30	24.23	21.26	8.29	11.99
31	26.59	21.85	12.85	20.98
TT Monthly Totals	563.23	524.89	385.74	466.71
 Daily Means	18.17	16.93	12.44	15.06
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: **OCTOBER** Year: **2005** Country: **CHILE**

		Daily Totals		
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station				
Date	PUNTA ARENAS			
1	14.78			
2	15.70			
3	15.97			
4	12.11			
5	16.53			
6	14.02			
7	11.50			
8	11.56			
9	16.91			
10	9.65			
11	13.19			
12	10.61			
13	13.87			
14	11.85			
15	19.21			
16	18.29			
17	16.25			
18	14.49			
19	4.01			
20	8.49			
21	12.63			
22	13.12			
23	19.07			
24	18.20			
25	18.80			
26	21.07			
27	8.81			
28	13.10			
29	16.79			
30	7.80			
31	20.65			
TT Monthly Totals	439.04			
 Daily Means	14.16			
SS Monthly Totals				
 Daily Means				
Types of Instruments	PYRANOMETER PSP EPPLEY			

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

Month: NOVEMBER Year: 2005 Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°23' S
Longitude	70°19' W	68°54' W	70°26' W	70°47' W
Elevation	58 m	2270 m	135 m	475 m
Station	ARICA	CALAMA	ANTOFAGASTA	PUDAHUEL
Date				
1	.	32.55	27.24	27.30
2	.	32.58	30.58	27.99
3	.	32.39	27.67	26.20
4	.	32.30	31.24	27.92
5	.	27.37	30.42	27.86
6	.	30.82	30.14	28.14
7	.	26.50	28.07	28.61
8	.	19.93	21.87	19.63
9	.	21.27	20.89	23.18
10	.	31.97	26.14	29.09
11	.	32.48	30.26	28.53
12	.	32.35	30.14	28.45
13	.	32.78	30.62	26.81
14	.	32.37	29.67	26.82
15	.	32.83	28.55	29.43
16	.	32.79	29.29	20.03
17	.	32.84	14.90	24.67
18	.	33.07	25.78	29.18
19	.	32.28	27.80	29.29
20	.	31.78	28.34	26.65
21	.	31.07	31.49	29.96
22	.	32.81	26.49	29.66
23	.	32.94	31.29	16.06
24	.	32.67	33.23	30.73
25	.	31.86	26.63	30.64
26	.	31.61	30.76	30.48
27	.	32.97	32.97	24.11
28	.	33.24	32.87	27.27
29	.	33.24	26.32	30.45
30	.	32.88	29.31	30.50
31	.			
TT Monthly Totals	.	938.51	850.98	815.65
 Daily Means	.	31.28	28.37	27.19
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: NOVEMBER Year: 2005 Country: CHILE

Daily Totals				
Latitude	34°58' S	36°46' S	41°25' S	45°35' S
Longitude	71°14' W	73°03' W	73°05' W	72°07' W
Elevation	228 m	12 m	85 m	310 m
Station	CURICO	CONCEPCION	PUERTO MONTT	COYHAIQUE
Date				
1	26.34	21.12	19.31	12.18
2	26.43	18.86	3.83	11.58
3	16.10	21.12	16.45	16.68
4	18.80	22.04	12.65	17.44
5	27.20	21.75	24.83	26.58
6	26.90	16.36	27.35	26.30
7	26.50	21.50	21.02	25.68
8	18.44	21.50	27.44	20.90
9	25.04	21.51	8.75	13.17
10	26.42	21.91	16.05	12.22
11	26.96	22.77	21.43	27.46
12	26.49	17.17	25.51	23.23
13	11.33	16.09	11.89	16.48
14	21.86	16.43	14.53	14.77
15	27.44	21.65	6.37	12.30
16	16.11	19.94	10.53	26.39
17	22.36	9.52	13.90	13.81
18	25.17	19.17	6.03	9.06
19	27.69	23.07	16.41	22.02
20	26.58	19.59	4.08	8.40
21	26.24	11.23	13.23	12.83
22	26.15	2.48	10.74	20.68
23	19.97	16.96	16.69	17.95
24	28.06	17.57	5.42	8.63
25	27.12	15.57	20.02	16.00
26	23.99	9.45	11.72	25.17
27	9.71	5.69	17.16	15.49
28	21.24	23.76	22.11	24.72
29	26.65	24.14	17.66	25.72
30	28.37	24.62	30.30	28.96
31				
TT Monthly Totals	707.66	544.53	473.41	552.80
 Daily Means	23.59	18.15	15.78	18.43
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: NOVEMBER

Year: 2005

Country: CHILE

		Daily Totals		
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station				
Date	PUNTA ARENAS			
1	13.58			
2	8.49			
3	23.02			
4	20.04			
5	19.13			
6	15.52			
7	24.55			
8	12.17			
9	17.18			
10	20.08			
11	11.32			
12	22.88			
13	24.39			
14	25.05			
15	17.76			
16	24.26			
17	11.86			
18	26.14			
19	21.56			
20	26.71			
21	18.45			
22	9.52			
23	17.78			
24	16.01			
25	20.77			
26	22.21			
27	23.43			
28	17.00			
29	13.78			
30	19.61			
31				
TT Monthly Totals	564.22			
Daily Means	18.81			
SS Monthly Totals				
Daily Means				
Types of Instruments	PYRANOMETER PSP EPPLEY			

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

Month: DECEMBER Year: 2005 Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	33°23' S
Longitude	70°19' W	68°54' W	70°26' W	70°47' W
Elevation	58 m	2270 m	135 m	475 m
Station	ARICA	CALAMA	ANTOFAGASTA	PUDAHUEL
Date				
1	.	31.98	31.63	30.70
2	.	31.91	8.09	30.44
3	.	31.51	32.02	30.09
4	.	32.54	30.22	28.24
5	.	32.82	32.27	26.70
6	.	33.27	28.92	25.13
7	.	32.73	32.71	24.17
8	.	32.08	32.48	21.58
9	.	33.03	30.45	28.15
10	.	32.84	32.48	28.90
11	.	32.27	30.33	28.84
12	.	31.76	29.75	24.56
13	.	32.04	28.23	28.37
14	.	32.26	31.99	28.26
15	.	32.61	32.39	26.34
16	.	32.43	31.72	26.43
17	.	32.48	31.94	28.00
18	.	32.87	30.95	28.60
19	.	32.20	31.54	28.94
20	.	32.58	32.87	28.69
21	.	31.98	32.17	22.19
22	.	32.07	31.20	27.74
23	.	31.58	32.23	27.51
24	.	31.46	32.13	28.51
25	.	28.19	32.01	28.37
26	.	30.44	31.85	26.36
27	.	31.45	29.93	18.44
28	.	31.35	28.68	28.17
29	.	30.71	31.56	27.73
30	.	30.94	30.56	28.61
31	.	30.59	30.39	28.06
TT Monthly Totals	.	988.98	945.69	842.84
 Daily Means	.	31.90	30.51	27.19
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: 2005 Country: CHILE

