

# **Techniques for Supplementing Solar Radiation Network Data**

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**A Report of Task 9: Solar Radiation and Pyranometry Studies**

**Volume 3**

**September 1992**



**INTERNATIONAL ENERGY AGENCY**  
Solar Heating & Cooling Programme

## THE INTERNATIONAL ENERGY AGENCY SOLAR HEATING AND COOLING PROGRAMME

### International Energy Agency

The International Energy Agency, headquartered in Paris, was formed in November 1974 as an autonomous body within the framework of the Organisation for Economic Cooperation and Development to establish cooperation in the area of energy policy. Twenty-one countries are presently members, with the Commission of the European Communities participating under a special arrangement.

Collaboration in the research, development and demonstration of new energy technologies to help reduce dependence on oil and to increase long-term energy security has been an important part of the Agency's programme. The IEA R&D activities are headed by the Committee on Research and Development (CRD) which is supported by a small Secretariat staff. In addition, four Working Parties (in Conservation, Fossil Fuels, Renewable Energy and Fusion) are charged with monitoring the various collaborative energy Agreements, identifying new areas for cooperation and advising the CRD on policy matters.

### Solar Heating and Cooling Programme

One of the first collaborative R&D agreements was the IEA Solar Heating and Cooling Programme which was initiated in 1977 to conduct joint projects in active and passive solar technologies, primarily for building applications. The eighteen members of the Programme are:

Australia	Germany	Norway
Austria	Finland	Spain
Belgium	Italy	Sweden
Canada	Japan	Switzerland
Denmark	The Netherlands	United Kingdom
European Community	New Zealand	United States
France (observer)		

A total of eighteen projects or "Tasks" have been undertaken since the beginning of the Programme. The overall programme is managed by an Executive Committee composed of one representative from each of the member countries, while the leadership and management of the individual Tasks is the responsibility of Operating Agents. These Tasks and their respective Operating Agents are:

- \*Task 1: Investigation of the Performance of Solar Heating and Cooling Systems - Denmark
- \*Task 2: Coordination of Research and Development on Solar Heating and Cooling - Japan
- \*Task 3: Performance Testing of Solar Collectors - United Kingdom
- \*Task 4: Development of an Insulation Handbook and Instrument Package - United States
- \*Task 5: Use of Existing Meteorological Information for Solar Energy Application - Sweden
- \*Task 6: Solar Heating, Cooling, and Hot Water Systems Using Evacuated Collectors - United States
- \*Task 7: Central Solar Heating Plants with Seasonal Storage - Sweden
- \*Task 8: Passive and Hybrid Solar Low Energy Buildings - United States
- \*Task 9: Solar Radiation and Pyranometry Studies - Federal Republic of Germany
- \*Task 10: Material Research and Testing - Japan
- \*Task 11: Passive and Hybrid Solar Commercial Buildings - Switzerland
- Task 12: Building Energy Analysis and Design Tools for Solar Applications - United States
- Task 13: Advanced Solar Low Energy Buildings - Norway
- Task 14: Advanced Active Solar Systems - Canada
- Task 15: Advanced Central Solar Heating Plants (In Planning Stage)
- Task 16: Photovoltaics in Buildings - Germany
- Task 17: Measuring and Modeling Spectral Radiation - Germany
- Task 18: Advanced Glazing Materials - United Kingdom

\*Completed Task

REPORT No. IEA-SHCP-9D-1

**TECHNIQUES FOR SUPPLEMENTING  
SOLAR RADIATION NETWORK DATA**

**VOLUME 3: RESULTS**

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Task 9: Solar Radiation and Pyranometry Studies  
Subtask D: Techniques for Supplementing Solar Radiation Network Data

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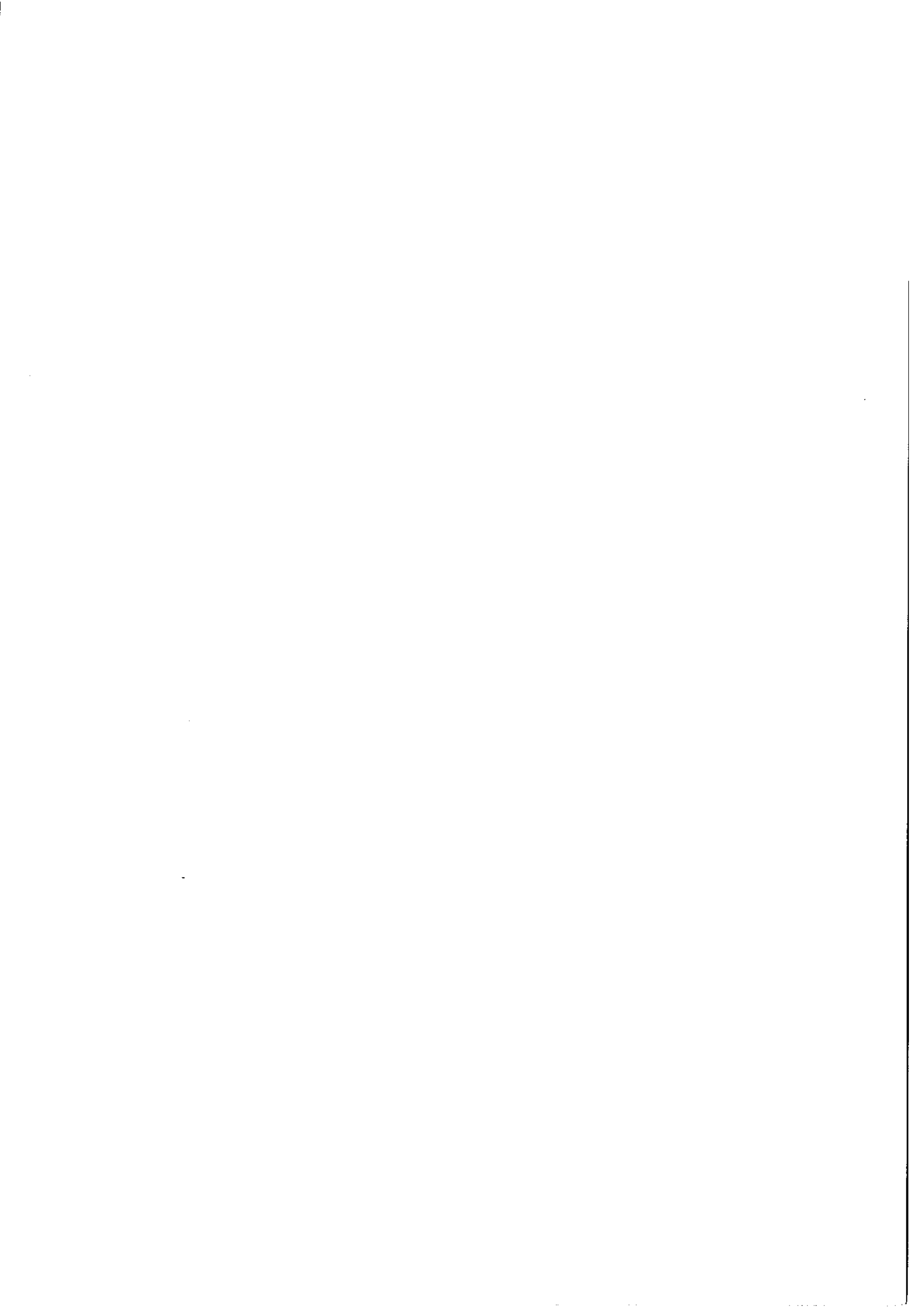
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**Table 3.1**

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**Detailed cross-validation results for extrapolated daily global irradiation**

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The results are presented network by network as follows:

1) Front page: Identifying the network.

Displaying min. & max. of relative (% of meas. mean)  
MBE, RMSE and  $U95 = \sqrt{[(MBE)^2 + (2RMSE)^2]}$ .

The absolute values are in  $MJm^{-2}day^{-1}$  and they  
correspond to the above-standing min. & max .

Min. & max. selection is only for months with at  
least 15 observed days.

2) Entries for each station and month with:

MM (ND)  
MBE / MBE%  
RMSE / RMSE%

where MM: meas. mean in  $MJm^{-2}day^{-1}$ ; ND: Number of observed days;  
MBE, resp. RMSE: absolute MBE, resp. RMSE in  $MJm^{-2}day^{-1}$ ;  
MBE%, resp. RMSE%: relative MBE, resp. RMSE in % of MM.

3) "Bottom lines" with monthly (for all stations) and station-wise (yearly) entries as 2).

	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
STATION	HER	BEN	BEN	HOO	BEN	HOO	BEN	HOO
MONTH	3	11	7	12	7	12	7	12
REL.	0	-35	11	80	21	160	21	160
ABS.	- .0	-2.3	3.1	2.1	6.2	4.2	6.2	4.2

U95

	FOR	HOO	HER	LAG	COB	EUG	BEN	BUR	WHR
JAN	4.33 ( 31) .84 / 19 1.89 / 44	0.00 ( 0) 0.00 / 0 0.00 / 0	4.70 ( 29) .44 / 9 2.19 / 47	5.24 ( 30) -.24 / -5 2.06 / 39	6.04 ( 31) -.87 / -14 2.19 / 36	5.17 ( 31) .87 / 17 2.19 / 42	7.21 ( 31) -2.04 / -28 2.95 / 41	6.23 ( 22) .41 / 7 2.61 / 42	7.56 ( 13) .51 / 7 1.89 / 25
FEB	6.39 ( 29) .61 / 10 1.69 / 26	0.00 ( 0) 0.00 / 0 0.00 / 0	6.32 ( 29) .78 / 12 3.27 / 52	7.10 ( 29) -.78 / -11 3.27 / 46	6.81 ( 29) .20 / 3 2.24 / 33	7.01 ( 29) -.20 / -3 2.24 / 32	9.17 ( 28) -2.19 / -24 2.67 / 29	9.94 ( 22) -1.02 / -10 2.26 / 23	9.30 ( 25) .49 / 5 3.35 / 36
MAR	9.80 ( 31) .90 / 9 3.03 / 31	0.00 ( 0) 0.00 / 0 0.00 / 0	11.75 ( 31) -.02 / 0 3.76 / 32	10.82 ( 24) 1.04 / 10 2.43 / 22	11.97 ( 30) -1.29 / -11 2.88 / 24	10.70 ( 31) 1.48 / 14 3.10 / 29	13.69 ( 26) -3.32 / -24 4.67 / 34	13.58 ( 31) .18 / 1 3.31 / 24	13.76 ( 31) -.18 / -1 3.31 / 24
APR	12.41 ( 30) 3.89 / 31 5.75 / 46	19.55 ( 17) -4.80 / -25 6.89 / 35	17.39 ( 30) -3.85 / -22 5.53 / 32	13.54 ( 30) 3.85 / 28 5.53 / 41	17.91 ( 29) -4.08 / -23 5.29 / 30	13.78 ( 30) 4.09 / 30 5.26 / 38	18.43 ( 30) -4.66 / -25 7.14 / 39	17.13 ( 30) 1.14 / 7 3.64 / 21	18.51 ( 29) -1.14 / -6 3.69 / 20
MAY	16.90 ( 31) 3.36 / 20 5.22 / 31	20.25 ( 31) -3.36 / -17 5.22 / 26	21.41 ( 31) -3.07 / -14 4.91 / 23	18.34 ( 31) 3.07 / 17 4.91 / 27	20.97 ( 31) -2.26 / -11 5.54 / 26	18.71 ( 31) 2.26 / 12 5.54 / 30	24.70 ( 30) -6.24 / -25 7.64 / 31	21.77 ( 31) .34 / 2 3.51 / 16	22.11 ( 31) -.34 / -2 3.51 / 16
JUN	18.27 ( 30) 4.91 / 27 6.76 / 37	23.18 ( 30) -4.91 / -21 6.76 / 29	24.16 ( 30) -2.15 / -9 4.47 / 18	20.63 ( 23) 2.98 / 14 4.54 / 22	23.25 ( 28) -1.84 / -8 7.62 / 33	21.84 ( 30) 1.57 / 7 7.39 / 34	24.38 ( 28) -3.03 / -12 5.54 / 23	25.17 ( 30) -.52 / -2 2.77 / 11	24.65 ( 30) .52 / 2 2.77 / 11
JUL	24.16 ( 31) 3.48 / 14 5.86 / 24	27.64 ( 31) -3.48 / -13 5.86 / 21	26.85 ( 31) -2.73 / -10 3.58 / 13	24.13 ( 31) 2.73 / 11 3.58 / 15	28.09 ( 29) -.73 / -3 3.53 / 13	27.35 ( 31) .80 / 3 3.44 / 13	29.08 ( 21) -.62 / -2 3.11 / 11	26.94 ( 29) -2.20 / -8 3.79 / 14	25.06 ( 31) 1.98 / 8 3.75 / 15
AUG	20.71 ( 31) 2.76 / 13 4.31 / 21	23.47 ( 31) -2.76 / -12 4.31 / 18	22.89 ( 31) -3.19 / -14 4.69 / 20	19.61 ( 30) 3.25 / 17 4.76 / 24	22.67 ( 31) -.60 / -3 4.56 / 20	22.07 ( 31) .60 / 3 4.56 / 21	25.82 ( 7) -4.70 / -18 6.70 / 26	22.90 ( 31) -.18 / -1 2.58 / 11	22.72 ( 31) -.18 / 1 2.58 / 11
SEP	14.04 ( 30) .85 / 6 2.33 / 17	14.90 ( 30) -.86 / -6 2.33 / 16	16.10 ( 30) -1.16 / -7 3.49 / 22	14.94 ( 30) 1.16 / 8 3.49 / 23	18.00 ( 25) -2.13 / -12 3.93 / 22	15.54 ( 30) 2.01 / 13 4.36 / 28	17.26 ( 22) -2.27 / -13 4.08 / 24	17.79 ( 30) .91 / 5 2.25 / 13	18.70 ( 30) -.91 / -5 2.25 / 12
OCT	6.60 ( 31) .79 / 12 2.76 / 42	7.39 ( 31) -.79 / -11 2.76 / 37	9.72 ( 31) -.90 / -9 2.74 / 28	8.62 ( 27) .71 / 8 2.75 / 32	9.72 ( 31) -2.02 / -21 3.02 / 31	7.70 ( 31) 2.02 / 26 3.02 / 39	12.20 ( 18) -2.97 / -24 3.62 / 30	10.22 ( 31) .57 / 6 2.29 / 22	10.78 ( 31) -.57 / -5 2.29 / 21
NOV	3.76 ( 30) -.19 / -5 1.83 / 49	3.57 ( 30) .19 / 5 1.83 / 51	4.50 ( 30) .20 / 4 1.86 / 41	4.70 ( 30) -.20 / -4 1.86 / 40	4.66 ( 30) -.62 / -13 1.41 / 30	4.05 ( 30) .62 / 15 1.41 / 35	6.49 ( 26) -2.29 / -35 2.73 / 42	5.41 ( 30) .70 / 13 2.19 / 41	6.09 ( 29) -.74 / -12 2.23 / 37
DEC	3.06 ( 31) -.17 / -5 2.01 / 66	2.64 ( 27) .34 / 13 2.11 / 80	3.48 ( 30) .80 / 23 2.31 / 66	4.31 ( 31) -.83 / -19 2.29 / 53	4.71 ( 31) -1.03 / -22 1.79 / 38	3.68 ( 31) 1.03 / 28 1.79 / 49	0.00 ( 0) 0.00 / 0 0.00 / 0	5.52 ( 20) .46 / 8 1.55 / 28	6.17 ( 24) -1.32 / -21 2.05 / 33
YEAR	11.73 (366) 1.84 / 16 4.03 / 34	15.87 (258) -2.18 / -14 4.52 / 29	14.21 (363) -1.26 / -9 3.75 / 26	12.61 (346) 1.38 / 11 3.66 / 29	14.42 (355) -1.43 / -10 4.03 / 28	13.16 (366) 1.43 / 11 4.06 / 31	16.38 (267) -3.11 / -19 4.93 / 30	15.83 (337) .08 / 1 2.85 / 18	16.18 (335) -.14 / -1 2.93 / 18

## ALL

JAN	5.66 ( 218)	-0.07 / -1	2.29 / 40
FEB	7.65 ( 220)	-0.24 / -3	2.68 / 35
MAR	12.01 ( 235)	-0.12 / -1	3.36 / 28
APR	16.35 ( 255)	-0.39 / -2	5.46 / 33
MAY	20.56 ( 278)	-0.67 / -3	5.23 / 25
JUN	22.88 ( 259)	-0.33 / -1	5.69 / 25
JUL	26.48 ( 265)	-0.04 / 0	4.22 / 16
AUG	22.24 ( 254)	-0.13 / -1	4.22 / 19
SEP	16.30 ( 257)	-0.17 / -1	3.23 / 20
OCT	9.08 ( 262)	-0.24 / -3	2.79 / 31
NOV	4.77 ( 265)	-0.23 / -5	1.95 / 41
DEC	4.10 ( 225)	-0.09 / -2	2.02 / 49
YEAR	14.36 ( 2993)	-0.23 / -2	3.87 / 27

SW Associates / NOAA / SERI , without VEG & PAG

STATION	MBE		RMSE		U95	
	MIN	MAX	MIN	MAX	MIN	MAX
MONTH	WLA	ESC	VIC	ESC	BLY	ESC
REL.	4	5	7	5	4	5
ABS.	0	27	4	41	8	86
	.1	5.8	1.1	8.8	2.0	18.4

	RID	BAR	IAN	VIC	SUV	YOV	AIH	WLA	ANG
JAN	9.57 ( 31) -31 / -3 2.03 / 21	9.26 ( 31) .45 / 5 1.04 / 11	9.63 ( 31) -88 / -9 2.32 / 24	9.70 ( 31) -45 / -5 1.04 / 11	8.76 ( 31) -35 / -4 .82 / 9	9.95 ( 31) -65 / -7 1.96 / 20	9.05 ( 30) -1.00 / -11 1.16 / 13	8.41 ( 31) -.20 / -2 .89 / 11	8.21 ( 31) .99 / 12 1.14 / 14
FEB	15.80 ( 28) -45 / -3 1.64 / 10	15.35 ( 28) .51 / 3 1.58 / 10	15.90 ( 28) -3.36 / -21 4.05 / 25	15.85 ( 28) -.51 / -3 1.58 / 10	12.54 ( 28) .11 / 1 1.28 / 10	16.76 ( 28) -.89 / -5 1.40 / 8	13.89 ( 28) -1.63 / -12 1.97 / 14	12.65 ( 28) -.39 / -3 1.64 / 13	12.26 ( 28) 1.63 / 13 1.97 / 16
MAR	19.63 ( 31) -2.11 / -11 3.87 / 20	17.52 ( 31) .60 / 3 2.49 / 14	18.83 ( 31) -3.77 / -20 5.42 / 29	18.12 ( 31) -.60 / -3 2.49 / 14	15.05 ( 31) .54 / 4 2.24 / 15	19.14 ( 31) -.55 / -3 2.47 / 13	15.71 ( 31) -.25 / -2 1.21 / 8	15.59 ( 31) -.13 / -1 1.91 / 12	15.46 ( 31) .25 / 2 1.21 / 8
APR	26.24 ( 30) -36 / -1 1.40 / 5	25.88 ( 30) -16 / -1 3.11 / 12	26.75 ( 30) -3.22 / -12 5.34 / 20	25.71 ( 30) .16 / 1 3.11 / 12	23.53 ( 30) -1.28 / -5 2.84 / 12	26.79 ( 30) -.91 / -3 1.19 / 4	22.82 ( 30) -.48 / -2 1.00 / 4	22.26 ( 30) .08 / 0 1.78 / 8	22.34 ( 30) .48 / 2 1.00 / 4
MAY	29.33 ( 30) -85 / -3 1.47 / 5	28.26 ( 31) .27 / 1 1.83 / 6	29.34 ( 31) -6.54 / -22 9.36 / 32	28.53 ( 31) -.27 / -1 1.83 / 6	22.80 ( 31) -.81 / -4 4.59 / 20	28.02 ( 31) -.94 / -3 2.33 / 8	21.42 ( 31) -.38 / -2 2.26 / 11	21.99 ( 31) -.95 / -4 2.94 / 13	21.04 ( 31) .38 / 2 2.26 / 11
JUN	31.49 ( 30) -1.15 / -4 1.58 / 5	30.34 ( 30) .75 / 2 1.55 / 5	31.44 ( 30) -4.54 / -14 6.72 / 21	31.09 ( 30) -.75 / -2 1.55 / 5	26.90 ( 30) -1.62 / -6 3.14 / 12	30.90 ( 30) -1.25 / -4 1.54 / 5	25.44 ( 30) -.76 / -3 1.00 / 4	25.28 ( 30) -.61 / -2 2.18 / 9	24.67 ( 30) .76 / 3 1.00 / 4
JUL	29.75 ( 30) -70 / -2 1.38 / 5	28.89 ( 31) .85 / 3 1.14 / 4	30.43 ( 31) -3.31 / -11 4.13 / 14	29.74 ( 31) -.85 / -3 1.14 / 4	27.13 ( 31) -.77 / -3 2.40 / 9	29.51 ( 31) -.85 / -3 1.71 / 6	27.01 ( 31) -.86 / -3 1.07 / 4	26.38 ( 28) -.23 / -1 1.64 / 6	26.16 ( 31) .86 / 3 1.07 / 4
AUG	25.54 ( 31) -1.46 / -6 3.36 / 13	24.08 ( 31) 1.62 / 7 3.13 / 13	27.04 ( 31) -3.76 / -14 5.34 / 20	25.70 ( 31) -1.62 / -6 3.13 / 12	23.27 ( 31) -1.21 / -5 2.87 / 12	25.40 ( 31) -1.20 / -5 2.11 / 8	22.57 ( 31) -.94 / -4 1.20 / 5	22.06 ( 31) -.42 / -2 2.04 / 9	21.64 ( 31) .94 / 4 1.20 / 6
SEP	22.93 ( 29) -1.12 / -5 1.49 / 7	21.84 ( 30) 1.02 / 5 1.73 / 8	23.32 ( 30) -2.42 / -10 2.92 / 13	22.86 ( 30) -1.02 / -4 1.73 / 8	20.90 ( 30) -.32 / -2 1.14 / 5	22.97 ( 30) -1.17 / -5 1.64 / 7	21.02 ( 30) -1.27 / -6 1.42 / 7	20.57 ( 30) -.82 / -4 1.46 / 7	19.76 ( 30) 1.27 / 6 1.42 / 7
OCT	17.55 ( 31) -32 / -2 1.64 / 9	17.23 ( 31) .36 / 2 1.81 / 11	17.93 ( 31) -3.19 / -18 4.26 / 24	17.59 ( 31) -.36 / -2 1.81 / 10	14.74 ( 31) -.24 / -2 1.25 / 8	18.18 ( 31) -.91 / -5 1.50 / 8	14.71 ( 31) -.90 / -6 1.10 / 8	14.50 ( 31) -.68 / -5 1.44 / 10	13.82 ( 31) .90 / 6 1.10 / 8
NOV	13.46 ( 30) -13 / -1 1.30 / 10	13.33 ( 30) .38 / 3 1.40 / 10	13.80 ( 30) -1.23 / -9 1.77 / 13	13.70 ( 30) -.38 / -3 1.40 / 10	12.57 ( 30) -.41 / -3 1.21 / 10	14.31 ( 30) -.54 / -4 .76 / 5	12.70 ( 30) -.88 / -7 1.02 / 8	12.16 ( 30) -.34 / -3 .72 / 6	11.82 ( 30) .88 / 7 1.02 / 9
DEC	10.67 ( 30) .23 / 2 1.85 / 17	10.94 ( 31) .47 / 4 .82 / 7	11.59 ( 31) -1.33 / -11 2.15 / 19	11.37 ( 30) -.47 / -4 .82 / 7	10.26 ( 31) -.46 / -5 .90 / 9	11.73 ( 30) -.34 / -3 1.00 / 8	10.60 ( 31) -.96 / -9 .99 / 9	9.79 ( 31) -.15 / -1 .96 / 10	9.65 ( 31) .96 / 10 .99 / 10
YEAR	20.99 (361) -73 / -3 2.09 / 10	20.25 (365) .60 / 3 1.94 / 10	21.35 (365) -3.13 / -15 4.95 / 23	20.87 (364) -.59 / -3 1.94 / 9	18.22 (365) -.57 / -3 2.34 / 13	21.17 (364) -.85 / -4 1.72 / 8	18.11 (364) -.85 / -5 1.34 / 7	17.58 (362) -.40 / -2 1.74 / 10	17.25 (365) .85 / 5 1.34 / 8



