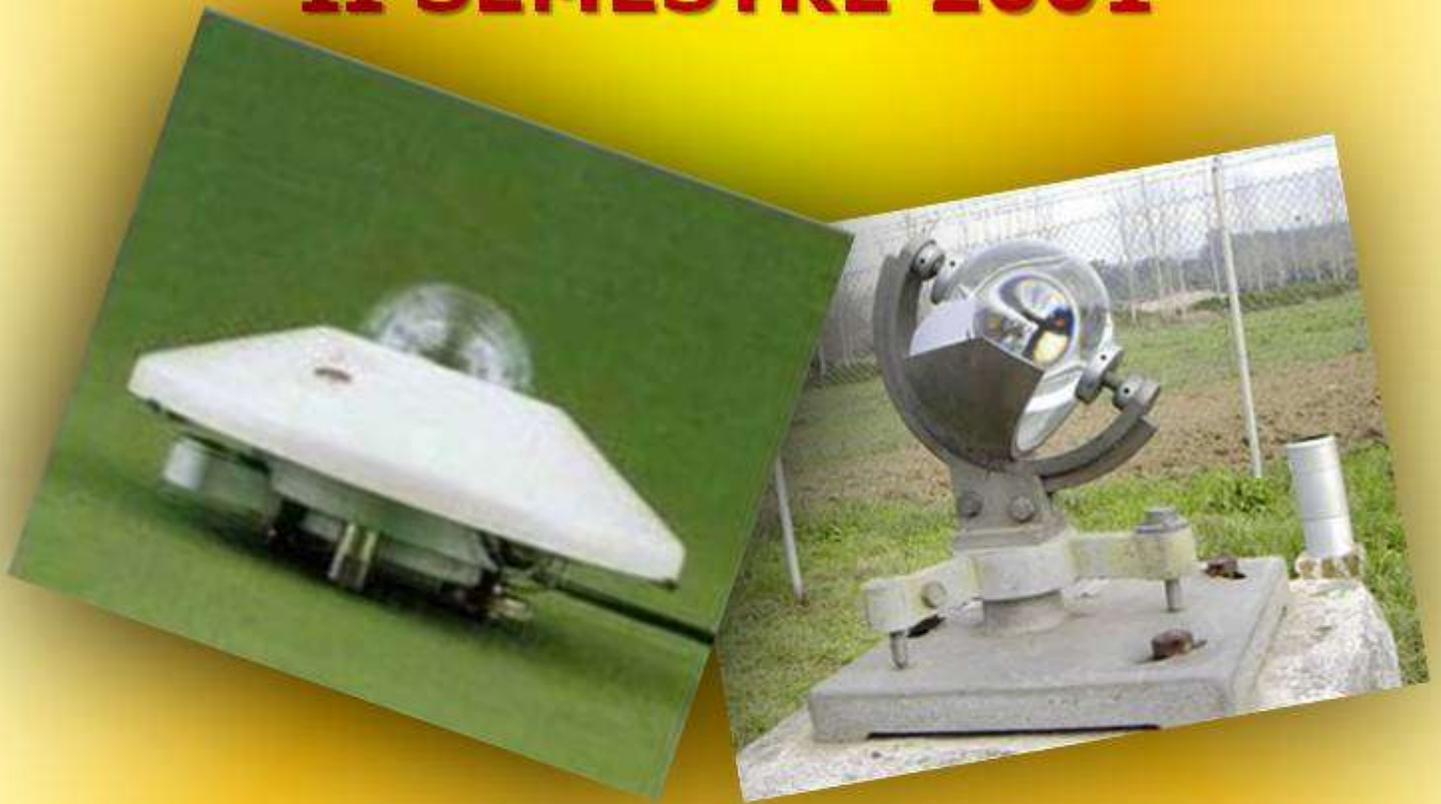




DIRECCIÓN METEOROLÓGICA DE CHILE

INFORME SOLARIMÉTRICO SEMESTRAL

II SEMESTRE 2001



SUBDIRECCIÓN DE CLIMATOLOGÍA Y MET APLICADA

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

Month: JULIO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	18°21' S	22°29' S	23°26' S	27°09' S
Longitude	70°19' W	68°54' W	70°26' W	109°25' W
Elevation	58 m	2270 m	135 m	51 m
Station	ARICA	CALAMA	ANTOFAGASTA	ISLA DE PASCUA
Date				
1	10.05	.	9.92	.
2	11.53	.	11.63	.
3	7.22	.	9.03	.
4	12.57	.	10.94	.
5	13.62	.	9.40	.
6	13.26	.	11.50	.
7	10.38	.	9.95	.
8	9.47	.	10.62	.
9	8.92	.	9.99	.
10	6.31	.	6.37	.
11	10.73	.	10.55	.
12	9.81	.	11.37	.
13	8.29	.	10.91	.
14	11.72	.	12.01	.
15	13.89	.	11.38	.
16	14.24	.	.	.
17	9.74	.	11.35	.
18	9.27	.	11.38	.
19	8.49	.	11.10	.
20	6.19	.	7.37	.
21	14.87	.	12.58	.
22	16.18	.	10.54	.
23	16.21	.	12.15	.
24	8.25	.	10.98	.
25	11.67	.	10.52	.
26	10.72	.	12.72	.
27	11.51	.	13.37	.
28	13.67	.	13.16	.
29	12.36	.	10.42	.
30	13.14	.	13.24	.
31	13.48	.	13.27	.
TT Monthly Totals	347.75	.	.	.
 Daily Means	11.22	.	10.99	.
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: JULIO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	27°18' S	28°35' S	33°23' S	34°06' S
Longitude	70°25' W	70°46' W	70°47' W	71°45' W
Elevation	291 m	469 m	475 m	296 m
Station	COPIAPO	VALLENAR	PUDAHUEL	HIDANGO
Date				
1	.	.	7.49	7.91
2	.	.	3.94	4.71
3	.	.	2.20	4.14
4	.	.	8.64	8.10
5	.	.	9.68	10.45
6	.	.	5.41	6.51
7	.	.	3.83	3.88
8	.	.	0.63	2.01
9	.	.	3.14	6.34
10	.	.	6.99	8.27
11	.	.	3.17	5.96
12	.	.	2.29	3.07
13	.	.	2.69	6.18
14	.	.	8.00	10.53
15	.	.	9.46	10.75
16	.	.	5.87	4.39
17	.	.	3.67	2.23
18	.	.	1.75	1.79
19	.	.	6.01	6.48
20	.	.	10.12	5.56
21	.	.	11.01	11.09
22	.	.	9.25	7.77
23	.	.	7.53	8.71
24	.	.	4.95	8.92
25	.	.	8.99	11.93
26	.	.	12.25	12.89
27	.	.	13.12	12.50
28	.	.	8.51	4.49
29	.	.	0.43	1.27
30	.	.	2.77	.
31	.	.	4.59	4.75
TT Monthly Totals	.	.	188.40	.
 Daily Means	.	.	6.08	6.79
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: JULIO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	34°58' S	35°58' S	36°46' S	37°24' S
Longitude	71°14' W	72°20' W	73°03' W	72°26' W
Elevation	228 m	142 m	12 m	109 m
Station	CURICO	CAUQUENES	CONCEPCION	LOS ANGELES
Date				
1	7.15	.	5.50	6.18
2	1.92	.	1.21	1.13
3	0.40	.	1.52	1.22
4	5.09	.	8.31	8.40
5	5.25	.	9.30	8.76
6	2.74	.	2.73	2.26
7	2.70	.	1.88	.
8	0.63	.	6.81	.
9	4.32	.	7.29	.
10	6.96	.	7.29	.
11	2.90	.	2.47	2.07
12	1.60	.	1.31	0.85
13	3.45	.	6.08	4.74
14	8.76	.	8.73	5.28
15	9.45	.	8.11	7.81
16	3.71	.	1.37	0.99
17	2.16	.	5.22	4.24
18	1.04	.	0.95	0.98
19	5.38	.	7.06	6.86
20	3.92	.	3.27	3.52
21	10.89	.	10.30	9.94
22	.	.	7.64	7.60
23	6.50	.	4.38	3.76
24	4.75	.	10.56	8.18
25	2.98	.	4.25	10.37
26	8.54	.	.	10.69
27	11.45	.	.	.
28	6.24	.	.	16.01
29	0.98	.	.	.
30	2.33	.	.	5.27
31	1.09	.	.	1.39
TT Monthly Totals
 Daily Means	4.51	.	.	.
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: JULIO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	38°45' S	41°25' S	42°55' S	45°35' S
Longitude	72°38' W	73°05' W	72°43' W	72°07' W
Elevation	114 m	85 m	7 m	310 m
Station	TEMUCO	PUERTO MONTT	CHAITEN	COYHAIQUE
Date				
1	5.60	5.30	.	4.33
2	1.94	3.43	.	2.30
3	2.32	5.41	.	2.97
4	6.53	4.65	.	4.34
5	7.42	4.67	.	2.36
6	2.34	1.47	.	1.68
7	0.74	1.73	.	5.35
8	3.63	4.29	.	2.18
9	5.91	3.68	.	3.75
10	4.71	5.10	.	3.55
11	1.32	1.15	.	2.52
12	2.51	4.41	.	0.41
13	4.44	2.70	.	1.36
14	4.39	2.12	.	1.12
15	3.52	1.29	.	5.00
16	1.39	3.75	.	3.82
17	3.36	2.90	.	2.83
18	1.34	3.67	.	3.09
19	2.27	3.34	.	1.31
20	1.89	4.88	.	4.83
21	5.31	6.99	.	3.44
22	6.99	9.25	.	3.62
23	6.03	5.46	.	7.73
24	6.66	5.33	.	7.50
25	6.69	4.43	.	7.42
26	9.79	9.76	.	6.21
27	7.06	5.23	.	5.47
28	4.15	3.09	.	6.42
29	4.25	5.64	.	6.19
30	7.78	2.61	.	4.75
31	.	2.73	.	4.55
TT Monthly Totals	.	130.48	.	122.40
 Daily Means	4.41	4.21	.	3.95
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: JULIO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station	PUNTA ARENAS			
Date				
1	1.04			
2	0.70			
3	2.67			
4	3.01			
5	1.13			
6	2.14			
7	2.58			
8	2.42			
9	0.75			
10	2.82			
11	3.67			
12	4.25			
13	0.82			
14	3.23			
15	3.52			
16	3.36			
17	3.67			
18	3.55			
19	3.80			
20	2.62			
21	3.28			
22	4.05			
23	6.33			
24	4.10			
25	3.92			
26	3.05			
27	1.49			
28	0.69			
29	0.72			
30	3.71			
31	1.21			
TT Monthly Totals	84.30			
 Daily Means	2.72			
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO			
Instruments	PSP EPPLEY			