Daily Totals				
Latitude	34°58' S	36°46' S	41°25' S	45°35' S
Longitude	71°14' W	73°03' W	73°05' W	72°07' W
Elevation	228 m	12 m	85 m	310 m
Station	CURICO	CONCEPCION	PUERTO MONTT	COYHAIQUE
Date				
1	28.46	24.79	30.16	29.81
2	28.06	15.58	23.65	29.99
3	28.17	17.46	11.29	16.86
4	18.17	17.90	19.79	22.13
5	27.02	22.72	21.78	26.28
6	25.01	20.24	12.10	22.62
7	14.09	2.02	10.60	21.72
8	25.01	23.30	17.47	12.76
9	23.89	24.94	24.24	28.42
10	28.50	25.11	30.11	30.60
11	28.29	24.99	28.17	30.34
12	13.18	15.11	19.91	30.57
13	24.55	20.71	21.64	29.25
14	27.22	23.66	23.82	18.83
15	13.01	10.21	30.43	28.18
16	18.98	23.86	24.67	22.85
17	28.61	24.92	14.83	18.99
18	28.68	24.77	20.65	29.79
19	24.53	24.81	14.28	20.79
20	27.53	24.40	28.70	16.59
21	23.03	18.33	13.93	30.41
22	22.07	22.01	24.61	21.48
23	27.28	25.10	25.40	29.75
24	27.71	25.07	30.15	28.07
25	27.05	20.01	26.35	29.42
26	8.06	10.28	28.10	29.54
27	12.65	14.86	7.66	29.26
28	28.26	24.69	20.85	26.88
29	27.74	23.50	24.24	18.07
30	27.31	24.22	21.64	21.20
31	26.88	24.18	20.35	20.51
TT Monthly Totals	739.00	643.73	671.55	771.95
 Daily Means	23.84	20.77	21.66	24.90
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: 2005 Country: CHILE

		Daily Totals		
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station	PUNTA ARENAS			
Date				
1	9.00			
2	16.50			
3	16.83			
4	21.34			
5	23.01			
6	11.78			
7	14.82			
8	18.37			
9	13.07			
10	26.75			
11	19.19			
12	16.53			
13	11.32			
14	29.20			
15	15.10			
16	30.62			
17	10.71			
18	22.47			
19	22.50			
20	12.76			
21	25.44			
22	16.47			
23	14.00			
24	15.94			
25	27.91			
26	17.67			
27	20.24			
28	23.94			
29	16.10			
30	16.36			
31	27.52			
TT Monthly Totals	583.44			
Daily Means	18.82			
SS Monthly Totals				
Daily Means				
Types of Instruments	PYRANOMETER PSP EPPLEY			

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

Month: JULY Year: 2005 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	9.4	9.5	9.8	8.7
2	5.1	6.4	10.0	8.3
3	4.0	6.3	9.9	7.8
4	5.4	7.9	10.1	7.7
5	5.6	0.8	10.1	7.1
6	7.2	8.0	10.0	6.3
7	3.5	7.8	10.1	4.2
8	5.0	8.9	10.0	8.2
9	5.2	3.5	10.1	9.0
10	4.2	0.7	10.1	5.6
11	7.3	0.0	10.1	3.0
12	2.5	6.2	10.0	9.1
13	1.8	6.1	10.0	7.6
14	3.3	4.6	10.0	2.5
15	4.9	7.4	10.0	5.0
16	2.9	9.9	10.1	10.0
17	4.3	4.7	10.2	9.9
18	6.1	10.0	10.1	9.4
19	2.9	3.3	10.0	6.8
20	3.8	3.8	10.0	2.6
21	4.4	9.7	10.3	9.9
22	2.0	7.8	10.4	9.6
23	5.0	9.7	10.4	9.9
24	5.2	9.8	10.5	8.6
25	0.3	6.8	10.5	6.8
26	3.3	1.8	10.5	6.4
27	3.8	1.9	9.1	6.8
28	0.0	0.2	10.3	5.5
29	0.0	0.1	10.4	4.1
30	2.3	3.1	10.4	3.6
31	2.7	0.0	10.6	6.1
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	123.4	166.7	314.1	216.1
 Daily Means	4.0	5.4	10.1	7.0
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: JULY

Year: 2005

Country: CHILE

Daily Totals				
Latitude	27°10' S	29°57' S	32°51' S	33°23' S
Longitude	109°26' W	71°22' W	70°37' W	70°47' W
Elevation	47 m	25 m	880 m	474 m
Station				
Date	ISLA DE PASCUA	LA SERENA	CALLE LARGA	PUDAHUEL
1	5.0	7.9	3.0	4.2
2	0.5	8.1	0.0	0.5
3	6.7	8.0	1.9	1.0
4	6.8	9.0	9.0	7.7
5	6.9	2.9	0.8	0.8
6	8.3	1.2	6.0	6.0
7	4.0	7.0	0.0	0.0
8	3.8	6.5	6.4	5.8
9	1.9	6.5	7.6	6.3
10	8.7	7.3	6.6	7.3
11	4.2	0.0	7.3	7.0
12	9.4	3.4	3.1	4.3
13	7.2	5.6	0.5	2.1
14	8.6	0.1	0.0	0.0
15	6.7	0.3	5.9	5.7
16	6.8	8.9	4.0	2.8
17	6.6	9.4	9.2	8.6
18	.	9.3	9.3	8.5
19	.	1.2	5.6	5.5
20	.	0.0	0.0	0.0
21	.	8.5	9.0	5.0
22	.	9.2	8.8	8.5
23	.	7.9	9.4	8.2
24	.	8.9	6.5	8.9
25	.	5.5	9.2	8.5
26	.	5.3	8.7	8.5
27	.	7.7	5.8	4.9
28	8.0	3.7	0.8	0.3
29	10.0	4.1	1.7	2.5
30	3.9	9.0	0.6	1.7
31	5.5	9.6	0.8	0.0
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	.	182.0	147.5	141.1
 Daily Means	.	5.9	4.8	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: JULY

Year: 2005

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	6.2	1.8	3.2	5.7
2	0.1	1.5	0.7	1.0
3	0.2	4.2	2.2	0.0
4	5.3	1.4	8.2	3.6
5	0.8	4.6	2.6	0.0
6	5.8	0.0	0.9	2.5
7	0.0	5.6	0.0	0.0
8	5.5	5.8	6.8	7.0
9	6.4	2.3	7.6	3.4
10	7.1	6.1	8.9	6.4
11	6.7	4.6	7.7	3.6
12	3.8	5.9	5.0	4.1
13	2.0	4.2	2.5	0.0
14	0.0	3.5	4.2	0.4
15	5.2	5.2	6.5	5.8
16	0.9	1.0	2.4	0.4
17	8.1	2.4	9.7	4.8
18	7.8	0.5	9.2	5.4
19	5.0	2.5	0.0	0.0
20	0.0	1.9	0.6	0.1
21	4.7	2.5	9.6	6.0
22	7.9	6.6	9.7	5.4
23	7.9	6.6	5.2	8.4
24	7.7	5.3	1.4	8.3
25	8.0	4.0	1.1	7.1
26	6.7	3.1	0.0	5.6
27	4.4	0.8	2.0	0.0
28	0.1	2.0	0.0	0.0
29	0.0	0.5	3.0	1.1
30	0.2	3.4	0.0	0.0
31	0.0	2.8	1.3	0.9
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	124.5	102.6	122.2	97.0
 Daily Means	4.0	3.3	3.9	3.1
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: 2005