	PAS	ESC	BIY	ALL
JAN	9.30 ( 31) .65 / 7 1.96 / 21	8.89 ( 31) .42 / 5 2.84 / 32	10.20 ( 31) -.89 / -9 2.58 / 25	9.24 ( 371) -.18 / -2 1.79 / 19
FEB	15.87 ( 28) .89 / 6 1.40 / 9	14.43 ( 28) 1.43 / 10 2.97 / 21	16.14 ( 28) -.28 / -2 2.05 / 13	14.79 ( 336) -.24 / -2 2.11 / 14
MAR	18.60 ( 31) .55 / 3 2.47 / 13	16.34 ( 5) 1.44 / 9 2.91 / 18	19.44 ( 31) -.84 / -4 2.88 / 15	17.54 ( 346) -.54 / -3 2.84 / 16
APR	25.88 ( 30) .91 / 4 1.19 / 5	22.59 ( 26) 3.51 / 16 5.69 / 25	26.08 ( 30) -.20 / -1 1.01 / 4	24.76 ( 356) -.16 / -1 2.83 / 11
MAY	27.09 ( 31) .94 / 3 2.33 / 9	21.32 ( 31) 5.77 / 27 8.75 / 41	27.55 ( 31) -.46 / -2 3.20 / 12	25.55 ( 371) -.32 / -1 4.42 / 17
JUN	29.59 ( 29) 1.30 / 4 1.56 / 5	25.46 ( 30) 4.19 / 16 7.13 / 28	29.90 ( 30) -.25 / -1 1.75 / 6	28.54 ( 359) -.33 / -1 3.27 / 11
JUL	28.66 ( 31) .85 / 3 1.71 / 6	27.16 ( 31) 1.51 / 6 2.61 / 10	28.97 ( 31) -.31 / -1 1.33 / 5	28.33 ( 368) -.32 / -1 1.98 / 7
AUG	24.20 ( 31) 1.20 / 5 2.11 / 9	22.25 ( 31) 1.95 / 9 4.54 / 20	25.54 ( 31) -1.34 / -5 3.94 / 15	24.11 ( 372) -.52 / -2 3.16 / 13
SEP	21.80 ( 30) 1.17 / 5 1.64 / 8	22.13 ( 29) -.40 / -2 2.00 / 9	22.59 ( 30) -.79 / -4 1.96 / 9	21.89 ( 358) -.49 / -2 1.77 / 8
OCT	17.28 ( 31) .91 / 5 1.50 / 9	15.72 ( 31) 1.55 / 10 2.50 / 16	17.64 ( 31) -.37 / -2 2.10 / 12	16.41 ( 372) -.27 / -2 2.02 / 12
NOV	13.78 ( 29) .55 / 4 .77 / 6	12.72 ( 30) 1.05 / 8 2.53 / 20	13.72 ( 28) .09 / 1 1.22 / 9	13.17 ( 357) -.08 / -1 1.35 / 10
DEC	11.41 ( 31) .33 / 3 .98 / 9	11.17 ( 31) -.24 / 2 1.73 / 15	11.65 ( 31) -.24 / -2 .74 / 6	10.90 ( 369) -.14 / -1 1.24 / 11
YEAR	20.29 (363) .85 / 4 1.72 / 8	18.45 (334) 1.91 / 10 4.49 / 24	20.84 (363) -.50 / -2 2.27 / 11	19.62 ( 4335) -.30 / -2 2.56 / 13

STATION	MBE		RMSE		U95	
	MIN	MAX	MIN	MAX	MIN	MAX
MONTH	WLA	PAG	VIC	PAG	BLY	PAG
REL.	4	2	7	2	4	2
ABS.	0	32	4	46	8	98
	.1	3.4	1.1	4.9	2.0	10.3

	RID	BAR	LAN	VIC	SUV	YOV	AIH	WLA	ANG
JAN	9.57 ( 31) -.31 / -3 2.03 / 21	9.26 ( 31) .45 / 5 1.04 / 11	9.63 ( 31) -.88 / -9 2.32 / 24	9.70 ( 31) -.45 / -5 1.04 / 11	8.76 ( 31) -.35 / -4 .82 / 9	9.95 ( 31) -.65 / -7 1.96 / 20	9.05 ( 30) -1.00 / -11 1.16 / 13	8.41 ( 31) -.20 / -2 .89 / 11	8.21 ( 31) .99 / 12 1.14 / 14
FEB	15.80 ( 28) -.45 / -3 1.64 / 10	15.35 ( 28) .51 / 3 1.58 / 10	15.90 ( 28) -3.36 / -21 4.05 / 25	15.85 ( 28) -.51 / -3 1.58 / 10	12.54 ( 28) .11 / 1 1.28 / 10	16.76 ( 28) -.89 / -5 1.40 / 8	13.89 ( 28) -1.63 / -12 1.97 / 14	12.65 ( 28) -.39 / -3 1.64 / 13	12.26 ( 28) 1.63 / 13 1.97 / 16
MAR	19.63 ( 31) -2.11 / -11 3.87 / 20	17.52 ( 31) .60 / 3 2.49 / 14	18.83 ( 31) -3.77 / -20 5.42 / 29	18.12 ( 31) -.60 / -3 2.49 / 14	15.05 ( 31) .54 / 4 2.24 / 15	19.14 ( 31) -.55 / -3 2.47 / 13	15.71 ( 31) -.25 / -2 1.21 / 8	15.59 ( 31) -.13 / -1 1.91 / 12	15.46 ( 31) .25 / 2 1.21 / 8
APR	26.24 ( 30) -.36 / -1 1.40 / 5	25.88 ( 30) -.16 / -1 3.11 / 12	26.75 ( 30) -3.22 / -12 5.34 / 20	25.71 ( 30) .16 / 1 3.11 / 12	23.53 ( 30) -1.28 / -5 2.84 / 12	26.79 ( 30) -.91 / -3 1.19 / 4	22.82 ( 30) -.48 / -2 1.00 / 4	22.26 ( 30) .08 / 0 1.78 / 8	22.34 ( 30) .48 / 2 1.00 / 4
MAY	29.33 ( 30) -.85 / -3 1.47 / 5	28.26 ( 31) .27 / 1 1.83 / 6	29.34 ( 31) -6.54 / -22 9.36 / 32	28.53 ( 31) -.27 / -1 1.83 / 6	22.80 ( 31) -.81 / -4 4.59 / 20	28.02 ( 31) -.94 / -3 2.33 / 8	21.42 ( 31) -.38 / -2 2.26 / 11	21.99 ( 31) -.95 / -4 2.94 / 13	21.04 ( 31) .38 / 2 2.26 / 11
JUN	31.49 ( 30) -1.15 / -4 1.58 / 5	30.34 ( 30) .75 / 2 1.55 / 5	31.44 ( 30) -4.54 / -14 6.72 / 21	31.09 ( 30) -.75 / -2 1.55 / 5	26.90 ( 30) -1.62 / -6 3.14 / 12	30.90 ( 30) -1.25 / -4 1.54 / 5	25.44 ( 30) -.76 / -3 1.00 / 4	25.28 ( 30) -.61 / -2 2.18 / 9	24.67 ( 30) .76 / 3 1.00 / 4
JUL	29.75 ( 30) -.70 / -2 1.38 / 5	28.89 ( 31) .85 / 3 1.14 / 4	30.43 ( 31) -3.31 / -11 4.13 / 14	29.74 ( 31) -.85 / -3 1.14 / 4	27.13 ( 31) -.77 / -3 2.40 / 9	29.51 ( 31) -.85 / -3 1.71 / 6	27.01 ( 31) -.86 / -3 1.07 / 4	26.38 ( 28) -.23 / -1 1.64 / 6	26.16 ( 31) .86 / 3 1.07 / 4
AUG	25.54 ( 31) -1.46 / -6 3.36 / 13	24.08 ( 31) 1.62 / 7 3.13 / 13	27.04 ( 31) -3.76 / -14 5.34 / 20	25.70 ( 31) -1.62 / -6 3.13 / 12	23.27 ( 31) -1.21 / -5 2.87 / 12	25.40 ( 31) -1.20 / -5 2.11 / 8	22.57 ( 31) -.94 / -4 1.20 / 5	22.06 ( 31) -.42 / -2 2.04 / 9	21.64 ( 31) .94 / 4 1.20 / 6
SEP	22.93 ( 29) -1.12 / -5 1.49 / 7	21.84 ( 30) 1.02 / 5 1.73 / 8	23.32 ( 30) -2.42 / -10 2.92 / 13	22.86 ( 30) -1.02 / -4 1.73 / 8	20.90 ( 30) -.32 / -2 1.14 / 5	22.97 ( 30) -1.17 / -5 1.64 / 7	21.02 ( 30) -1.27 / -6 1.42 / 7	20.57 ( 30) -.82 / -4 1.46 / 7	19.76 ( 30) 1.27 / 6 1.42 / 7
OCT	17.55 ( 31) -.32 / -2 1.64 / 9	17.23 ( 31) .36 / 2 1.81 / 11	17.93 ( 31) -3.19 / -18 4.26 / 24	17.59 ( 31) -.36 / -2 1.81 / 10	14.74 ( 31) -.24 / -2 1.25 / 8	18.18 ( 31) -.91 / -5 1.50 / 8	14.71 ( 31) -.90 / -6 1.10 / 8	14.50 ( 31) -.68 / -5 1.44 / 10	13.82 ( 31) .90 / 6 1.10 / 8
NOV	13.46 ( 30) -1.13 / -1 1.30 / 10	13.33 ( 30) .38 / 3 1.40 / 10	13.80 ( 30) -1.23 / -9 1.77 / 13	13.70 ( 30) -.38 / -3 1.40 / 10	12.57 ( 30) -.41 / -3 1.21 / 10	14.31 ( 30) -.54 / -4 .76 / 5	12.70 ( 30) -.88 / -7 1.02 / 8	12.16 ( 30) -.34 / -3 .72 / 6	11.82 ( 30) .88 / 7 1.02 / 9
DEC	10.67 ( 30) .23 / 2 1.85 / 17	10.94 ( 31) .47 / 4 .82 / 7	11.59 ( 31) -1.33 / -11 2.15 / 19	11.37 ( 30) -.47 / -4 .82 / 7	10.26 ( 31) -.46 / -5 .90 / 9	11.73 ( 30) -.34 / -3 1.00 / 8	10.60 ( 31) -.96 / -9 .99 / 9	9.79 ( 31) -.15 / -1 .96 / 10	9.65 ( 31) .96 / 10 .99 / 10
YEAR	20.99 (361) -.73 / -3 2.09 / 10	20.25 (365) .60 / 3 1.94 / 10	21.35 (365) -3.13 / -15 4.95 / 23	20.87 (364) -.59 / -3 1.94 / 9	18.22 (365) -.57 / -3 2.34 / 13	21.17 (364) -.85 / -4 1.72 / 8	18.11 (364) -.85 / -5 1.34 / 7	17.58 (362) -.40 / -2 1.74 / 10	17.25 (365) .85 / 5 1.34 / 8

	PAS	ESC	VEG	PAG	BLX	ALL
JAN	9.30 ( 31) .65 / 7 1.96 / 21	8.89 ( 31) .42 / 5 2.84 / 32	7.65 ( 30) 1.42 / 19 2.83 / 37	7.15 ( 31) .73 / 10 2.62 / 37	10.20 ( 31) -.89 / -9 2.58 / 25	8.98 ( 432) -.01 / 0 1.95 / 22
FEB	15.87 ( 28) .89 / 6 1.40 / 9	14.43 ( 28) 1.43 / 10 2.97 / 21	13.97 ( 28) 1.37 / 10 2.56 / 18	10.58 ( 27) 3.36 / 32 4.88 / 46	16.14 ( 28) -.28 / -2 2.05 / 13	14.44 ( 391) -.12 / 1 2.43 / 17
MAR	18.60 ( 31) .55 / 3 2.47 / 13	16.34 ( 5) 1.44 / 9 2.91 / 18	17.23 ( 31) .30 / 2 2.53 / 15	15.29 ( 31) 1.94 / 13 3.58 / 23	19.44 ( 31) -.84 / -4 2.88 / 15	17.34 ( 408) -.29 / -2 2.88 / 17
APR	25.88 ( 30) .91 / 4 1.19 / 5	22.59 ( 26) 3.51 / 16 5.69 / 25	24.59 ( 28) 1.27 / 5 2.88 / 12	22.53 ( 30) 2.21 / 10 3.38 / 15	26.08 ( 30) -.20 / -1 1.01 / 4	24.59 ( 414) .11 / 0 2.88 / 12
MAY	27.09 ( 31) .94 / 3 2.33 / 9	21.32 ( 31) 5.77 / 27 8.75 / 41	27.34 ( 30) .90 / 3 3.00 / 11	22.88 ( 31) 4.39 / 19 5.37 / 23	27.55 ( 31) -.46 / -2 3.20 / 12	25.48 ( 432) .10 / 0 4.42 / 17
JUN	29.59 ( 29) 1.30 / 4 1.56 / 5	25.46 ( 30) 4.19 / 16 7.13 / 28	29.88 ( 30) .46 / 2 1.25 / 4	0.00 ( 0) 0.00 / 0 0.00 / 0	29.90 ( 30) -.25 / -1 1.75 / 6	28.64 ( 389) -.27 / -1 3.16 / 11
JUL	28.66 ( 31) .85 / 3 1.71 / 6	27.16 ( 31) 1.51 / 6 2.61 / 10	27.90 ( 30) .98 / 4 2.68 / 10	24.75 ( 29) 2.91 / 12 5.21 / 21	28.97 ( 31) -.31 / -1 1.33 / 5	28.05 ( 427) -.01 / 0 2.39 / 9
AUG	24.20 ( 31) 1.20 / 5 2.11 / 9	22.25 ( 31) 1.95 / 9 4.54 / 20	24.22 ( 16) .51 / 2 1.68 / 7	21.44 ( 31) 3.32 / 16 5.07 / 24	25.54 ( 31) -1.34 / -5 3.94 / 15	23.91 ( 419) -.20 / -1 3.30 / 14
SEP	21.80 ( 30) 1.17 / 5 1.64 / 8	22.13 ( 29) -.40 / -2 2.00 / 9	21.14 ( 29) .55 / 3 1.56 / 7	19.01 ( 30) 2.28 / 12 2.65 / 14	22.59 ( 30) -.79 / -4 1.96 / 9	21.63 ( 417) -.22 / -1 1.83 / 8
OCT	17.28 ( 31) .91 / 5 1.50 / 9	15.72 ( 31) 1.55 / 10 2.50 / 16	16.04 ( 31) 1.19 / 7 1.76 / 11	14.53 ( 31) 1.51 / 10 3.62 / 25	17.64 ( 31) -.37 / -2 2.10 / 12	16.25 ( 434) -.04 / 0 2.15 / 13
NOV	13.78 ( 29) .55 / 4 .77 / 6	12.72 ( 30) 1.05 / 8 2.53 / 20	12.01 ( 27) 1.32 / 11 1.91 / 16	11.31 ( 30) .98 / 9 2.54 / 22	13.72 ( 28) .09 / 1 1.22 / 9	12.96 ( 414) .09 / 1 1.51 / 12
DEC	11.41 ( 31) .33 / 3 .98 / 9	11.17 ( 31) -.24 / 2 1.73 / 15	9.52 ( 28) 1.61 / 17 1.86 / 20	8.61 ( 31) .93 / 11 2.49 / 29	11.65 ( 31) -.24 / -2 .74 / 6	10.64 ( 428) .05 / 0 1.42 / 13
YEAR	20.29 (363) .85 / 4 1.72 / 8	18.45 (334) 1.91 / 10 4.49 / 24	19.19 (338) 1.00 / 5 2.30 / 12	16.19 (332) 2.22 / 14 3.91 / 24	20.84 (363) -.50 / -2 2.27 / 11	19.36 ( 5005) -.05 / 0 2.65 / 14

NE Utilities / SUNY

STATION	MBE		RMSE		U95	
	MIN	MAX	MIN	MAX	MIN	MAX
MONTH	FAR	ALB	FAR	ALB	FAR	ALB
REL.	7	12	6	12	6	12
ABS.	0	44	4	81	8	168
	-1.1	1.3	.8	2.5	1.6	5.1

	WAT	MID	DEV	WOH	ALB	FAR	QOE	ALL
JAN	5.54 ( 16) .18 / 3 .64 / 12	5.73 ( 16) - .18 / -3 .64 / 11	6.00 ( 16) - .27 / -5 .91 / 15	5.71 ( 16) - .16 / -3 1.29 / 23	5.62 ( 16) .11 / 2 2.58 / 46	5.52 ( 16) - .31 / -6 .51 / 9	5.21 ( 16) .31 / 6 .51 / 10	5.62 ( 112) - .05 / -1 1.22 / 22
FEB	7.34 ( 5) - .02 / 0 1.15 / 16	7.32 ( 5) .02 / 0 1.15 / 16	8.96 ( 5) - 1.64 / -18 2.32 / 26	8.95 ( 5) - 1.62 / -18 2.14 / 24	6.53 ( 5) .79 / 12 4.79 / 73	9.76 ( 5) - .66 / -7 1.26 / 13	9.10 ( 5) .66 / 7 1.26 / 14	8.28 ( 35) - .35 / -4 2.35 / 28
MAR	10.49 ( 3) - .11 / -1 .82 / 8	10.38 ( 3) .11 / 1 .82 / 8	10.98 ( 3) - .60 / -5 1.10 / 10	13.60 ( 3) - 3.11 / -23 3.39 / 25	6.65 ( 3) 3.73 / 56 4.74 / 71	10.72 ( 3) - .00 / 0 .69 / 6	10.71 ( 3) .00 / 0 .69 / 6	10.50 ( 21) .00 / 0 2.31 / 22
APR	13.47 ( 10) .06 / 0 3.32 / 25	13.53 ( 10) - .06 / 0 3.32 / 25	14.99 ( 10) - 1.47 / -10 4.07 / 27	12.69 ( 10) .77 / 6 3.32 / 26	10.80 ( 10) 2.73 / 25 6.41 / 59	14.98 ( 10) .54 / 4 2.27 / 15	15.52 ( 10) - .54 / -3 2.27 / 15	13.71 ( 70) .29 / 2 3.80 / 28
MAY	19.16 ( 19) - 1.97 / -10 2.82 / 15	17.19 ( 19) 1.97 / 11 2.82 / 16	17.60 ( 19) - .41 / -2 2.23 / 13	20.68 ( 19) - 1.51 / -7 4.00 / 19	17.64 ( 19) - .45 / -3 4.05 / 23	18.02 ( 19) - .45 / -2 1.76 / 10	17.57 ( 19) .45 / 3 1.76 / 10	18.27 ( 133) - .34 / -2 2.92 / 16
JUN	21.04 ( 20) - .72 / -3 2.03 / 10	20.32 ( 20) .72 / 4 2.03 / 10	19.67 ( 20) .65 / 3 3.96 / 20	19.62 ( 20) 1.42 / 7 3.42 / 17	19.12 ( 20) 1.20 / 6 5.68 / 30	19.39 ( 20) - .08 / 0 .78 / 4	19.31 ( 20) .08 / 0 .78 / 4	19.78 ( 140) .47 / 2 3.14 / 16
JUL	19.56 ( 19) - 1.27 / -6 2.93 / 15	18.29 ( 19) 1.27 / 7 2.93 / 16	20.74 ( 19) - 2.45 / -12 3.21 / 15	18.07 ( 19) 1.49 / 8 4.67 / 26	20.04 ( 19) - 1.75 / -9 5.48 / 27	20.28 ( 19) - .07 / 0 1.81 / 9	20.21 ( 19) .07 / 0 1.81 / 9	19.60 ( 133) - .39 / -2 3.50 / 18
AUG	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
SEP	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
OCT	10.21 ( 10) .71 / 7 1.48 / 15	10.93 ( 10) - .71 / -7 1.48 / 14	11.43 ( 10) - .50 / -4 1.07 / 9	11.02 ( 10) - .81 / -7 1.26 / 11	8.71 ( 10) 2.22 / 25 3.84 / 44	11.59 ( 10) - .71 / -6 1.59 / 14	10.88 ( 10) .71 / 7 1.59 / 15	10.68 ( 70) .13 / 1 1.96 / 18
NOV	5.77 ( 17) .11 / 2 .61 / 11	5.88 ( 17) - .11 / -2 .61 / 10	6.64 ( 17) - .76 / -12 1.23 / 19	5.79 ( 17) - .02 / 0 1.64 / 28	4.82 ( 17) 1.06 / 22 2.27 / 47	6.18 ( 17) - .39 / -6 .95 / 15	5.79 ( 17) .39 / 7 .95 / 16	5.84 ( 119) .04 / 1 1.30 / 22
DEC	4.55 ( 15) - .20 / -4 1.21 / 27	4.35 ( 15) .20 / 5 1.21 / 28	4.76 ( 15) - .42 / -9 1.43 / 30	4.96 ( 15) - .41 / -8 1.36 / 27	3.02 ( 15) 1.32 / 44 2.45 / 81	4.64 ( 15) - .16 / -4 .42 / 9	4.48 ( 15) .16 / 4 .42 / 9	4.39 ( 105) .07 / 2 1.37 / 31
YEAR	12.81 (134) - .50 / -4 2.07 / 16	12.31 (134) .50 / 4 2.07 / 17	13.02 (134) - .71 / -5 2.56 / 20	12.80 (134) .01 / 0 3.04 / 24	11.67 (134) .64 / 6 4.36 / 37	12.87 (134) - .23 / -2 1.34 / 10	12.65 (134) .23 / 2 1.34 / 11	12.59 ( 938) - .01 / 0 2.59 / 21

DWD

	MBE		RMSE		U95	
STATION	MIN	MAX	MIN	MAX	MIN	MAX
MONTH	GSS	LSP	WSB	NOR	WSB	NOR
REL.	9	12	4	11	4	11
ABS.	0	52	9	146	17	293
	.0	.5	1.4	4.2	2.9	8.4

	BOC	BRA	BLG	BRE	BON	COB	KAS	FRB	GEK
JAN	1.93 ( 31) .10 / 5 .64 / 33	2.26 ( 31) -.67 / -30 1.46 / 65	1.59 ( 31) .67 / 42 1.46 / 92	1.70 ( 31) .22 / 13 .72 / 42	2.70 ( 31) -.77 / -29 1.41 / 52	1.99 ( 31) .67 / 34 1.22 / 61	1.93 ( 31) -.05 / -2 1.26 / 65	2.89 ( 31) .54 / 19 1.83 / 63	2.03 ( 31) -.10 / -5 .60 / 29
FEB	4.36 ( 29) -.49 / -11 1.24 / 29	3.79 ( 29) .01 / 0 1.50 / 40	3.80 ( 29) -.01 / 0 1.50 / 39	3.69 ( 29) -.07 / -2 .91 / 25	4.15 ( 29) -.63 / -15 1.38 / 33	4.59 ( 29) .16 / 3 1.53 / 33	4.20 ( 29) -.79 / -19 1.54 / 37	4.98 ( 29) .90 / 18 2.36 / 47	3.87 ( 29) -.34 / -9 1.01 / 26
MAR	6.65 ( 31) -1.05 / -16 1.72 / 26	6.68 ( 31) -.16 / -2 1.95 / 29	6.52 ( 31) .16 / 2 1.95 / 30	6.45 ( 31) -.53 / -8 1.44 / 22	5.94 ( 31) -.68 / -11 2.27 / 38	6.93 ( 31) -.05 / -1 1.99 / 29	7.01 ( 31) -1.67 / -24 2.14 / 31	6.28 ( 31) 1.24 / 20 2.50 / 40	5.60 ( 31) -.34 / -6 1.66 / 30
APR	16.57 ( 30) -1.31 / -8 2.70 / 16	15.45 ( 30) .57 / 4 3.06 / 20	16.03 ( 30) -.57 / -4 3.06 / 19	13.26 ( 30) 1.37 / 10 3.22 / 24	15.12 ( 30) .77 / 5 2.61 / 17	16.99 ( 30) -.81 / -5 1.62 / 10	14.94 ( 30) .03 / 0 3.33 / 22	15.24 ( 30) .93 / 6 3.52 / 23	15.26 ( 30) .63 / 4 2.86 / 19
MAY	19.40 ( 31) -1.60 / -8 2.99 / 15	20.21 ( 31) -1.51 / -7 3.58 / 18	18.70 ( 31) 1.51 / 8 3.58 / 19	18.55 ( 31) 1.04 / 6 3.94 / 21	16.76 ( 31) .63 / 4 2.24 / 13	18.98 ( 31) .45 / 2 2.23 / 12	18.87 ( 31) .27 / 1 2.71 / 14	17.34 ( 31) 1.61 / 9 4.40 / 25	17.80 ( 31) -.40 / -2 2.17 / 12
JUN	15.09 ( 30) -1.78 / -12 3.59 / 24	15.55 ( 30) .73 / 5 5.60 / 36	16.28 ( 30) -.73 / -4 5.60 / 34	12.81 ( 30) 1.53 / 12 4.21 / 33	13.63 ( 30) .21 / 2 4.09 / 30	16.72 ( 30) -.17 / -1 2.91 / 17	14.94 ( 30) -.15 / -1 5.21 / 35	20.74 ( 30) -.96 / -5 4.88 / 24	13.31 ( 30) .52 / 4 2.71 / 20
JUL	14.41 ( 31) .73 / 5 2.50 / 17	17.06 ( 28) -1.33 / -8 3.47 / 20	16.05 ( 31) 1.25 / 8 3.58 / 22	14.14 ( 31) .67 / 5 2.70 / 19	14.37 ( 25) -.76 / -5 2.71 / 19	17.69 ( 31) .75 / 4 2.52 / 14	16.58 ( 31) -1.96 / -12 4.53 / 27	20.01 ( 31) 1.21 / 6 4.26 / 21	15.14 ( 31) -.15 / -1 2.14 / 14
AUG	15.46 ( 31) -.03 / 0 1.95 / 13	16.44 ( 31) -.56 / -3 3.11 / 19	15.88 ( 31) .56 / 4 3.11 / 20	14.09 ( 31) 1.38 / 10 3.06 / 22	15.42 ( 31) .16 / 1 2.51 / 16	16.84 ( 31) -1.26 / -7 2.86 / 17	16.33 ( 31) -.74 / -5 2.98 / 18	17.60 ( 31) -1.14 / -6 4.72 / 27	15.43 ( 31) .16 / 1 2.24 / 15
SEP	8.94 ( 30) -.95 / -11 1.78 / 20	9.81 ( 30) -.45 / -5 2.33 / 24	9.36 ( 30) .45 / 5 2.33 / 25	9.22 ( 30) -.27 / -3 1.60 / 17	8.28 ( 27) -.96 / -12 3.09 / 37	10.02 ( 30) .19 / 2 2.40 / 24	9.64 ( 30) -1.20 / -12 2.31 / 24	11.56 ( 30) -1.10 / -1 2.31 / 20	7.99 ( 30) .21 / 3 2.70 / 34
OCT	5.49 ( 31) -.21 / -4 1.42 / 26	5.34 ( 31) -.55 / -10 2.54 / 47	4.79 ( 31) .55 / 11 2.54 / 53	4.85 ( 31) .11 / 2 1.61 / 33	5.49 ( 30) -.21 / -4 1.92 / 35	5.60 ( 31) .47 / 8 2.59 / 46	4.71 ( 31) .33 / 7 1.59 / 34	6.62 ( 16) -.05 / -1 3.23 / 49	5.27 ( 31) .00 / 0 1.20 / 23
NOV	3.27 ( 30) -.32 / -10 -.89 / 27	2.75 ( 30) .34 / 12 1.08 / 39	3.09 ( 30) -.34 / -11 1.08 / 35	3.39 ( 30) -.51 / -15 4.12 / 122	3.25 ( 30) -.41 / -13 .91 / 28	3.09 ( 30) .63 / 20 1.08 / 35	3.14 ( 30) -.44 / -14 .81 / 26	4.15 ( 27) -.91 / -22 2.05 / 49	2.95 ( 30) -.11 / -4 1.00 / 34
DEC	1.34 ( 31) -.25 / -19 .61 / 46	1.51 ( 31) -.00 / 0 .57 / 38	1.50 ( 31) .00 / 0 .57 / 38	1.33 ( 31) -.06 / -5 .49 / 37	1.30 ( 31) -.34 / -26 .69 / 53	1.30 ( 31) .30 / 23 .73 / 56	1.49 ( 31) -.51 / -34 1.02 / 68	1.89 ( 31) .19 / 10 .93 / 49	1.09 ( 31) -.13 / -12 .58 / 53
YEAR	9.42 (366) -.59 / -6 2.05 / 22	9.70 (363) -.30 / -3 2.83 / 29	9.48 (366) .30 / 3 2.85 / 30	8.64 (366) .41 / 5 2.67 / 31	8.80 (356) -.23 / -3 2.33 / 26	10.07 (366) .11 / 1 2.10 / 21	9.50 (366) -.57 / -6 2.78 / 29	11.02 (348) .32 / 3 3.33 / 30	8.83 (366) -.01 / 0 1.91 / 22