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

Month: AGOSTO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	18°20' S	22°29' S	23°26' S	27°09' S
Longitude	70°20' W	68°54' W	70°26' W	109°25' W
Elevation	58 m	2270 m	135 m	51 m
Station	ARICA	CALAMA	ANTOFAGASTA	ISLA DE PASCUA
Date				
1	11.29	.	9.39	.
2	15.51	.	5.00	.
3	14.11	.	10.17	.
4	15.11	.	13.09	.
5	.	.	13.60	.
6	.	.	13.96	.
7	.	.	13.86	.
8	9.68	.	13.42	.
9	9.71	.	10.23	.
10	8.18	.	11.85	.
11	9.68	.	8.63	.
12	11.20	.	11.68	.
13	9.34	.	13.31	.
14	7.82	.	13.15	.
15	.	.	14.50	.
16	10.85	.	14.06	.
17	6.92	.	13.51	.
18	9.31	.	15.22	.
19	13.19	.	14.94	.
20	9.97	.	15.63	.
21	14.26	.	15.02	.
22	10.65	.	12.93	.
23	9.59	.	14.14	.
24	14.78	.	12.32	.
25	8.41	.	10.70	.
26	9.79	.	9.43	.
27	16.94	.	13.63	.
28	17.05	.	15.87	.
29	13.17	.	16.28	.
30	12.58	.	15.10	.
31	11.90	.	5.10	.
TT Monthly Totals	.	.	389.71	.
 Daily Means	11.52	.	12.57	.
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: AGOSTO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	27°18' S	28°35' S	33°23' S	34°06' S
Longitude	70°25' W	70°46' W	70°47' W	71°45' W
Elevation	291 m	469 m	475 m	296 m
Station	COPIAPO	VALLENAR	PUDAHUEL	HIDANGO
Date				
1	.	.	11.55	8.54
2	.	.	6.42	8.89
3	.	.	6.55	12.89
4	.	.	6.60	5.11
5	.	.	11.29	6.99
6	.	.	13.11	13.72
7	.	.	13.44	13.66
8	.	.	13.11	13.88
9	.	.	13.48	13.97
10	.	.	14.39	5.73
11	.	.	6.48	2.76
12	.	.	12.05	6.93
13	.	.	11.61	9.35
14	.	.	3.21	7.82
15	.	.	3.98	7.56
16	.	.	3.87	6.89
17	.	.	5.15	11.93
18	.	.	8.50	6.63
19	.	.	13.20	15.43
20	.	.	15.46	15.69
21	.	.	15.60	15.81
22	.	.	15.30	15.86
23	.	.	3.85	6.61
24	.	.	4.51	4.62
25	.	.	1.57	1.47
26	.	.	7.01	7.77
27	.	.	5.04	13.50
28	.	.	1.80	3.12
29	.	.	5.08	5.12
30	.	.	7.40	14.97
31	.	.	7.30	15.22
TT Monthly Totals	.	.	267.92	298.43
 Daily Means	.	.	8.64	9.63
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: AGOSTO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	34°58' S	35°58' S	36°46' S	37°24' S
Longitude	71°14' W	72°20' W	73°03' W	72°26' W
Elevation	228 m	142 m	12 m	109 m
Station	CURICO	CAUQUENES	CONCEPCION	LOS ANGELES
Date				
1	8.71	.	.	3.10
2	8.56	.	.	8.84
3	2.82	.	.	9.63
4	6.69	.	.	3.95
5	9.04	.	.	4.76
6	10.39	.	.	10.75
7	9.58	.	.	9.50
8	6.09	.	.	10.82
9	7.66	.	.	12.22
10	9.87	.	.	12.20
11	5.98	.	.	4.24
12	10.87	.	.	.
13	7.28	.	.	.
14	5.62	.	.	.
15	5.24	.	.	.
16	4.08	.	.	.
17	10.75	.	.	.
18	4.58	.	.	.
19	14.38	.	.	.
20	14.45	.	.	.
21	14.91	.	.	13.83
22	14.96	.	.	13.91
23	5.29	.	.	6.76
24	3.08	.	.	2.23
25	0.92	.	.	.
26	4.17	.	.	.
27	10.66	.	.	.
28	1.16	.	.	.
29	3.89	.	.	.
30	8.92	.	.	.
31	9.60	.	.	.
TT Monthly Totals	240.21	.	.	.
 Daily Means	7.75	.	.	.
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: AGOSTO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	38°45' S	41°25' S	42°55' S	45°35' S
Longitude	72°38' W	73°05' W	72°43' W	72°07' W
Elevation	114 m	85 m	7 m	310 m
Station	TEMUCO	PUERTO MONTT	CHAITEN	COYHAIQUE
Date				
1	5.18	2.79	.	3.40
2	6.51	5.37	.	5.00
3	8.07	10.28	.	6.48
4	6.09	3.88	.	1.49
5	4.50	4.67	.	4.78
6	9.19	6.83	.	4.22
7	5.91	2.96	.	3.38
8	8.02	8.81	.	7.84
9	9.35	8.85	.	6.51
10	10.30	8.53	.	8.03
11	4.51	2.69	.	1.98
12	3.48	5.98	.	7.91
13	3.50	4.14	.	9.76
14	10.88	6.14	.	7.08
15	11.45	9.19	.	7.04
16	12.76	9.17	.	5.07
17	12.48	9.08	.	7.37
18	7.06	8.90	.	3.60
19	11.78	4.51	.	5.84
20	11.91	11.64	.	7.92
21	9.28	2.66	.	4.24
22	9.77	5.81	.	2.66
23	7.59	3.06	.	9.35
24	4.37	2.05	.	1.92
25	6.66	8.47	.	1.44
26	6.53	3.43	.	6.08
27	11.51	8.22	.	7.19
28	1.42	4.61	.	2.72
29	16.57	9.76	.	11.09
30	14.91	10.48	.	8.76
31	14.28	9.84	.	4.04
TT Monthly Totals	265.82	202.81	.	174.17
 Daily Means	8.57	6.54	.	5.62
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: AGOSTO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station	PUNTA ARENAS			
Date				
1	2.50			
2	3.45			
3	4.34			
4	5.34			
5	3.65			
6	2.53			
7	2.14			
8	4.95			
9	6.03			
10	6.27			
11	7.22			
12	4.47			
13	6.56			
14	4.44			
15	3.62			
16	6.80			
17	6.70			
18	7.36			
19	5.69			
20	3.66			
21	5.92			
22	6.16			
23	8.24			
24	8.45			
25	5.83			
26	1.77			
27	7.20			
28	9.32			
29	9.24			
30	5.38			
31	9.13			
TT Monthly Totals	174.38			
Daily Means	5.63			
SS Monthly Totals				
Daily Means				
Types of	PIRANOMETRO			
Instruments	PSP EPPLEY			

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

Month: SEPTIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	18°20' S	22°29' S	23°26' S	27°09' S
Longitude	70°20' W	68°54' W	70°26' W	109°25' W
Elevation	58 m	2270 m	135 m	51 m
Station	ARICA	CALAMA	ANTOFAGASTA	ISLA DE PASCUA
Date				
1	.	.	5.92	.
2	9.12	.	12.94	.
3	10.46	.	15.47	.
4	13.75	.	12.08	.
5	13.50	.	13.78	.
6	16.89	.	12.93	.
7	15.76	.	9.68	.
8	7.43	.	11.85	.
9	9.72	.	14.54	.
10	.	.	13.82	.
11	.	.	3.95	.
12	.	.	16.48	.
13	.	.	17.76	.
14	14.94	.	16.08	.
15	13.87	.	16.30	.
16	16.37	.	15.83	.
17	14.60	.	16.69	.
18	11.41	.	12.05	.
19	4.02	.	17.84	.
20	.	.	12.26	.
21	21.22	.	16.46	.
22	20.74	.	16.63	.
23	17.51	.	17.36	.
24	16.81	.	16.68	.
25	18.15	.	15.44	.
26	13.61	.	15.28	.
27	12.30	.	18.13	.
28	13.44	.	12.69	.
29	.	.	18.91	.
30	19.01	.	19.02	.
31				
TT Monthly Totals	.	.	434.87	.
 Daily Means	.	.	14.50	.
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: SEPTIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	27°18' S	28°35' S	33°23' S	34°06' S
Longitude	70°25' W	70°46' W	70°47' W	71°45' W
Elevation	291 m	469 m	475 m	296 m
Station	COPIAPO	VALLENAR	PUDAHUEL	HIDANGO
Date				
1	.	.	7.97	10.90
2	.	.	6.37	15.75
3	.	.	15.31	16.60
4	.	.	16.87	17.93
5	.	.	15.62	14.67
6	.	.	12.75	16.97
7	.	.	18.04	18.79
8	.	.	6.88	13.60
9	.	.	17.91	19.36
10	.	.	18.79	19.49
11	.	.	9.13	3.10
12	.	.	3.82	6.68
13	.	.	16.94	19.11
14	.	.	18.96	19.69
15	.	.	19.47	19.91
16	.	.	16.01	4.39
17	.	.	18.69	14.55
18	.	.	9.71	13.71
19	.	.	18.30	19.27
20	.	.	19.76	19.33
21	.	.	12.71	14.63
22	.	.	9.00	10.97
23	.	.	10.07	14.49
24	.	.	13.16	20.22
25	.	.	17.71	11.73
26	.	.	6.32	7.04
27	.	.	17.43	12.50
28	.	.	13.26	13.68
29	.	.	12.43	16.78
30	.	.	21.05	21.23
31				
TT Monthly Totals	.	.	420.43	447.08
 Daily Means	.	.	14.01	14.90
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: SEPTIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	34°58' S	35°58' S	36°46' S	37°24' S
Longitude	71°14' W	72°20' W	73°03' W	72°26' W
Elevation	228 m	142 m	12 m	109 m
Station	CURICO	CAUQUENES	CONCEPCION	LOS ANGELES
Date				
1	7.25	.	.	.
2	7.21	.	.	.
3	13.82	.	.	16.63
4	17.22	.	.	.
5	14.65	.	.	.
6	13.94	.	.	8.85
7	17.72	.	.	14.37
8	11.89	.	.	14.00
9	18.44	.	.	17.74
10	16.46	.	.	17.47
11	5.33	.	.	17.87
12	2.30	.	.	.
13	18.24	.	.	.
14	17.94	.	.	.
15	18.58	.	.	.
16	4.33	.	.	.
17	10.22	.	.	.
18	12.92	.	.	.
19	16.63	.	.	.
20	17.45	.	.	.
21	12.58	.	.	.
22	7.21	.	.	.
23	8.70	.	.	.
24	16.21	.	.	16.59
25	15.15	.	.	12.90
26	6.61	.	.	7.65
27	7.59	.	.	5.90
28	13.50	.	.	17.11
29	18.37	.	.	7.81
30	18.08	.	.	3.89
31				
TT Monthly Totals	386.57	.	.	.
 Daily Means	12.89	.	.	.
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: SEPTIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	38°45' S	41°25' S	42°55' S	45°35' S
Longitude	72°38' W	73°05' W	72°43' W	72°07' W
Elevation	114 m	85 m	7 m	310 m
Station	TEMUCO	PUERTO MONTT	CHAITEN	COYHAIQUE
Date				
1	15.71	10.39	.	10.79
2	11.39	15.51	.	13.23
3	12.30	15.38	.	13.73
4	15.62	15.50	.	13.96
5	9.38	15.66	.	12.48
6	10.09	7.24	.	5.16
7	13.72	6.25	.	10.04
8	14.48	10.39	.	6.94
9	15.35	10.38	.	9.87
10	17.46	5.86	.	13.41
11	4.00	14.11	.	5.45
12	13.15	7.20	.	14.28
13	17.53	15.22	.	15.03
14	18.47	6.44	.	15.30
15	0.00	18.35	.	15.92
16	0.00	18.05	.	15.91
17	0.00	4.00	.	13.05
18	11.22	10.41	.	13.87
19	5.06	3.07	.	6.64
20	.	14.32	.	8.56
21	.	3.53	.	5.07
22	.	7.43	.	8.96
23	12.98	11.38	.	5.46
24	13.44	10.80	.	7.05
25	9.51	17.20	.	4.49
26	7.79	6.31	.	11.69
27	8.05	7.67	.	9.40
28	16.43	19.18	.	17.71
29	11.75	19.91	.	18.67
30	7.98	19.87	.	19.07
31				
TT Monthly Totals	.	346.99	.	341.20
 Daily Means	10.85	11.57	.	11.37
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: SEPTIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station	PUNTA ARENAS			
Date				
1	8.80			
2	8.98			
3	9.73			
4	8.72			
5	10.32			
6	10.93			
7	5.60			
8	10.39			
9	8.35			
10	9.96			
11	5.05			
12	7.06			
13	6.27			
14	12.88			
15	6.70			
16	5.24			
17	3.27			
18	12.88			
19	4.83			
20	9.94			
21	7.34			
22	13.98			
23	15.19			
24	14.48			
25	10.34			
26	14.06			
27	14.52			
28	8.78			
29	15.18			
30	7.41			
31				
TT Monthly Totals	287.15			
Daily Means	9.57			
SS Monthly Totals				
Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY			