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	2.1	0.3
2	3.8	3.9	2.3	0.5
3	0.0	1.7	0.2	1.7
4	8.7	8.2	4.5	3.5
5	0.9	1.2	3.8	4.9
6	2.6	1.2	3.6	4.3
7	0.0	0.0	0.0	0.0
8	7.9	7.8	6.7	3.9
9	5.2	7.1	0.0	0.0
10	8.3	8.5	3.6	4.3
11	6.8	6.6	5.8	0.0
12	0.7	0.1	1.6	0.0
13	1.8	5.8	2.9	0.4
14	2.3	6.9	7.8	4.0
15	5.2	8.2	6.1	4.5
16	0.5	1.0	0.0	0.0
17	6.6	7.6	5.1	0.7
18	1.5	8.5	4.0	0.6
19	0.0	1.8	0.0	0.0
20	0.0	0.0	1.0	0.0
21	7.8	8.8	4.3	5.9
22	8.7	8.9	8.1	8.5
23	8.6	8.8	8.2	4.1
24	7.9	7.8	7.9	2.8
25	6.5	6.0	6.9	0.8
26	1.0	0.0	0.0	0.0
27	0.2	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0
29	0.0	0.0	1.6	0.0
30	2.1	0.0	1.8	0.7
31	0.0	0.1	0.6	0.0
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	105.6	126.5	100.5	56.4
 Daily Means	3.4	4.1	3.2	1.8
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: 2005

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	0.1	1.2	0.0	
2	0.2	0.0	1.0	
3	0.0	0.1	4.0	
4	0.0	5.7	6.2	
5	2.6	0.0	6.8	
6	3.1	4.9	2.2	
7	0.0	0.8	0.0	
8	2.8	3.5	0.9	
9	0.0	5.8	1.4	
10	3.7	3.1	0.4	
11	0.7	1.3	0.0	
12	0.0	0.1	0.0	
13	0.1	2.8	6.4	
14	5.3	6.3	0.8	
15	0.2	1.4	6.8	
16	0.1	7.1	7.2	
17	0.1	5.1	0.0	
18	2.6	5.5	0.0	
19	0.4	1.4	0.0	
20	0.0	1.2	5.5	
21	4.3	0.9	0.0	
22	6.1	7.0	1.5	
23	4.5	7.1	0.0	
24	5.6	5.5	5.4	
25	3.1	0.0	5.6	
26	0.6	3.0	4.4	
27	0.0	0.0	4.5	
28	0.0	0.0	0.0	
29	0.5	2.1	0.0	
30	0.0	1.2	8.1	
31	3.3	4.9	0.0	
TT Monthly Totals				
Daily Means				
SS Monthly Totals	50.0	89.0	79.1	
Daily Means	1.6	2.9	2.6	
Types of Instruments	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: 2005 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	0.7	0.4	10.6	5.5
2	2.7	8.1	10.5	7.4
3	2.2	6.2	10.6	6.4
4	5.0	7.7	10.6	7.0
5	2.6	4.4	10.7	2.7
6	3.8	2.9	10.7	1.5
7	7.5	8.0	10.8	7.2
8	6.9	9.4	10.7	6.2
9	1.2	6.7	10.8	5.4
10	0.7	0.4	10.7	5.4
11	4.6	0.2	10.9	5.4
12	6.0	0.8	10.8	7.9
13	4.6	4.6	10.8	5.6
14	7.5	9.2	10.9	9.7
15	4.9	1.9	10.9	7.6
16	6.2	7.5	10.8	7.4
17	4.6	6.5	11.1	6.8
18	5.2	7.2	11.1	7.4
19	6.4	8.7	10.9	8.1
20	4.6	5.9	11.0	5.1
21	5.0	6.8	11.0	7.0
22	6.0	6.3	10.4	6.1
23	6.2	10.2	10.5	10.4
24	4.9	7.3	11.0	6.4
25	5.1	7.9	11.2	8.0
26	4.5	5.0	11.2	7.6
27	5.0	0.7	0.0	7.4
28	5.5	6.6	8.3	8.0
29	3.6	7.4	11.1	5.2
30	4.2	0.0	11.0	4.2
31	3.9	10.4	10.9	11.0
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	141.8	175.3	322.5	207.0
 Daily Means	4.6	5.7	10.4	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: AUGUST Year: 2005 Country: CHILE

Daily Totals				
Latitude	27°10' S	29°57' S	32°51' S	33°23' S
Longitude	109°26' W	71°22' W	70°37' W	70°47' W
Elevation	47 m	25 m	880 m	474 m
Station				
Date	ISLA DE PASCUA	LA SERENA	CALLE LARGA	PUDAHUEL
1	1.6	8.0	0.0	0.0
2	8.3	9.8	3.2	0.6
3	4.3	9.2	3.0	0.7
4	1.6	0.7	7.0	2.5
5	2.4	6.3	9.4	8.8
6	5.4	7.8	7.3	6.2
7	3.6	1.1	9.7	9.2
8	5.6	1.0	9.7	9.3
9	0.0	5.0	9.8	8.4
10	5.4	4.4	4.6	2.5
11	0.0	4.7	9.1	7.9
12	1.8	4.8	2.3	1.6
13	7.3	0.0	0.5	0.9
14	8.8	4.3	4.4	0.6
15	7.3	0.0	0.0	0.0
16	1.7	0.0	1.2	1.8
17	7.0	10.0	0.0	1.6
18	2.2	0.6	5.5	5.6
19	7.0	1.4	10.0	8.8
20	6.9	6.6	5.1	5.1
21	6.6	6.3	6.0	2.4
22	0.3	0.2	0.9	0.0
23	8.6	7.9	4.2	4.3
24	1.2	8.6	8.1	7.6
25	7.4	5.4	5.4	5.7
26	2.5	8.8	0.0	0.0
27	8.0	0.0	0.0	0.0
28	7.9	0.4	0.0	0.0
29	6.6	7.0	8.1	4.8
30	8.0	5.5	1.5	4.1
31	2.0	8.6	10.0	8.7
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	147.3	144.4	146.0	119.7
 Daily Means	4.8	4.7	4.7	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: AUGUST