	GEH	GSS	HOP	KON	LUD	LSP	LIS	MAN	NUE
JAN	2.32 ( 31) .17 / 8 .95 / 41	2.00 ( 31) .32 / 16 .79 / 39	4.47 ( 31) -1.24 / -28 2.07 / 46	3.43 ( 31) -.54 / -16 1.83 / 53	1.93 ( 31) .10 / 5 .60 / 31	1.88 ( 31) .05 / 2 1.26 / 67	1.37 ( 31) .06 / 4 .72 / 52	2.50 ( 31) -.17 / -7 .95 / 38	2.66 ( 31) -.44 / 16 .91 / 34
FEB	4.76 ( 29) -.04 / -1 1.45 / 30	4.36 ( 29) .40 / 9 1.33 / 31	6.48 ( 29) -.82 / -13 2.16 / 33	5.88 ( 29) -.90 / -15 2.36 / 40	3.53 ( 29) .34 / 10 1.01 / 29	3.41 ( 29) .79 / 23 1.54 / 45	3.62 ( 29) -.30 / -8 1.24 / 34	4.72 ( 29) .04 / 1 1.45 / 31	4.75 ( 29) .37 / 8 1.12 / 24
MAR	7.03 ( 31) -1.08 / -15 2.53 / 36	6.46 ( 31) .57 / 9 2.01 / 31	8.70 ( 31) -.40 / -5 2.94 / 34	7.52 ( 31) -1.24 / -16 2.50 / 33	5.26 ( 31) .34 / 6 1.66 / 32	5.34 ( 31) 1.67 / 31 2.14 / 40	7.71 ( 31) -.89 / -12 2.26 / 29	5.95 ( 31) 1.08 / 18 2.53 / 42	6.91 ( 30) .87 / 13 2.01 / 29
APR	15.36 ( 29) -.01 / 0 2.31 / 15	14.95 ( 30) .64 / 4 2.29 / 15	15.80 ( 30) .94 / 6 3.50 / 22	16.17 ( 30) -.93 / -6 3.52 / 22	15.89 ( 30) -.63 / -4 2.86 / 18	14.97 ( 30) -.03 / 0 3.33 / 22	14.43 ( 30) -.23 / -2 3.37 / 23	15.58 ( 30) .02 / 0 2.27 / 15	16.19 ( 30) .40 / 2 1.42 / 9
MAY	18.75 ( 31) -.86 / -5 4.30 / 23	18.14 ( 31) .61 / 3 4.22 / 23	18.27 ( 31) 1.64 / 9 4.31 / 24	18.95 ( 31) -1.61 / -9 4.40 / 23	17.40 ( 31) .40 / 2 2.17 / 12	19.14 ( 31) -.27 / -1 2.71 / 14	20.34 ( 31) -.70 / -3 4.00 / 20	17.90 ( 31) .86 / 5 4.30 / 24	19.43 ( 31) .25 / 1 2.90 / 15
JUN	17.56 ( 30) -.86 / -5 3.81 / 22	16.71 ( 30) .86 / 5 3.87 / 23	17.87 ( 30) .24 / 1 4.42 / 25	19.78 ( 30) .96 / 5 4.88 / 25	13.83 ( 30) -.52 / -4 2.71 / 20	14.61 ( 29) .19 / 1 5.29 / 36	18.05 ( 30) -1.35 / -7 3.98 / 22	16.70 ( 30) .86 / 5 3.81 / 23	16.56 ( 30) .74 / 4 3.46 / 21
JUL	16.98 ( 28) -.29 / -2 3.29 / 19	17.34 ( 30) -.38 / -2 3.25 / 19	19.93 ( 31) .07 / 0 3.04 / 15	21.22 ( 31) -1.21 / -6 4.26 / 20	15.00 ( 31) .15 / 1 2.14 / 14	14.62 ( 31) 1.96 / 13 4.53 / 31	15.57 ( 31) -.76 / -5 3.84 / 25	17.06 ( 31) .29 / 2 3.19 / 19	18.44 ( 31) .89 / 5 2.64 / 14
AUG	17.07 ( 31) -1.03 / -6 3.03 / 18	16.50 ( 31) .57 / 3 2.29 / 14	15.93 ( 31) .84 / 5 3.05 / 19	16.46 ( 31) 1.14 / 7 4.72 / 29	15.59 ( 31) -.16 / -1 2.24 / 14	15.59 ( 31) .74 / 5 2.98 / 19	14.41 ( 31) -.69 / -5 3.30 / 23	16.04 ( 31) 1.03 / 6 3.03 / 19	14.43 ( 14) .27 / 2 1.70 / 12
SEP	9.70 ( 30) .05 / 0 2.33 / 24	9.71 ( 30) -.01 / 0 2.20 / 23	11.27 ( 30) -.54 / -5 2.84 / 25	11.47 ( 30) .10 / 1 2.31 / 20	8.20 ( 30) -.21 / -3 2.70 / 33	8.44 ( 30) 1.20 / 14 2.31 / 27	9.15 ( 30) -.49 / -5 2.30 / 25	9.75 ( 30) -.05 / 0 2.33 / 24	7.58 ( 19) .05 / 1 1.90 / 25
OCT	4.87 ( 31) .64 / 13 2.24 / 46	4.97 ( 31) -.10 / -2 1.53 / 31	6.61 ( 29) -.79 / -12 2.74 / 42	6.31 ( 31) .18 / 3 2.76 / 44	5.28 ( 31) -.00 / 0 1.20 / 23	5.04 ( 31) -.33 / -6 1.59 / 32	4.88 ( 31) -.46 / -9 1.92 / 39	5.51 ( 31) -.64 / -12 2.24 / 41	6.07 ( 31) -.64 / -11 2.40 / 40
NOV	3.36 ( 30) .31 / 9 1.39 / 42	3.25 ( 30) .11 / 3 .91 / 28	4.78 ( 30) -.70 / -15 2.64 / 55	3.60 ( 30) .93 / 26 2.02 / 56	2.83 ( 30) .11 / 4 1.00 / 35	2.69 ( 30) .44 / 17 .81 / 30	2.84 ( 30) -.03 / -1 1.03 / 36	3.66 ( 30) -.31 / -8 1.39 / 38	3.72 ( 30) .09 / 2 1.15 / 31
DEC	1.63 ( 31) -.18 / -11 .87 / 53	1.47 ( 31) .16 / 11 .77 / 52	2.62 ( 31) -.72 / -28 1.84 / 70	2.08 ( 31) -.19 / -9 .93 / 45	.96 ( 31) .13 / 13 .58 / 60	.98 ( 31) .51 / 52 1.02 / 104	1.31 ( 31) .04 / 3 .58 / 44	1.45 ( 31) .18 / 12 .87 / 60	1.60 ( 31) -.00 / 0 .54 / 34
YEAR	9.89 (362) -.27 / -3 2.59 / 26	9.65 (365) .31 / 3 2.40 / 25	11.10 (364) -.12 / -1 3.06 / 28	11.08 (366) -.28 / -3 3.28 / 30	8.82 (366) .01 / 0 1.91 / 22	8.89 (365) .58 / 7 2.79 / 31	9.49 (366) -.48 / -5 2.69 / 28	9.74 (366) .27 / 3 2.59 / 27	9.73 (337) .32 / 3 2.05 / 21

	NOR	OSN	PAS	HAM	SWG	SAR	SITU	TRE	WSB
JAN	1.60 ( 31) .10 / 7 .74 / 46	1.93 ( 31) -.05 / -2 .83 / 43	3.27 ( 31) -0.04 / -1 1.04 / 32	1.59 ( 31) -.16 / -10 .65 / 41	1.43 ( 31) -.06 / -4 .72 / 50	2.13 ( 31) -.15 / -7 .93 / 44	3.20 ( 31) -.70 / -22 1.28 / 40	1.98 ( 31) .15 / 8 .93 / 47	3.09 ( 31) -.44 / -14 .91 / 29
FEB	3.96 ( 29) -.27 / -7 1.17 / 30	3.62 ( 29) -.21 / -6 1.02 / 28	5.49 ( 29) .18 / 3 1.86 / 34	3.28 ( 29) .04 / 1 .95 / 29	3.32 ( 29) .30 / 9 1.24 / 37	5.12 ( 29) -.31 / -6 1.27 / 25	5.61 ( 29) -.89 / -16 1.73 / 31	4.82 ( 29) .31 / 6 1.27 / 26	5.12 ( 29) -.37 / -7 1.12 / 22
MAR	7.31 ( 31) -.86 / -12 2.47 / 34	5.92 ( 31) -.58 / -10 1.40 / 24	7.47 ( 31) .83 / 11 3.20 / 43	6.29 ( 31) .53 / 8 2.46 / 39	6.82 ( 31) .89 / 13 2.26 / 33	6.02 ( 31) .37 / 6 1.54 / 26	7.67 ( 31) -1.72 / -22 2.82 / 37	6.40 ( 31) -.37 / -6 1.54 / 24	7.66 ( 31) -.81 / -11 1.98 / 26
APR	15.41 ( 30) -2.15 / -14 4.37 / 28	14.63 ( 30) .34 / 2 3.17 / 22	17.23 ( 30) -2.48 / -3 2.90 / 17	14.06 ( 30) .14 / 1 3.38 / 24	14.20 ( 30) .23 / 2 3.37 / 24	16.30 ( 30) .22 / 1 2.65 / 16	15.78 ( 28) .44 / 3 2.25 / 14	16.51 ( 30) -.22 / -1 2.65 / 16	16.58 ( 30) -.40 / -2 1.42 / 9
MAY	20.07 ( 31) -1.52 / -8 5.09 / 25	19.59 ( 31) -.45 / -2 2.84 / 14	20.96 ( 31) -1.06 / -5 4.57 / 22	19.52 ( 31) .13 / 1 3.07 / 16	19.65 ( 31) .70 / 4 4.00 / 20	16.87 ( 31) .85 / 5 2.47 / 15	18.13 ( 31) -.24 / -1 3.21 / 18	17.72 ( 31) -.85 / -5 2.47 / 14	19.69 ( 31) -.25 / -1 2.90 / 15
JUN	16.47 ( 30) -3.66 / -22 7.27 / 44	14.34 ( 30) .32 / 2 4.81 / 34	19.38 ( 30) -1.27 / -7 5.37 / 28	14.73 ( 30) 1.97 / 13 5.16 / 35	16.70 ( 30) 1.35 / 8 3.98 / 24	18.86 ( 30) -.62 / -3 3.71 / 20	18.30 ( 30) -1.60 / -9 4.31 / 24	18.24 ( 30) .62 / 3 3.71 / 20	17.30 ( 30) -.74 / -4 3.46 / 20
JUL	15.80 ( 31) -1.65 / -10 5.34 / 34	14.82 ( 31) -.19 / -1 3.03 / 20	19.53 ( 31) .47 / 2 3.84 / 20	14.57 ( 31) .24 / 2 2.43 / 17	14.81 ( 31) .76 / 5 3.84 / 26	17.35 ( 31) .46 / 3 2.63 / 15	18.56 ( 31) -1.50 / -8 3.80 / 20	17.80 ( 31) -.46 / -3 2.63 / 15	19.33 ( 31) -.89 / -5 2.64 / 14
AUG	15.79 ( 31) -1.71 / -11 3.97 / 25	15.47 ( 31) .13 / 1 2.41 / 16	16.83 ( 31) -.06 / 0 2.22 / 13	14.53 ( 31) -.82 / -6 2.98 / 20	13.72 ( 31) .69 / 5 3.30 / 24	17.38 ( 31) .26 / 1 1.93 / 11	16.34 ( 31) -.30 / -2 3.25 / 20	17.64 ( 31) -.26 / -1 1.93 / 11	16.56 ( 31) .19 / 1 2.34 / 14
SEP	9.81 ( 30) -.59 / -6 2.72 / 28	8.94 ( 30) -.50 / -6 2.00 / 22	10.13 ( 30) .59 / 6 2.55 / 25	9.05 ( 30) -.39 / -4 2.03 / 22	8.66 ( 30) .49 / 6 2.30 / 27	10.01 ( 30) -.21 / -2 2.17 / 22	10.38 ( 30) -.63 / -6 2.60 / 25	9.80 ( 30) .21 / 2 2.17 / 22	10.51 ( 30) -.35 / -3 2.61 / 25
OCT	5.01 ( 31) -.16 / -3 1.64 / 33	4.96 ( 31) .08 / 2 1.08 / 22	6.82 ( 31) -.92 / -14 3.04 / 45	4.97 ( 31) -.55 / -11 1.89 / 38	4.42 ( 31) .46 / 10 1.92 / 43	5.71 ( 31) .22 / 4 2.09 / 37	6.07 ( 31) -.56 / -9 2.21 / 36	5.93 ( 31) -.22 / -4 2.09 / 35	5.43 ( 31) .64 / 12 2.40 / 44
NOV	2.87 ( 30) .52 / 18 4.19 / 146	2.87 ( 30) -.18 / -6 1.08 / 38	3.97 ( 29) .04 / 1 1.63 / 41	2.67 ( 30) .13 / 5 .83 / 31	2.86 ( 29) .03 / 1 1.04 / 37	3.85 ( 30) -.18 / -5 1.53 / 40	4.10 ( 30) -.44 / -11 1.33 / 32	3.67 ( 30) .18 / 5 1.53 / 42	3.81 ( 30) -.09 / -2 1.15 / 30
DEC	1.38 ( 31) -.05 / -4 .57 / 41	1.27 ( 31) -.29 / -23 .96 / 76	1.56 ( 31) .34 / 22 .95 / 61	1.26 ( 31) .09 / 7 .71 / 56	1.35 ( 31) -.04 / -3 .58 / 43	1.39 ( 30) -.16 / -12 .79 / 57	1.87 ( 31) -.42 / -22 .89 / 48	1.24 ( 31) .17 / 14 .78 / 62	1.59 ( 31) .00 / 0 .54 / 34
YEAR	9.64 (366) -1.00 / -10 3.85 / 40	9.05 (366) -.13 / -1 2.36 / 26	11.08 (365) -.11 / -1 3.06 / 28	8.89 (366) .11 / 1 2.55 / 29	9.03 (365) .48 / 5 2.69 / 30	10.11 (365) .07 / 1 2.13 / 21	10.48 (364) -.72 / -7 2.68 / 26	10.15 (366) -.07 / -1 2.13 / 21	10.57 (366) -.29 / -3 2.14 / 20

	WEI	WUE	ALL
JAN	3.23 ( 31) 1.24 / 38 2.07 / 64	2.60 ( 31) .05 / 2 .93 / 36	2.33 ( 899) -.01 / 0 1.17 / 50
FEB	5.67 ( 29) .82 / 14 2.16 / 38	5.25 ( 29) -.50 / -10 1.45 / 28	4.49 ( 841) -.08 / -2 1.50 / 33
MAR	8.30 ( 31) .40 / 5 2.94 / 35	7.64 ( 31) -.82 / -11 2.17 / 28	6.77 ( 898) -.15 / -2 2.22 / 33
APR	16.75 ( 30) -.94 / -6 3.50 / 21	15.38 ( 30) .80 / 5 3.17 / 21	15.55 ( 867) -.01 / 0 2.96 / 19
MAY	19.90 ( 31) -1.64 / -8 4.31 / 22	19.22 ( 31) .22 / 1 2.75 / 14	18.84 ( 899) -.06 / 0 3.51 / 19
JUN	18.11 ( 30) -.24 / -1 4.42 / 24	17.10 ( 30) -.55 / -3 3.29 / 19	16.56 ( 869) -.14 / -1 4.40 / 27
JUL	20.00 ( 31) -.07 / 0 3.04 / 15	18.84 ( 31) -.40 / -2 3.05 / 16	17.02 ( 886) -.06 / 0 3.37 / 20
AUG	16.77 ( 31) -.84 / -5 3.05 / 18	16.04 ( 31) .26 / 2 3.73 / 23	15.98 ( 882) -.05 / 0 3.01 / 19
SEP	10.72 ( 30) .54 / 5 2.84 / 26	10.52 ( 30) -.56 / -5 2.21 / 21	9.64 ( 856) -.15 / -2 2.38 / 25
OCT	5.90 ( 31) .65 / 11 2.68 / 45	5.46 ( 31) .61 / 11 3.09 / 57	5.44 ( 881) -.05 / -1 2.17 / 40
NOV	4.24 ( 28) .68 / 16 2.69 / 64	3.60 ( 30) .11 / 3 .79 / 22	3.38 ( 863) -.01 / 0 1.72 / 51
DEC	1.90 ( 31) .72 / 38 1.84 / 97	1.61 ( 31) -.01 / 0 .55 / 34	1.49 ( 898) -.02 / -1 .87 / 58
YEAR	11.01 (364) .10 / 1 3.06 / 28	10.29 (366) -.06 / -1 2.50 / 24	9.80 (10539) -.07 / -1 2.64 / 27

## SMHI mesoscale

	MBE		RMSE		U95	
STATION	MIN	MAX	MIN	MAX	MIN	MAX
MONTH	JOE	HAR	JOE	VIM	JOE	VIM
REL.	7	7	5	7	5	7
ABS.	0	-18	5	27	10	54
	-0	-3.3	1.1	4.0	2.2	8.0

	NOR	GRU	ORE	KAT	VAE	JOE	ORB	HER	VRK
JAN	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
FEB	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
MAR	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
APR	12.81 ( 30) .27 / 2 .84 / 7	13.74 ( 30) -5.66 / -5 2.03 / 15	13.73 ( 30) -4.49 / -4 1.72 / 13	13.24 ( 30) -1.18 / -1 2.17 / 16	13.08 ( 30) -0.02 / 0 2.00 / 15	13.06 ( 30) -0.23 / -2 1.38 / 11	14.09 ( 30) -0.96 / -7 2.02 / 14	13.12 ( 30) -0.45 / -3 .95 / 7	12.67 ( 30) .45 / 4 .95 / 8
MAY	20.54 ( 31) -1.16 / -1 1.68 / 8	20.00 ( 31) .82 / 4 2.37 / 12	19.71 ( 31) .33 / 2 2.51 / 13	20.04 ( 31) .62 / 3 2.94 / 15	20.82 ( 31) -0.16 / -1 2.36 / 11	20.66 ( 31) .16 / 1 1.08 / 5	21.81 ( 31) -1.32 / -6 2.51 / 11	20.49 ( 31) .15 / 1 1.38 / 7	20.69 ( 30) -0.15 / -1 1.40 / 7
JUN	19.70 ( 30) -0.33 / -2 2.01 / 10	19.93 ( 30) .37 / 2 2.56 / 13	20.71 ( 30) -0.73 / -4 3.59 / 17	20.05 ( 29) .21 / 1 3.03 / 15	20.31 ( 30) -0.08 / 0 2.56 / 13	20.44 ( 29) -0.39 / -2 2.13 / 10	21.96 ( 30) -2.50 / -11 3.41 / 16	19.10 ( 27) .63 / 3 2.01 / 11	20.03 ( 30) -0.47 / -2 1.98 / 10
JUL	16.41 ( 31) -0.15 / -1 2.16 / 13	16.35 ( 31) .43 / 3 2.33 / 14	16.56 ( 31) .12 / 1 2.92 / 18	16.48 ( 30) -0.09 / -1 2.38 / 14	16.01 ( 25) -0.39 / -2 2.21 / 14	16.25 ( 30) -0.02 / 0 2.15 / 13	16.91 ( 13) -1.72 / -10 2.52 / 15	16.64 ( 17) 1.59 / 10 2.77 / 17	16.08 ( 31) -0.34 / -2 2.35 / 15
AUG	14.53 ( 31) .25 / 2 1.32 / 9	13.73 ( 31) .72 / 5 1.78 / 13	13.85 ( 31) .36 / 3 2.48 / 18	14.32 ( 30) .54 / 4 2.45 / 17	14.45 ( 31) .46 / 3 2.20 / 15	15.50 ( 23) -0.11 / -1 1.66 / 11	15.31 ( 31) -1.19 / -8 1.97 / 13	14.56 ( 22) .09 / 1 1.89 / 13	14.19 ( 31) .39 / 3 2.24 / 16
SEP	10.14 ( 30) -0.08 / -1 .71 / 7	9.85 ( 30) .04 / 0 1.65 / 17	9.41 ( 30) .55 / 6 1.37 / 15	9.95 ( 30) -0.28 / 3 1.21 / 12	9.89 ( 30) -0.31 / 3 1.24 / 13	10.39 ( 20) .11 / 1 1.01 / 10	9.98 ( 30) -0.20 / 2 1.21 / 12	10.43 ( 25) -0.61 / -6 1.22 / 12	9.66 ( 30) -0.60 / 6 1.22 / 13
OCT	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
NOV	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
DEC	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
YEAR	15.71 (183) -0.03 / 0 1.56 / 10	15.62 (183) -0.29 / 2 2.15 / 14	15.68 (183) .03 / 0 2.54 / 16	15.68 (180) .23 / 1 2.44 / 16	15.77 (177) .03 / 0 2.14 / 14	16.42 (163) -0.09 / -1 1.66 / 10	16.67 (165) -1.20 / -7 2.35 / 14	15.85 (152) .14 / 1 1.70 / 11	15.55 (182) .08 / 1 1.78 / 11

	SOD	OST	THO	HAR	VIM	STO	ALL
JAN	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
FEB	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
MAR	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
APR	13.08 ( 30) -.25 / -2 1.07 / 8	12.83 ( 30) .25 / 2 1.07 / 8	12.89 ( 30) -.06 / 0 .95 / 7	14.16 ( 30) -1.27 / -9 2.30 / 16	13.45 ( 30) -.33 / -2 2.61 / 19	13.26 ( 30) -.49 / 4 1.75 / 13	13.28 ( 450) -.23 / -2 1.69 / 13
MAY	20.38 ( 31) .50 / 2 1.42 / 7	21.40 ( 29) -.47 / -2 1.41 / 7	20.64 ( 31) .44 / 2 1.50 / 7	21.39 ( 31) -.75 / -3 1.73 / 8	20.37 ( 31) .12 / 1 2.71 / 13	20.15 ( 31) -.14 / -1 1.59 / 8	20.60 ( 462) .00 / 0 1.99 / 10
JUN	19.37 ( 30) .50 / 3 1.78 / 9	19.87 ( 30) -.50 / -3 1.78 / 9	18.83 ( 30) 1.03 / 5 1.89 / 10	20.49 ( 30) -1.66 / -8 2.55 / 12	20.29 ( 30) -.83 / -4 4.36 / 21	16.56 ( 16) 1.79 / 11 2.72 / 16	19.95 ( 431) -.27 / -1 2.66 / 13
JUL	15.46 ( 19) .59 / 4 1.77 / 11	19.43 ( 6) -1.06 / -5 1.72 / 9	15.69 ( 31) 2.17 / 14 3.35 / 21	18.63 ( 18) -3.31 / -18 3.96 / 21	14.79 ( 31) .41 / 3 4.00 / 27	17.47 ( 27) -1.18 / -7 2.89 / 17	16.37 ( 371) -.04 / 0 2.76 / 17
AUG	14.79 ( 31) .10 / 1 1.13 / 8	14.88 ( 31) -.10 / -1 1.13 / 8	14.05 ( 31) .83 / 6 1.40 / 10	14.14 ( 17) -2.44 / -17 2.95 / 21	14.20 ( 31) -.08 / -1 2.20 / 16	13.20 ( 31) .52 / 4 2.55 / 19	14.36 ( 433) .10 / 1 2.00 / 14
SEP	10.07 ( 30) .17 / 2 .80 / 8	10.24 ( 30) -.17 / -2 .80 / 8	9.82 ( 30) .42 / 4 1.22 / 12	11.38 ( 24) -1.11 / -10 1.38 / 12	10.46 ( 27) .04 / 0 1.72 / 16	10.27 ( 30) -.43 / -4 1.51 / 15	10.10 ( 426) .04 / 0 1.25 / 12
OCT	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
NOV	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
DEC	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
YEAR	15.55 (171) .25 / 2 1.35 / 9	15.94 (156) -.23 / -1 1.30 / 8	15.34 (183) .81 / 5 1.90 / 12	17.01 (150) -1.59 / -9 2.48 / 15	15.69 (180) -.11 / -1 3.10 / 20	15.01 (165) .06 / 0 2.18 / 15	15.81 ( 2573) -.07 / 0 2.10 / 13