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

Month: **OCTUBRE**Years: **2001**Country: **CHILE**

Daily Totals				
Latitude	18°20' S	22°29' S	23°26' S	27°09' S
Longitude	70°20' W	68°54' W	70°26' W	109°25' W
Elevation	58 m	2270 m	135 m	51 m
Station	ARICA	CALAMA	ANTOFAGASTA	ISLA DE PASCUA
Date				
1	18.73	.	18.78	.
2	16.18	.	18.47	.
3	17.43	.	18.20	.
4	19.28	.	19.05	.
5	13.29	.	5.59	.
6	18.35	.	17.68	.
7	17.21	.	20.21	.
8	16.57	.	19.65	.
9	16.54	.	18.63	.
10	20.25	.	18.57	.
11	17.80	.	19.56	.
12	22.28	.	20.48	.
13	15.56	.	19.84	.
14	.	.	18.62	.
15	14.94	.	16.65	.
16	16.44	.	18.17	.
17	16.07	.	18.45	.
18	16.12	.	17.56	.
19	16.56	.	18.21	.
20	20.40	.	18.63	.
21	21.42	.	20.15	.
22	20.55	.	20.12	.
23	21.66	.	20.49	.
24	22.71	.	14.14	.
25	23.59	.	18.39	.
26	21.69	.	17.95	.
27	22.60	.	13.66	.
28	18.34	.	19.26	.
29	16.36	.	20.63	.
30	14.83	.	16.92	.
31	20.10	.	20.67	.
TT Monthly Totals	.	.	563.37	.
 Daily Means	18.46	.	18.17	.
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: **OCTUBRE**Years: **2001**Country: **CHILE**

Daily Totals				
Latitude	27°18' S	28°35' S	33°23' S	34°06' S
Longitude	70°25' W	70°46' W	70°47' W	71°45' W
Elevation	291 m	469 m	475 m	296 m
Station	COPIAPO	VALLENAR	PUDAHUEL	HIDANGO
Date				
1	.	.	22.44	.
2	.	.	22.05	.
3	.	.	7.82	.
4	.	.	20.79	.
5	.	.	21.52	.
6	.	.	14.13	.
7	.	.	15.93	.
8	.	.	23.34	.
9	.	.	18.65	.
10	.	.	22.60	.
11	.	.	11.42	.
12	.	.	22.95	.
13	.	.	20.88	.
14	.	.	18.61	.
15	.	.	23.76	.
16	.	.	21.08	14.93
17	.	.	14.19	21.66
18	.	.	18.39	24.15
19	.	.	14.17	15.57
20	.	.	22.01	26.60
21	.	.	25.04	26.36
22	.	.	24.66	26.11
23	.	.	14.72	22.48
24	.	.	23.85	8.50
25	.	.	11.68	9.46
26	.	.	15.15	9.86
27	.	.	5.18	12.55
28	.	.	17.88	20.81
29	.	.	26.36	26.45
30	.	.	26.35	26.36
31	.	.	25.42	22.77
TT Monthly Totals	.	.	593.02	.
 Daily Means	.	.	19.13	.
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: **OCTUBRE**

Years: **2001**

Country: **CHILE**

Daily Totals				
Latitude	34°58' S	35°58' S	36°46' S	37°24' S
Longitude	71°14' W	72°20' W	73°03' W	72°26' W
Elevation	228 m	142 m	12 m	109 m
Station	CURICO	CAUQUENES	CONCEPCION	LOS ANGELES
Date				
1	16.74	.	.	18.64
2	22.45	.	.	.
3	4.29	.	.	.
4	22.35	.	.	.
5	17.33	.	.	.
6	7.53	.	.	.
7	19.59	.	.	.
8	19.10	.	.	.
9	13.23	.	.	.
10	18.69	.	.	.
11	10.35	.	.	.
12	18.54	.	.	24.22
13	21.09	.	.	19.57
14	15.74	.	.	21.05
15	23.85	.	.	23.38
16	9.76	.	.	.
17	8.55	.	.	.
18	19.32	.	.	.
19	8.87	.	.	.
20	23.58	.	.	.
21	25.74	.	.	.
22	25.06	.	.	.
23	19.72	.	.	.
24	6.58	.	.	.
25	4.24	.	.	.
26	6.27	.	.	.
27	9.96	.	.	.
28	14.86	.	.	.
29	25.95	.	.	.
30	24.81	.	.	.
31	19.71	.	.	.
TT Monthly Totals	503.84	.	.	.
 Daily Means	16.25	.	.	.
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: **OCTUBRE**

Years: **2001**

Country: **CHILE**

Daily Totals				
Latitude	38°45' S	41°25' S	42°55' S	45°35' S
Longitude	72°38' W	73°05' W	72°43' W	72°07' W
Elevation	114 m	85 m	7 m	310 m
Station	TEMUCO	PUERTO MONTT	CHAITEN	COYHAIQUE
Date				
1	17.12	6.98	.	18.98
2	18.02	7.45	.	3.09
3	3.44	10.04	.	13.16
4	14.23	13.24	.	19.73
5	4.74	4.56	.	9.68
6	12.98	10.01	.	13.69
7	11.18	9.26	.	9.65
8	20.06	9.20	.	10.75
9	6.38	7.72	.	20.77
10	22.87	19.55	.	21.56
11	19.48	14.40	.	20.44
12	21.76	23.12	.	20.99
13	22.50	21.56	.	22.54
14	22.07	22.31	.	21.33
15	23.20	22.56	.	22.39
16	5.59	20.37	.	20.55
17	11.63	7.78	.	20.98
18	20.01	19.17	.	13.16
19	11.78	4.89	.	19.88
20	24.66	18.64	.	22.35
21	23.80	15.69	.	22.90
22	21.20	22.59	.	18.77
23	21.89	11.78	.	22.37
24	5.77	6.72	.	16.90
25	4.96	7.01	.	18.36
26	12.85	5.60	.	18.31
27	21.21	15.63	.	22.86
28	22.54	25.32	.	24.82
29	22.52	14.18	.	24.20
30	23.38	17.53	.	22.98
31	22.56	23.28	.	25.10
TT Monthly Totals	516.40	438.16	.	583.21
 Daily Means	16.66	14.13	.	18.81
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: **OCTUBRE**

Years: **2001**

Country: **CHILE**

Daily Totals				
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station	PUNTA ARENAS			
Date				
1	16.50			
2	17.57			
3	9.98			
4	14.03			
5	14.26			
6	16.05			
7	10.55			
8	15.48			
9	18.65			
10	12.37			
11	15.98			
12	15.29			
13	15.47			
14	15.97			
15	3.36			
16	11.12			
17	20.23			
18	11.63			
19	19.18			
20	19.60			
21	17.64			
22	19.33			
23	6.20			
24	21.94			
25	7.98			
26	21.70			
27	22.87			
28	8.56			
29	16.81			
30	18.82			
31	11.86			
TT Monthly Totals	466.97			
 Daily Means	15.06			
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO			
Instruments	PSP EPPLEY			