Year: 2005

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	0.0	4.4	0.0	4.4
2	0.0	0.0	0.2	0.0
3	0.0	5.1	0.0	5.1
4	3.3	1.6	2.6	1.6
5	7.2	5.3	9.7	5.3
6	5.2	4.1	10.4	4.1
7	7.7	6.6	10.0	6.6
8	7.8	4.9	8.6	4.9
9	7.7	2.2	6.4	2.2
10	1.8	0.2	4.6	0.2
11	6.6	0.0	6.5	0.0
12	1.5	0.3	0.2	0.3
13	0.9	0.4	2.7	0.4
14	0.0	0.4	5.2	0.4
15	0.0	0.1	0.8	0.1
16	0.7	5.2	0.6	5.2
17	1.8	1.3	7.5	1.3
18	4.6	4.8	7.2	4.8
19	8.2	0.0	0.0	0.0
20	2.4	4.5	0.9	4.5
21	1.5	5.1	8.4	5.1
22	0.0	4.9	4.0	4.9
23	2.9	6.2	9.1	6.2
24	6.7	5.5	7.4	5.5
25	4.9	0.0	0.0	0.0
26	0.0	0.0	0.6	0.0
27	0.0	5.8	7.7	5.8
28	0.2	6.7	3.0	6.7
29	3.0	5.7	9.0	5.7
30	3.4	7.2	4.2	7.2
31	8.2	3.8	10.9	3.8
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	98.2	102.3	148.4	102.3
 Daily Means	3.2	3.3	4.8	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: 2005 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	2.8	1.6	1.4
2	0.0	0.4	1.4	3.2
3	0.0	4.5	3.3	3.8
4	0.4	0.0	1.1	3.8
5	5.1	2.5	6.5	5.5
6	8.8	8.7	8.2	4.6
7	8.2	9.1	7.5	7.6
8	5.4	6.6	4.0	0.5
9	1.4	0.2	6.1	.
10	4.4	6.8	0.0	.
11	0.0	1.2	0.0	.
12	0.0	0.2	0.0	.
13	0.3	6.7	5.8	5.2
14	8.8	8.6	6.8	5.9
15	1.2	2.6	0.9	.
16	1.0	0.0	0.1	1.2
17	4.6	4.7	5.8	1.6
18	1.4	2.7	4.5	3.9
19	2.5	7.3	6.3	7.2
20	0.0	0.6	1.3	1.9
21	3.5	1.9	2.4	1.4
22	7.2	5.7	3.1	1.9
23	7.6	9.7	4.8	2.6
24	7.2	9.0	6.7	4.4
25	0.1	0.2	0.0	.
26	0.0	0.0	1.0	0.7
27	6.1	6.2	4.6	4.5
28	1.2	4.7	2.5	3.0
29	1.3	4.0	2.1	6.2
30	7.8	8.9	9.2	9.6
31	8.3	9.7	10.1	8.6
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	103.8	136.2	117.7	.
 Daily Means	3.3	4.4	3.8	.
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: 2005

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	3.0	0.0	0.0	
2	3.3	3.7	0.0	
3	0.0	0.0	7.0	
4	5.1	3.7	6.5	
5	0.6	2.0	1.4	
6	7.6	7.7	6.5	
7	6.2	3.4	2.4	
8	0.5	3.3	0.0	
9	0.0	0.3	0.1	
10	3.8	7.4	4.6	
11	0.0	5.4	2.5	
12	5.1	2.9	5.4	
13	6.1	7.5	3.5	
14	7.5	7.7	8.8	
15	0.0	6.6	8.1	
16	1.1	4.5	0.2	
17	0.1	3.0	6.3	
18	4.3	8.6	4.9	
19	2.4	2.7	8.0	
20	2.1	0.7	7.9	
21	0.3	0.0	0.0	
22	2.2	3.2	0.0	
23	1.5	3.1	1.9	
24	2.1	2.4	1.5	
25	0.3	0.2	0.0	
26	0.4	5.9	0.0	
27	3.9	4.0	0.0	
28	2.2	7.1	4.3	
29	6.2	4.5	3.1	
30	8.3	5.5	8.8	
31	9.2	8.9	9.5	
TT Monthly Totals				
Daily Means				
SS Monthly Totals	95.4	125.9	113.2	
Daily Means	3.1	4.1	3.7	
Types of Instruments	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: 2005 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	6.2	10.2	10.9	10.6
2	2.1	1.2	11.0	8.1
3	3.0	8.1	10.9	10.2
4	4.2	6.4	10.9	8.5
5	5.3	0.0	11.0	7.6
6	7.9	4.7	11.0	8.0
7	6.9	9.7	11.1	9.9
8	7.9	9.0	10.6	9.2
9	9.1	8.7	11.0	6.0
10	2.3	5.2	10.9	6.1
11	0.0	0.0	11.1	4.8
12	0.8	0.1	7.8	7.9
13	1.3	0.0	0.0	0.0
14	0.1	4.5	10.7	10.6
15	0.1	0.0	10.9	10.4
16	3.7	8.5	11.0	10.8
17	2.2	9.9	11.1	10.5
18	5.0	8.8	11.0	7.9
19	4.2	5.5	10.6	3.9
20	4.3	8.5	11.0	7.7
21	6.8	8.1	11.0	7.1
22	5.1	0.1	11.1	6.2
23	9.0	2.5	9.7	5.2
24	1.1	7.7	10.6	9.5
25	5.5	9.7	11.2	10.9
26	1.8	5.9	11.0	8.8
27	6.2	3.6	11.1	8.2
28	6.3	7.9	11.2	7.3
29	5.7	8.0	11.1	11.0
30	4.9	1.7	11.1	9.7
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	129.0	164.2	313.6	242.6
 Daily Means	4.3	5.5	10.5	8.1
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: 2005 Country: CHILE