ANETZ

	MSE		RMSE		U95	
STATION	MIN	MAX	MIN	MAX	MIN	MAX
MONTH	WAE	FAH	REH	FAH	REH	FAH
REL.	11	12	7	12	7	12
ABS.	0	92	4	115	9	247
	.0	2.1	.9	2.6	1.8	5.7

	DOL	PAY	WYN	SAE	AIG	MLS	FAH	MVE	CHA
JAN	3.90 ( 31) -0.92 / -24 2.18 / 56	3.22 ( 31) -0.69 / -21 1.10 / 34	0.00 ( 0) 0.00 / 0 0.00 / 0	4.81 ( 31) -1.58 / -33 2.81 / 58	0.00 ( 0) 0.00 / 0 0.00 / 0	4.32 ( 31) -1.30 / -30 2.19 / 51	2.94 ( 31) 0.97 / 33 1.76 / 60	4.61 ( 31) -0.50 / -10 1.28 / 27	3.90 ( 31) -1.37 / -35 2.61 / 67
FEB	7.46 ( 29) -0.68 / -9 1.97 / 26	6.51 ( 29) -0.42 / -6 1.45 / 22	5.78 ( 29) 0.62 / 11 1.46 / 25	7.36 ( 29) -1.66 / -23 3.55 / 48	0.00 ( 0) 0.00 / 0 0.00 / 0	7.60 ( 29) -1.24 / -16 2.48 / 33	5.48 ( 29) 1.52 / 28 2.82 / 51	8.80 ( 29) -1.20 / -14 2.25 / 26	7.00 ( 29) -0.91 / -13 1.69 / 24
MAR	9.13 ( 31) -0.10 / -1 2.59 / 28	8.48 ( 31) -0.89 / -11 2.25 / 26	7.24 ( 31) 0.14 / 2 1.85 / 26	8.32 ( 31) -0.60 / -7 2.47 / 30	0.00 ( 0) 0.00 / 0 0.00 / 0	9.12 ( 31) -0.91 / -10 3.04 / 33	6.87 ( 31) 2.21 / 32 3.33 / 48	10.76 ( 31) -0.16 / -2 2.52 / 23	9.08 ( 31) -1.49 / -16 2.69 / 30
APR	14.90 ( 30) 0.24 / 2 3.30 / 22	14.58 ( 30) 0.61 / 4 2.36 / 16	14.00 ( 30) 0.66 / 5 1.96 / 14	19.58 ( 30) -4.73 / -24 6.52 / 33	0.00 ( 0) 0.00 / 0 0.00 / 0	16.60 ( 30) -1.50 / -9 4.12 / 25	14.14 ( 30) 2.20 / 16 5.14 / 36	17.63 ( 30) -0.50 / -3 2.52 / 14	16.35 ( 30) -1.16 / -7 4.40 / 27
MAY	13.86 ( 31) 3.21 / 23 5.11 / 37	17.33 ( 31) 0.32 / 2 2.95 / 17	17.67 ( 31) -1.42 / -8 3.11 / 18	18.74 ( 31) -1.28 / -7 4.81 / 26	16.69 ( 31) -2.00 / -12 4.66 / 28	14.69 ( 31) 2.00 / 14 4.66 / 32	14.63 ( 31) -0.72 / -5 3.95 / 27	19.18 ( 31) -0.45 / -2 3.61 / 19	13.90 ( 31) 3.74 / 27 5.83 / 42
JUN	17.21 ( 30) 4.07 / 24 6.46 / 38	21.27 ( 30) -0.63 / -3 2.70 / 13	20.03 ( 30) -1.41 / -7 2.42 / 12	17.39 ( 30) 1.18 / 7 5.38 / 31	18.71 ( 30) -2.73 / -15 5.33 / 28	15.98 ( 30) 2.73 / 17 5.33 / 33	18.67 ( 30) -1.57 / -8 5.16 / 28	0.00 ( 0) 0.00 / 0 0.00 / 0	17.10 ( 30) 3.55 / 21 6.37 / 37
JUL	19.68 ( 31) 1.85 / 9 3.80 / 19	21.25 ( 31) -0.55 / -3 2.49 / 12	20.23 ( 31) -0.75 / -4 2.35 / 12	20.49 ( 31) -0.27 / -1 3.53 / 17	20.81 ( 31) -0.30 / -1 4.75 / 23	20.51 ( 31) 0.30 / 1 4.75 / 23	19.27 ( 31) -0.76 / -4 3.49 / 18	24.34 ( 31) -0.19 / -1 2.99 / 12	18.51 ( 31) 2.20 / 12 4.28 / 23
AUG	16.77 ( 31) 1.24 / 7 3.46 / 21	17.99 ( 31) -0.41 / -2 1.62 / 9	16.67 ( 31) -0.58 / -3 1.70 / 10	16.39 ( 31) -0.62 / -4 2.70 / 16	0.00 ( 0) 0.00 / 0 0.00 / 0	17.83 ( 31) -0.05 / 0 3.12 / 17	17.21 ( 31) -0.41 / -2 3.06 / 18	18.46 ( 31) 0.39 / 2 3.16 / 17	16.80 ( 31) 0.79 / 5 3.46 / 21
SEP	12.68 ( 30) 0.32 / 2 3.09 / 24	12.73 ( 30) -0.22 / -2 1.65 / 13	11.83 ( 30) -0.38 / -3 1.42 / 12	12.99 ( 30) -2.00 / -15 5.58 / 43	0.00 ( 0) 0.00 / 0 0.00 / 0	12.27 ( 30) 0.44 / 4 3.17 / 26	11.05 ( 30) 1.78 / 16 3.25 / 29	14.90 ( 30) -0.43 / -3 1.89 / 13	12.83 ( 30) -0.32 / -2 2.68 / 21
OCT	7.78 ( 31) -1.02 / -13 2.35 / 30	5.69 ( 31) 0.57 / 10 1.76 / 31	5.64 ( 31) 1.06 / 19 2.05 / 36	9.57 ( 31) -3.37 / -35 5.55 / 58	0.00 ( 0) 0.00 / 0 0.00 / 0	8.50 ( 31) -1.42 / -17 3.17 / 37	6.89 ( 31) 1.70 / 25 3.61 / 52	8.63 ( 31) -0.13 / -2 2.63 / 30	8.59 ( 31) -2.33 / -27 4.02 / 47
NOV	6.44 ( 30) -2.58 / -40 3.89 / 60	4.07 ( 30) -0.18 / -5 0.98 / 24	0.00 ( 0) 0.00 / 0 0.00 / 0	7.25 ( 30) -3.49 / -48 4.62 / 64	0.00 ( 0) 0.00 / 0 0.00 / 0	6.56 ( 30) -2.00 / -30 3.18 / 48	4.42 ( 30) 2.36 / 53 2.94 / 66	6.88 ( 30) -0.32 / -5 1.52 / 22	6.78 ( 30) -2.89 / -43 4.06 / 60
DEC	4.33 ( 31) -1.33 / -31 2.50 / 58	2.95 ( 31) -0.28 / -9 0.49 / 17	0.00 ( 0) 0.00 / 0 0.00 / 0	4.01 ( 31) -1.98 / -50 2.95 / 74	0.00 ( 0) 0.00 / 0 0.00 / 0	4.29 ( 31) -1.17 / -27 2.28 / 53	2.28 ( 31) 2.09 / 92 2.63 / 115	4.25 ( 31) 0.04 / 1 1.59 / 37	4.38 ( 31) -1.70 / -39 2.84 / 65
YEAR	11.18 (366) 0.36 / 3 3.61 / 32	11.35 (366) -0.23 / -2 1.95 / 17	13.26 (274) -0.23 / -2 2.10 / 16	12.25 (366) -1.69 / -14 4.39 / 36	18.74 ( 92) -1.66 / -9 4.92 / 26	11.53 (366) -0.34 / -3 3.59 / 31	10.33 (366) 0.94 / 9 3.55 / 34	12.62 (336) -0.31 / -2 2.47 / 20	11.27 (366) -0.15 / -1 3.97 / 35



	PIL	LUG	NAP	SIO	MAG	NEU	STA	INT	STG
JAN	4.64 ( 31) -.59 / -13 .95 / 20	0.00 ( 0) 0.00 / 0 0.00 / 0	4.06 ( 31) .59 / 14 .95 / 23	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	2.53 ( 31) 1.08 / 43 2.18 / 86	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
FEB	7.21 ( 29) -.90 / -12 1.84 / 25	0.00 ( 0) 0.00 / 0 0.00 / 0	6.38 ( 29) .83 / 13 1.21 / 19	0.00 ( 0) 0.00 / 0 0.00 / 0	7.97 ( 29) .51 / 6 .90 / 11	6.09 ( 29) .65 / 11 1.15 / 19	7.43 ( 29) .54 / 7 1.58 / 21	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
MAR	8.90 ( 31) -.65 / -7 2.01 / 23	11.17 ( 31) .29 / 3 .99 / 9	7.64 ( 31) 1.26 / 17 2.51 / 33	0.00 ( 0) 0.00 / 0 0.00 / 0	12.00 ( 31) .79 / 7 1.11 / 9	7.59 ( 31) 1.33 / 18 2.22 / 29	11.47 ( 31) -.29 / -3 .99 / 9	0.00 ( 0) 0.00 / 0 0.00 / 0	7.71 ( 31) .60 / 8 2.47 / 32
APR	16.05 ( 30) -3.44 / -21 6.50 / 40	11.51 ( 30) -.17 / -1 .82 / 7	13.03 ( 30) 3.02 / 23 5.05 / 39	17.13 ( 30) .50 / 3 2.52 / 15	13.08 ( 30) 1.62 / 12 2.30 / 18	15.19 ( 30) -1.17 / -1 3.87 / 25	11.34 ( 30) .17 / 2 .82 / 7	0.00 ( 0) 0.00 / 0 0.00 / 0	14.86 ( 30) 4.73 / 32 6.52 / 44
MAY	15.59 ( 31) .33 / 2 2.67 / 17	0.00 ( 0) 0.00 / 0 0.00 / 0	13.74 ( 31) 1.84 / 13 4.46 / 32	18.73 ( 31) .45 / 2 3.61 / 19	12.60 ( 31) 1.63 / 13 2.28 / 18	17.65 ( 31) -3.80 / -22 5.29 / 30	11.90 ( 31) .70 / 6 2.46 / 21	16.43 ( 31) -2.68 / -16 4.40 / 27	17.46 ( 31) 1.28 / 7 4.81 / 28
JUN	14.35 ( 30) 2.26 / 16 4.93 / 34	0.00 ( 0) 0.00 / 0 0.00 / 0	15.23 ( 30) -.88 / -6 5.19 / 34	20.53 ( 30) -1.83 / -9 4.03 / 20	17.55 ( 30) 2.71 / 15 3.33 / 19	20.64 ( 30) -2.28 / -11 4.60 / 22	16.51 ( 30) 1.05 / 6 3.56 / 22	18.62 ( 30) -3.38 / -18 5.30 / 28	18.57 ( 30) -1.18 / -6 5.38 / 29
JUL	16.93 ( 31) 1.71 / 10 4.20 / 25	0.00 ( 0) 0.00 / 0 0.00 / 0	18.80 ( 31) -1.87 / -10 4.52 / 24	24.16 ( 31) .19 / 1 2.99 / 12	19.33 ( 31) 1.70 / 9 2.21 / 11	20.70 ( 31) -1.14 / -6 2.78 / 13	18.73 ( 31) .60 / 3 2.82 / 15	20.24 ( 31) -1.44 / -7 2.96 / 15	20.22 ( 31) .27 / 1 3.53 / 17
AUG	15.09 ( 31) -.12 / -1 2.65 / 18	17.95 ( 31) .32 / 2 1.49 / 8	15.48 ( 31) -.39 / -3 2.66 / 17	18.85 ( 31) -.39 / -2 3.16 / 17	17.44 ( 31) 1.10 / 6 1.50 / 9	17.59 ( 31) -.81 / -5 2.10 / 12	18.27 ( 31) -.32 / -2 1.49 / 8	0.00 ( 0) 0.00 / 0 0.00 / 0	15.77 ( 31) .62 / 4 2.70 / 17
SEP	12.28 ( 30) -1.33 / -11 5.10 / 41	13.97 ( 30) -.13 / -1 1.31 / 9	11.08 ( 30) 1.20 / 11 4.65 / 42	14.47 ( 30) .43 / 3 1.89 / 13	13.35 ( 30) .75 / 6 1.02 / 8	12.51 ( 30) -1.19 / -2 1.85 / 15	13.84 ( 30) .13 / 1 1.31 / 9	0.00 ( 0) 0.00 / 0 0.00 / 0	10.99 ( 30) 2.00 / 18 5.58 / 51
OCT	9.24 ( 31) -3.56 / -38 5.43 / 59	6.85 ( 31) .01 / 0 .87 / 13	7.96 ( 31) 1.28 / 16 3.01 / 38	0.00 ( 0) 0.00 / 0 0.00 / 0	6.50 ( 31) .56 / 9 .89 / 14	6.27 ( 31) 1.59 / 25 2.88 / 46	6.86 ( 31) -.01 / 0 .87 / 13	0.00 ( 0) 0.00 / 0 0.00 / 0	6.20 ( 31) 3.37 / 54 5.55 / 90
NOV	6.46 ( 30) -.86 / -13 2.04 / 32	0.00 ( 0) 0.00 / 0 0.00 / 0	5.59 ( 30) .86 / 15 2.04 / 37	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.89 ( 30) 1.84 / 47 3.16 / 81	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
DEC	3.76 ( 31) -.16 / -4 -.69 / 18	0.00 ( 0) 0.00 / 0 0.00 / 0	3.60 ( 31) .16 / 5 .69 / 19	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	2.68 ( 31) .75 / 28 2.01 / 75	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
YEAR	10.88 (366) -.60 / -6 3.72 / 34	12.29 (153) .07 / 1 1.13 / 9	10.23 (366) .65 / 6 3.46 / 34	19.00 (183) -.11 / -1 3.12 / 16	13.34 (274) 1.27 / 9 1.90 / 14	11.12 (366) -.10 / -1 3.07 / 28	12.96 (274) .28 / 2 1.99 / 15	18.43 ( 92) -2.49 / -14 4.32 / 23	13.96 (245) 1.46 / 10 4.76 / 34

	GVE	KLO	GUE	PUY	GSB	VIS	CDF	RUE	BUS
JAN	2.99 / (31) -.02 / -1 .58 / 20	2.97 / (31) -1.14 / -5 .34 / 11	0.00 / (0) 0.00 / 0 0.00 / 0	3.02 / (31) 1.30 / 43 2.19 / 73	0.00 / (0) 0.00 / 0 0.00 / 0	0.00 / (0) 0.00 / 0 0.00 / 0	3.61 / (31) -1.08 / -30 2.18 / 60	3.48 / (31) -7.75 / -22 1.75 / 50	2.72 / (31) .75 / 28 1.75 / 64
FEB	6.64 / (29) .15 / 2 1.01 / 15	6.07 / (29) -.07 / -1 .51 / 8	10.02 / (29) -2.81 / -28 3.94 / 39	6.36 / (29) 1.24 / 19 2.48 / 39	0.00 / (0) 0.00 / 0 0.00 / 0	0.00 / (0) 0.00 / 0 0.00 / 0	6.74 / (29) -.65 / -10 1.15 / 17	6.40 / (29) -.40 / -6 1.14 / 18	6.00 / (29) .40 / 7 1.14 / 19
MAR	9.72 / (31) -.68 / -7 1.55 / 16	7.84 / (31) -1.12 / -1 .67 / 9	14.25 / (31) -5.35 / -38 6.00 / 42	8.21 / (31) .91 / 11 3.04 / 37	13.48 / (31) -2.72 / -20 3.83 / 28	10.60 / (31) .16 / 2 2.52 / 24	8.92 / (31) -1.33 / -15 2.22 / 25	7.38 / (31) .20 / 3 1.83 / 25	7.58 / (31) -2.20 / -3 1.83 / 24
APR	14.85 / (30) .29 / 2 1.80 / 12	15.02 / (30) -1.16 / -1 .96 / 6	21.28 / (30) -5.23 / -25 7.94 / 37	15.10 / (30) 1.50 / 10 4.12 / 27	18.14 / (30) -1.01 / -6 4.69 / 26	18.69 / (30) -1.07 / -6 2.55 / 14	15.02 / (30) .17 / 1 3.87 / 26	14.65 / (30) -.94 / -6 1.83 / 13	13.71 / (30) .94 / 7 1.83 / 13
MAY	16.48 / (31) .59 / 4 1.69 / 10	18.55 / (31) -1.45 / -2 1.29 / 7	18.83 / (31) -3.24 / -17 7.95 / 42	17.23 / (31) -2.54 / -15 5.41 / 31	18.32 / (31) .41 / 2 5.40 / 29	19.99 / (31) -.81 / -4 3.42 / 17	13.85 / (31) 3.80 / 27 5.29 / 38	16.25 / (31) .72 / 4 2.06 / 13	16.97 / (31) -.72 / -4 2.06 / 12
JUN	21.36 / (30) -.08 / 0 2.23 / 10	20.22 / (30) -.06 / 0 1.09 / 5	20.37 / (30) -6.02 / -30 8.39 / 41	20.77 / (30) -4.79 / -23 7.09 / 34	18.26 / (30) 2.27 / 12 6.13 / 34	20.62 / (30) -.09 / 0 3.03 / 15	18.37 / (30) 2.28 / 12 4.60 / 25	18.62 / (30) .01 / 0 2.32 / 12	18.63 / (30) -.01 / 0 2.32 / 12
JUL	21.15 / (31) .38 / 2 1.53 / 7	20.61 / (31) .06 / 0 .92 / 4	21.61 / (31) -4.68 / -22 8.82 / 41	21.10 / (31) -.60 / -3 4.73 / 22	22.33 / (31) 1.83 / 8 6.21 / 28	24.53 / (31) -1.18 / -1 3.63 / 15	19.56 / (31) 1.14 / 6 2.78 / 14	19.47 / (31) -.78 / -4 2.41 / 12	18.70 / (31) .78 / 4 2.41 / 13
AUG	18.18 / (31) -.17 / -1 1.35 / 7	16.47 / (31) -1.10 / -1 .84 / 5	17.63 / (31) -2.54 / -14 5.05 / 29	17.78 / (31) .05 / 0 3.12 / 18	18.42 / (31) .43 / 2 3.96 / 21	19.20 / (31) -.74 / -4 2.49 / 13	16.78 / (31) .81 / 5 2.10 / 13	16.09 / (31) -1.46 / -9 1.84 / 11	14.63 / (31) 1.46 / 10 1.84 / 13
SEP	13.93 / (30) -.93 / -7 1.41 / 10	11.81 / (30) -.01 / 0 .59 / 5	15.03 / (30) -2.74 / -18 5.59 / 37	12.71 / (30) -.44 / -3 3.17 / 25	13.98 / (30) .49 / 4 4.58 / 33	15.65 / (30) -.75 / -5 2.75 / 18	12.33 / (30) .19 / 2 1.85 / 15	11.45 / (30) -.82 / -7 1.60 / 14	10.63 / (30) .82 / 8 1.60 / 15
OCT	7.24 / (31) -.48 / -7 1.40 / 19	6.20 / (31) -1.16 / -3 .40 / 6	8.06 / (31) 1.18 / 15 4.04 / 50	7.08 / (31) 1.42 / 20 3.17 / 45	0.00 / (0) 0.00 / 0 0.00 / 0	0.00 / (0) 0.00 / 0 0.00 / 0	7.86 / (31) -1.59 / -20 2.88 / 37	6.70 / (31) -1.36 / -20 2.16 / 32	5.35 / (31) 1.36 / 25 2.16 / 40
NOV	3.83 / (30) .03 / 1 .93 / 24	3.98 / (30) -1.14 / -4 .40 / 10	0.00 / (0) 0.00 / 0 0.00 / 0	4.56 / (30) 2.00 / 44 3.18 / 70	0.00 / (0) 0.00 / 0 0.00 / 0	0.00 / (0) 0.00 / 0 0.00 / 0	5.73 / (30) -1.84 / -32 3.16 / 55	4.56 / (30) -1.12 / -24 1.85 / 41	3.45 / (30) 1.12 / 32 1.85 / 54
DEC	3.22 / (31) -.22 / -7 .44 / 14	2.11 / (31) -.00 / 0 .24 / 11	0.00 / (0) 0.00 / 0 0.00 / 0	3.12 / (31) 1.17 / 38 2.28 / 73	0.00 / (0) 0.00 / 0 0.00 / 0	0.00 / (0) 0.00 / 0 0.00 / 0	3.43 / (31) -.75 / -22 2.01 / 58	2.49 / (31) -.05 / -2 .42 / 17	0.00 / (0) 0.00 / 0 0.00 / 0
YEAR	11.64 / (366) -.10 / -1 1.41 / 12	11.00 / (366) -1.11 / -1 .76 / 7	16.36 / (274) -3.48 / -21 6.66 / 41	11.43 / (366) .10 / 1 3.92 / 34	17.57 / (214) .24 / 1 5.05 / 29	18.47 / (214) -.50 / -3 2.95 / 16	11.02 / (366) .10 / 1 3.07 / 28	10.63 / (366) -.56 / -5 1.84 / 17	10.78 / (335) .61 / 6 1.92 / 18

	LJZ	SMA	WFJ	COV	BAS	CGI	FRE	BER	GUT
JAN	0.00 ( 0) 0.00 / 0 0.00 / 0	3.13 ( 31) -.29 / -9 .64 / 20	6.16 ( 31) .41 / 7 1.74 / 28	6.57 ( 31) -.41 / -6 1.74 / 27	3.20 ( 31) .28 / 9 1.06 / 33	2.97 ( 31) .92 / 31 2.18 / 73	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.23 ( 31) -.12 / -4 .72 / 22
FEB	6.32 ( 29) .90 / 14 1.84 / 29	5.91 ( 29) .09 / 1 .99 / 17	9.78 ( 29) 1.34 / 14 2.07 / 21	11.11 ( 29) -1.34 / -12 2.07 / 19	5.51 ( 29) .89 / 16 1.37 / 25	6.79 ( 29) .68 / 10 1.97 / 29	7.03 ( 29) -.52 / -7 2.03 / 29	6.95 ( 29) .05 / 1 1.86 / 27	5.70 ( 29) .35 / 6 1.88 / 33
MAR	8.25 ( 31) .65 / 8 2.01 / 24	6.95 ( 31) .78 / 11 1.48 / 21	12.88 ( 31) 2.90 / 23 3.58 / 28	15.78 ( 31) -2.90 / -18 3.58 / 23	6.75 ( 31) .62 / 9 2.14 / 32	9.04 ( 31) .10 / 1 2.59 / 29	9.28 ( 31) -.80 / -9 2.57 / 28	8.22 ( 31) .86 / 10 2.48 / 30	7.88 ( 31) -.17 / -2 1.37 / 17
APR	12.61 ( 30) 3.44 / 27 6.50 / 52	14.20 ( 30) .66 / 5 1.30 / 9	20.94 ( 30) 1.20 / 6 2.89 / 14	22.14 ( 30) -1.20 / -5 2.89 / 13	13.87 ( 30) .78 / 6 1.95 / 14	15.13 ( 30) -.24 / -2 3.30 / 22	0.00 ( 0) 0.00 / 0 0.00 / 0	14.47 ( 30) 1.87 / 13 4.96 / 34	15.84 ( 30) -.99 / -6 1.97 / 12
MAY	15.91 ( 31) -.33 / -2 2.67 / 17	17.23 ( 31) .87 / 5 1.39 / 8	20.27 ( 31) 1.02 / 5 4.62 / 23	21.30 ( 31) -1.02 / -5 4.62 / 22	16.08 ( 31) .17 / 1 2.07 / 13	17.07 ( 31) -3.21 / -19 5.11 / 30	0.00 ( 0) 0.00 / 0 0.00 / 0	17.15 ( 31) -3.24 / -19 5.29 / 31	18.23 ( 31) -.77 / -4 2.54 / 14
JUN	16.61 ( 30) -2.26 / -14 4.93 / 30	18.80 ( 30) 1.36 / 7 2.07 / 11	18.92 ( 30) 1.12 / 6 3.71 / 20	20.04 ( 30) -1.12 / -6 3.71 / 19	19.21 ( 30) -.59 / -3 2.77 / 14	21.28 ( 30) -4.07 / -19 6.46 / 30	0.00 ( 0) 0.00 / 0 0.00 / 0	20.15 ( 30) -3.05 / -15 5.30 / 26	20.67 ( 30) -2.10 / -10 4.38 / 21
JUL	18.65 ( 31) -1.71 / -9 4.20 / 23	19.84 ( 31) .83 / 4 1.47 / 7	21.30 ( 31) 2.12 / 10 4.16 / 20	23.41 ( 31) -2.12 / -9 4.16 / 18	19.34 ( 31) .13 / 1 1.88 / 10	21.53 ( 31) -1.85 / -9 3.80 / 18	0.00 ( 0) 0.00 / 0 0.00 / 0	21.39 ( 31) -2.88 / -13 5.38 / 25	20.61 ( 31) -.39 / -2 1.67 / 8
AUG	14.97 ( 31) .12 / 1 2.65 / 18	16.03 ( 31) .34 / 2 1.27 / 8	16.26 ( 31) 2.42 / 15 3.57 / 22	18.67 ( 31) -2.42 / -13 3.57 / 19	17.06 ( 31) -.98 / -6 2.14 / 13	18.01 ( 31) -1.24 / -7 3.46 / 19	0.00 ( 0) 0.00 / 0 0.00 / 0	17.42 ( 31) -.62 / -4 4.29 / 25	15.96 ( 31) -.19 / -1 2.37 / 15
SEP	10.96 ( 30) 1.33 / 12 5.10 / 47	11.36 ( 30) .44 / 4 1.22 / 11	14.71 ( 30) 2.25 / 15 3.57 / 24	16.96 ( 30) -2.25 / -13 3.57 / 21	11.30 ( 30) .15 / 1 1.47 / 13	13.00 ( 30) -.32 / -2 3.09 / 24	12.45 ( 30) -.28 / 2 2.77 / 22	11.99 ( 30) .84 / 7 3.14 / 26	11.03 ( 30) -.04 / 0 2.13 / 19
OCT	5.69 ( 31) 3.56 / 63 5.43 / 95	5.98 ( 31) .06 / 1 .82 / 14	10.03 ( 31) .99 / 10 2.29 / 23	11.02 ( 31) -.99 / -9 2.29 / 21	6.48 ( 31) .23 / 4 2.01 / 31	6.76 ( 31) 1.02 / 15 2.35 / 35	7.00 ( 31) -1.30 / -19 2.47 / 35	6.09 ( 31) 2.50 / 41 4.15 / 68	6.17 ( 31) .02 / 0 2.41 / 39
NOV	0.00 ( 0) 0.00 / 0 0.00 / 0	3.84 ( 30) .00 / 0 .80 / 21	7.77 ( 30) 1.13 / 15 1.60 / 21	8.90 ( 30) -1.13 / -13 1.60 / 18	4.26 ( 30) .30 / 7 1.07 / 25	3.86 ( 30) 2.58 / 67 3.89 / 101	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.76 ( 30) .08 / 2 1.47 / 39
DEC	0.00 ( 0) 0.00 / 0 0.00 / 0	1.93 ( 31) .18 / 9 .35 / 18	5.00 ( 31) 1.11 / 22 1.46 / 29	6.11 ( 31) -1.11 / -18 1.46 / 24	2.44 ( 31) .05 / 2 .42 / 17	3.00 ( 31) 1.33 / 44 2.50 / 83	4.02 ( 31) -1.06 / -26 2.03 / 50	0.00 ( 0) 0.00 / 0 0.00 / 0	2.02 ( 31) .07 / 4 .39 / 19
YEAR	12.25 (274) .63 / 5 4.23 / 35	10.44 (366) .44 / 4 1.23 / 12	13.67 (366) 1.50 / 11 3.12 / 23	15.17 (366) -1.50 / -10 3.12 / 21	10.47 (366) .17 / 2 1.80 / 17	11.54 (366) -.36 / -3 3.61 / 31	7.94 (152) -.69 / -9 2.39 / 30	13.79 (274) -.41 / -3 4.29 / 31	10.93 (366) -.35 / -3 2.16 / 20