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

Month: **NOVIEMBRE**Years: **2001**Country: **CHILE**

Daily Totals				
Latitude	18°20' S	22°29' S	23°26' S	27°09' S
Longitude	70°20' W	68°54' W	70°26' W	109°25' W
Elevation	58 m	2270 m	135 m	51 m
Station	ARICA	CALAMA	ANTOFAGASTA	ISLA DE PASCUA
Date				
1	.	.	21.21	.
2	22.01	.	20.53	.
3	19.42	.	19.65	.
4	18.70	.	19.44	.
5	23.37	.	20.97	.
6	23.31	.	18.64	.
7	22.02	.	20.88	.
8	18.80	.	19.95	.
9	17.61	.	20.66	.
10	18.58	.	20.09	.
11	19.63	.	21.52	.
12	19.41	.	20.62	.
13	17.22	.	20.27	.
14	20.94	.	18.50	.
15	24.04	.	19.60	.
16	24.56	.	22.09	.
17	20.31	.	20.93	.
18	20.89	.	19.96	.
19	16.29	.	17.66	.
20	24.11	.	20.92	.
21	19.24	.	19.90	.
22	19.07	25.76	18.07	.
23	20.45	30.02	21.89	.
24	18.52	29.16	19.59	.
25	13.78	29.93	19.41	.
26	22.11	25.85	22.17	.
27	19.19	28.58	22.51	.
28	23.77	29.87	21.02	.
29	22.79	29.21	21.89	.
30	21.56	29.41	20.98	.
31				
TT Monthly Totals	.	.	611.48	.
 Daily Means	20.40	.	20.38	.
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: **NOVIEMBRE**

Years: **2001**

Country: **CHILE**

Daily Totals				
Latitude	27°18' S	28°35' S	33°23' S	34°06' S
Longitude	70°25' W	70°46' W	70°47' W	71°45' W
Elevation	291 m	469 m	475 m	296 m
Station	COPIAPO	VALLENAR	PUDAHUEL	HIDANGO
Date				
1	27.47	18.32	24.58	22.33
2	.	18.33	25.50	13.32
3	31.19	20.67	18.03	23.91
4	29.26	19.73	22.57	11.14
5	27.51	17.75	17.02	27.80
6	29.30	22.42	26.38	27.89
7	29.96	20.58	18.38	11.43
8	30.48	22.50	9.67	25.48
9	30.26	23.07	22.14	25.18
10	30.94	23.12	26.89	27.44
11	35.40	21.84	26.94	22.86
12	30.07	22.75	20.77	24.05
13	27.78	22.35	27.39	.
14	28.66	22.76	27.05	29.26
15	27.10	22.78	28.40	29.11
16	28.19	22.60	28.45	29.03
17	33.95	22.99	27.30	28.60
18	32.64	23.06	27.53	28.80
19	31.85	22.59	25.13	11.37
20	28.32	20.44	23.70	24.64
21	34.05	22.91	28.97	29.32
22	25.62	23.31	28.76	29.28
23	29.63	23.02	25.87	20.60
24	29.70	23.34	29.45	30.65
25	23.36	23.30	29.22	26.57
26	25.47	22.55	29.26	30.32
27	27.26	22.47	28.95	30.42
28	29.01	22.52	29.09	30.42
29	28.76	22.97	29.38	30.47
30	31.22	23.11	28.88	29.54
31				
TT Monthly Totals	.	660.14	761.67	.
 Daily Means	29.46	22.00	25.39	25.22
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: **NOVIEMBRE**

Years: **2001**

Country: **CHILE**

Daily Totals				
Latitude	34°58' S	35°58' S	36°46' S	37°24' S
Longitude	71°14' W	72°20' W	73°03' W	72°26' W
Elevation	228 m	142 m	12 m	109 m
Station	CURICO	CAUQUENES	CONCEPCION	LOS ANGELES
Date				
1	23.42	.	.	.
2	25.59	.	.	.
3	13.26	.	.	.
4	14.04	.	.	.
5	26.28	.	.	.
6	26.27	.	.	.
7	22.87	.	.	.
8	21.09	.	.	.
9	17.91	.	.	12.97
10	24.57	.	.	14.68
11	15.71	.	.	16.48
12	20.08	.	.	12.03
13	18.70	.	.	9.38
14	17.85	.	.	24.04
15	26.54	.	.	26.63
16	25.65	.	.	27.60
17	26.51	.	.	27.45
18	25.97	.	.	27.37
19	18.29	.	.	23.46
20	19.05	.	.	7.52
21	26.26	.	.	21.05
22	24.68	.	.	20.02
23	11.65	.	.	29.32
24	27.80	.	.	26.35
25	21.68	.	.	27.77
26	27.81	.	.	28.95
27	27.97	.	.	29.00
28	27.84	.	.	28.65
29	26.24	.	.	29.36
30	27.25	.	.	21.75
31				
TT Monthly Totals	678.83	.	.	.
 Daily Means	22.63	.	.	.
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: **NOVIEMBRE**Years: **2001**Country: **CHILE**

Daily Totals				
Latitude	38°45' S	41°25' S	42°55' S	45°35' S
Longitude	72°38' W	73°05' W	72°43' W	72°07' W
Elevation	114 m	85 m	7 m	310 m
Station	TEMUCO	PUERTO MONTT	CHAITEN	COYHAIQUE
Date				
1	18.94	24.78	.	16.26
2	11.11	12.39	.	9.27
3	25.19	18.82	.	25.67
4	18.06	17.14	.	11.16
5	15.30	16.42	.	18.82
6	21.03	17.99	.	22.60
7	25.27	.	.	20.33
8	25.24	.	.	25.47
9	5.75	.	.	28.00
10	13.06	.	.	15.27
11	26.84	.	.	21.00
12	5.36	.	.	19.65
13	14.42	.	.	8.98
14	13.86	.	.	12.27
15	27.33	.	.	15.18
16	28.92	.	.	16.00
17	20.36	.	.	23.53
18	21.35	.	.	14.48
19	20.40	.	.	27.05
20	11.74	.	.	17.43
21	23.21	.	.	18.29
22	11.63	.	.	22.81
23	25.97	.	.	24.14
24	30.65	.	.	20.93
25	18.63	.	.	12.99
26	22.17	.	.	24.39
27	24.32	.	.	14.70
28	27.04	.	.	29.98
29	30.59	.	.	28.06
30	29.13	.	.	16.39
31				
TT Monthly Totals	612.87	.	.	581.11
 Daily Means	20.43	.	.	19.37
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY	PIRANOMETRO PSP EPPLEY

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

Month: **NOVIEMBRE**

Years: **2001**

Country: **CHILE**

Daily Totals				
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station	PUNTA ARENAS			
Date				
1	21.07			
2	9.50			
3	22.32			
4	10.86			
5	24.57			
6	17.10			
7	21.09			
8	17.76			
9	11.21			
10	11.82			
11	19.47			
12	17.65			
13	8.96			
14	20.27			
15	16.56			
16	25.95			
17	18.87			
18	16.23			
19	20.91			
20	26.64			
21	16.90			
22	8.65			
23	17.26			
24	20.17			
25	18.56			
26	19.62			
27	18.07			
28	22.74			
29	18.35			
30	20.45			
31				
TT Monthly Totals	539.56			
 Daily Means	17.99			
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY			

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

Month: DICIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	18°20' S	22°29' S	23°26' S	27°09' S
Longitude	70°20' W	68°54' W	70°26' W	109°25' W
Elevation	58 m	2270 m	135 m	51 m
Station	ARICA	CALAMA	ANTOFAGASTA	ISLA DE PASCUA
Date				
1	20.99	29.63	17.36	.
2	21.31	29.40	11.80	.
3	24.31	28.23	20.30	.
4	24.39	29.16	22.22	.
5	21.40	30.00	19.77	.
6	22.65	29.97	20.68	.
7	19.15	28.78	20.48	.
8	18.95	29.78	21.31	.
9	24.18	27.88	22.11	.
10	24.39	26.98	22.83	.
11	11.76	29.58	21.28	.
12	23.72	14.04	20.56	.
13	17.71	29.93	6.90	.
14	21.91	28.95	22.04	.
15	23.69	29.76	20.73	.
16	22.31	24.08	18.55	.
17	14.26	28.06	13.69	.
18	22.17	21.74	19.74	.
19	23.30	20.90	20.50	.
20	23.41	27.76	21.14	.
21	23.55	27.55	18.59	.
22	17.08	30.01	18.38	.
23	23.85	26.29	20.38	.
24	23.18	22.23	20.51	.
25	17.76	.	21.31	.
26	17.49	.	20.35	.
27	20.81	.	20.57	.
28	19.33	.	21.39	.
29	17.54	.	13.90	.
30	22.75	.	21.87	.
31	18.78	.	20.70	.
TT Monthly Totals	648.08	.	601.91	.
 Daily Means	20.91	.	19.42	.
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: **DICIEMBRE**

Years: **2001**

Country: **CHILE**

Daily Totals				
Latitude	34°58' S	35°58' S	36°46' S	37°24' S
Longitude	71°14' W	72°20' W	73°03' W	72°26' W
Elevation	228 m	142 m	12 m	109 m
Station	CURICO	CAUQUENES	CONCEPCION	LOS ANGELES
Date				
1	26.07	.	.	22.01
2	26.87	.	.	29.31
3	26.50	.	.	28.89
4	26.33	.	.	24.73
5	25.78	.	.	.
6	26.26	.	.	.
7	24.57	.	.	.
8	26.54	.	.	.
9	13.28	.	.	.
10	19.20	.	.	.
11	25.81	.	.	.
12	26.09	.	.	.
13	19.79	.	.	.
14	26.19	.	.	.
15	25.96	.	.	.
16	26.46	.	.	.
17	25.59	.	.	.
18	25.74	.	.	.
19	22.01	.	.	.
20	25.54	.	.	.
21	24.83	.	.	.
22	26.56	.	.	.
23	26.54	.	.	.
24	25.84	.	.	.
25	25.53	.	.	.
26	25.96	.	.	.
27	26.26	.	.	.
28	25.98	.	.	.
29	25.54	.	.	.
30	26.07	.	.	.
31	25.86	.	.	.
TT Monthly Totals	775.56	.	.	.
 Daily Means	25.02	.	.	.
SS Monthly Totals				
 Daily Means				
Types of	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO	PIRANOMETRO
Instruments	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY	PSP EPPLEY

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

Month: DICIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	53°00' S			
Longitude	70°51' W			
Elevation	37 m			
Station	PUNTA ARENAS			
Date				
1	19.56			
2	8.11			
3	23.84			
4	23.55			
5	27.27			
6	21.62			
7	24.82			
8	20.36			
9	19.69			
10	19.00			
11	29.57			
12	23.72			
13	14.86			
14	20.81			
15	23.85			
16	29.45			
17	11.02			
18	23.90			
19	23.28			
20	27.53			
21	22.90			
22	20.22			
23	8.76			
24	31.00			
25	21.60			
26	20.94			
27	22.37			
28	23.38			
29	29.32			
30	28.23			
31	12.79			
TT Monthly Totals	677.31			
 Daily Means	21.85			
SS Monthly Totals				
 Daily Means				
Types of Instruments	PIRANOMETRO PSP EPPLEY			