Daily Totals				
Latitude	27°10' S	29°57' S	32°51' S	33°23' S
Longitude	109°26' W	71°22' W	70°37' W	70°47' W
Elevation	47 m	25 m	880 m	474 m
Station				
Date	ISLA DE PASCUA	LA SERENA	CALLE LARGA	PUDAHUEL
1	3.5	10.1	5.8	6.7
2	8.8	3.4	1.4	2.9
3	5.2	3.9	0.3	0.0
4	9.6	10.0	0.3	1.4
5	4.2	10.1	0.0	1.0
6	2.9	9.5	8.1	8.1
7	6.5	0.0	9.7	9.2
8	9.9	0.0	9.1	9.1
9	5.0	0.8	0.0	0.1
10	7.8	8.7	3.5	4.4
11	6.0	10.4	9.8	9.8
12	8.2	10.2	9.9	9.6
13	5.9	0.0	10.0	9.9
14	4.6	5.1	9.8	9.3
15	8.6	10.3	10.0	9.9
16	3.5	8.4	10.0	9.8
17	9.4	3.1	10.0	9.6
18	7.9	5.2	9.6	8.6
19	0.5	0.0	9.6	7.4
20	7.0	4.0	7.3	5.1
21	7.1	3.6	8.3	4.8
22	3.2	6.0	7.1	4.5
23	6.5	0.0	4.8	5.4
24	5.3	10.2	9.9	9.4
25	8.2	9.2	9.9	10.3
26	3.6	3.8	9.9	10.6
27	6.9	7.0	8.6	0.8
28	10.3	1.8	5.2	2.4
29	9.2	10.8	6.4	6.9
30	9.2	11.3	7.2	6.3
31				
TT Monthly Totals				
Daily Means				
SS Monthly Totals	194.5	176.9	211.5	193.3
Daily Means	6.5	5.9	7.1	6.4
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: 2005 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	6.8	1.9	6.9	7.9
2	2.6	1.6	0.4	0.0
3	0.1	4.7	3.9	1.9
4	0.2	3.3	8.6	2.9
5	0.9	5.9	1.3	2.1
6	7.8	7.4	8.7	7.8
7	8.4	0.3	10.3	3.9
8	7.6	1.2	6.0	3.0
9	0.0	5.4	4.2	1.1
10	3.3	5.5	10.3	6.0
11	8.5	5.6	10.9	6.0
12	8.6	6.7	10.9	9.8
13	8.4	7.8	10.6	9.9
14	7.0	5.1	10.2	7.1
15	8.4	7.1	10.7	10.2
16	8.4	3.9	8.9	10.1
17	8.4	0.4	0.0	9.6
18	7.8	0.4	1.3	3.8
19	8.0	4.5	0.0	3.8
20	4.8	7.4	2.8	6.3
21	5.4	1.7	9.0	9.4
22	4.0	0.4	6.9	4.9
23	4.4	5.8	7.3	3.9
24	8.3	4.1	10.6	6.3
25	8.7	8.4	10.6	10.8
26	8.7	8.4	5.3	10.7
27	2.9	0.0	0.0	0.0
28	3.6	6.4	5.2	2.7
29	6.3	6.0	10.5	9.3
30	.	8.7	10.0	6.1
31				
TT Monthly Totals				
Daily Means				
SS Monthly Totals	.	136.0	202.3	177.3
Daily Means	5.8	4.5	6.7	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: SEPTEMBER Year: 2005 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	9.3	6.5	7.5	3.2
2	0.1	0.4	0.0	0.0
3	0.0	3.4	1.6	1.4
4	1.5	3.5	0.1	0.3
5	0.0	4.7	0.0	0.0
6	5.1	5.6	0.8	0.0
7	4.6	7.0	7.1	6.9
8	6.8	9.7	5.1	9.4
9	8.5	9.0	9.7	10.5
10	10.4	10.6	9.4	10.3
11	9.8	10.7	9.6	9.2
12	10.5	9.7	9.9	10.4
13	10.3	9.4	9.9	10.2
14	10.2	10.3	9.5	8.6
15	10.0	10.3	8.9	6.3
16	9.8	5.1	8.6	9.1
17	9.4	3.8	5.8	5.4
18	3.4	5.7	3.5	2.2
19	1.6	9.9	7.0	3.6
20	9.4	8.0	7.6	6.9
21	10.0	7.1	8.5	7.4
22	5.3	0.4	1.6	0.5
23	2.4	10.6	1.7	7.2
24	7.5	11.0	8.3	8.1
25	10.7	4.9	9.6	9.4
26	8.5	1.9	5.7	6.8
27	0.3	0.9	1.0	0.6
28	0.1	10.9	2.7	4.9
29	10.8	8.7	5.8	7.6
30	9.5	0.0	5.9	2.7
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	195.8	199.7	172.4	169.1
 Daily Means	6.5	6.7	5.7	5.6
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: 2005 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	4.2	5.1	2.3	
2	0.3	0.6	5.7	
3	0.5	0.5	0.0	
4	0.6	0.0	0.0	
5	0.0	2.5	0.5	
6	0.0	1.6	0.0	
7	5.8	8.5	6.3	
8	7.1	5.0	4.3	
9	8.3	7.1	4.8	
10	6.1	5.2	10.1	
11	8.9	7.9	9.1	
12	9.8	8.7	4.0	
13	9.7	2.3	8.4	
14	2.8	8.2	10.1	
15	9.1	9.7	0.2	
16	8.3	9.5	0.1	
17	5.6	0.3	6.1	
18	0.0	7.0	5.0	
19	3.6	9.5	2.4	
20	1.5	7.3	2.5	
21	3.0	3.5	1.2	
22	0.0	10.2	5.2	
23	1.7	6.3	10.3	
24	3.6	5.3	9.0	
25	6.0	1.8	4.5	
26	4.0	1.2	0.2	
27	0.0	5.0	2.5	
28	7.3	6.8	1.6	
29	9.3	4.9	11.5	
30	7.5	4.0	10.2	
31				
TT Monthly Totals				
Daily Means				
SS Monthly Totals	134.6	155.5	138.1	
Daily Means	4.5	5.2	4.6	
Types of Instruments	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: 2005

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	5.5	2.4	11.3	10.7
2	7.2	5.9	11.2	7.9
3	5.3	10.7	11.2	10.5
4	5.3	6.6	11.4	9.6
5	4.5	4.9	11.3	10.3
6	4.9	7.2	10.5	9.3
7	6.3	9.3	10.0	10.0
8	6.0	6.2	11.5	8.6
9	4.8	5.1	10.8	8.3
10	8.0	0.8	11.4	10.2
11	11.1	10.6	11.5	10.2
12	9.2	10.9	11.6	9.5
13	5.9	7.4	11.4	8.0
14	6.5	4.8	11.5	1.4
15	5.9	4.8	11.8	4.3
16	7.0	6.4	10.9	5.4
17	7.4	5.4	11.9	5.5
18	7.1	0.0	12.0	9.7
19	7.5	8.3	12.1	9.8
20	7.6	8.9	11.9	10.3
21	7.1	10.2	12.0	9.6
22	11.3	11.2	12.0	10.1
23	5.6	5.9	12.1	8.6
24	8.3	11.3	12.1	11.1
25	4.4	3.6	11.4	6.2
26	6.7	8.2	11.9	7.3
27	6.0	8.4	12.3	9.6
28	6.6	11.4	12.3	10.8
29	6.6	9.7	12.5	8.8
30	7.1	10.7	12.4	8.4
31	7.1	7.1	11.6	8.6
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	209.8	224.3	359.8	268.6
 Daily Means	6.8	7.2	11.6	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: OCTOBER