	WAE	TAE	REH	LOC	CIM	ALL
JAN	3.20 ( 31) -.07 / -2 .64 / 20	3.11 ( 31) .02 / 1 .66 / 21	2.84 ( 31) .14 / 5 .34 / 12	0.00 ( 0) 0.00 / 0 0.00 / 0	4.79 ( 31) 1.78 / 37 2.75 / 57	3.74 ( 806) -.06 / -2 1.69 / 45
FEB	6.35 ( 29) -.44 / -7 1.22 / 19	6.05 ( 29) -.14 / -2 1.62 / 27	6.00 ( 29) .07 / 1 .51 / 8	8.48 ( 29) 1.34 / 16 1.58 / 19	9.82 ( 29) -1.34 / -14 1.58 / 16	7.09 ( 986) -.07 / -1 1.86 / 26
MAR	7.74 ( 31) -.79 / -10 1.86 / 24	8.35 ( 31) -1.40 / -17 2.24 / 27	7.73 ( 31) .12 / 1 .67 / 9	12.79 ( 31) 1.49 / 12 1.63 / 13	14.28 ( 31) -1.49 / -10 1.63 / 11	9.46 ( 1178) -.20 / -2 2.47 / 26
APR	14.40 ( 30) -.20 / -1 1.65 / 11	15.07 ( 30) -.86 / -6 2.15 / 14	14.86 ( 30) .16 / 1 .96 / 6	14.70 ( 30) -.21 / -1 3.04 / 21	14.49 ( 30) .21 / 1 3.04 / 21	15.50 ( 1140) .03 / 0 3.75 / 24
MAY	17.46 ( 31) -.23 / -1 2.67 / 15	17.44 ( 31) -.21 / -1 2.19 / 13	18.11 ( 31) .45 / 2 1.29 / 7	14.24 ( 31) -1.81 / -13 3.29 / 23	12.42 ( 31) 1.81 / 15 3.29 / 26	16.67 ( 1209) -.14 / -1 3.99 / 24
JUN	20.48 ( 30) -1.68 / -8 2.70 / 13	19.47 ( 30) -.67 / -3 2.29 / 12	20.16 ( 30) .06 / 0 1.09 / 5	20.26 ( 30) -1.52 / -8 3.61 / 18	18.74 ( 30) 1.52 / 8 3.61 / 19	18.96 ( 1140) -.47 / -2 4.52 / 24
JUL	19.91 ( 31) -.07 / 0 2.79 / 14	20.15 ( 31) -.31 / -2 2.21 / 11	20.67 ( 31) -.06 / 0 .92 / 4	21.03 ( 31) -.24 / -1 2.10 / 10	20.78 ( 31) .24 / 1 2.10 / 10	20.56 ( 1209) -.17 / -1 3.63 / 18
AUG	16.35 ( 31) -.32 / -2 1.57 / 10	15.80 ( 31) .22 / 1 1.53 / 10	16.37 ( 31) .10 / 1 .84 / 5	18.54 ( 31) .36 / 2 1.84 / 10	18.90 ( 31) -.36 / -2 1.84 / 10	17.11 ( 1178) -.12 / -1 2.65 / 15
SEP	11.49 ( 30) -.13 / -1 1.60 / 14	11.16 ( 30) .19 / 2 1.40 / 13	11.80 ( 30) .01 / 0 .59 / 5	14.10 ( 30) .13 / 1 2.14 / 15	14.23 ( 30) -.13 / -1 2.14 / 15	12.76 ( 1170) .02 / 0 2.99 / 23
OCT	6.18 ( 31) -.20 / -3 1.23 / 20	5.84 ( 31) .14 / 2 1.08 / 19	6.04 ( 31) .16 / 3 .40 / 7	7.07 ( 31) .42 / 6 .94 / 13	7.49 ( 31) -.42 / -6 .94 / 13	7.15 ( 1116) .14 / 2 2.89 / 40
NOV	3.84 ( 30) .00 / 0 1.14 / 30	3.84 ( 30) -.00 / 0 1.04 / 27	3.84 ( 30) .14 / 4 .40 / 10	0.00 ( 0) 0.00 / 0 0.00 / 0	7.16 ( 30) 1.75 / 24 3.03 / 42	5.21 ( 780) -.09 / -2 2.46 / 47
DEC	0.00 ( 0) 0.00 / 0 0.00 / 0	2.09 ( 31) -.17 / -8 .51 / 25	2.10 ( 31) .00 / 0 .24 / 11	0.00 ( 0) 0.00 / 0 0.00 / 0	5.53 ( 31) .58 / 10 1.77 / 32	3.41 ( 775) -.10 / -3 1.69 / 49
YEAR	11.60 (335) -.37 / -3 1.86 / 16	10.71 (366) -.27 / -2 1.69 / 16	10.88 (366) .11 / 1 .76 / 7	14.60 (274) -.01 / 0 2.39 / 16	12.39 (366) .35 / 3 2.44 / 20	12.23 (12687) -.11 / -1 3.11 / 25

## Table 3.2

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### Detailed cross-validation results for "gravity"-interpolated daily global irradiation

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The results are presented network by network as follows:

- 1) Front page: Identifying the network.  
Listing the monthly vertical scale factor and search radius.  
Displaying min. & max. of relative (% of meas. mean)  
MBE, RMSE and  $U95 = \sqrt{[(MBE)^2 + (2RMSE)^2]}$ .  
The absolute values are in  $MJm^{-2}day^{-1}$  and they  
correspond to the above-standing min. & max .  
Min. & max. selection is only for months with at  
least 15 observed days.

- 2) Entries for each station and month with:

MM (ND)  
MBE / MBE%  
RMSE / RMSE%

where MM: meas. mean in  $MJm^{-2}day^{-1}$ ; ND: Number of observed days;  
MBE, resp. RMSE: absolute MBE, resp. RMSE in  $MJm^{-2}day^{-1}$ ;  
MBE%, resp. RMSE%: relative MBE, resp. RMSE in % of MM.

- 3) "Bottom lines" with monthly (for all stations) and station-wise (yearly) entries as 2).

MONTH = 1 2 3 4 5 6 7 8 9 10 11 12  
 V.S.F. = 150 150 150 150 150 150 150 150 150 150 150 150  
 S.R. = 600 600 600 600 600 600 600 600 600 600 600 600

MIN	WHR	MBE	RMSE			U95		
			MAX	MIN	MAX	MIN	MAX	
8			POR	BUR	HOO	BUR	HOO	HOO
MONTH			4	9	12	9	12	12
REL.			33	7	72	15	145	145
ABS.	.0		4.1	1.3	1.9	2.6	3.8	3.8

	FOR	HOO	HER	LAG	COB	EUG	BEN	BUR	WHR
JAN	4.33 ( 31) 1.25 / 29 2.01 / 46	0.00 ( 0) 0.00 / 0 0.00 / 0	4.70 ( 29) .52 / 11 1.88 / 40	5.24 ( 30) .26 / 5 1.90 / 36	6.04 ( 31) -.83 / -14 2.10 / 35	5.17 ( 31) .56 / 11 1.60 / 31	7.21 ( 31) -1.69 / -23 2.53 / 35	6.23 ( 22) -.49 / -8 2.03 / 33	7.56 ( 13) -.21 / -3 1.91 / 25
FEB	6.39 ( 29) .88 / 14 1.80 / 28	0.00 ( 0) 0.00 / 0 0.00 / 0	6.32 ( 29) 1.07 / 17 3.17 / 50	7.10 ( 29) .19 / 3 2.66 / 38	6.81 ( 29) .27 / 4 2.21 / 32	7.01 ( 29) .04 / 1 1.49 / 21	9.17 ( 28) -1.49 / -16 2.15 / 23	9.94 ( 22) -1.72 / -17 2.34 / 24	9.30 ( 25) .10 / 1 2.87 / 31
MAR	9.80 ( 31) 1.69 / 17 3.19 / 33	0.00 ( 0) 0.00 / 0 0.00 / 0	11.75 ( 31) -.43 / -4 2.43 / 21	10.82 ( 24) 1.52 / 14 2.69 / 25	11.97 ( 30) -1.20 / -10 2.76 / 23	10.70 ( 31) .94 / 9 2.20 / 21	13.69 ( 26) -2.10 / -15 3.74 / 27	13.58 ( 31) -.49 / -4 2.89 / 21	13.76 ( 31) -.33 / -2 3.25 / 24
APR	12.41 ( 30) 4.07 / 33 5.43 / 44	19.55 ( 17) -3.74 / -19 5.29 / 27	17.39 ( 30) -2.60 / -15 3.65 / 21	13.54 ( 30) 3.78 / 28 5.18 / 38	17.91 ( 29) -3.82 / -21 5.04 / 28	13.78 ( 30) 2.66 / 19 3.71 / 27	18.43 ( 30) -2.81 / -15 4.79 / 26	17.13 ( 30) .26 / 2 2.59 / 15	18.51 ( 29) -1.28 / -7 3.69 / 20
MAY	16.90 ( 31) 3.37 / 20 4.68 / 28	20.25 ( 31) -2.03 / -10 4.33 / 21	21.41 ( 31) -2.00 / -9 3.90 / 18	18.34 ( 31) 3.19 / 17 4.30 / 23	20.97 ( 31) -2.01 / -10 5.25 / 25	18.71 ( 31) 1.68 / 9 3.80 / 20	24.70 ( 30) -4.85 / -20 6.20 / 25	21.77 ( 31) .09 / 0 2.70 / 12	22.11 ( 31) -.36 / -2 3.55 / 16
JUN	18.27 ( 30) 4.79 / 26 6.24 / 34	23.18 ( 30) -3.29 / -14 5.22 / 23	24.16 ( 30) -1.89 / -8 3.57 / 15	20.63 ( 23) 3.05 / 15 4.33 / 21	23.25 ( 28) -1.86 / -8 7.58 / 33	21.84 ( 30) .39 / 2 4.43 / 20	24.38 ( 28) -2.00 / -8 4.04 / 17	25.17 ( 30) -1.19 / -5 2.58 / 10	24.65 ( 30) .26 / 1 2.82 / 11
JUL	24.16 ( 31) 3.41 / 14 5.41 / 22	27.64 ( 31) -2.67 / -10 4.53 / 16	26.85 ( 31) -1.18 / -4 2.04 / 8	24.13 ( 31) 2.78 / 12 3.44 / 14	28.09 ( 29) -.99 / -4 3.49 / 12	27.35 ( 31) -.43 / -2 2.39 / 9	29.08 ( 21) -1.93 / -7 3.00 / 10	26.94 ( 29) -1.42 / -5 2.70 / 10	25.06 ( 31) 1.85 / 7 3.74 / 15
AUG	20.71 ( 31) 2.43 / 12 3.96 / 19	23.47 ( 31) -2.27 / -10 3.39 / 14	22.89 ( 31) -1.52 / -7 2.67 / 12	19.61 ( 30) 3.26 / 17 4.61 / 24	22.67 ( 31) -.62 / -3 4.30 / 19	22.07 ( 31) .23 / 1 3.48 / 16	25.82 ( 7) -3.04 / -12 3.87 / 15	22.90 ( 31) -.63 / -3 2.07 / 9	22.72 ( 31) .03 / 0 2.59 / 11
SEP	14.04 ( 30) 1.24 / 9 2.37 / 17	14.90 ( 30) -.21 / -1 1.74 / 12	16.10 ( 30) -.92 / -6 2.83 / 18	14.94 ( 30) 1.55 / 10 3.45 / 23	18.00 ( 25) -2.16 / -12 3.85 / 21	15.54 ( 30) .63 / 4 2.48 / 16	17.26 ( 22) -1.73 / -10 3.61 / 21	17.79 ( 30) -.24 / -1 1.31 / 7	18.70 ( 30) -1.12 / -6 2.37 / 13
OCT	6.60 ( 31) 1.16 / 18 2.59 / 39	7.39 ( 31) .03 / 0 2.33 / 32	9.72 ( 31) -1.36 / -14 2.29 / 24	8.62 ( 27) .63 / 7 2.93 / 34	9.72 ( 31) -2.01 / -21 2.93 / 30	7.70 ( 31) 1.11 / 14 2.19 / 28	12.20 ( 18) -2.62 / -21 3.39 / 28	10.22 ( 31) .10 / 1 1.93 / 19	10.78 ( 31) -.61 / -6 2.25 / 21
NOV	3.76 ( 30) .11 / 3 1.43 / 38	3.57 ( 30) .49 / 14 1.67 / 47	4.50 ( 30) -.13 / -3 1.32 / 29	4.70 ( 30) .06 / 1 1.70 / 36	4.66 ( 30) -.54 / -12 1.32 / 28	4.05 ( 30) .48 / 12 1.12 / 28	6.49 ( 26) -1.77 / -27 2.26 / 35	5.41 ( 30) .23 / 4 1.22 / 23	6.09 ( 29) -.75 / -12 2.29 / 38
DEC	3.06 ( 31) .10 / 3 1.65 / 54	2.64 ( 27) .52 / 20 1.89 / 72	3.48 ( 30) .22 / 6 1.58 / 45	4.31 ( 31) -.45 / -11 1.85 / 43	4.71 ( 31) -1.11 / -24 1.81 / 38	3.68 ( 31) -.36 / 10 1.16 / 32	0.00 ( 0) 0.00 / 0 0.00 / 0	5.52 ( 20) -.51 / -9 1.43 / 26	6.17 ( 24) -1.54 / -25 2.20 / 36
YEAR	11.73 (366) 2.04 / 17 3.76 / 32	15.87 (258) -1.38 / -9 3.58 / 23	14.21 (363) -.87 / -6 2.73 / 19	12.61 (346) 1.64 / 13 3.44 / 27	14.42 (355) -1.39 / -10 3.91 / 27	13.16 (366) .72 / 5 2.72 / 21	16.38 (267) -2.35 / -14 3.83 / 23	15.83 (337) -.47 / -3 2.24 / 14	16.18 (335) -.31 / -2 2.91 / 18

## ALL

JAN	5.66 ( 218)
	-06 / -1
	2.02 / 36
FEB	7.65 ( 220)
	-03 / 0
	2.39 / 31
MAR	12.01 ( 235)
	-05 / 0
	2.92 / 24
APR	16.35 ( 255)
	-20 / -1
	4.43 / 27
MAY	20.56 ( 278)
	-31 / -1
	4.40 / 21
JUN	22.88 ( 259)
	-25 / -1
	4.77 / 21
JUL	26.48 ( 265)
	.02 / 0
	3.58 / 14
AUG	22.24 ( 254)
	.02 / 0
	3.49 / 16
SEP	16.30 ( 257)
	-25 / -2
	2.73 / 17
OCT	9.08 ( 262)
	-30 / -3
	2.52 / 28
NOV	4.77 ( 265)
	-18 / -4
	1.63 / 34
DEC	4.10 ( 225)
	-27 / -7
	1.72 / 42
YEAR	14.36 ( 2993)
	-16 / -1
	3.26 / 23



SW Associates / NOAA / SERI, without VEG & PAG

MONTH =	1	2	3	4	5	6	7	8	9	10	11	12
V.S.F. =	150	150	150	150	150	150	150	150	150	150	150	150
S.R. =	250	250	250	250	250	250	250	250	250	250	250	250

	MIN	MBE	MAX	MIN	RMSE	MAX	MIN	MAX	U95
STATION	RID	ESC	BAR	ESC	BAR	ESC	BAR	ESC	BAR
MONTH	7	5	7,	5	7,	5	7	5	5
REL.	0	20	3	31	7	65			
ABS.	-.1	4.2	.9	6.6	2.0	13.9			

	RID	BAR	LAN	VIC	SUV	YUV	ALH	WLA	ANG
JAN	9.57 ( 31) -1.10 / -1 1.41 / 15	9.26 ( 31) .38 / 4 .87 / 9	9.63 ( 31) -3.37 / -4 1.75 / 18	9.70 ( 31) -3.33 / -3 1.12 / 12	8.76 ( 31) -1.15 / -2 .72 / 8	9.95 ( 31) -5.1 / -5 2.13 / 21	9.05 ( 30) -9.6 / -11 1.11 / 12	8.41 ( 31) .18 / 2 .73 / 9	8.21 ( 31) .88 / 11 1.04 / 13
FEB	15.80 ( 28) -2.26 / -2 1.62 / 10	15.35 ( 28) .41 / 3 1.32 / 9	15.90 ( 28) -1.23 / -8 2.04 / 13	15.85 ( 28) -4.1 / -3 1.31 / 8	12.54 ( 28) .43 / 3 1.55 / 12	16.76 ( 28) -1.15 / -7 1.71 / 10	13.89 ( 28) -1.59 / -11 1.90 / 14	12.65 ( 28) .11 / 1 1.17 / 9	12.26 ( 28) 1.44 / 12 1.80 / 15
MAR	19.63 ( 31) -1.62 / -8 3.26 / 17	17.52 ( 31) .73 / 4 2.10 / 12	18.83 ( 31) -1.58 / -8 2.66 / 14	18.12 ( 31) -2.23 / -1 2.21 / 12	15.05 ( 31) .59 / 4 1.83 / 12	19.14 ( 31) -1.09 / -6 2.29 / 12	15.71 ( 31) -2.26 / -2 1.19 / 8	15.59 ( 31) -1.3 / -1 1.81 / 12	15.46 ( 31) .21 / 1 1.10 / 7
APR	26.24 ( 30) -2.22 / -1 2.03 / 8	25.88 ( 30) -1.11 / 0 2.12 / 8	26.75 ( 30) -1.95 / -7 2.67 / 10	25.71 ( 30) .18 / 1 2.95 / 11	23.53 ( 30) -9.8 / -4 1.96 / 8	26.79 ( 30) -1.14 / -4 2.05 / 8	22.82 ( 30) -4.2 / -2 1.01 / 4	22.26 ( 30) .48 / 2 1.99 / 9	22.34 ( 30) .46 / 2 .85 / 4
MAY	29.33 ( 30) -1.77 / -3 1.41 / 5	28.26 ( 31) -0.09 / 0 1.55 / 6	29.34 ( 31) -3.18 / -11 4.20 / 14	28.53 ( 31) -1.65 / -2 1.63 / 6	22.80 ( 31) -1.18 / -5 3.70 / 16	28.02 ( 31) -3.1 / -1 2.64 / 9	21.42 ( 31) -2.3 / -1 2.24 / 10	21.99 ( 31) -4.4 / -2 3.16 / 14	21.04 ( 31) .52 / 2 1.95 / 9
JUN	31.49 ( 30) -1.80 / -3 1.21 / 4	30.34 ( 30) .44 / 1 1.37 / 5	31.44 ( 30) -2.32 / -7 3.16 / 10	31.09 ( 30) -8.6 / -3 1.34 / 4	26.90 ( 30) -1.66 / -6 2.68 / 10	30.90 ( 30) -6.8 / -2 1.32 / 4	25.44 ( 30) -6.1 / -2 .94 / 4	25.28 ( 30) .09 / 0 2.07 / 8	24.67 ( 30) .83 / 3 1.00 / 4
JUL	29.75 ( 30) -0.08 / 0 1.84 / 6	28.89 ( 31) .67 / 2 .92 / 3	30.43 ( 31) -1.91 / -6 2.32 / 8	29.74 ( 31) -6.6 / -2 1.05 / 4	27.13 ( 31) -5.5 / -2 1.73 / 6	29.51 ( 31) -3.9 / -1 1.59 / 5	27.01 ( 31) -7.9 / -3 1.02 / 4	26.38 ( 28) .22 / 1 1.76 / 7	26.16 ( 31) .80 / 3 .97 / 4
AUG	25.54 ( 31) -1.16 / -1 2.16 / 8	24.08 ( 31) 1.46 / 6 2.89 / 12	27.04 ( 31) -2.72 / -10 3.37 / 12	25.70 ( 31) -1.01 / -4 2.37 / 9	23.27 ( 31) -1.11 / -5 2.28 / 10	25.40 ( 31) -6.2 / -2 1.78 / 7	22.57 ( 31) -8.3 / -4 1.16 / 5	22.06 ( 31) .19 / 1 2.05 / 9	21.64 ( 31) .92 / 4 1.11 / 5
SEP	22.93 ( 29) -1.42 / -2 1.03 / 5	21.84 ( 30) .92 / 4 1.49 / 7	23.32 ( 30) -1.40 / -6 1.68 / 7	22.86 ( 30) -6.8 / -3 1.39 / 6	20.90 ( 30) -4.2 / -2 1.17 / 6	22.97 ( 30) -6.7 / -3 1.77 / 8	21.02 ( 30) -1.16 / -6 1.30 / 6	20.57 ( 30) -2.3 / -1 1.01 / 5	19.76 ( 30) 1.22 / 6 1.38 / 7
OCT	17.55 ( 31) -1.12 / -1 1.57 / 9	17.23 ( 31) .24 / 1 1.29 / 7	17.93 ( 31) -1.51 / -8 2.05 / 11	17.59 ( 31) -3.4 / -2 1.81 / 10	14.74 ( 31) -3.4 / -2 1.19 / 8	18.18 ( 31) -8.9 / -5 1.63 / 9	14.71 ( 31) -8.1 / -5 1.03 / 7	14.50 ( 31) -2.3 / -2 1.14 / 8	13.82 ( 31) .88 / 6 1.07 / 8
NOV	13.46 ( 30) .08 / 1 1.42 / 11	13.33 ( 30) .34 / 3 1.16 / 9	13.80 ( 30) -6.5 / -5 1.25 / 9	13.70 ( 30) -2.4 / -2 1.08 / 8	12.57 ( 30) -3.3 / -3 1.02 / 8	14.31 ( 30) -7.6 / -5 1.06 / 7	12.70 ( 30) -8.2 / -6 .97 / 8	12.16 ( 30) .06 / 0 .65 / 5	11.82 ( 30) .81 / 7 .93 / 8
DEC	10.67 ( 30) .52 / 5 1.59 / 15	10.94 ( 31) .37 / 3 .76 / 7	11.59 ( 31) -8.0 / -7 1.30 / 11	11.37 ( 30) -3.2 / -3 .68 / 6	10.26 ( 31) -2.3 / -2 .64 / 6	11.73 ( 30) -5.0 / -4 1.02 / 9	10.60 ( 31) -9.1 / -9 .95 / 9	9.79 ( 31) .24 / 2 .89 / 9	9.65 ( 31) .85 / 9 .90 / 9
YEAR	20.99 (361) -3.33 / -2 1.81 / 9	20.25 (365) .48 / 2 1.60 / 8	21.35 (365) -1.64 / -8 2.52 / 12	20.87 (364) -4.6 / -2 1.70 / 8	18.22 (365) -5.0 / -3 1.91 / 10	21.17 (364) -7.2 / -3 1.81 / 9	18.11 (364) -7.8 / -4 1.29 / 7	17.58 (362) .04 / 0 1.69 / 10	17.25 (365) .81 / 5 1.22 / 7