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

Month: JULIO

Years: 2001

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	.	10.2	6.1
2	3.2	.	10.3	8.1
3	1.7	.	10.5	5.6
4	5.7	.	10.5	7.2
5	.	.	10.5	5.1
6	.	.	9.7	9.1
7	.	.	10.2	6.3
8	1.1	.	10.3	5.9
9	1.1	.	10.5	5.9
10	0.9	.	10.2	1.7
11	4.9	.	10.2	7.1
12	4.0	.	10.7	7.6
13	2.0	.	10.6	7.3
14	5.7	.	10.6	8.8
15	5.2	.	10.5	7.3
16	7.3	.	10.3	5.3
17	4.0	.	10.4	7.7
18	3.9	.	10.5	7.2
19	3.4	.	10.5	6.0
20	2.9	.	10.5	3.4
21	7.3	.	10.4	9.3
22	8.3	.	10.3	6.0
23	8.3	.	10.4	8.1
24	3.2	.	10.5	6.5
25	5.3	.	10.6	5.9
26	5.1	.	10.7	9.3
27	4.4	.	10.8	9.5
28	5.7	.	10.8	9.5
29	4.4	.	10.7	6.0
30	4.7	.	10.9	9.6
31	5.6	.	10.8	8.9
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	.	.	324.6	217.3
 Daily Means	4.4	.	10.5	7.0
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: JULIO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	27°10' S	27°18' S	28°35' S	29°57' S
Longitude	109°26' W	70°25' W	70°46' W	71°22' W
Elevation	47 m	291 m	469 m	25 m
Station	ISLA DE PASCUA	COPIAPO	VALLENAR	LA SERENA
Date				
1	6.4	7.7	8.8	7.4
2	1.6	8.6	8.9	8.2
3	0.0	8.6	9.2	9.3
4	8.3	7.5	7.7	6.5
5	5.3	4.4	6.9	4.1
6	0.4	8.5	8.2	5.7
7	8.0	7.3	7.9	8.1
8	7.0	0.0	0.0	1.6
9	7.1	8.4	8.6	7.8
10	6.0	4.1	0.8	2.4
11	1.9	8.4	8.1	7.1
12	2.3	8.7	9.1	8.8
13	3.8	6.4	8.7	6.2
14	7.5	8.7	9.4	8.9
15	1.1	8.4	9.6	2.8
16	3.5	3.9	2.4	1.8
17	8.6	2.7	0.7	0.0
18	8.7	3.5	2.9	3.7
19	1.2	8.5	1.2	0.0
20	7.3	8.7	9.1	8.9
21	8.4	8.8	8.3	8.4
22	7.3	7.1	8.6	8.0
23	5.7	6.5	7.0	4.6
24	1.3	8.7	9.2	6.6
25	6.9	8.9	9.8	8.9
26	6.5	9.1	9.0	9.9
27	2.4	8.8	9.7	9.5
28	7.1	6.4	4.9	2.1
29	3.2	5.2	0.0	0.2
30	5.5	7.6	4.3	0.1
31	6.1	9.0	7.1	8.4
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	156.4	219.1	206.1	176.0
 Daily Means	5.0	7.1	6.6	5.7
Types of Instruments	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES

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

Month: JULIO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	32°51' S	33°23' S	33°27' S	33°37' S
Longitude	70°37' W	70°47' W	70°42' W	78°50' W
Elevation	880 m	474 m	520 m	30 m
Station	CALLE LARGA	PUDAHUEL	QUINTA NORMAL	ROBINSON CRUSOE
Date				
1	3.0	4.7	3.2	0.0
2	0.0	0.2	0.2	0.2
3	1.1	0.0	0.0	1.7
4	5.3	6.8	5.4	2.1
5	8.7	8.3	7.0	5.8
6	4.5	2.3	0.2	0.0
7	2.6	0.0	0.2	1.1
8	0.0	0.0	0.0	4.3
9	0.0	0.0	0.0	3.9
10	0.8	2.9	1.8	2.3
11	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0
13	0.3	0.4	0.1	4.8
14	1.4	3.4	0.5	1.4
15	7.8	7.6	6.2	0.0
16	2.6	1.0	0.2	3.2
17	0.0	1.5	1.5	5.4
18	0.0	0.0	0.0	2.1
19	0.6	2.5	2.4	5.3
20	9.3	5.3	6.5	5.8
21	8.5	8.9	7.2	0.7
22	9.3	3.9	3.0	4.6
23	9.0	2.8	0.0	0.5
24	1.8	0.1	0.0	1.3
25	6.0	4.7	2.3	4.8
26	8.7	8.2	6.1	2.7
27	9.4	8.5	7.3	1.0
28	2.8	3.5	3.3	0.0
29	0.0	0.0	0.0	3.3
30	0.0	0.0	0.0	4.0
31	0.7	0.9	0.0	0.0
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	104.2	88.4	64.6	72.3
 Daily Means	3.4	2.9	2.1	2.3
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: JULIO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	33°39' S	34°06' S	34°58' S	36°36' S
Longitude	71°36' W	71°45' W	71°12' W	72°26' W
Elevation	74 m	296 m	225 m	124 m
Station	SANTO DOMINGO	HIDANGO	CURICO	CHILLAN
Date				
1	3.7	.	4.8	0.7
2	.	.	0.0	0.0
3	0.1	0.0	0.0	0.0
4	5.0	4.7	1.8	5.4
5	7.8	6.0	2.5	6.8
6	0.4	1.9	0.7	0.0
7	0.3	0.2	0.0	0.0
8	9.2	.	0.0	3.0
9	0.6	.	0.1	8.2
10	4.8	3.4	2.8	0.1
11	1.3	1.0	0.0	0.0
12	.	7.7	0.0	0.0
13	0.5	0.0	1.2	0.0
14	6.3	.	5.2	5.7
15	1.1	.	6.7	2.7
16	.	0.0	0.0	0.0
17	0.3	0.0	0.0	0.0
18	.	1.8	0.0	0.0
19	2.8	0.0	4.4	1.3
20	7.3	0.0	1.3	0.1
21	7.7	.	9.1	4.4
22	4.2	.	0.8	1.2
23	1.0	3.1	1.7	0.0
24	1.0	3.2	0.4	1.5
25	8.0	8.5	0.0	7.6
26	9.0	9.6	5.4	8.1
27	9.2	.	7.8	5.8
28	1.1	.	1.6	1.2
29	.	.	0.0	0.0
30	.	0.0	0.0	4.3
31	0.1	.	0.0	0.0
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	.	.	58.3	68.1
 Daily Means	.	.	1.9	2.2
Types of Instruments	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES

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

Month: JULIO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	36°46' S	39°41' S	41°26' S	45°35' S
Longitude	73°03' W	73°04' W	73°07' W	72°07' W
Elevation	12 m	19 m	81 m	310 m
Station	CONCEPCION	VALDIVIA	PUERTO MONTT	COYHAIQUE
Date				
1	1.6	0.4	4.0	3.7
2	0.0	0.0	0.9	0.5
3	0.0	3.6	3.9	0.9
4	5.8	3.3	2.1	5.7
5	8.0	5.3	3.2	0.0
6	0.1	0.0	0.0	0.1
7	0.0	0.0	0.0	4.4
8	5.0	3.2	2.6	0.0
9	5.1	2.1	2.1	1.3
10	4.1	3.3	4.3	1.0
11	0.0	0.0	0.0	0.0
12	0.0	0.0	1.9	0.0
13	2.9	0.6	1.4	1.0
14	6.6	0.0	0.0	0.0
15	5.7	0.0	0.0	4.2
16	0.0	0.0	1.4	0.0
17	0.9	0.9	1.2	0.0
18	0.0	0.0	1.0	0.0
19	3.6	0.0	0.3	0.0
20	0.2	4.6	1.8	0.7
21	8.3	4.6	6.1	0.0
22	4.3	3.2	7.0	0.0
23	0.8	3.0	2.3	2.3
24	6.9	4.0	4.1	1.7
25	8.9	4.9	4.4	6.9
26	8.9	3.6	7.5	0.4
27	5.0	1.4	0.8	0.8
28	0.0	0.0	1.5	2.4
29	4.2	5.0	3.7	5.4
30	3.2	3.0	0.8	3.2
31	0.0	0.0	0.1	1.7
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	100.1	60.0	70.4	48.3
 Daily Means	3.2	1.9	2.3	1.6
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: AGOSTO

Years: 2001

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	2.5	10.6	3.1
2	7.2	8.9	10.8	0.0
3	6.2	3.6	10.8	5.3
4	6.4	7.7	10.8	8.5
5	0.3	6.2	10.8	8.4
6	4.6	6.1	10.8	9.9
7	3.3	2.7	10.8	8.8
8	0.9	6.7	10.8	7.6
9	1.6	9.0	10.8	4.6
10	2.6	3.8	10.8	6.6
11	1.0	7.7	10.8	2.1
12	3.9	7.1	10.8	7.0
13	1.8	2.5	10.9	8.0
14	1.1	5.9	10.9	7.4
15	4.6	8.4	11.0	8.5
16	3.3	2.7	11.0	8.0
17	0.0	3.4	11.0	7.4
18	1.9	8.6	11.0	10.0
19	4.3	8.2	11.0	8.1
20	1.9	1.8	11.0	10.0
21	6.0	0.5	11.0	8.8
22	1.3	1.9	9.7	6.6
23	1.0	1.4	10.5	6.8
24	4.8	8.7	10.5	7.3
25	0.0	3.8	11.0	3.5
26	2.6	6.0	10.0	2.9
27	8.3	5.3	11.0	8.2
28	5.9	0.3	11.1	9.4
29	3.8	1.1	11.1	9.2
30	3.6	0.0	11.1	7.7
31	2.1	3.6	11.1	0.0
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	101.2	146.1	335.3	209.7
 Daily Means	3.3	4.7	10.8	6.8
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: AGOSTO