Year: 2005

Country: CHILE

Daily Totals				
Latitude	27°10' S	29°57' S	32°51' S	33°23' S
Longitude	109°26' W	71°22' W	70°37' W	70°47' W
Elevation	47 m	25 m	880 m	474 m
Station				
Date	ISLA DE PASCUA	LA SERENA	CALLE LARGA	PUDAHUEL
1	3.4	3.7	2.4	4.3
2	0.3	8.8	2.3	0.3
3	9.7	10.8	7.3	9.3
4	1.6	11.4	10.0	11.0
5	6.9	10.1	9.1	10.3
6	7.6	4.3	8.2	8.0
7	6.2	11.4	8.5	8.0
8	0.0	10.1	10.1	10.6
9	9.6	0.0	10.2	10.7
10	9.8	0.0	10.0	7.9
11	10.1	0.0	9.7	6.6
12	10.9	8.5	10.2	9.2
13	11.9	5.2	8.1	8.3
14	8.0	5.6	10.4	10.6
15	5.0	3.5	8.1	0.8
16	10.2	12.1	10.8	9.9
17	9.8	10.1	4.4	7.2
18	2.8	10.9	10.8	11.0
19	7.0	5.4	10.8	11.2
20	7.1	5.9	9.5	9.8
21	8.1	5.2	9.4	8.7
22	4.5	0.0	10.6	8.9
23	3.6	2.1	10.9	11.4
24	4.1	9.1	1.0	1.2
25	9.9	11.6	4.8	7.9
26	7.9	10.8	9.4	7.5
27	9.4	9.8	6.5	3.9
28	9.0	11.6	9.3	10.6
29	10.2	11.4	11.0	11.0
30	10.3	11.6	11.0	11.5
31	11.2	7.3	11.0	11.9
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	226.1	228.3	265.8	259.5
 Daily Means	7.3	7.4	8.6	8.4
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: 2005

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	2.7	0.3	0.6	0.3
2	1.1	0.0	10.3	0.0
3	8.9	6.4	11.7	9.6
4	9.6	4.0	10.7	11.3
5	9.9	0.3	10.8	10.3
6	7.4	1.2	0.2	0.9
7	8.2	2.8	8.0	6.9
8	9.8	9.6	11.5	8.6
9	10.0	9.1	0.0	11.1
10	9.7	2.9	0.0	6.0
11	7.0	8.6	10.7	3.8
12	10.0	9.1	11.2	8.6
13	8.1	6.1	11.5	11.9
14	10.4	3.4	11.9	9.1
15	0.7	2.6	3.1	0.2
16	9.9	10.4	11.6	9.9
17	4.5	7.2	4.8	9.6
18	10.4	6.3	10.9	9.8
19	10.5	10.6	11.8	12.6
20	10.3	6.4	3.6	12.3
21	8.6	0.0	2.9	4.9
22	8.6	8.0	9.1	10.2
23	10.9	1.7	11.7	12.8
24	0.9	4.5	3.0	0.5
25	5.6	9.8	9.9	8.0
26	7.7	2.2	9.7	6.9
27	3.9	1.1	5.5	2.7
28	9.6	6.7	5.4	2.6
29	10.5	7.8	11.6	8.8
30	11.0	2.5	11.9	9.6
31	11.0	5.7	11.8	12.8
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	247.4	157.3	247.4	232.6
 Daily Means	8.0	5.1	8.0	7.5
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: 2005

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	1.2	0.0	0.0
2	0.0	1.6	2.1	0.0
3	10.0	6.2	8.6	11.0
4	9.9	10.7	9.0	10.8
5	11.0	11.5	8.2	9.5
6	4.3	6.6	0.0	0.0
7	6.0	8.8	8.3	9.0
8	11.0	11.5	8.7	8.5
9	10.8	9.3	3.0	3.4
10	6.5	0.9	6.8	1.5
11	0.2	1.7	5.3	5.8
12	9.7	10.6	9.2	7.9
13	11.5	11.9	2.1	4.8
14	10.6	11.4	8.8	6.6
15	5.5	11.2	4.1	2.4
16	6.0	9.3	0.8	3.7
17	10.9	11.6	8.8	0.4
18	10.0	10.5	7.8	10.7
19	11.8	12.1	7.2	9.5
20	11.7	11.2	3.0	0.2
21	1.6	2.1	4.0	7.7
22	11.7	11.9	10.7	9.8
23	12.0	12.1	9.2	10.8
24	4.6	8.5	7.0	10.6
25	11.2	11.9	9.8	11.1
26	9.2	10.6	6.5	2.9
27	4.4	4.6	1.2	0.0
28	3.7	11.1	2.1	6.0
29	11.0	12.4	9.1	9.5
30	9.8	12.1	4.2	4.9
31	11.5	12.4	9.0	8.5
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	248.1	279.5	184.6	187.5
 Daily Means	8.0	9.0	6.0	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: 2005

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	0.0	0.0	10.2	
2	0.8	0.5	10.9	
3	1.1	9.6	11.5	
4	9.8	10.4	7.9	
5	0.6	5.9	11.5	
6	0.0	4.5	8.4	
7	4.7	6.0	5.1	
8	10.4	0.4	1.7	
9	2.5	8.0	10.1	
10	0.0	0.2	4.0	
11	7.7	0.9	5.1	
12	7.6	4.4	3.2	
13	4.1	10.1	7.5	
14	8.4	10.8	2.8	
15	0.2	8.9	11.8	
16	3.0	2.8	8.8	
17	0.5	10.3	8.8	
18	0.2	1.9	6.8	
19	6.5	0.0	0.0	
20	6.2	6.2	2.2	
21	7.6	9.9	8.7	
22	9.5	5.8	5.0	
23	10.1	7.7	11.9	
24	10.7	10.5	8.9	
25	4.0	4.7	12.2	
26	7.4	10.3	11.8	
27	0.0	10.3	2.2	
28	4.9	2.2	3.4	
29	1.6	11.0	6.7	
30	0.0	1.6	0.0	
31	3.8	7.3	10.3	
TT Monthly Totals				
Daily Means				
SS Monthly Totals	133.9	183.1	219.4	
Daily Means	4.3	5.9	7.1	
Types of Instruments	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: 2005 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	7.2	9.5	12.4	8.2
2	8.4	10.0	12.4	10.1
3	6.4	6.5	12.4	7.9
4	11.3	9.8	12.1	10.6
5	11.5	10.9	9.8	10.3
6	10.0	11.1	12.2	10.4
7	9.2	8.5	8.4	8.2
8	0.0	1.9	2.3	4.9
9	7.7	0.9	3.6	4.2
10	8.0	7.4	12.3	7.5
11	7.7	7.1	12.6	9.5
12	10.4	9.9	12.6	8.7
13	9.7	10.6	12.6	9.4
14	8.8	7.9	12.5	8.5
15	9.1	9.0	12.6	7.2
16	8.3	10.5	12.5	8.2
17	7.0	7.4	12.6	0.9
18	4.5	7.2	12.6	7.2
19	6.5	6.2	10.8	7.1
20	6.0	8.0	11.2	7.0
21	9.0	9.5	12.4	10.8
22	6.2	7.2	12.6	6.1
23	7.7	9.9	12.6	9.7
24	11.2	11.2	12.5	11.5
25	8.9	11.0	11.9	10.5
26	8.1	11.2	11.8	9.2
27	11.7	11.9	12.6	11.6
28	9.6	9.0	12.7	11.5
29	7.6	8.2	12.6	5.4
30	9.0	11.7	12.7	7.5
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	246.7	261.1	344.9	249.8
 Daily Means	8.2	8.7	11.5	8.3
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: NOVEMBER Year: 2005 Country: CHILE