	PAS	ESC	BLY	ALL
JAN	9.30 ( 31) -.04 / 0 1.83 / 20	8.89 ( 31) .28 / 3 2.40 / 27	10.20 ( 31) -.82 / -8 2.49 / 24	9.24 ( 371) -.13 / -1 1.59 / 17
FEB	15.87 ( 28) -.80 / -5 1.63 / 10	14.43 ( 28) .58 / 4 2.36 / 16	16.14 ( 28) -.19 / -1 2.02 / 13	14.79 ( 336) -.22 / -2 1.73 / 12
MAR	18.60 ( 31) -.71 / -4 2.10 / 11	16.34 ( 5) 1.02 / 6 2.41 / 15	19.44 ( 31) -.78 / -4 2.75 / 14	17.54 ( 346) -.42 / -2 2.21 / 13
APR	25.88 ( 30) -1.48 / -6 2.86 / 11	22.59 ( 26) 2.44 / 11 4.37 / 19	26.08 ( 30) -.13 / 0 .95 / 4	24.76 ( 356) -.27 / -1 2.32 / 9
MAY	27.09 ( 31) -2.74 / -10 4.64 / 17	21.32 ( 31) 4.19 / 20 6.62 / 31	27.55 ( 31) -.42 / -2 3.20 / 12	25.55 ( 371) -.44 / -2 3.42 / 13
JUN	29.59 ( 29) -1.87 / -6 3.59 / 12	25.46 ( 30) 2.97 / 12 5.43 / 21	29.90 ( 30) -.16 / -1 1.75 / 6	28.54 ( 359) -.38 / -1 2.51 / 9
JUL	28.66 ( 31) -.57 / -2 1.49 / 5	27.16 ( 31) .98 / 4 2.14 / 8	28.97 ( 31) -.23 / -1 1.32 / 5	28.33 ( 368) -.21 / -1 1.57 / 6
AUG	24.20 ( 31) -.63 / -3 2.37 / 10	22.25 ( 31) 1.48 / 7 3.98 / 18	25.54 ( 31) -1.23 / -5 3.86 / 15	24.11 ( 372) -.35 / -1 2.60 / 11
SEP	21.80 ( 30) .41 / 2 1.38 / 6	22.13 ( 29) -.65 / -3 1.68 / 8	22.59 ( 30) -.66 / -3 1.82 / 8	21.89 ( 358) -.31 / -1 1.45 / 7
OCT	17.28 ( 31) -.78 / -5 1.54 / 9	15.72 ( 31) .73 / 5 1.70 / 11	17.64 ( 31) -.28 / -2 2.01 / 11	16.41 ( 372) -.29 / -2 1.54 / 9
NOV	13.78 ( 29) -.57 / -4 1.29 / 9	12.72 ( 30) .61 / 5 2.27 / 18	13.72 ( 28) .13 / 1 1.25 / 9	13.17 ( 357) -.11 / -1 1.25 / 10
DEC	11.41 ( 31) -.22 / -2 .82 / 7	11.17 ( 31) .15 / -1 1.37 / 12	11.65 ( 31) -.20 / -2 .75 / 6	10.90 ( 369) -.11 / -1 1.01 / 9
YEAR	20.29 (363) -.83 / -4 2.37 / 12	18.45 (334) 1.21 / 7 3.51 / 19	20.84 (363) -.42 / -2 2.21 / 11	19.62 ( 4335) -.27 / -1 2.05 / 10

NE Utilities / SUNY

MONTH = 1 2 3 4 5 6 7 8 9 10 11 12  
 V.S.F. = 50 50 50 50 50 50 50 50 50 50 50 50  
 S.R. = 200 200 200 200 200 200 200 200 200 200 200 200

STATION	MIN	MBE		RMSE		U95	
		FAR	ALB	MIN	MAX	MIN	MAX
MONTH	6	12	12	6	12	6	12
REL.	0	48	84	4	84	8	175
ABS.	.0	1.5	2.5	.8	2.5	1.5	5.3

	BOC	BRA	BLG	BRE	BON	COB	KAS	FRB	GEK
JAN	1.93 ( 31) .11 / 6 .61 / 32	2.26 ( 31) -.54 / -24 1.15 / 51	1.59 ( 31) .51 / 32 1.18 / 74	1.70 ( 31) .10 / 6 .49 / 29	2.70 ( 31) -.66 / -24 1.02 / 38	1.99 ( 31) .56 / 28 .98 / 49	1.93 ( 31) .03 / 2 .85 / 44	2.89 ( 31) .09 / 3 1.18 / 41	2.03 ( 31) -.02 / -1 .41 / 20
FEB	4.36 ( 29) -.53 / -12 1.27 / 29	3.79 ( 29) -.02 / 0 .97 / 26	3.80 ( 29) .12 / 3 1.30 / 34	3.69 ( 29) -.06 / -2 .66 / 18	4.15 ( 29) -.04 / -1 .84 / 20	4.59 ( 29) .23 / 5 1.19 / 26	4.20 ( 29) -.35 / -8 1.06 / 25	4.98 ( 29) .51 / 10 1.77 / 35	3.87 ( 29) .09 / 2 .60 / 16
MAR	6.65 ( 31) -.96 / -14 1.82 / 27	6.68 ( 31) -.30 / -5 1.62 / 24	6.52 ( 31) .05 / 1 1.83 / 28	6.45 ( 31) -.12 / -2 1.11 / 17	5.94 ( 31) .05 / 1 1.44 / 24	6.93 ( 31) .18 / 3 1.53 / 22	7.01 ( 31) -.99 / -14 1.55 / 22	6.28 ( 31) .86 / 14 1.90 / 30	5.60 ( 31) .39 / 7 .95 / 17
APR	16.57 ( 30) -1.33 / -8 2.89 / 17	15.45 ( 30) -1.11 / -1 2.33 / 15	16.03 ( 30) -.76 / -5 3.01 / 19	13.26 ( 30) 1.59 / 12 2.40 / 18	15.12 ( 30) .55 / 4 2.06 / 14	16.99 ( 30) -1.22 / -7 2.06 / 12	14.94 ( 30) .39 / 3 2.28 / 15	15.24 ( 30) .73 / 5 3.15 / 21	15.26 ( 30) .62 / 4 1.87 / 12
MAY	19.40 ( 31) -1.43 / -7 2.78 / 14	20.21 ( 31) -1.38 / -7 3.14 / 16	18.70 ( 31) -.80 / 4 3.07 / 16	18.55 ( 31) .95 / 5 2.08 / 11	16.76 ( 31) 1.25 / 7 2.56 / 15	18.98 ( 31) .16 / 1 2.30 / 12	18.87 ( 31) -.10 / -1 2.52 / 13	17.34 ( 31) .98 / 6 3.90 / 23	17.80 ( 31) .55 / 3 1.83 / 10
JUN	15.09 ( 30) -1.37 / -9 2.98 / 20	15.55 ( 30) -1.11 / -1 4.56 / 29	16.28 ( 30) -.97 / -6 4.17 / 26	12.81 ( 30) 2.30 / 18 4.01 / 31	13.63 ( 30) 1.72 / 13 3.19 / 23	16.72 ( 30) -.01 / 0 2.62 / 16	14.94 ( 30) .45 / 3 3.48 / 23	20.74 ( 30) -2.02 / -10 4.66 / 22	13.31 ( 30) 1.23 / 9 2.39 / 18
JUL	14.41 ( 31) .78 / 5 2.59 / 18	17.06 ( 28) -1.66 / -10 2.65 / 16	16.05 ( 31) .53 / 3 3.00 / 19	14.14 ( 31) 1.08 / 8 2.09 / 15	14.37 ( 25) .43 / 3 2.07 / 14	17.69 ( 31) .52 / 3 2.18 / 12	16.58 ( 31) -.76 / -5 2.88 / 17	20.01 ( 31) -.73 / -4 2.63 / 13	15.14 ( 31) -.20 / -1 1.44 / 9
AUG	15.46 ( 31) .05 / 0 1.70 / 11	16.44 ( 31) -.81 / -5 2.12 / 13	15.88 ( 31) .31 / 2 2.77 / 17	14.09 ( 31) 1.28 / 9 2.46 / 17	15.42 ( 31) .69 / 4 2.26 / 15	16.84 ( 31) -.74 / -4 2.18 / 13	16.33 ( 31) -.45 / -3 2.07 / 13	17.60 ( 31) -1.01 / -6 3.10 / 18	15.43 ( 31) .16 / 1 1.60 / 10
SEP	8.94 ( 30) -.64 / -7 1.95 / 22	9.81 ( 30) -.60 / -6 1.73 / 18	9.36 ( 30) .19 / 2 1.93 / 21	9.22 ( 30) -.12 / -1 1.15 / 12	8.28 ( 27) -.13 / -2 1.95 / 23	10.02 ( 30) .04 / 0 1.90 / 19	9.64 ( 30) -.60 / -6 1.65 / 17	11.56 ( 30) -.89 / -8 2.54 / 22	7.99 ( 30) .74 / 9 1.53 / 19
OCT	5.49 ( 31) -.25 / -5 1.41 / 26	5.34 ( 31) -.47 / -9 1.75 / 33	4.79 ( 31) .36 / 7 2.29 / 48	4.85 ( 31) .15 / 3 1.46 / 30	5.49 ( 30) -.23 / -4 1.43 / 26	5.60 ( 31) -.03 / -1 2.32 / 41	4.71 ( 31) .38 / 8 1.17 / 25	6.62 ( 16) -.58 / -9 2.43 / 37	5.27 ( 31) .05 / 1 .65 / 12
NOV	3.27 ( 30) -.31 / -10 .96 / 29	2.75 ( 30) .28 / 10 .91 / 33	3.09 ( 30) -.17 / -6 .75 / 24	3.39 ( 30) -.56 / -17 4.25 / 126	3.25 ( 30) -.11 / -3 .71 / 22	3.09 ( 30) .49 / 16 .87 / 28	3.14 ( 30) -.16 / -5 .61 / 19	4.15 ( 27) -.72 / -17 1.79 / 43	2.95 ( 30) .12 / 4 .38 / 13
DEC	1.34 ( 31) -.21 / -16 .61 / 46	1.51 ( 31) -.12 / -8 .40 / 27	1.50 ( 31) -.09 / -6 .59 / 39	1.33 ( 31) -.04 / -3 .38 / 28	1.30 ( 31) -.07 / -6 .56 / 43	1.30 ( 31) .27 / 21 .60 / 46	1.49 ( 31) -.24 / -16 .63 / 42	1.89 ( 31) -.08 / -4 .96 / 51	1.09 ( 31) .10 / 10 .34 / 32
YEAR	9.42 (366) -.50 / -5 1.98 / 21	9.70 (363) -.48 / -5 2.22 / 23	9.48 (366) .08 / 1 2.40 / 25	8.64 (366) .55 / 6 2.23 / 26	8.80 (356) .29 / 3 1.84 / 21	10.07 (366) .04 / 0 1.84 / 18	9.50 (366) -.20 / -2 1.94 / 20	11.02 (348) -.22 / -2 2.72 / 25	8.83 (366) .32 / 4 1.34 / 15

	GEH	GSS	HOP	KON	LUD	LSP	LIS	MAN	NUE
JAN	2.32 ( 31) -.01 / -1 .79 / 34	2.00 ( 31) .23 / 12 .65 / 32	4.47 ( 31) -1.30 / -29 1.95 / 44	3.43 ( 31) -.25 / -7 1.49 / 43	1.93 ( 31) .22 / 12 .72 / 37	1.88 ( 31) .07 / 4 .81 / 43	1.37 ( 31) .11 / 8 .66 / 48	2.50 ( 31) -.02 / -1 .63 / 25	2.66 ( 31) .16 / 6 .66 / 25
FEB	4.76 ( 29) -1.16 / -3 1.05 / 22	4.36 ( 29) -.00 / 0 1.05 / 24	6.48 ( 29) -.96 / -15 1.92 / 30	5.88 ( 29) -.49 / -8 1.69 / 29	3.53 ( 29) .51 / 14 1.04 / 30	3.41 ( 29) .52 / 15 .94 / 28	3.62 ( 29) -.21 / -6 1.25 / 34	4.72 ( 29) .21 / 4 .97 / 21	4.75 ( 29) .34 / 7 .92 / 19
MAR	7.03 ( 31) -.80 / -11 2.02 / 29	6.46 ( 31) -.02 / 0 1.10 / 17	8.70 ( 31) -.84 / -10 2.97 / 34	7.52 ( 31) -.33 / -4 2.31 / 31	5.26 ( 31) .71 / 13 1.53 / 29	5.34 ( 31) 1.01 / 19 1.31 / 25	7.71 ( 31) -.89 / -12 2.16 / 28	5.95 ( 31) 1.00 / 17 1.60 / 27	6.91 ( 30) .70 / 10 1.59 / 23
APR	15.36 ( 29) -.03 / 0 1.67 / 11	14.95 ( 30) -.56 / 4 2.19 / 15	15.80 ( 30) .70 / 4 3.19 / 20	16.17 ( 30) -.57 / -4 2.82 / 17	15.89 ( 30) -.62 / -4 1.90 / 12	14.97 ( 30) .12 / 1 2.80 / 19	14.43 ( 30) -.13 / -1 3.17 / 22	15.58 ( 30) .05 / 0 1.76 / 11	16.19 ( 30) .18 / 1 1.32 / 8
MAY	18.75 ( 31) -.95 / -5 3.58 / 19	18.14 ( 31) .18 / 1 2.16 / 12	18.27 ( 31) 1.29 / 7 3.61 / 20	18.95 ( 31) -.93 / -5 2.50 / 13	17.40 ( 31) .63 / 4 1.74 / 10	19.14 ( 31) -.32 / -2 1.85 / 10	20.34 ( 31) -.70 / -3 3.74 / 18	17.90 ( 31) .46 / 3 2.78 / 16	19.43 ( 31) -.07 / 0 2.17 / 11
JUN	17.56 ( 30) -.96 / -5 3.07 / 17	16.71 ( 30) -.92 / -6 2.93 / 18	17.87 ( 30) .34 / 2 3.99 / 22	19.78 ( 30) -.80 / -4 3.62 / 18	13.83 ( 30) .49 / 4 2.58 / 19	14.61 ( 29) .05 / 0 3.79 / 26	18.05 ( 30) -1.72 / -10 4.10 / 23	16.70 ( 30) .84 / 5 2.70 / 16	16.56 ( 30) .69 / 4 2.74 / 17
JUL	16.98 ( 28) -.13 / -1 2.26 / 13	17.34 ( 30) -1.01 / -6 2.92 / 17	19.93 ( 31) -.12 / -1 3.20 / 16	21.22 ( 31) -1.89 / -9 3.96 / 19	15.00 ( 31) .49 / 3 1.85 / 12	14.62 ( 31) 1.16 / 8 2.81 / 19	15.57 ( 31) -.68 / -4 3.73 / 24	17.06 ( 31) .74 / 4 2.46 / 14	18.44 ( 31) .45 / 2 1.86 / 10
AUG	17.07 ( 31) -.70 / -4 1.86 / 11	16.50 ( 31) -.29 / -2 1.93 / 12	15.93 ( 31) .73 / 5 3.40 / 21	16.46 ( 31) .35 / 2 3.53 / 21	15.59 ( 31) .08 / 1 1.71 / 11	15.59 ( 31) .25 / 2 1.85 / 12	14.41 ( 31) -.33 / -2 3.13 / 22	16.04 ( 31) .68 / 4 1.83 / 11	14.43 ( 14) .59 / 4 1.35 / 9
SEP	9.70 ( 30) -.05 / -1 1.63 / 17	9.71 ( 30) -.34 / -3 1.63 / 17	11.27 ( 30) -.55 / -5 2.87 / 26	11.47 ( 30) -.52 / -5 2.07 / 18	8.20 ( 30) .50 / 6 2.15 / 26	8.44 ( 30) .74 / 9 1.41 / 17	9.15 ( 30) -.28 / -3 2.22 / 24	9.75 ( 30) .22 / 2 1.65 / 17	7.58 ( 19) .24 / 3 1.31 / 17
OCT	4.87 ( 31) .60 / 12 1.59 / 33	4.97 ( 31) .23 / 5 1.50 / 30	6.61 ( 29) -.76 / -12 2.70 / 41	6.31 ( 31) -.11 / -2 2.38 / 38	5.28 ( 31) -.02 / 0 1.35 / 26	5.04 ( 31) -.05 / -1 1.02 / 20	4.88 ( 31) -.31 / -6 1.61 / 33	5.51 ( 31) -.12 / -2 1.56 / 28	6.07 ( 31) -.54 / -9 1.91 / 31
NOV	3.36 ( 30) .14 / 4 1.06 / 32	3.25 ( 30) .00 / 0 .71 / 22	4.78 ( 30) -.81 / -17 2.46 / 51	3.60 ( 30) .65 / 18 1.82 / 50	2.83 ( 30) -.25 / 9 .89 / 31	2.69 ( 30) .34 / 13 .73 / 27	2.84 ( 30) -.01 / 0 .98 / 34	3.66 ( 30) -.09 / -2 .94 / 26	3.72 ( 30) -.05 / -1 .80 / 21
DEC	1.63 ( 31) -.23 / -14 .69 / 43	1.47 ( 31) -.09 / -6 .46 / 31	2.62 ( 31) -.79 / -30 1.83 / 70	2.08 ( 31) -.14 / -7 .98 / 47	.96 ( 31) .27 / 28 .52 / 55	.98 ( 31) .36 / 37 .78 / 80	1.31 ( 31) .04 / 3 .53 / 40	1.45 ( 31) .14 / 10 .48 / 33	1.60 ( 31) -.02 / -1 .38 / 24
YEAR	9.89 (362) -.27 / -3 1.96 / 20	9.65 (365) -.12 / -1 1.79 / 19	11.10 (364) -.25 / -2 2.92 / 26	11.08 (366) -.42 / -4 2.59 / 23	8.82 (366) .29 / 3 1.61 / 18	8.89 (365) .36 / 4 1.91 / 22	9.49 (366) -.43 / -4 2.58 / 27	9.74 (366) .34 / 4 1.78 / 18	9.73 (337) .20 / 2 1.58 / 16

	WAT	MID	DEV	WOH	AIB	FAR	QUE	ALLI
JAN	5.54 ( 16) .21 / 4 .57 / 10	5.73 ( 16) -.05 / -1 .64 / 11	6.00 ( 16) -.44 / -7 .90 / 15	5.71 ( 16) -1.13 / -2 1.32 / 23	5.62 ( 16) .20 / 4 2.40 / 43	5.52 ( 16) -1.19 / -3 .32 / 6	5.21 ( 16) .35 / 7 .59 / 11	5.62 ( 112) -.01 / 0 1.17 / 21
FEB	7.34 ( 5) .31 / 4 .91 / 12	7.32 ( 5) .60 / 8 1.43 / 20	8.96 ( 5) -.63 / -7 .93 / 10	8.95 ( 5) -1.62 / -18 2.27 / 25	6.53 ( 5) 1.32 / 20 4.78 / 73	9.76 ( 5) -.72 / -7 1.22 / 13	9.10 ( 5) .57 / 6 1.18 / 13	8.28 ( 35) -.03 / 0 2.23 / 27
MAR	10.49 ( 3) .04 / 0 .80 / 8	10.38 ( 3) .27 / 3 .64 / 6	10.98 ( 3) -.44 / -4 1.15 / 10	13.60 ( 3) -3.13 / -23 3.43 / 25	6.65 ( 3) 3.93 / 59 4.73 / 71	10.72 ( 3) .03 / 0 .76 / 7	10.71 ( 3) .02 / 0 .60 / 6	10.50 ( 21) .10 / 1 2.31 / 22
APR	13.47 ( 10) .30 / 2 2.76 / 21	13.53 ( 10) .46 / 3 3.37 / 25	14.99 ( 10) -.74 / -5 2.53 / 17	12.69 ( 10) .78 / 6 3.29 / 26	10.80 ( 10) 3.20 / 30 6.20 / 57	14.98 ( 10) .42 / 3 2.15 / 14	15.52 ( 10) -.56 / -4 2.15 / 14	13.71 ( 70) .55 / 4 3.46 / 25
MAY	19.16 ( 19) -1.83 / -10 2.61 / 14	17.19 ( 19) 1.45 / 8 2.29 / 13	17.60 ( 19) .19 / 1 1.29 / 7	20.68 ( 19) -1.86 / -9 4.17 / 20	17.64 ( 19) -.32 / -2 4.17 / 24	18.02 ( 19) -.43 / -2 1.55 / 9	17.57 ( 19) .41 / 2 1.76 / 10	18.27 ( 133) -.34 / -2 2.78 / 15
JUN	21.04 ( 20) -.85 / -4 2.01 / 10	20.32 ( 20) .23 / 1 2.02 / 10	19.67 ( 20) .32 / 2 2.60 / 13	19.62 ( 20) 1.30 / 7 3.48 / 18	19.12 ( 20) .99 / 5 5.14 / 27	19.39 ( 20) .00 / 0 .90 / 5	19.31 ( 20) .11 / 1 .75 / 4	19.78 ( 140) .30 / 2 2.80 / 14
JUL	19.56 ( 19) -.88 / -4 2.65 / 14	18.29 ( 19) 1.65 / 9 2.62 / 14	20.74 ( 19) -1.37 / -7 2.21 / 11	18.07 ( 19) 1.27 / 7 4.71 / 26	20.04 ( 19) -.96 / -5 5.03 / 25	20.28 ( 19) -.03 / 0 1.55 / 8	20.21 ( 19) .09 / 0 1.81 / 9	19.60 ( 133) -.03 / 0 3.20 / 16
AUG	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
SEP	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
OCT	10.21 ( 10) .80 / 8 1.46 / 14	10.93 ( 10) -.30 / -3 1.05 / 10	11.43 ( 10) -.42 / -4 .73 / 6	11.02 ( 10) -.69 / -6 1.22 / 11	8.71 ( 10) 2.38 / 27 3.89 / 45	11.59 ( 10) -.64 / -6 1.44 / 12	10.88 ( 10) .69 / 6 1.53 / 14	10.68 ( 70) .26 / 2 1.88 / 18
NOV	5.77 ( 17) .22 / 4 .58 / 10	5.88 ( 17) .17 / 3 .64 / 11	6.64 ( 17) -.71 / -11 1.15 / 17	5.79 ( 17) -.00 / 0 1.56 / 27	4.82 ( 17) 1.31 / 27 2.43 / 51	6.18 ( 17) -.27 / -4 .90 / 15	5.79 ( 17) .42 / 7 .91 / 16	5.84 ( 119) .16 / 3 1.31 / 23
DEC	4.55 ( 15) -.13 / -3 1.04 / 23	4.35 ( 15) .27 / 6 1.18 / 27	4.76 ( 15) -.28 / -6 .80 / 17	4.96 ( 15) -.44 / -9 1.32 / 27	3.02 ( 15) 1.46 / 48 2.54 / 84	4.64 ( 15) -.12 / -3 -.35 / 8	4.48 ( 15) .17 / 4 .43 / 10	4.39 ( 105) .13 / 3 1.29 / 29
YEAR	12.81 (134) -.38 / -3 1.88 / 15	12.31 (134) .56 / 5 1.90 / 15	13.02 (134) -.41 / -3 1.69 / 13	12.80 (134) -.08 / -1 3.08 / 24	11.67 (134) .87 / 7 4.18 / 36	12.87 (134) -.18 / -1 1.23 / 10	12.65 (134) .23 / 2 1.32 / 10	12.59 ( 938) .09 / 1 2.40 / 19

DWD

MONTH = 1 2 3 4 5 6 7 8 9 10 11 12  
 V.S.F. = 50 50 50 50 50 50 50 50 50 50 50 50  
 S.R. = 400 400 400 400 400 400 400 400 400 400 400 400

STATION	MIN	MBE		RMSE		U95	
		WSB	LSP	MIN	MAX	MIN	MAX
MONTH	11	12	4	4	11	4	11
REL.	0	37	8	126	16	252	252
ABS.	.0	.4	1.3	4.3	2.6	8.5	8.5