Years: 2001

Country: CHILE

Daily Totals				
Latitude	45°54' S	53°08' S	54°56' S	
Longitude	71°43' W	70°58' W	67°58' W	
Elevation	520 m	37 m	36 m	
Station	BALMACEDA	PUNTA ARENAS	PUERTO WILLIAMS	
Date				
1	0.0	0.5	0.0	
2	7.7	2.8	1.4	
3	4.3	4.6	6.6	
4	0.0	6.8	0.0	
5	4.2	2.8	0.0	
6	4.0	0.6	6.5	
7	2.1	2.1	1.1	
8	7.8	4.8	1.9	
9	3.4	7.2	8.5	
10	6.6	7.4	7.9	
11	0.0	4.0	0.0	
12	6.7	2.0	0.0	
13	8.3	7.5	8.2	
14	8.1	4.2	4.3	
15	9.0	0.8	0.0	
16	8.0	7.1	7.5	
17	6.3	6.6	1.0	
18	0.0	8.1	0.0	
19	5.8	5.8	0.0	
20	5.6	1.2	4.7	
21	5.8	4.7	5.5	
22	0.4	5.0	7.7	
23	8.5	8.4	8.2	
24	0.0	8.5	8.6	
25	0.0	3.2	0.0	
26	1.3	0.0	0.0	
27	5.9	4.9	0.7	
28	0.0	9.0	5.3	
29	9.0	9.0	4.5	
30	9.2	1.1	5.4	
31	4.1	7.6	8.9	
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	142.1	148.3	114.4	
 Daily Means	4.6	4.8	3.7	
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	
Instruments	CAMPELL	CAMPELL	CAMPELL	
	STOKES	STOKES	STOKES	

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

Month: SEPTIEMBRE

Years: 2001

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	4.1	0.9	11.0	0.1
2	1.5	0.0	11.0	5.1
3	2.4	1.9	11.0	8.4
4	4.5	6.4	11.0	6.3
5	4.0	9.2	10.6	6.9
6	7.6	1.0	2.5	5.0
7	4.5	5.7	6.8	1.5
8	0.0	0.0	9.2	5.2
9	0.2	0.0	8.0	5.9
10	2.9	0.0	7.2	6.4
11	2.2	0.3	0.5	0.0
12	5.6	2.6	10.8	10.0
13	3.0	9.8	11.1	10.6
14	3.1	9.6	11.0	7.1
15	5.3	4.6	11.2	7.8
16	6.5	8.0	11.3	7.2
17	5.7	7.4	11.4	8.9
18	4.8	0.1	11.2	4.8
19	4.4	7.7	11.2	9.3
20	7.4	6.2	3.4	4.9
21	9.1	10.5	11.2	8.0
22	9.2	9.2	11.3	7.5
23	6.4	9.1	11.3	8.2
24	4.4	4.7	11.4	7.5
25	4.9	7.2	11.4	6.0
26	3.9	4.4	11.2	6.4
27	3.8	8.2	11.4	9.2
28	4.2	0.0	11.4	4.7
29	6.6	10.3	11.3	10.7
30	8.1	10.8	11.5	10.6
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	140.3	155.8	294.8	200.2
 Daily Means	4.7	5.2	9.8	6.7
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: SEPTIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	27°10' S	27°18' S	28°35' S	29°57' S
Longitude	109°26' W	70°25' W	70°46' W	71°22' W
Elevation	47 m	291 m	469 m	25 m
Station	ISLA DE PASCUA	COPIAPO	VALLENAR	LA SERENA
Date				
1	1.4	5.9	5.1	2.5
2	6.1	5.9	6.6	0.6
3	1.7	8.7	10.1	9.3
4	0.6	8.6	10.5	9.0
5	4.3	5.9	9.3	7.6
6	6.6	8.2	8.5	7.7
7	2.7	8.2	10.3	10.1
8	5.1	6.6	10.0	10.3
9	8.1	8.5	7.8	8.0
10	2.5	7.5	8.1	3.3
11	8.1	0.0	1.0	0.4
12	8.8	7.2	4.8	5.3
13	9.4	9.9	10.6	10.5
14	0.2	9.6	10.5	4.7
15	6.3	8.6	9.5	0.0
16	5.0	6.6	5.6	0.0
17	5.0	7.9	10.0	10.0
18	5.5	8.5	10.4	10.1
19	7.7	6.8	8.0	4.2
20	3.5	7.4	6.6	0.0
21	3.8	7.5	8.1	1.1
22	7.1	7.6	6.3	0.0
23	7.0	7.3	.	8.1
24	4.0	4.8	9.0	6.5
25	8.3	8.5	7.8	0.7
26	3.4	8.1	5.3	4.2
27	4.3	10.8	11.0	11.3
28	8.3	10.3	10.4	3.2
29	6.7	10.9	.	1.1
30	6.9	10.7	.	11.4
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	158.4	233.0	.	161.2
 Daily Means	5.3	7.8	8.2	5.4
Types of Instruments	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES

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

Month: SEPTIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	32°51' S	33°23' S	33°27' S	33°37' S
Longitude	70°37' W	70°47' W	70°42' W	78°50' W
Elevation	880 m	474 m	520 m	30 m
Station	CALLE LARGA	PUDAHUEL	QUINTA NORMAL	ROBINSON CRUSOE
Date				
1	0.9	0.6	0.2	4.4
2	0.0	0.6	0.0	5.2
3	8.4	8.2	6.6	5.8
4	6.1	9.1	7.8	6.5
5	3.9	7.1	7.0	5.3
6	2.0	5.6	5.9	6.4
7	10.1	9.5	8.3	1.4
8	3.5	0.1	0.0	4.4
9	9.4	9.6	8.1	4.2
10	10.2	9.8	8.5	3.1
11	0.0	2.3	2.2	0.0
12	0.0	0.0	0.0	0.0
13	10.1	7.7	7.9	0.2
14	10.1	9.8	8.6	7.2
15	10.1	10.1	8.6	6.7
16	10.0	6.9	5.4	5.6
17	9.1	8.9	7.0	0.1
18	10.0	2.8	2.9	2.7
19	9.6	7.5	7.8	0.8
20	9.6	10.0	8.4	1.0
21	4.5	3.3	2.9	1.6
22	0.0	0.0	0.0	1.5
23	3.2	2.6	3.9	6.1
24	9.3	5.3	3.6	4.6
25	5.4	7.4	5.7	1.2
26	1.0	0.9	0.2	5.2
27	9.2	7.0	6.5	3.7
28	1.9	3.3	1.1	0.1
29	1.5	3.3	1.4	6.6
30	8.3	9.8	8.9	8.6
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	177.4	169.1	145.4	110.2
 Daily Means	5.9	5.6	4.8	3.7
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: SEPTIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	33°39' S	34°06' S	34°58' S	36°36' S
Longitude	71°36' W	71°45' W	71°12' W	72°26' W
Elevation	74 m	296 m	225 m	124 m
Station	SANTO DOMINGO	HIDANGO	CURICO	CHILLAN
Date				
1	0.8	.	0.6	3.8
2	7.2	.	2.7	10.1
3	9.4	.	6.5	8.2
4	10.1	9.5	9.6	10.0
5	4.6	5.0	7.7	9.4
6	8.0	8.5	6.3	6.8
7	10.1	9.5	8.6	7.9
8	4.6	.	5.6	8.6
9	10.7	.	9.8	10.6
10	10.6	11.0	8.0	10.7
11	0.0	0.0	1.8	10.0
12	0.0	0.0	0.0	0.0
13	10.4	10.1	9.2	9.6
14	10.7	10.4	8.5	10.3
15	10.9	.	8.7	10.4
16	0.0	.	0.0	10.7
17	6.5	.	3.2	3.6
18	5.4	.	5.4	2.4
19	9.0	.	6.4	5.3
20	9.3	7.9	6.8	8.9
21	4.9	8.1	3.8	2.4
22	1.2	.	0.2	2.9
23	6.2	.	2.0	6.0
24	9.9	10.0	6.9	10.7
25	2.9	3.3	5.7	5.5
26	1.2	2.5	0.8	1.5
27	5.6	2.9	2.4	0.0
28	4.7	10.8	3.6	7.1
29	6.2	.	7.4	0.5
30	10.8	.	9.2	2.2
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	191.9	.	157.4	196.1
 Daily Means	6.4	.	5.2	6.5
Types of Instruments	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES

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

Month: SEPTIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	36°46' S	39°41' S	41°26' S	45°35' S
Longitude	73°03' W	73°04' W	73°07' W	72°07' W
Elevation	12 m	19 m	81 m	310 m
Station	CONCEPCION	VALDIVIA	PUERTO MONTT	COYHAIQUE
Date				
1	7.5	5.7	7.1	6.7
2	9.8	9.9	8.7	9.3
3	9.7	7.0	9.3	7.6
4	9.8	9.2	9.4	7.7
5	8.3	10.5	9.9	7.9
6	4.8	3.3	3.7	2.4
7	7.0	2.1	2.0	5.6
8	9.3	8.1	5.5	3.3
9	10.4	5.5	6.1	4.7
10	10.5	4.8	0.0	8.2
11	7.8	9.2	6.9	2.2
12	1.8	3.8	0.8	8.8
13	5.0	9.2	8.6	9.6
14	10.6	9.4	2.5	10.1
15	10.6	10.8	10.4	8.9
16	3.9	10.9	9.7	9.6
17	0.2	0.0	0.5	5.2
18	6.5	8.9	3.2	7.8
19	1.1	0.0	0.0	1.3
20	6.4	7.1	8.7	5.5
21	0.3	0.1	0.0	0.0
22	0.4	1.1	0.5	1.7
23	7.4	6.0	4.2	0.0
24	9.9	4.9	3.5	0.4
25	5.6	3.1	7.3	0.0
26	0.3	2.7	0.2	3.3
27	4.5	2.3	1.2	3.3
28	6.2	6.9	9.5	10.5
29	2.8	5.8	10.6	10.8
30	0.7	6.1	10.7	10.9
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	179.1	174.4	160.7	173.3
 Daily Means	6.0	5.8	5.4	5.8
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: SEPTIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	45°54' S	53°08' S	54°56' S	
Longitude	71°43' W	70°58' W	67°58' W	
Elevation	520 m	37 m	36 m	
Station	BALMACEDA	PUNTA ARENAS	PUERTO WILLIAMS	
Date				
1	9.2	5.8	.	
2	8.7	6.3	.	
3	8.1	7.9	.	
4	10.0	5.6	3.8	
5	8.2	8.3	3.9	
6	3.4	8.9	8.2	
7	3.8	3.6	4.6	
8	6.2	8.2	.	
9	1.3	4.6	.	
10	6.6	6.2	2.1	
11	9.1	0.0	7.8	
12	9.5	2.5	6.2	
13	9.1	1.7	0.0	
14	10.4	9.8	5.5	
15	9.0	3.7	.	
16	9.5	0.0	.	
17	4.4	0.0	0.7	
18	9.8	8.5	.	
19	1.0	0.3	.	
20	8.4	4.2	7.5	
21	0.4	3.4	1.8	
22	0.0	10.1	.	
23	0.1	10.1	.	
24	1.2	8.9	9.1	
25	0.4	4.8	10.3	
26	5.1	8.2	8.7	
27	2.0	9.0	8.3	
28	10.9	2.2	4.4	
29	10.5	7.9	.	
30	11.0	2.3	.	
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	187.3	163.0	.	
 Daily Means	6.2	5.4	.	
Types of Instruments	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	