Daily Totals				
Latitude	27°10' S	29°57' S	32°51' S	33°23' S
Longitude	109°26' W	71°22' W	70°37' W	70°47' W
Elevation	47 m	25 m	880 m	474 m
Station				
Date	ISLA DE PASCUA	LA SERENA	CALLE LARGA	PUDAHUEL
1	10.1	1.0	11.2	11.8
2	8.2	0.3	11.2	11.9
3	2.2	9.6	10.3	10.4
4	9.8	12.2	11.2	12.1
5	5.8	7.1	9.4	11.8
6	7.8	12.0	11.2	11.7
7	7.2	4.6	11.2	11.7
8	10.0	4.0	6.9	7.2
9	11.1	6.0	6.5	9.2
10	6.0	1.8	11.3	11.8
11	6.0	0.0	11.2	11.9
12	5.7	0.0	11.2	11.1
13	5.9	1.2	11.2	8.8
14	6.7	3.1	11.1	8.9
15	8.8	4.2	11.3	11.3
16	9.6	4.9	4.8	6.6
17	7.5	7.3	7.2	8.0
18	10.6	4.7	11.3	11.9
19	7.4	6.8	11.2	12.2
20	7.2	0.0	11.0	12.0
21	8.4	2.1	11.4	12.0
22	4.8	0.0	11.4	11.3
23	6.6	5.8	5.6	5.4
24	4.9	13.1	11.3	11.5
25	5.0	11.8	11.3	12.3
26	10.2	5.8	11.3	12.2
27	7.0	12.9	7.8	7.5
28	12.4	11.5	11.3	8.7
29	5.1	11.3	11.3	12.3
30	13.1	12.7	11.3	12.2
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	231.1	177.8	305.9	317.7
 Daily Means	7.7	5.9	10.2	10.6
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: NOVEMBER Year: 2005 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	11.0	3.5	1.1	13.0
2	10.9	9.5	6.6	11.9
3	9.5	1.2	9.4	3.8
4	11.0	9.0	12.2	5.8
5	11.0	6.9	12.2	12.9
6	10.8	4.0	8.7	12.6
7	11.1	8.8	5.4	12.2
8	7.2	7.6	0.0	7.4
9	8.7	1.8	7.9	11.2
10	11.3	7.4	10.7	12.9
11	11.3	7.4	0.7	13.2
12	11.0	3.0	0.9	13.0
13	9.9	0.5	0.0	4.1
14	10.0	7.7	8.1	9.0
15	11.0	7.7	13.0	13.1
16	5.6	1.1	6.9	4.6
17	8.6	4.6	11.1	10.0
18	10.9	1.8	11.8	9.9
19	11.4	1.3	12.5	13.1
20	10.4	8.2	5.0	10.9
21	11.5	5.9	10.1	11.3
22	11.2	1.2	3.3	11.1
23	5.0	8.3	4.3	10.0
24	11.1	8.3	12.7	12.8
25	11.7	10.1	13.2	11.6
26	11.9	8.2	4.3	9.5
27	7.7	6.6	2.7	0.0
28	9.8	4.8	10.2	8.2
29	11.7	7.4	12.4	11.9
30	11.8	9.9	12.7	13.5
31				
TT Monthly Totals				
Daily Means				
SS Monthly Totals	306.0	173.7	230.1	304.5
Daily Means	10.2	5.8	7.7	10.2
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: 2005 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	11.7	10.7	7.6	11.3
2	11.6	8.5	1.0	0.3
3	4.9	11.8	8.8	7.9
4	11.3	11.7	11.0	6.3
5	11.8	10.9	9.2	6.3
6	10.3	6.3	11.2	11.5
7	11.7	12.1	7.0	7.6
8	11.9	10.8	8.7	11.3
9	11.0	10.6	9.5	7.9
10	12.3	11.6	8.7	11.1
11	12.2	12.6	11.4	11.4
12	12.1	5.6	5.2	11.2
13	6.1	6.4	2.1	2.5
14	10.0	7.5	5.7	5.9
15	10.5	10.4	4.6	3.8
16	10.9	9.6	6.2	1.5
17	7.2	2.9	3.9	4.0
18	10.2	11.9	2.2	2.6
19	12.4	12.1	8.6	9.6
20	12.5	9.4	2.6	0.1
21	8.9	0.4	0.1	0.6
22	2.6	0.0	0.0	0.0
23	6.6	7.5	5.4	3.2
24	8.0	5.8	0.0	7.2
25	11.0	5.4	7.1	0.6
26	12.3	1.1	4.1	0.0
27	4.9	0.4	5.2	7.9
28	9.9	12.3	7.9	6.7
29	12.0	12.7	10.5	9.2
30	13.0	12.6	11.3	12.4
31				
TT Monthly Totals				
Daily Means				
SS Monthly Totals	301.8	251.6	186.8	181.9
Daily Means	10.1	8.4	6.2	6.1
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: 2005 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	6.2	3.1	4.4	
2	0.0	2.9	2.9	
3	7.0	8.3	11.8	
4	4.8	6.6	10.5	
5	11.5	12.4	8.0	
6	10.8	12.2	8.2	
7	7.5	10.7	13.6	
8	13.2	7.6	1.0	
9	0.8	4.4	5.9	
10	8.7	6.1	7.2	
11	9.8	11.5	2.8	
12	10.0	9.5	12.0	
13	3.1	6.1	13.3	
14	4.4	3.5	13.1	
15	0.1	3.0	8.5	
16	1.9	10.5	12.4	
17	3.7	4.1	3.8	
18	0.2	1.6	12.5	
19	5.8	9.4	8.7	
20	0.0	2.7	12.2	
21	3.2	4.6	7.5	
22	3.3	9.0	2.3	
23	5.0	4.9	5.9	
24	0.6	0.1	5.5	
25	9.3	9.2	7.9	
26	4.4	8.4	12.5	
27	6.6	3.9	12.6	
28	9.8	11.3	4.8	
29	8.3	10.9	6.8	
30	13.5	12.6	6.5	
31				
TT Monthly Totals				
Daily Means				
SS Monthly Totals	173.5	211.1	245.1	
Daily Means	5.8	7.0	8.2	
Types of Instruments	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: 2005 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	8.7	11.8	12.3	10.3
2	9.5	11.5	12.2	10.6
3	7.1	11.5	11.7	10.8
4	9.5	11.8	12.5	9.5
5	8.4	11.8	12.5	11.4
6	9.3	10.2	12.7	11.7
7	7.8	11.7	12.0	7.2
8	10.3	11.2	12.6	11.9
9	6.6	11.9	12.8	10.8
10	8.1	9.9	12.6	12.1
11	9.1	10.1	12.7	9.8
12	10.1	11.9	12.6	9.8
13	7.5	10.0	12.6	8.3
14	11.3	11.7	12.6	12.0
15	11.2	11.9	12.6	10.8
16	11.4	11.8	12.5	10.1
17	11.0	11.2	12.5	10.4
18	9.5	11.8	12.7	11.5
19	2.9	11.1	12.4	10.9
20	10.1	11.2	12.6	12.1
21	9.3	11.4	12.5	11.7
22	10.6	11.3	12.7	11.8
23	7.7	11.5	12.3	11.4
24	9.9	11.2	11.0	11.3
25	10.3	11.3	9.5	10.7
26	9.3	9.2	11.2	11.2
27	5.8	11.6	11.9	10.0
28	9.6	8.5	11.7	10.7
29	4.8	11.7	11.5	10.8
30	10.2	10.1	11.4	11.2
31	8.1	11.2	10.5	10.2
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	275.0	345.0	375.9	333.0
 Daily Means	8.9	11.1	12.1	10.7
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: 2005 Country: CHILE