NOR OSN PAS HAM SWG SAR STU TRE WSB

JAN	1.60 ( 31) .09 / 5 .66 / 41	1.93 ( 31) -0.02 / -1 .52 / 27	3.27 ( 31) -0.04 / -1 .88 / 27	1.59 ( 31) .08 / 5 .50 / 32	1.43 ( 31) .07 / 5 .53 / 37	2.13 ( 31) .14 / 7 .80 / 38	3.20 ( 31) -0.47 / -15 1.12 / 35	1.98 ( 31) .30 / 15 .80 / 40	3.09 ( 31) -0.26 / -8 .71 / 23
FEB	3.96 ( 29) -3.32 / -8 1.19 / 30	3.62 ( 29) .14 / 4 .66 / 18	5.49 ( 29) .03 / 1 1.76 / 32	3.28 ( 29) .30 / 9 .74 / 23	3.32 ( 29) .21 / 6 .66 / 20	5.12 ( 29) -3.33 / -6 1.23 / 24	5.61 ( 29) -0.55 / -10 1.23 / 22	4.82 ( 29) -0.03 / -1 .87 / 18	5.12 ( 29) -0.03 / -1 .93 / 18
MAR	7.31 ( 31) -7.76 / -10 2.24 / 31	5.92 ( 31) .04 / 1 1.06 / 18	7.47 ( 31) .53 / 7 2.74 / 37	6.29 ( 31) .38 / 6 1.46 / 23	6.82 ( 31) .24 / 4 1.63 / 24	6.02 ( 31) .47 / 8 1.24 / 21	7.67 ( 31) -0.83 / -11 2.07 / 27	6.40 ( 31) -0.15 / -2 1.31 / 20	7.66 ( 31) -0.37 / -5 1.35 / 18
APR	15.41 ( 30) -1.17 / -8 3.54 / 23	14.63 ( 30) .44 / 3 2.32 / 16	17.23 ( 30) -0.72 / -4 2.97 / 17	14.06 ( 30) .19 / 1 2.51 / 18	14.20 ( 30) .10 / 1 2.51 / 18	16.30 ( 30) -0.32 / -2 1.78 / 11	15.78 ( 28) .44 / 3 1.90 / 12	16.51 ( 30) -0.68 / -4 2.50 / 15	16.58 ( 30) -0.40 / -2 1.34 / 8
MAY	20.07 ( 31) -0.82 / -4 4.55 / 23	19.59 ( 31) -0.87 / -4 2.37 / 12	20.96 ( 31) -1.41 / -7 4.29 / 20	19.52 ( 31) -0.15 / -1 2.93 / 15	19.65 ( 31) .25 / 1 2.67 / 14	16.87 ( 31) 1.07 / 6 2.04 / 12	18.13 ( 31) .34 / 2 2.18 / 12	17.72 ( 31) -0.24 / -1 2.58 / 15	19.69 ( 31) -0.38 / -2 2.08 / 11
JUN	16.47 ( 30) -1.67 / -10 5.55 / 34	14.34 ( 30) .06 / 0 3.60 / 25	19.38 ( 30) -1.67 / -9 4.93 / 25	14.73 ( 30) .51 / 3 3.31 / 22	16.70 ( 30) -0.36 / -2 2.79 / 17	18.86 ( 30) -1.13 / -6 2.99 / 16	18.30 ( 30) -0.59 / -3 3.83 / 21	18.24 ( 30) -0.87 / -5 3.18 / 17	17.30 ( 30) -0.16 / -1 2.59 / 15
JUL	15.80 ( 31) -1.06 / -7 4.78 / 30	14.82 ( 31) .18 / 1 2.22 / 15	19.53 ( 31) .06 / 0 3.32 / 17	14.57 ( 31) .45 / 3 2.20 / 15	14.81 ( 31) .34 / 2 2.17 / 15	17.35 ( 31) .34 / 2 1.78 / 10	18.56 ( 31) -0.05 / 0 2.64 / 14	17.80 ( 31) -0.78 / -4 2.32 / 13	19.33 ( 31) -0.55 / -3 2.16 / 11
AUG	15.79 ( 31) -1.21 / -8 3.60 / 23	15.47 ( 31) -0.03 / 0 1.86 / 12	16.83 ( 31) -0.23 / -1 2.62 / 16	14.53 ( 31) -0.01 / 0 1.99 / 14	13.72 ( 31) .85 / 6 2.37 / 17	17.38 ( 31) -0.33 / -2 1.42 / 8	16.34 ( 31) .13 / 1 2.43 / 15	17.64 ( 31) -0.85 / -5 1.75 / 10	16.56 ( 31) -0.22 / -1 2.03 / 12
SEP	9.81 ( 30) -0.80 / -8 2.38 / 24	8.94 ( 30) -0.18 / -2 1.53 / 17	10.13 ( 30) .53 / 5 2.69 / 27	9.05 ( 30) .04 / 0 1.46 / 16	8.66 ( 30) .50 / 6 1.44 / 17	10.01 ( 30) -0.13 / -1 1.72 / 17	10.38 ( 30) -0.02 / 0 1.97 / 19	9.80 ( 30) -0.07 / -1 1.79 / 18	10.51 ( 30) -0.21 / -2 2.05 / 19
OCT	5.01 ( 31) -0.11 / -2 1.45 / 29	4.96 ( 31) .15 / 3 .90 / 18	6.82 ( 31) -0.90 / -13 3.01 / 44	4.97 ( 31) -0.20 / -4 1.33 / 27	4.42 ( 31) .51 / 11 1.74 / 39	5.71 ( 31) -0.06 / -1 1.66 / 29	6.07 ( 31) -0.38 / -6 1.85 / 30	5.93 ( 31) -0.47 / -8 1.85 / 31	5.43 ( 31) .55 / 10 1.74 / 32
NOV	2.87 ( 30) .16 / 6 1.61 / 56	2.87 ( 30) .10 / 3 .71 / 25	3.97 ( 29) .01 / 0 1.34 / 34	2.67 ( 30) .33 / 12 1.57 / 59	2.86 ( 29) .02 / 1 .71 / 25	3.85 ( 30) -0.22 / -6 1.42 / 37	4.10 ( 30) -0.37 / -9 1.10 / 27	3.67 ( 30) -0.08 / -2 .93 / 25	3.81 ( 30) -0.00 / 0 .83 / 22
DEC	1.38 ( 31) -0.09 / -6 .53 / 38	1.27 ( 31) -0.09 / -7 .50 / 40	1.56 ( 31) .32 / 20 .82 / 53	1.26 ( 31) .09 / 7 .46 / 36	1.35 ( 31) -0.05 / -4 .48 / 36	1.39 ( 30) .02 / 1 .64 / 46	1.67 ( 31) -0.22 / -12 .80 / 43	1.24 ( 31) .19 / 16 .55 / 44	1.59 ( 31) .10 / 7 .52 / 32
YEAR	9.64 (366) -0.65 / -7 3.13 / 32	9.05 (366) -0.01 / 0 1.78 / 20	11.08 (365) -0.29 / -3 2.88 / 26	8.89 (366) .16 / 2 1.92 / 22	9.03 (365) .23 / 3 1.85 / 20	10.11 (365) -0.03 / 0 1.67 / 16	10.48 (364) -0.22 / -2 2.09 / 20	10.15 (366) -0.31 / -3 1.88 / 18	10.57 (366) -0.16 / -2 1.66 / 16

	WEI	WUE	ALL
JAN	3.23 ( 31) .25 / 8 1.06 / 33	2.60 ( 31) -.09 / -3 .77 / 30	2.33 ( 899) -.02 / -1 .91 / 39
FEB	5.67 ( 29) -.08 / -1 1.35 / 24	5.25 ( 29) -.46 / -9 1.05 / 20	4.49 ( 841) -.05 / -1 1.16 / 26
MAR	8.30 ( 31) -.45 / -5 1.88 / 23	7.64 ( 31) -.76 / -10 1.42 / 19	6.77 ( 898) -.07 / -1 1.75 / 26
APR	16.75 ( 30) -.47 / -3 2.39 / 14	15.38 ( 30) .70 / 5 2.20 / 14	15.55 ( 867) -.04 / 0 2.44 / 16
MAY	19.90 ( 31) -.69 / -3 2.67 / 13	19.22 ( 31) -.41 / -2 2.31 / 12	18.84 ( 899) -.07 / 0 2.82 / 15
JUN	18.11 ( 30) -.39 / -2 3.38 / 19	17.10 ( 30) -.19 / -1 2.53 / 15	16.56 ( 869) -.25 / -2 3.54 / 21
JUL	20.00 ( 31) -.59 / -3 2.28 / 11	18.84 ( 31) -.86 / -5 1.96 / 10	17.02 ( 886) -.12 / -1 2.67 / 16
AUG	16.77 ( 31) -.43 / -3 1.97 / 12	16.04 ( 31) .37 / 2 2.15 / 13	15.98 ( 882) -.05 / 0 2.34 / 15
SEP	10.72 ( 30) -.05 / 0 1.41 / 13	10.52 ( 30) -.54 / -5 1.33 / 13	9.64 ( 856) -.11 / -1 1.88 / 20
OCT	5.90 ( 31) .19 / 3 1.55 / 26	5.46 ( 31) .16 / 3 1.85 / 34	5.44 ( 881) -.07 / -1 1.77 / 32
NOV	4.24 ( 28) .02 / 0 1.47 / 35	3.60 ( 30) -.05 / -1 .65 / 18	3.38 ( 863) -.03 / -1 1.38 / 41
DEC	1.90 ( 31) .05 / 2 .81 / 43	1.61 ( 31) -.08 / -5 .50 / 31	1.49 ( 898) -.02 / -2 .69 / 46
YEAR	11.01 (364) -.22 / -2 1.98 / 18	10.29 (366) -.18 / -2 1.70 / 17	9.80 (10539) -.07 / -1 2.11 / 22

SMHI Mesoscale

MONTH = \*\*\*\*\*  
 V.S.F. = \*\*\*\*\*  
 S.R. = \*\*\*\*\*

4 5 6 7 8 9  
 1 1 1 1 1 1  
 150 150 150 150 150 150

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	MIN	MBE	MAX	MIN	RMSE	MAX	MIN	U95	MAX
STATION	VRK	HAR	SOD	VIM	SOD	VIM	SOD	VIM	VIM
MONTH	5	7	5	7	5	7	5	7	7
REL.	0	-17	5	27	5	27	9	55	55
ABS.	.0	-3.2	.9	4.0	.9	4.0	1.9	8.2	8.2

	NOR	GRU	ORE	KAT	VAE	JOE	ORB	HER	VRK
JAN	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
FEB	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
MAR	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
APR	12.81 ( 30) .23 / 2 .71 / 6	13.74 ( 30) - .60 / -4 1.54 / 11	13.73 ( 30) - .55 / -4 1.99 / 14	13.24 ( 30) - .16 / -1 1.90 / 14	13.08 ( 30) .19 / 1 1.40 / 11	13.06 ( 30) - .02 / 0 1.25 / 10	14.09 ( 30) - 1.05 / -7 2.04 / 14	13.12 ( 30) .11 / 1 .91 / 7	12.67 ( 30) .51 / 4 .98 / 8
MAY	20.54 ( 31) - .03 / 0 1.54 / 7	20.00 ( 31) .49 / 2 1.65 / 8	19.71 ( 31) .67 / 3 2.74 / 14	20.04 ( 31) .49 / 2 2.03 / 10	20.82 ( 31) - .40 / -2 1.58 / 8	20.66 ( 31) - .03 / 0 1.36 / 7	21.81 ( 31) - 1.30 / -6 2.55 / 12	20.49 ( 31) .57 / 3 1.27 / 6	20.69 ( 30) .00 / 0 1.19 / 6
JUN	19.70 ( 30) - .10 / 0 1.75 / 9	19.93 ( 30) - .04 / 0 2.07 / 10	20.71 ( 30) - .66 / -3 3.93 / 19	20.05 ( 29) - .03 / 0 2.67 / 13	20.31 ( 30) - .45 / -2 2.11 / 10	20.44 ( 29) - .48 / -2 1.50 / 7	21.96 ( 30) - 2.37 / -11 3.34 / 15	19.10 ( 27) 1.25 / 7 1.96 / 10	20.03 ( 30) - .15 / -1 1.48 / 7
JUL	16.41 ( 31) - .13 / -1 1.40 / 9	16.35 ( 31) .55 / 3 1.72 / 11	16.56 ( 31) - .09 / -1 2.61 / 16	16.48 ( 30) - .21 / -1 1.87 / 11	16.01 ( 25) - .05 / 0 1.64 / 10	16.25 ( 30) .02 / 0 1.50 / 9	16.91 ( 13) - 1.46 / -9 2.36 / 14	16.64 ( 17) 1.66 / 10 2.59 / 16	16.08 ( 31) - .07 / 0 2.29 / 14
AUG	14.53 ( 31) .16 / 1 1.29 / 9	13.73 ( 31) .47 / 3 1.35 / 10	13.85 ( 31) .55 / 4 2.05 / 15	14.32 ( 30) - .29 / 2 1.98 / 14	14.45 ( 31) - .14 / -1 1.73 / 12	15.50 ( 23) - .43 / -3 1.33 / 9	15.31 ( 31) - 1.09 / -7 1.99 / 13	14.56 ( 22) .56 / 4 1.41 / 10	14.19 ( 31) .42 / 3 1.80 / 13
SEP	10.14 ( 30) - .08 / -1 .60 / 6	9.85 ( 30) .19 / 2 1.16 / 12	9.41 ( 30) .57 / 6 1.32 / 14	9.95 ( 30) .09 / 1 .92 / 9	9.89 ( 30) .22 / 2 1.07 / 11	10.39 ( 20) - .13 / -1 .79 / 8	9.98 ( 30) .12 / 1 1.26 / 13	10.43 ( 25) - .39 / -4 .78 / 8	9.66 ( 30) .51 / 5 1.06 / 11
OCT	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
NOV	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
DEC	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
YEAR	15.71 (183) .01 / 0 1.29 / 8	15.62 (183) .18 / 1 1.61 / 10	15.68 (183) .09 / 1 2.57 / 16	15.68 (180) .08 / 1 1.96 / 13	15.77 (177) - .11 / -1 1.62 / 10	16.42 (163) - .17 / -1 1.34 / 8	16.67 (165) - 1.16 / -7 2.34 / 14	15.85 (152) .56 / 4 1.52 / 10	15.55 (182) .20 / 1 1.54 / 10

	SOD	OST	THO	HAR	VIM	STO	ALL
JAN	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
FEB	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
MAR	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
APR	13.08 ( 30) -1.18 / -1 .78 / 6	12.83 ( 30) .23 / 2 .74 / 6	12.89 ( 30) .48 / 4 .95 / 7	14.16 ( 30) -1.25 / -9 2.37 / 17	13.45 ( 30) -2.27 / -2 2.17 / 16	13.26 ( 30) .18 / 1 1.56 / 12	13.28 ( 450) -1.14 / -1 1.52 / 11
MAY	20.38 ( 31) .34 / 2 .94 / 5	21.40 ( 29) -1.33 / -2 1.23 / 6	20.64 ( 31) .36 / 2 1.03 / 5	21.39 ( 31) -1.73 / -3 1.81 / 8	20.37 ( 31) .41 / 2 2.21 / 11	20.15 ( 31) .22 / 1 1.52 / 8	20.60 ( 462) .05 / 0 1.73 / 8
JUN	19.37 ( 30) .37 / 2 1.41 / 7	19.87 ( 30) -1.44 / -2 1.08 / 5	18.83 ( 30) 1.20 / 6 1.97 / 10	20.49 ( 30) -1.36 / -7 2.31 / 11	20.29 ( 30) -1.43 / -2 3.76 / 19	16.56 ( 16) 1.88 / 11 2.58 / 16	19.95 ( 431) -1.20 / -1 2.41 / 12
JUL	15.46 ( 19) .39 / 2 1.14 / 7	19.43 ( 6) -1.26 / -6 1.32 / 7	15.69 ( 31) 1.72 / 11 2.48 / 16	18.63 ( 18) -3.21 / -17 4.01 / 22	14.79 ( 31) 1.56 / 11 4.01 / 27	17.47 ( 27) -1.19 / -7 2.77 / 16	16.37 ( 371) .06 / 0 2.42 / 15
AUG	14.79 ( 31) -1.14 / -1 -85 / 6	14.88 ( 31) -1.31 / -2 -91 / 6	14.05 ( 31) 1.10 / 8 1.60 / 11	14.14 ( 17) -2.19 / -16 2.66 / 19	14.20 ( 31) .46 / 3 2.26 / 16	13.20 ( 31) .89 / 7 2.54 / 19	14.36 ( 433) .11 / 1 1.77 / 12
SEP	10.07 ( 30) .08 / 1 .59 / 6	10.24 ( 30) -1.19 / -2 .74 / 7	9.82 ( 30) .58 / 6 .96 / 10	11.38 ( 24) -1.01 / -9 1.32 / 12	10.46 ( 27) -1.01 / 0 1.45 / 14	10.27 ( 30) -1.39 / -4 1.68 / 16	10.10 ( 426) .03 / 0 1.09 / 11
OCT	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
NOV	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
DEC	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
YEAR	15.55 (171) .12 / 1 .98 / 6	15.94 (156) -1.25 / -2 .97 / 6	15.34 (183) .91 / 6 1.61 / 11	17.01 (150) -1.47 / -9 2.42 / 14	15.69 (180) -1.30 / 2 2.82 / 18	15.01 (165) -1.16 / 1 2.12 / 14	15.81 ( 2573) -1.02 / 0 1.87 / 12

MONTH = 1 2 3 4 5 6 7 8 9 10 11 12  
 V.S.F. = 100 50 50 50 50 50 50 50 50 50 100 100  
 S.R. = 200 200 200 200 200 200 200 200 200 200 200 200

STATION	MIN	MBE	RMSE				U95				
			MAX	MIN	MAX	MIN	MAX	MIN	MAX	CIM	
MONTH	7		SAE	REH	CIM	REH	REH	CIM	REH	CIM	1
REL.	0		31	4	69	8	8	138	8	138	138
ABS.	.0		2.5	.6	3.3	1.2	1.2	6.6	1.2	6.6	6.6

DOL PAY WYN SAE AIG MLS FAH MVE CHA

JAN	3.90 ( 31) .05 / 1 .89 / 23	3.22 ( 31) -.49 / -15 .97 / 30	0.00 ( 0) 0.00 / 0 0.00 / 0	4.81 ( 31) 1.05 / 22 1.86 / 39	0.00 ( 0) 0.00 / 0 0.00 / 0	4.32 ( 31) -.06 / -1 .85 / 20	2.94 ( 31) .17 / 6 .88 / 30	4.81 ( 31) -.75 / -16 1.15 / 24	3.90 ( 31) -.06 / -2 .92 / 24
FEB	7.46 ( 29) -.58 / -8 1.62 / 22	6.51 ( 29) -.08 / -1 1.16 / 18	5.78 ( 29) .43 / 7 1.16 / 20	7.36 ( 29) 1.09 / 15 2.22 / 30	0.00 ( 0) 0.00 / 0 0.00 / 0	7.60 ( 29) -.29 / -4 1.84 / 24	5.48 ( 29) .91 / 17 1.70 / 31	8.80 ( 29) -1.60 / -18 2.11 / 24	7.00 ( 29) -.39 / -6 1.50 / 21
MAR	9.13 ( 31) .05 / 1 2.09 / 23	8.48 ( 31) -.35 / -4 1.64 / 19	7.24 ( 31) .36 / 5 1.43 / 20	8.32 ( 31) 2.54 / 31 3.61 / 43	0.00 ( 0) 0.00 / 0 0.00 / 0	9.12 ( 31) .43 / 5 2.40 / 26	6.87 ( 31) 1.21 / 18 2.19 / 32	10.76 ( 31) -.98 / -9 2.54 / 24	9.08 ( 31) -.64 / -7 1.93 / 21
APR	14.90 ( 30) .62 / 4 2.38 / 16	14.58 ( 30) .55 / 4 2.04 / 14	14.00 ( 30) .26 / 2 1.49 / 11	19.58 ( 30) -1.56 / -8 4.16 / 21	0.00 ( 0) 0.00 / 0 0.00 / 0	16.60 ( 30) -.51 / -3 2.60 / 16	14.14 ( 30) .65 / 5 2.52 / 18	17.63 ( 30) -1.16 / -7 2.04 / 12	16.35 ( 30) -1.46 / -9 3.21 / 20
MAY	13.86 ( 31) 2.67 / 19 4.25 / 31	17.33 ( 31) -.44 / -3 2.05 / 12	17.67 ( 31) -1.16 / -7 2.49 / 14	18.74 ( 31) -.32 / -2 4.02 / 21	16.69 ( 31) .78 / 5 2.71 / 16	14.69 ( 31) 2.16 / 15 3.68 / 25	14.63 ( 31) 1.41 / 10 2.47 / 17	19.18 ( 31) -2.25 / -12 3.81 / 20	13.90 ( 31) 1.64 / 12 3.49 / 25
JUN	17.21 ( 30) 2.62 / 15 4.87 / 28	21.27 ( 30) -1.32 / -6 2.32 / 11	20.03 ( 30) -1.30 / -6 2.04 / 10	17.39 ( 30) 1.35 / 8 3.98 / 23	18.71 ( 30) 1.75 / 9 2.94 / 16	15.98 ( 30) 2.91 / 18 4.84 / 30	18.67 ( 30) .53 / 3 2.45 / 13	0.00 ( 0) 0.00 / 0 0.00 / 0	17.10 ( 30) 1.64 / 10 3.78 / 22
JUL	19.68 ( 31) 1.46 / 7 3.55 / 18	21.25 ( 31) -.54 / -3 1.96 / 9	20.23 ( 31) -.72 / -4 1.74 / 9	20.49 ( 31) .04 / 0 4.49 / 22	20.81 ( 31) 1.12 / 5 2.37 / 11	20.51 ( 31) .92 / 5 4.44 / 22	19.27 ( 31) .70 / 4 2.24 / 12	24.34 ( 31) -2.72 / -11 3.80 / 16	18.51 ( 31) 1.58 / 9 3.58 / 19
AUG	16.77 ( 31) 1.12 / 7 3.04 / 18	17.99 ( 31) -.53 / -3 1.44 / 8	16.67 ( 31) -.67 / -4 1.44 / 9	16.39 ( 31) -.06 / 0 3.12 / 19	0.00 ( 0) 0.00 / 0 0.00 / 0	17.83 ( 31) -.21 / -1 2.82 / 16	17.21 ( 31) -.25 / -1 2.02 / 12	18.46 ( 31) -.47 / -3 2.45 / 13	16.80 ( 31) -.20 / 1 2.95 / 18
SEP	12.68 ( 30) .28 / 2 2.34 / 18	12.73 ( 30) -.24 / -2 1.27 / 10	11.83 ( 30) -.47 / -4 .94 / 8	12.99 ( 30) .29 / 2 4.09 / 31	0.00 ( 0) 0.00 / 0 0.00 / 0	12.27 ( 30) .98 / 8 3.13 / 25	11.05 ( 30) 1.08 / 10 1.70 / 15	14.90 ( 30) -1.47 / -10 2.32 / 16	12.83 ( 30) -.64 / -5 2.28 / 18
OCT	7.78 ( 31) -.55 / -7 1.94 / 25	5.69 ( 31) 1.00 / 18 1.70 / 30	5.64 ( 31) .65 / 12 1.24 / 22	9.57 ( 31) -1.29 / -14 3.20 / 33	0.00 ( 0) 0.00 / 0 0.00 / 0	8.50 ( 31) -.91 / -11 2.52 / 30	6.89 ( 31) -.06 / -1 1.39 / 20	8.63 ( 31) -1.11 / -13 2.03 / 24	8.59 ( 31) -1.44 / -17 2.52 / 29
NOV	6.44 ( 30) -.47 / -7 1.05 / 16	4.07 ( 30) .06 / 1 .84 / 21	0.00 ( 0) 0.00 / 0 0.00 / 0	7.25 ( 30) .30 / 4 1.34 / 19	0.00 ( 0) 0.00 / 0 0.00 / 0	6.56 ( 30) -.04 / -1 1.01 / 15	4.42 ( 30) .03 / 1 1.34 / 30	6.88 ( 30) -.77 / -11 1.31 / 19	6.78 ( 30) -1.09 / -16 1.49 / 22
DEC	4.33 ( 31) -.38 / -9 .85 / 20	2.95 ( 31) -.13 / -4 .44 / 15	0.00 ( 0) 0.00 / 0 0.00 / 0	4.01 ( 31) .82 / 20 1.18 / 30	0.00 ( 0) 0.00 / 0 0.00 / 0	4.29 ( 31) -.16 / -4 .96 / 22	2.28 ( 31) .60 / 26 1.00 / 44	4.25 ( 31) -.21 / -5 1.41 / 33	4.38 ( 31) -.71 / -16 1.12 / 26
YEAR	11.18 (366) .58 / 5 2.71 / 24	11.35 (366) -.21 / -2 1.58 / 14	13.26 (274) -.29 / -2 1.62 / 12	12.25 (366) .35 / 3 3.30 / 27	18.74 ( 92) 1.21 / 6 2.68 / 14	11.53 (366) .44 / 4 2.88 / 25	10.33 (366) .58 / 6 1.90 / 18	12.62 (336) -1.22 / -10 2.43 / 19	11.27 (366) -.11 / -1 2.59 / 23