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

Month: OCTUBRE

Years: 2001

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	.	10.7	11.5	9.5
2	.	6.2	11.5	8.9
3	.	7.7	11.4	9.4
4	.	8.0	11.5	9.9
5	.	0.0	9.0	0.0
6	.	3.9	9.0	8.1
7	.	11.0	11.5	11.0
8	.	3.4	11.6	10.3
9	.	0.2	11.7	9.3
10	.	9.2	11.6	8.8
11	.	9.7	11.4	10.1
12	.	11.1	11.6	10.1
13	.	9.6	11.7	9.5
14	.	8.2	11.7	7.9
15	.	3.3	12.1	7.7
16	.	6.0	12.0	7.3
17	.	5.3	12.0	7.4
18	.	5.4	12.0	7.3
19	.	7.9	12.1	7.9
20	.	10.6	11.8	8.1
21	.	9.5	12.0	9.8
22	.	9.7	12.2	9.9
23	.	7.9	12.2	10.5
24	.	4.9	12.1	3.6
25	.	9.4	11.2	9.1
26	.	9.4	10.3	7.7
27	.	8.0	5.4	5.9
28	.	11.4	12.3	9.2
29	.	6.7	12.1	9.3
30	.	6.8	12.0	6.6
31	.	8.2	11.8	9.6
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	.	229.3	352.3	259.7
 Daily Means	.	7.4	11.4	8.4
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: **OCTUBRE**Years: **2001**Country: **CHILE**

Daily Totals				
Latitude	27°10' S	27°18' S	28°35' S	29°57' S
Longitude	109°26' W	70°25' W	70°46' W	71°22' W
Elevation	47 m	291 m	469 m	25 m
Station	ISLA DE PASCUA	COPIAPO	VALLENAR	LA SERENA
Date				
1	3.1	11.0	11.1	10.8
2	3.9	8.6	8.2	0.0
3	4.8	6.8	7.3	0.0
4	5.2	10.9	11.0	11.2
5	1.6	5.5	4.9	0.0
6	8.7	8.4	9.5	7.8
7	6.6	11.0	11.4	11.2
8	7.0	11.1	11.6	11.1
9	0.6	9.3	11.5	3.8
10	1.8	8.5	7.5	0.0
11	0.0	7.6	8.6	0.0
12	8.1	8.2	8.8	0.0
13	10.4	8.5	11.3	0.0
14	7.8	8.3	8.4	0.0
15	2.5	8.0	6.6	0.0
16	0.6	7.0	6.6	0.0
17	5.0	7.7	6.5	0.2
18	9.1	7.4	7.7	0.0
19	7.5	8.2	8.3	0.0
20	10.2	9.3	10.3	5.6
21	8.4	10.3	11.9	7.4
22	8.6	8.3	9.3	3.4
23	7.8	7.1	8.9	1.0
24	8.9	7.8	8.5	3.5
25	9.8	9.1	9.2	7.5
26	0.8	8.2	8.9	11.8
27	5.6	5.2	5.2	2.3
28	5.0	11.9	10.6	11.5
29	4.9	12.3	12.3	12.5
30	7.5	8.2	7.8	3.1
31	7.5	8.5	8.9	0.0
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	179.3	268.2	278.6	125.7
 Daily Means	5.8	8.7	9.0	4.1
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: **OCTUBRE**Years: **2001**Country: **CHILE**

Daily Totals				
Latitude	32°51' S	33°23' S	33°27' S	33°37' S
Longitude	70°37' W	70°47' W	70°42' W	78°50' W
Elevation	880 m	474 m	520 m	30 m
Station	CALLE LARGA	PUDAHUEL	QUINTA NORMAL	ROBINSON CRUSOE
Date				
1	10.1	10.6	9.9	5.9
2	10.2	10.5	9.9	7.2
3	0.0	0.4	0.0	0.0
4	9.8	9.0	8.7	9.4
5	10.2	10.7	8.9	0.0
6	5.8	4.5	3.0	6.4
7	9.1	5.1	2.4	2.8
8	10.2	10.6	9.9	5.7
9	7.3	6.7	6.7	4.9
10	9.8	10.8	10.2	7.8
11	1.7	1.2	0.3	1.8
12	9.6	10.5	10.0	8.1
13	6.5	8.1	7.0	10.0
14	9.8	6.9	6.4	7.7
15	10.6	11.0	10.1	10.1
16	10.6	8.1	10.4	3.2
17	9.1	5.1	4.6	2.2
18	9.4	6.2	5.9	3.6
19	0.0	1.1	0.8	8.3
20	9.4	8.6	8.1	3.0
21	10.9	11.2	10.6	10.3
22	11.0	10.9	10.6	6.7
23	3.4	3.8	2.9	0.2
24	10.3	9.4	8.9	5.0
25	6.9	0.9	0.1	5.9
26	10.8	1.6	0.1	2.6
27	1.1	0.8	0.7	3.4
28	9.4	7.2	6.3	4.9
29	11.3	10.7	10.6	1.3
30	11.3	11.5	10.9	5.0
31	11.3	10.4	10.2	4.5
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	256.9	224.1	205.1	157.9
 Daily Means	8.3	7.2	6.6	5.1
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: **OCTUBRE**Years: **2001**Country: **CHILE**

Daily Totals				
Latitude	33°39' S	34°06' S	34°58' S	36°36' S
Longitude	71°36' W	71°45' W	71°12' W	72°26' W
Elevation	74 m	296 m	225 m	124 m
Station	SANTO DOMINGO	HIDANGO	CURICO	CHILLAN
Date				
1	11.1	9.6	6.5	9.0
2	0.0	1.2	11.3	5.7
3	1.9	2.2	0.0	0.0
4	10.8	11.0	10.6	10.8
5	0.8	11.2	6.0	2.3
6	8.9	.	0.8	1.6
7	7.4	.	8.5	8.3
8	11.3	10.5	6.6	10.5
9	7.8	5.3	2.1	1.3
10	10.9	9.6	7.0	9.7
11	1.2	4.1	0.8	2.4
12	10.6	11.0	6.2	11.1
13	1.8	.	10.5	10.2
14	5.7	.	3.5	9.0
15	0.0	.	12.2	11.6
16	0.0	2.5	3.9	0.0
17	2.9	7.3	2.6	3.6
18	0.8	9.7	8.1	9.3
19	6.1	11.2	0.0	5.6
20	12.1	.	9.7	11.8
21	11.5	.	12.2	11.2
22	11.9	10.5	12.3	10.6
23	8.7	7.1	8.1	7.8
24	1.6	0.6	2.9	0.0
25	1.1	0.7	0.0	0.0
26	0.3	8.1	0.8	1.6
27	4.3	.	3.3	7.4
28	6.3	.	4.3	8.4
29	12.1	11.8	12.3	8.5
30	0.0	10.7	12.5	6.9
31	0.0	10.4	8.5	9.7
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	169.9	.	194.1	205.9
 Daily Means	5.5	.	6.3	6.6
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: OCTUBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	36°46' S	39°41' S	41°26' S	45°35' S
Longitude	73°03' W	73°04' W	73°07' W	72°07'W
Elevation	12 m	19 m	81 m	310 m
Station	CONCEPCION	VALDIVIA	PUERTO MONTT	COYHAIQUE
Date				
1	10.5	10.5	1.6	10.3
2	0.0	6.2	2.2	0.0
3	0.0	0.0	1.9	3.4
4	5.2	5.0	4.3	10.5
5	2.3	2.9	0.8	2.4
6	4.3	1.4	3.1	6.8
7	5.1	3.9	3.1	2.9
8	9.6	8.4	0.1	3.1
9	3.1	2.7	0.7	9.9
10	10.8	10.2	10.5	11.2
11	6.0	8.7	6.4	10.0
12	11.7	11.7	11.4	10.9
13	10.2	11.7	9.4	11.2
14	11.2	9.4	10.6	11.3
15	9.9	12.1	9.3	11.1
16	0.0	1.1	8.4	10.9
17	7.3	0.0	1.0	8.5
18	8.5	8.4	9.7	6.9
19	8.5	3.4	0.6	8.2
20	11.7	9.6	9.9	10.4
21	11.6	10.5	6.7	10.4
22	12.0	5.1	9.1	9.3
23	9.5	8.9	1.9	10.0
24	0.0	0.0	0.4	5.9
25	0.0	0.3	1.0	6.4
26	0.3	6.6	0.0	10.0
27	11.6	7.0	5.8	11.8
28	10.9	12.3	10.0	11.8
29	8.9	11.9	4.2	11.1
30	9.8	8.3	6.6	11.0
31	10.9	11.7	9.2	12.3
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	221.4	209.9	159.9	269.9
 Daily Means	7.1	6.8	5.2	8.7
Types of Instruments	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES

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

Month: OCTUBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	45°54' S	53°08' S	54°56' S	
Longitude	71°43' W	70°58' W	67°58' W	
Elevation	520 m	37 m	36 m	
Station	BALMACEDA	PUNTA ARENAS	PUERTO WILLIAMS	
Date				
1	10.2	9.9	10.5	
2	0.0	11.4	8.7	
3	3.1	4.0	10.3	
4	11.1	6.5	5.1	
5	3.5	6.7	3.4	
6	8.5	7.3	0.0	
7	5.5	6.0	0.0	
8	4.2	8.8	6.4	
9	11.6	11.3	6.9	
10	11.5	3.9	2.4	
11	11.3	6.9	6.4	
12	11.3	8.8	8.7	
13	12.2	7.8	0.0	
14	11.0	7.3	0.0	
15	12.1	0.0	0.0	
16	11.1	4.2	0.8	
17	11.8	12.1	7.8	
18	10.8	5.3	7.1	
19	9.9	9.6	8.5	
20	12.6	9.8	0.0	
21	8.4	9.2	0.0	
22	10.1	8.4	0.6	
23	11.5	0.1	1.6	
24	11.1	12.6	2.9	
25	6.3	3.1	7.3	
26	12.0	10.8	9.9	
27	11.5	12.5	0.0	
28	11.2	0.8	0.0	
29	12.3	6.7	10.8	
30	11.3	8.4	8.3	
31	11.8	1.9	4.8	
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	300.8	222.1	139.2	
 Daily Means	9.7	7.2	4.5	
Types of Instruments	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	