Daily Totals				
Latitude	27°10' S	29°57' S	32°51' S	33°23' S
Longitude	109°26' W	71°22' W	70°37' W	70°47' W
Elevation	47 m	25 m	880 m	474 m
Station				
Date	ISLA DE PASCUA	LA SERENA	CALLE LARGA	PUDAHUEL
1	9.7	11.0	11.4	
2	9.2	6.8	11.4	
3	6.5	11.2	11.5	
4	12.5	13.0	7.4	
5	12.6	12.4	10.0	
6	11.2	12.0	8.5	
7	9.1	11.5	7.3	
8	12.3	12.2	7.3	
9	12.9	11.3	11.6	
10	11.2	0.8	11.6	
11	8.8	0.8	11.6	
12	12.4	12.8	10.5	
13	7.8	5.1	11.6	
14	6.8	5.5	11.6	
15	11.6	4.6	10.5	
16	11.2	8.4	11.6	
17	12.3	9.3	11.5	
18	6.0	2.9	11.6	
19	0.9	4.6	11.6	
20	7.2	5.5	11.6	
21	8.9	6.1	7.0	
22	12.0	6.9	10.2	
23	11.5	6.0	11.6	
24	7.7	4.1	11.6	12.3
25	9.2	4.4	11.5	12.8
26	11.4	8.1	11.5	10.5
27	12.3	6.0	6.7	5.7
28	9.8	12.8	11.5	12.5
29	8.9	7.4	11.5	12.6
30	5.9	7.8	11.8	12.4
31	7.4	4.9	11.5	12.6
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	297.2	236.2	328.1	.
 Daily Means	9.6	7.6	10.6	.
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: DECEMBER Year: 2005 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	11.8	9.7	13.0	13.6
2	11.9	5.0	8.4	13.5
3	11.4	10.0	13.4	12.8
4	9.4	10.0	12.8	5.9
5	7.8	6.0	12.3	10.8
6	10.4	8.3	10.9	10.8
7	9.5	4.1	10.6	2.0
8	7.6	4.1	10.4	9.6
9	12.0	4.8	12.4	9.0
10	12.6	8.6	12.6	11.4
11	12.6	10.6	2.6	12.8
12	9.4	3.4	6.0	4.9
13	12.3	3.0	8.1	9.0
14	12.3	9.1	2.7	12.7
15	9.6	7.9	0.9	3.1
16	9.9	10.7	1.4	7.0
17	11.9	11.5	9.0	13.1
18	12.5	7.4	9.2	13.4
19	11.5	2.9	11.0	13.4
20	12.5	1.5	7.7	13.3
21	7.4	5.0	5.5	6.7
22	12.3	3.2	9.7	8.7
23	12.4	6.4	1.0	13.3
24	12.0	11.5	2.9	13.3
25	12.2	5.9	3.4	13.4
26	10.4	3.8	0.0	0.2
27	5.1	4.5	5.3	5.5
28	12.1	4.2	11.1	12.9
29	12.1	10.6	1.8	12.5
30	12.1	5.5	5.3	12.5
31	12.1	4.8	12.7	13.1
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	339.1	204.0	234.1	314.2
 Daily Means	10.9	6.6	7.6	10.1
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: 2005 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	13.0	12.9	12.3	12.4
2	13.3	6.5	2.3	4.9
3	7.9	4.9	0.9	2.6
4	4.0	9.1	7.8	11.4
5	12.1	12.7	9.2	11.0
6	5.2	7.4	8.1	6.6
7	0.0	0.0	0.0	0.0
8	8.8	11.9	7.0	10.4
9	13.3	13.0	11.5	11.5
10	12.9	13.0	11.6	11.6
11	12.8	12.8	11.4	12.8
12	2.4	4.0	9.4	11.1
13	10.4	9.0	2.1	11.8
14	10.4	12.9	10.0	11.4
15	6.1	0.9	7.8	10.2
16	9.5	11.4	9.5	12.3
17	11.0	12.8	9.3	9.0
18	13.3	13.1	6.4	1.2
19	13.3	12.9	8.0	10.7
20	13.2	12.6	8.4	11.7
21	5.1	7.1	10.8	10.8
22	5.4	9.8	10.4	11.6
23	13.3	12.8	11.5	11.5
24	12.7	13.0	11.4	12.5
25	13.3	8.3	11.2	12.4
26	7.3	1.3	10.3	12.0
27	3.9	6.4	5.7	9.0
28	12.6	13.0	9.7	9.9
29	9.0	11.5	0.4	4.7
30	10.2	12.6	6.5	10.7
31	12.9	12.8	10.4	9.5
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	298.6	302.4	251.3	299.2
 Daily Means	9.6	9.8	8.1	9.7
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: 2005 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	13.0	13.5	0.4	
2	8.0	13.5	3.6	
3	1.5	3.8	6.9	
4	9.0	7.6	9.8	
5	10.4	10.0	11.6	
6	2.5	8.7	1.7	
7	1.7	7.2	6.5	
8	6.6	3.2	5.9	
9	11.6	11.3	2.2	
10	11.8	13.5	9.8	
11	10.7	13.8	5.9	
12	5.8	13.5	6.9	
13	6.4	11.4	2.2	
14	9.7	6.3	14.2	
15	12.8	11.0	4.6	
16	11.0	7.0	14.8	
17	3.4	5.8	2.2	
18	7.7	11.8	9.5	
19	4.7	5.8	7.2	
20	12.2	2.4	0.9	
21	3.4	13.3	8.9	
22	9.9	9.4	4.2	
23	9.1	13.6	5.4	
24	11.9	11.7	3.5	
25	9.3	13.1	12.6	
26	9.4	13.2	5.5	
27	0.8	12.9	5.6	
28	6.2	9.4	10.4	
29	9.8	4.9	3.7	
30	9.7	5.9	5.1	
31	8.6	6.2	13.2	
TT Monthly Totals				
Daily Means				
SS Monthly Totals	248.6	294.7	204.9	
Daily Means	8.0	9.5	6.6	
Types of Instruments	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	HELIOGRAPH CAMPBELL STOKES	