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

Month: NOVIEMBRE

Years: 2001

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	0.0	.	.	.
2	8.5	.	.	.
3	7.1	.	.	.
4	6.6	.	.	.
5	9.1	.	.	.
6	10.3	.	.	.
7	8.6	.	.	.
8	6.6	.	.	.
9	5.0	.	.	.
10	6.6	.	.	.
11	6.9	.	.	.
12	5.2	.	.	.
13	6.1	.	.	.
14	7.5	.	.	.
15	10.0	.	.	.
16	11.7	.	.	.
17	7.3	.	.	.
18	7.2	.	.	.
19	5.8	.	.	.
20	10.1	.	.	.
21	7.2	.	.	.
22	6.2	.	.	.
23	7.5	.	.	.
24	6.6	.	.	.
25	3.4	.	.	.
26	7.0	.	.	.
27	7.1	.	.	.
28	11.4	.	.	.
29	11.0	.	.	.
30	8.2	.	.	.
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	221.8	.	.	.
 Daily Means	7.4	.	.	.
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: **NOVIEMBRE**Years: **2001**Country: **CHILE**

Daily Totals				
Latitude	27°10' S	27°18' S	28°35' S	29°57' S
Longitude	109°26' W	70°25' W	70°46' W	71°22' W
Elevation	47 m	291 m	469 m	25 m
Station	ISLA DE PASCUA	COPIAPO	VALLENAR	LA SERENA
Date				
1	.	.	7.9	1.9
2	.	.	7.8	0.0
3	.	.	9.5	0.0
4	.	.	8.6	0.0
5	.	.	6.8	5.4
6	.	.	11.2	10.3
7	.	.	11.2	11.1
8	.	.	11.9	8.3
9	.	.	10.8	10.8
10	.	.	12.5	12.8
11	.	.	12.7	12.5
12	.	.	12.5	8.2
13	.	.	12.0	11.2
14	.	.	12.4	10.4
15	.	.	11.8	11.9
16	.	.	11.1	8.2
17	.	.	11.8	5.4
18	.	.	11.1	6.0
19	.	.	9.7	3.9
20	.	.	8.7	7.5
21	.	.	10.6	12.7
22	.	.	12.7	4.1
23	.	.	11.1	7.8
24	.	.	.	12.8
25	.	.	.	11.2
26	.	.	9.7	9.7
27	.	.	9.7	11.7
28	.	.	10.3	11.6
29	.	.	10.1	11.5
30	.	.	12.0	5.7
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	.	.	.	244.6
 Daily Means	.	.	10.7	8.2
Types of Instruments	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES

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

Month: **NOVIEMBRE**Years: **2001**Country: **CHILE**

Daily Totals				
Latitude	32°51' S	33°23' S	33°27' S	33°37' S
Longitude	70°37' W	70°47' W	70°42' W	78°50' W
Elevation	880 m	474 m	520 m	30 m
Station	CALLE LARGA	PUDAHUEL	QUINTA NORMAL	ROBINSON CRUSOE
Date				
1	.	9.4	9.5	.
2	.	11.3	10.7	.
3	.	7.0	6.1	.
4	.	7.4	6.6	.
5	.	5.7	5.9	.
6	.	9.3	10.7	.
7	.	3.5	2.6	.
8	.	0.3	0.0	.
9	.	8.1	7.0	.
10	.	9.8	11.2	.
11	.	11.2	10.4	.
12	.	7.4	5.4	.
13	.	10.9	10.6	.
14	.	9.3	7.7	.
15	.	11.1	11.0	.
16	.	12.0	10.9	.
17	.	11.9	10.8	.
18	.	11.8	10.8	.
19	.	8.5	8.1	.
20	.	7.8	7.3	.
21	.	11.3	11.0	.
22	.	12.2	11.0	.
23	.	9.3	8.9	.
24	.	11.9	11.0	.
25	.	12.2	11.0	.
26	.	12.3	11.0	.
27	.	12.3	11.1	.
28	.	12.3	10.9	.
29	.	12.6	11.3	.
30	.	12.5	11.3	.
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	.	292.6	271.8	.
 Daily Means	.	9.8	9.1	.
Types of Instruments	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES

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

Month: **NOVIEMBRE**Years: **2001**Country: **CHILE**

Daily Totals				
Latitude	36°46' S	39°41' S	41°26' S	45°35' S
Longitude	73°03' W	73°04' W	73°07' W	72°07' W
Elevation	12 m	19 m	81 m	310 m
Station	CONCEPCION	VALDIVIA	PUERTO MONTT	COYHAIQUE
Date				
1	9.6	12.5	.	7.3
2	7.1	3.8	.	0.0
3	3.6	11.0	.	10.6
4	11.8	9.6	.	1.7
5	10.5	5.6	.	7.1
6	12.3	9.0	.	9.0
7	11.9	12.8	.	7.6
8	9.3	11.3	.	12.1
9	3.2	5.8	.	12.9
10	3.2	2.5	.	3.7
11	11.5	12.1	.	9.3
12	0.5	0.9	.	4.7
13	5.8	9.4	.	7.4
14	12.7	2.1	.	4.2
15	12.4	11.9	.	1.9
16	12.6	12.0	.	7.1
17	12.3	2.2	.	10.4
18	11.4	4.2	.	3.8
19	9.9	2.0	.	10.1
20	6.7	1.0	.	4.5
21	11.3	7.0	.	4.1
22	8.9	0.6	.	8.2
23	12.5	11.2	.	9.7
24	12.9	12.6	.	4.8
25	13.1	9.0	.	2.7
26	13.2	10.9	.	7.7
27	13.0	10.7	.	5.5
28	13.1	8.5	.	12.1
29	13.2	12.4	.	11.4
30	13.0	12.9	.	4.3
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	302.5	237.5	.	205.9
 Daily Means	10.1	7.9	.	6.9
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: NOVIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	45°54' S	53°08' S	54°56' S	
Longitude	71°43' W	70°58' W	67°58' W	
Elevation	520 m	37 m	36 m	
Station	BALMACEDA	PUNTA ARENAS	PUERTO WILLIAMS	
Date				
1	10.6	10.8	.	
2	4.4	3.4	.	
3	12.5	12.0	.	
4	10.1	4.3	.	
5	11.2	12.4	.	
6	13.0	8.6	.	
7	10.8	9.5	.	
8	12.9	8.7	.	
9	12.6	3.4	.	
10	3.5	3.2	.	
11	12.0	9.0	.	
12	3.7	8.2	.	
13	10.6	0.0	.	
14	7.7	8.5	.	
15	2.7	5.7	.	
16	6.4	13.6	.	
17	13.5	7.4	.	
18	8.3	4.9	.	
19	12.4	9.1	.	
20	8.3	13.0	.	
21	10.1	3.3	.	
22	11.5	0.0	.	
23	10.3	6.1	.	
24	8.0	7.6	.	
25	9.7	8.5	.	
26	3.9	8.0	.	
27	8.9	9.3	.	
28	12.0	9.4	.	
29	14.2	4.6	.	
30	12.1	6.7	.	
31				
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	287.9	219.2	.	
 Daily Means	9.6	7.3	.	
Types of Instruments	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	HELIOGRAFO CAMPELL STOKES	

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

Month: DICIEMBRE

Years: 2001

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	6.8	8.5	.	.
2	.	5.5	.	3.9
3	11.0	7.6	.	9.2
4	11.7	12.0	.	10.6
5	8.2	10.2	.	8.1
6	8.8	8.6	.	9.4
7	6.7	9.0	.	8.7
8	6.7	4.8	.	10.4
9	11.3	11.5	.	11.9
10	11.1	11.8	.	11.9
11	9.5	11.0	.	10.4
12	9.5	10.2	.	8.9
13	6.3	9.7	.	0.4
14	8.9	11.4	.	12.1
15	9.8	7.7	.	10.1
16	8.2	11.7	.	9.2
17	1.8	2.9	.	6.6
18	8.1	3.0	.	.
19	10.8	11.6	.	11.5
20	10.8	11.7	.	9.3
21	11.4	11.9	.	8.4
22	4.8	9.6	.	7.0
23	11.6	11.0	.	10.4
24	9.6	11.8	.	11.1
25	6.3	9.6	.	.
26	6.2	9.6	.	9.9
27	8.4	12.0	.	10.4
28	13.0	7.9	.	10.0
29	6.1	6.6	.	5.2
30	8.8	12.1	.	11.4
31	7.3	12.2	.	9.7
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	.	294.7	.	.
 Daily Means	8.7	9.5	.	9.1
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

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

Month: DICIEMBRE

Years: 2001

Country: CHILE

Daily Totals				
Latitude	27°10' S	27°18' S	28°35' S	29°57' S
Longitude	109°26' W	70°25' W	70°46' W	71°22' W
Elevation	47 m	291 m	469 m	25 m
Station	ISLA DE PASCUA	COPIAPO	VALLENAR	LA SERENA
Date				
	7.0	9.3	11.3	0.0
2	11.7	8.1	6.8	0.0
3	5.3	12.0	7.1	7.3
4	2.2	12.6	12.2	13.1
5	.	10.7	10.4	10.0
6	7.4	9.4	11.1	10.6
7	12.6	9.0	11.7	8.3
8	11.2	9.0	7.7	4.3
9	7.2	8.4	0.0	6.8
10	6.0	9.4	12.6	7.8
11	10.2	12.2	11.5	10.3
12	.	9.1	10.5	0.0
13	2.9	7.5	6.9	0.0
14	6.2	6.6	6.2	0.0
15	5.2	10.3	0.0	3.6
16	8.6	10.6	0.0	7.2
17	12.0	11.1	12.5	8.5
18	8.7	8.0	8.5	9.2
19	8.2	8.1	8.5	8.3
20	8.0	12.3	12.6	11.4
21	8.6	9.3	11.6	2.4
22	4.2	9.3	12.2	7.1
23	12.2	0.7	4.1	1.2
24	.	9.2	9.0	3.2
25	5.1	12.3	11.4	3.7
26	13.0	8.7	10.0	0.0
27	11.8	7.7	9.1	2.8
28	10.4	7.4	8.6	0.0
29	8.3	5.7	6.0	0.0
30	6.7	6.5	6.7	5.6
31	10.0	7.0	8.9	4.0
TT Monthly Totals				
 Daily Means				
SS Monthly Totals	.	277.5	265.7	156.7
 Daily Means	8.2	9.0	8.6	5.1
Types of	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO	HELIOGRAFO
Instruments	CAMPELL	CAMPELL	CAMPELL	CAMPELL
	STOKES	STOKES	STOKES	STOKES