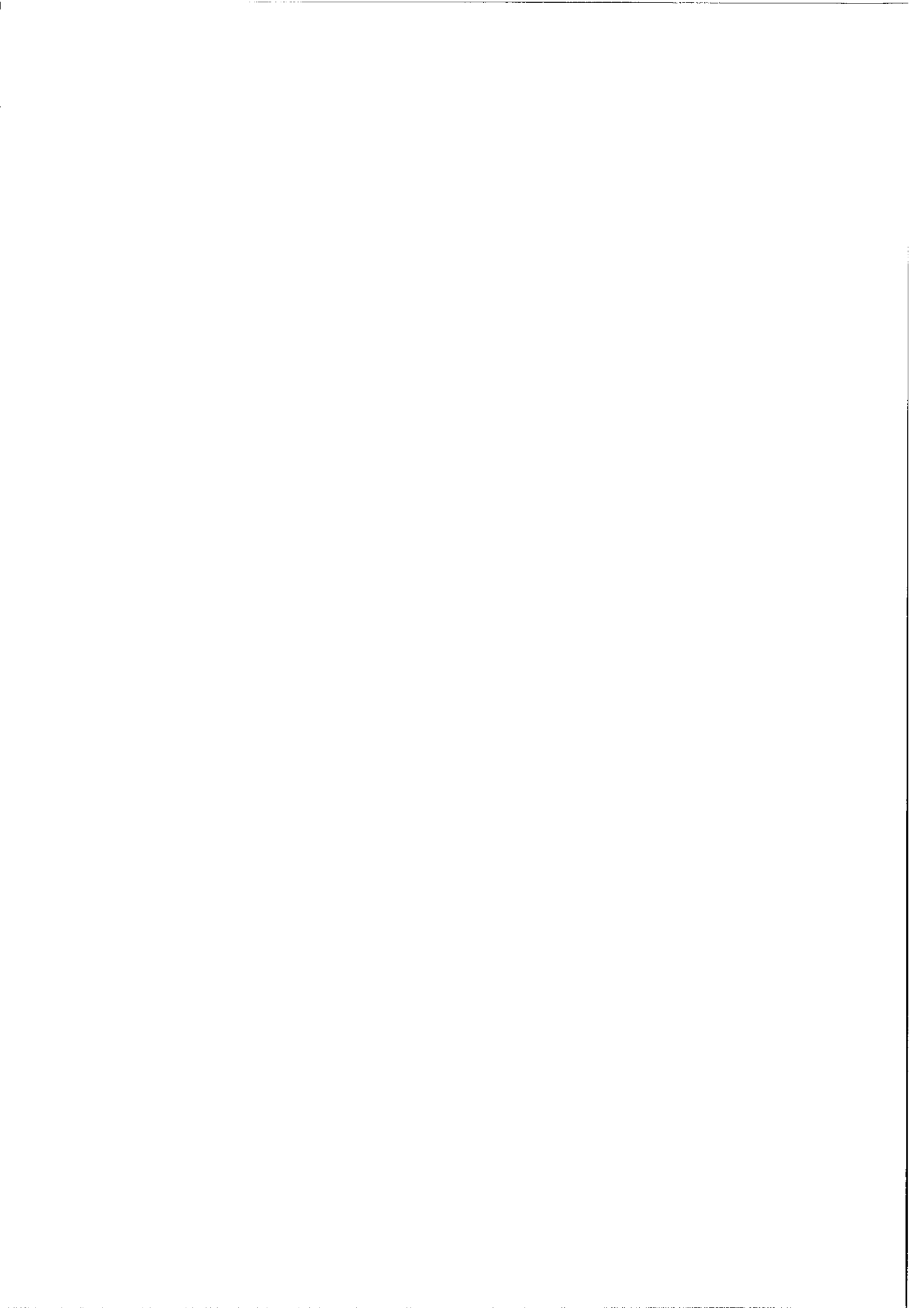
	PIL	LUG	NAP	SIO	MAG	NEU	STA	INT	STG
JAN	4.64 ( 31) -.28 / -6 .70 / 15	0.00 ( 0) 0.00 / 0 0.00 / 0	4.06 ( 31) -.21 / -5 .95 / 23	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	2.53 ( 31) .68 / 27 1.02 / 40	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
FEB	7.21 ( 29) .25 / 3 1.31 / 18	0.00 ( 0) 0.00 / 0 0.00 / 0	6.38 ( 29) .36 / 6 1.41 / 22	0.00 ( 0) 0.00 / 0 0.00 / 0	7.97 ( 29) .44 / 6 .79 / 10	6.09 ( 29) .48 / 8 1.05 / 17	7.43 ( 29) .87 / 12 1.84 / 25	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
MAR	8.90 ( 31) .80 / 9 1.96 / 22	11.17 ( 31) .80 / 7 .98 / 9	7.64 ( 31) .90 / 12 1.90 / 25	0.00 ( 0) 0.00 / 0 0.00 / 0	12.00 ( 31) .35 / 3 .78 / 7	7.59 ( 31) .86 / 11 1.84 / 24	11.47 ( 31) .08 / 1 1.14 / 10	0.00 ( 0) 0.00 / 0 0.00 / 0	7.71 ( 31) .28 / 4 1.39 / 18
APR	16.05 ( 30) -.03 / 0 4.30 / 27	11.51 ( 30) 1.33 / 12 1.66 / 14	13.03 ( 30) 2.13 / 16 3.18 / 24	17.13 ( 30) -.55 / -3 1.86 / 11	13.08 ( 30) .81 / 6 1.62 / 12	15.19 ( 30) -.45 / -3 1.90 / 13	11.34 ( 30) .96 / 8 1.39 / 12	0.00 ( 0) 0.00 / 0 0.00 / 0	14.86 ( 30) .57 / 4 1.51 / 10
MAY	15.59 ( 31) .82 / 5 4.40 / 28	0.00 ( 0) 0.00 / 0 0.00 / 0	13.74 ( 31) 2.84 / 21 3.90 / 28	18.73 ( 31) -1.23 / -7 2.54 / 14	12.60 ( 31) 1.56 / 12 2.09 / 17	17.65 ( 31) -1.33 / -8 3.04 / 17	11.90 ( 31) 1.75 / 15 2.97 / 25	16.43 ( 31) .70 / 4 2.52 / 15	17.46 ( 31) .41 / 2 2.04 / 12
JUN	14.35 ( 30) 3.77 / 26 5.63 / 39	0.00 ( 0) 0.00 / 0 0.00 / 0	15.23 ( 30) 2.96 / 19 4.34 / 28	20.53 ( 30) -1.06 / -5 3.03 / 15	17.55 ( 30) 2.45 / 14 3.06 / 17	20.64 ( 30) -.69 / -3 2.52 / 12	16.51 ( 30) 2.37 / 14 3.98 / 24	18.62 ( 30) .48 / 3 2.61 / 14	18.57 ( 30) 1.44 / 8 3.09 / 17
JUL	16.93 ( 31) 3.27 / 19 5.68 / 34	0.00 ( 0) 0.00 / 0 0.00 / 0	18.80 ( 31) .88 / 5 2.29 / 12	24.16 ( 31) -2.28 / -9 3.71 / 15	19.33 ( 31) 1.57 / 8 2.02 / 10	20.70 ( 31) -.06 / 0 1.82 / 9	18.73 ( 31) 1.60 / 9 3.20 / 17	20.24 ( 31) .96 / 5 2.28 / 11	20.22 ( 31) .12 / 1 1.55 / 8
AUG	15.09 ( 31) 1.47 / 10 2.95 / 20	17.95 ( 31) .09 / 0 1.08 / 6	15.48 ( 31) .87 / 6 2.45 / 16	18.85 ( 31) -.61 / -3 2.62 / 14	17.44 ( 31) .95 / 5 1.26 / 7	17.59 ( 31) -.11 / -1 1.42 / 8	18.27 ( 31) -.30 / -2 1.69 / 9	0.00 ( 0) 0.00 / 0 0.00 / 0	15.77 ( 31) .23 / 1 1.97 / 12
SEP	12.28 ( 30) -.29 / 2 4.04 / 33	13.97 ( 30) -.24 / -2 .75 / 5	11.08 ( 30) 1.06 / 10 2.42 / 22	14.47 ( 30) -.51 / -4 1.60 / 11	13.35 ( 30) .70 / 5 .98 / 7	12.51 ( 30) -.10 / -1 1.57 / 13	13.84 ( 30) .07 / 1 1.37 / 10	0.00 ( 0) 0.00 / 0 0.00 / 0	10.99 ( 30) .29 / 3 1.70 / 15
OCT	9.24 ( 31) -1.76 / -19 3.13 / 34	6.85 ( 31) -.06 / -1 .66 / 10	7.96 ( 31) -.92 / -12 2.22 / 28	0.00 ( 0) 0.00 / 0 0.00 / 0	6.50 ( 31) .51 / 8 .76 / 12	6.27 ( 31) .25 / 4 1.59 / 25	6.86 ( 31) -.02 / 0 .90 / 13	0.00 ( 0) 0.00 / 0 0.00 / 0	6.20 ( 31) .01 / 0 1.85 / 30
NOV	6.46 ( 30) -.09 / -1 1.02 / 16	0.00 ( 0) 0.00 / 0 0.00 / 0	5.59 ( 30) .04 / 1 2.07 / 37	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.89 ( 30) .38 / 10 1.08 / 28	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
DEC	3.76 ( 31) .33 / 9 .65 / 17	0.00 ( 0) 0.00 / 0 0.00 / 0	3.60 ( 31) -.03 / -1 .95 / 26	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	2.68 ( 31) .27 / 10 .61 / 23	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
YEAR	10.88 (366) .74 / 7 3.47 / 32	12.29 (153) .38 / 3 1.08 / 9	10.23 (366) .90 / 9 2.55 / 25	19.00 (183) -1.05 / -6 2.66 / 14	13.34 (274) 1.04 / 8 1.66 / 12	11.12 (366) .02 / 0 1.75 / 16	12.96 (274) .82 / 6 2.29 / 18	18.43 ( 92) .72 / 4 2.47 / 13	13.96 (245) .41 / 3 1.95 / 14



	GVE	KLO	GUE	PUY	GSB	VIS	CDF	RUE	BUS
JAN	2.99 ( 31) -.01 / 0 .59 / 20	2.97 ( 31) -.09 / -3 .35 / 12	0.00 ( 0) 0.00 / 0 0.00 / 0	3.02 ( 31) .03 / 1 .84 / 28	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.61 ( 31) -.41 / -11 1.17 / 32	3.48 ( 31) -.53 / -15 1.36 / 39	2.72 ( 31) .44 / 16 .92 / 34
FEB	6.64 ( 29) .15 / 2 1.00 / 15	6.07 ( 29) -.07 / -1 .60 / 10	10.02 ( 29) -2.26 / -23 2.92 / 29	6.36 ( 29) .39 / 6 1.10 / 17	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	6.74 ( 29) -.21 / -3 .87 / 13	6.40 ( 29) -.46 / -7 .95 / 15	6.00 ( 29) .14 / 2 .89 / 15
MAR	9.72 ( 31) -.74 / -8 1.55 / 16	7.84 ( 31) -.21 / -3 .71 / 9	14.25 ( 31) -4.12 / -29 4.52 / 32	8.21 ( 31) .70 / 8 1.73 / 21	13.48 ( 31) -3.50 / -26 4.13 / 31	10.60 ( 31) -.53 / -5 2.86 / 27	8.92 ( 31) -.59 / -7 1.58 / 18	7.38 ( 31) .08 / 1 1.46 / 20	7.58 ( 31) -.08 / -1 1.27 / 17
APR	14.85 ( 30) .32 / 2 1.75 / 12	15.02 ( 30) -.28 / -2 1.00 / 7	21.28 ( 30) -5.52 / -26 6.44 / 30	15.10 ( 30) .14 / 1 1.88 / 12	18.14 ( 30) -1.41 / -8 5.49 / 30	18.69 ( 30) -2.89 / -15 3.34 / 18	15.02 ( 30) .13 / 1 2.92 / 19	14.65 ( 30) -.65 / -4 1.28 / 9	13.71 ( 30) .70 / 5 1.40 / 10
MAY	16.48 ( 31) .47 / 3 1.68 / 10	18.55 ( 31) -.66 / -4 1.31 / 7	18.83 ( 31) -3.08 / -16 5.56 / 30	17.23 ( 31) -.41 / -2 2.29 / 13	18.32 ( 31) -1.33 / -7 5.83 / 32	19.99 ( 31) -3.03 / -15 4.22 / 21	13.85 ( 31) 2.40 / 17 3.47 / 25	16.25 ( 31) .73 / 4 1.79 / 11	16.97 ( 31) -.02 / 0 1.65 / 10
JUN	21.36 ( 30) -.47 / -2 2.16 / 10	20.22 ( 30) -.33 / -2 1.08 / 5	20.37 ( 30) -3.43 / -17 5.49 / 27	20.77 ( 30) -.88 / -4 1.86 / 9	18.26 ( 30) -.04 / 0 5.43 / 30	20.62 ( 30) -1.45 / -7 2.82 / 14	18.37 ( 30) 1.02 / 6 2.63 / 14	18.62 ( 30) .50 / 3 1.88 / 10	18.63 ( 30) .51 / 3 1.86 / 10
JUL	21.15 ( 31) .26 / 1 1.38 / 7	20.61 ( 31) -.14 / -1 .93 / 4	21.61 ( 31) -2.23 / -10 4.91 / 23	21.10 ( 31) .06 / 0 1.67 / 8	22.33 ( 31) -.19 / -1 5.45 / 24	24.53 ( 31) -2.85 / -12 4.01 / 16	19.56 ( 31) .63 / 3 2.42 / 12	19.47 ( 31) .03 / 0 1.67 / 9	18.70 ( 31) 1.16 / 6 1.92 / 10
AUG	18.18 ( 31) -.24 / -1 1.36 / 8	16.47 ( 31) -.20 / -1 .93 / 6	17.63 ( 31) -1.08 / -6 3.16 / 18	17.78 ( 31) .09 / 1 1.25 / 7	18.42 ( 31) -.35 / -2 2.89 / 16	19.20 ( 31) -1.23 / -6 2.26 / 12	16.78 ( 31) .56 / 3 1.60 / 10	16.09 ( 31) -.18 / -1 1.15 / 7	14.63 ( 31) 1.65 / 11 1.87 / 13
SEP	13.93 ( 30) -.97 / -7 1.45 / 10	11.81 ( 30) -.12 / -1 .60 / 5	15.03 ( 30) -2.14 / -14 3.75 / 25	12.71 ( 30) .27 / 2 1.29 / 10	13.98 ( 30) -.28 / -2 3.62 / 26	15.65 ( 30) -2.03 / -13 2.77 / 18	12.33 ( 30) .06 / 1 1.48 / 12	11.45 ( 30) -.16 / -1 1.25 / 11	10.63 ( 30) .94 / 9 1.29 / 12
OCT	7.24 ( 31) -.40 / -6 1.38 / 19	6.20 ( 31) -.17 / -3 .41 / 7	8.06 ( 31) .18 / 2 2.71 / 34	7.08 ( 31) -.32 / -5 1.37 / 19	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	7.86 ( 31) -.96 / -12 1.84 / 23	6.70 ( 31) -.84 / -13 1.68 / 25	5.35 ( 31) .94 / 18 1.36 / 26
NOV	3.83 ( 30) .11 / 3 .96 / 25	3.98 ( 30) -.14 / -4 .45 / 11	0.00 ( 0) 0.00 / 0 0.00 / 0	4.56 ( 30) -.52 / -11 1.39 / 30	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	5.73 ( 30) -.97 / -17 1.63 / 28	4.56 ( 30) -.71 / -16 1.31 / 29	3.45 ( 30) .70 / 20 1.20 / 35
DEC	3.22 ( 31) -.20 / -6 .43 / 13	2.11 ( 31) -.02 / -1 .25 / 12	0.00 ( 0) 0.00 / 0 0.00 / 0	3.12 ( 31) -.08 / -3 .77 / 25	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.43 ( 31) .00 / 0 .83 / 24	2.49 ( 31) -.17 / -7 .67 / 27	0.00 ( 0) 0.00 / 0 0.00 / 0
YEAR	11.64 (366) -.14 / -1 1.39 / 12	11.00 (366) -.20 / -2 .78 / 7	16.36 (274) -2.62 / -16 4.56 / 28	11.43 (366) -.04 / 0 1.52 / 13	17.57 (214) -1.02 / -6 4.81 / 27	18.47 (214) -2.00 / -11 3.25 / 18	11.02 (366) .14 / 1 2.03 / 18	10.63 (366) -.19 / -2 1.41 / 13	10.78 (335) .65 / 6 1.47 / 14

	LUZ	SMA	WFJ	COV	BAS	CGI	FRE	BER	GUT
JAN	0.00 ( 0) 0.00 / 0 0.00 / 0	3.13 ( 31) -.16 / -5 .58 / 19	6.16 ( 31) -.81 / -13 1.27 / 21	6.57 ( 31) -.56 / -9 1.86 / 28	3.20 ( 31) -.12 / -4 1.10 / 34	2.97 ( 31) .03 / 1 .49 / 16	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.23 ( 31) -.16 / -5 .69 / 21
FEB	6.32 ( 29) -.07 / -1 1.06 / 17	5.91 ( 29) .15 / 3 1.01 / 17	9.78 ( 29) -.55 / -6 1.34 / 14	11.11 ( 29) -1.57 / -14 2.11 / 19	5.51 ( 29) .64 / 12 1.25 / 23	6.79 ( 29) -.14 / -2 .81 / 12	7.03 ( 29) -.33 / -5 1.39 / 20	6.95 ( 29) -.59 / -8 .98 / 14	5.70 ( 29) .41 / 7 1.70 / 30
MAR	8.25 ( 31) -.42 / -5 2.07 / 25	6.95 ( 31) .85 / 12 1.43 / 21	12.88 ( 31) -.75 / -6 1.73 / 13	15.78 ( 31) -3.18 / -20 3.67 / 23	6.75 ( 31) .77 / 11 2.06 / 31	9.04 ( 31) .32 / 4 1.19 / 13	9.28 ( 31) -.64 / -7 2.41 / 26	8.22 ( 31) -.09 / -1 1.23 / 15	7.88 ( 31) -.01 / 0 .96 / 12
APR	12.61 ( 30) 1.88 / 15 2.65 / 21	14.20 ( 30) .60 / 4 1.15 / 8	20.94 ( 30) -.84 / -4 2.66 / 13	22.14 ( 30) -1.84 / -8 3.02 / 14	13.87 ( 30) .48 / 3 1.92 / 14	15.13 ( 30) -.17 / -1 1.50 / 10	0.00 ( 0) 0.00 / 0 0.00 / 0	14.47 ( 30) .36 / 2 1.70 / 12	15.84 ( 30) -.98 / -6 1.89 / 12
MAY	15.91 ( 31) 1.14 / 7 2.66 / 17	17.23 ( 31) .78 / 5 1.38 / 8	20.27 ( 31) -.89 / -4 3.72 / 18	21.30 ( 31) -1.85 / -9 4.48 / 21	16.08 ( 31) .57 / 4 2.25 / 14	17.07 ( 31) -.52 / -3 1.38 / 8	0.00 ( 0) 0.00 / 0 0.00 / 0	17.15 ( 31) -.53 / -3 1.99 / 12	18.23 ( 31) -.73 / -4 2.23 / 12
JUN	16.61 ( 30) 2.63 / 16 3.87 / 23	18.80 ( 30) 1.24 / 7 1.81 / 10	18.92 ( 30) -.08 / 0 3.28 / 17	20.04 ( 30) -1.22 / -6 3.30 / 16	19.21 ( 30) -.18 / -1 2.57 / 13	21.28 ( 30) -.44 / -2 1.99 / 9	0.00 ( 0) 0.00 / 0 0.00 / 0	20.15 ( 30) -.81 / -4 2.18 / 11	20.67 ( 30) -1.57 / -8 3.56 / 17
JUL	18.65 ( 31) 1.32 / 7 2.13 / 11	19.84 ( 31) .62 / 3 1.29 / 7	21.30 ( 31) .40 / 2 2.50 / 12	23.41 ( 31) -2.27 / -10 3.92 / 17	19.34 ( 31) .35 / 2 1.97 / 10	21.53 ( 31) -.44 / -2 1.40 / 6	0.00 ( 0) 0.00 / 0 0.00 / 0	21.39 ( 31) -1.02 / -5 2.58 / 12	20.61 ( 31) -.45 / -2 1.70 / 8
AUG	14.97 ( 31) 1.26 / 8 1.93 / 13	16.03 ( 31) .28 / 2 1.12 / 7	16.26 ( 31) 1.22 / 8 2.66 / 16	18.67 ( 31) -2.15 / -11 3.23 / 17	17.06 ( 31) -.85 / -5 1.92 / 11	18.01 ( 31) .02 / 0 1.08 / 6	0.00 ( 0) 0.00 / 0 0.00 / 0	17.42 ( 31) -.33 / -2 2.03 / 12	15.96 ( 31) -.06 / 0 1.86 / 12
SEP	10.96 ( 30) .68 / 6 1.85 / 17	11.36 ( 30) .34 / 3 1.08 / 10	14.71 ( 30) .01 / 0 2.03 / 14	16.96 ( 30) -2.45 / -14 3.56 / 21	11.30 ( 30) .20 / 2 1.40 / 12	13.00 ( 30) .56 / 4 1.06 / 8	12.45 ( 30) .11 / 1 2.56 / 21	11.99 ( 30) .31 / 3 1.25 / 10	11.03 ( 30) .19 / 2 1.65 / 15
OCT	5.69 ( 31) .57 / 10 1.76 / 31	5.98 ( 31) .10 / 2 .70 / 12	10.03 ( 31) -.32 / -3 1.39 / 14	11.02 ( 31) -1.39 / -13 2.41 / 22	6.48 ( 31) -.20 / -3 1.82 / 28	6.76 ( 31) .43 / 6 1.16 / 17	7.00 ( 31) .25 / 4 1.65 / 24	6.09 ( 31) .50 / 8 1.73 / 28	6.17 ( 31) -.07 / -1 1.78 / 29
NOV	0.00 ( 0) 0.00 / 0 0.00 / 0	3.84 ( 30) .04 / 1 .66 / 17	7.77 ( 30) -.03 / 0 1.22 / 16	8.90 ( 30) -1.20 / -13 1.60 / 18	4.26 ( 30) -.16 / -4 .97 / 23	3.86 ( 30) .14 / 4 .75 / 19	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.76 ( 30) -.11 / 3 1.36 / 36
DEC	0.00 ( 0) 0.00 / 0 0.00 / 0	1.93 ( 31) .19 / 10 .36 / 19	5.00 ( 31) -.32 / -6 -.77 / 15	6.11 ( 31) -1.22 / -20 1.55 / 25	2.44 ( 31) -.02 / -1 .46 / 19	3.00 ( 31) .20 / 7 .42 / 14	4.02 ( 31) -.51 / -13 .76 / 19	0.00 ( 0) 0.00 / 0 0.00 / 0	2.02 ( 31) .07 / 3 .58 / 19
YEAR	12.25 (274) 1.00 / 8 2.34 / 19	10.44 (366) .42 / 4 1.12 / 11	13.67 (366) -.24 / -2 2.23 / 16	15.17 (366) -1.74 / -11 3.04 / 20	10.47 (366) .12 / 1 1.74 / 17	11.54 (366) .00 / 0 1.18 / 10	7.94 (152) -.23 / -3 1.88 / 24	13.79 (274) -.24 / -2 1.81 / 13	10.93 (366) -.27 / -2 1.81 / 17

	WAE	TAE	REH	LOC	CIM	ALL
JAN	3.20 ( 31) -.17 / -5 .53 / 17	3.11 ( 31) -.04 / -1 .48 / 16	2.84 ( 31) .17 / 6 .29 / 10	0.00 ( 0) 0.00 / 0 0.00 / 0	4.79 ( 31) -.20 / -4 3.31 / 69	3.74 ( 806) -.10 / -3 1.17 / 31
FEB	6.35 ( 29) -.29 / -5 .90 / 14	6.05 ( 29) -.02 / 0 1.24 / 20	6.00 ( 29) .04 / 1 .34 / 6	8.48 ( 29) -.53 / -6 .93 / 11	9.82 ( 29) -1.36 / -14 2.15 / 22	7.09 ( 986) -.14 / -2 1.43 / 20
MAR	7.74 ( 31) -.10 / -1 1.40 / 18	8.35 ( 31) -.70 / -8 1.50 / 18	7.73 ( 31) -.13 / -2 .64 / 8	12.79 ( 31) -.96 / -8 1.23 / 10	14.28 ( 31) -2.44 / -17 3.37 / 24	9.46 ( 1178) -.26 / -3 2.12 / 22
APR	14.40 ( 30) .04 / 0 1.70 / 12	15.07 ( 30) -.28 / -2 1.58 / 10	14.86 ( 30) -.12 / -1 .74 / 5	14.70 ( 30) -1.84 / -13 2.41 / 16	14.49 ( 30) 1.42 / 10 3.92 / 27	15.50 ( 1140) -.23 / -1 2.66 / 17
MAY	17.46 ( 31) -.07 / 0 2.14 / 12	17.44 ( 31) .30 / 2 1.73 / 10	18.11 ( 31) -.04 / 0 .95 / 5	14.24 ( 31) -1.51 / -11 2.28 / 16	12.42 ( 31) 3.74 / 30 5.46 / 44	16.67 ( 1209) .14 / 1 3.14 / 19
JUN	20.48 ( 30) -1.39 / -7 2.46 / 12	19.47 ( 30) .22 / 1 1.73 / 9	20.16 ( 30) -.40 / -2 1.07 / 5	20.26 ( 30) -2.70 / -13 3.30 / 16	18.74 ( 30) .11 / 1 4.57 / 24	18.96 ( 1140) .28 / 1 3.28 / 17
JUL	19.91 ( 31) .08 / 0 2.60 / 13	20.15 ( 31) .06 / 0 2.12 / 11	20.67 ( 31) -.35 / -2 .83 / 4	21.03 ( 31) -1.64 / -8 2.19 / 10	20.78 ( 31) .01 / 0 4.22 / 20	20.56 ( 1209) .03 / 0 2.95 / 14
AUG	16.35 ( 31) -.34 / -2 1.67 / 10	15.80 ( 31) .34 / 2 1.28 / 8	16.37 ( 31) -.07 / 0 .62 / 4	18.54 ( 31) -.97 / -5 1.51 / 8	18.90 ( 31) -1.20 / -6 3.23 / 17	17.11 ( 1178) -.05 / 0 2.12 / 12
SEP	11.49 ( 30) -.04 / 0 1.55 / 13	11.16 ( 30) .30 / 3 1.13 / 10	11.80 ( 30) -.16 / -1 .59 / 5	14.10 ( 30) -.62 / -4 .88 / 6	14.23 ( 30) -.23 / -2 3.18 / 22	12.76 ( 1170) -.10 / -1 2.12 / 17
OCT	6.18 ( 31) -.14 / -2 1.14 / 18	5.84 ( 31) .30 / 5 .86 / 15	6.04 ( 31) .08 / 1 .40 / 7	7.07 ( 31) -.48 / -7 .85 / 12	7.49 ( 31) -.03 / 0 1.96 / 26	7.15 ( 1116) -.21 / -3 1.75 / 25
NOV	3.84 ( 30) .03 / 1 1.23 / 32	3.84 ( 30) .02 / 1 .86 / 22	3.84 ( 30) .11 / 3 .32 / 8	0.00 ( 0) 0.00 / 0 0.00 / 0	7.16 ( 30) -.71 / -10 2.66 / 37	5.21 ( 780) -.19 / -4 1.29 / 25
DEC	0.00 ( 0) 0.00 / 0 0.00 / 0	2.09 ( 31) -.04 / -2 .38 / 18	2.10 ( 31) -.02 / -1 .20 / 10	0.00 ( 0) 0.00 / 0 0.00 / 0	5.53 ( 31) -1.56 / -28 2.45 / 44	3.41 ( 775) -.13 / -4 .93 / 27
YEAR	11.60 (335) -.21 / -2 1.69 / 15	10.71 (366) .04 / 0 1.34 / 13	10.88 (366) -.07 / -1 .64 / 6	14.60 (274) -1.25 / -9 1.91 / 13	12.39 (366) -.20 / -2 3.52 / 28	12.23 (12687) -.07 / -1 2.30 / 19



### Table 3.3

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#### Detailed cross-validation results for kriged daily global irradiation

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The results are presented for the Swiss ANETZ network as follows:

1) Front page: Identifying the network.

Displaying min. & max. of relative (% of meas. mean)  
MBE, RMSE and  $U95 = \sqrt{[(MBE)^2 + (2RMSE)^2]}$ .

The absolute values are in  $MJm^{-2}day^{-1}$  and they correspond to the above-standing min. & max .

Min. & max. selection is only for months with at least 15 observed days.

2) Entries for each station and month with:

MM (ND)  
MBE / MBE%  
RMSE / RMSE%

where MM: meas. mean in  $MJm^{-2}day^{-1}$ ; ND: Number of observed days;  
MBE, resp. RMSE: absolute MBE, resp. RMSE in  $MJm^{-2}day^{-1}$ ;  
MBE%, resp. RMSE%: relative MBE, resp. RMSE in % of MM.

3) "Bottom lines" with monthly (for all stations) and station-wise (yearly) entries as 2).

ANETZ

	MBE		RMSE		U95	
STATION	MIN	MAX	MIN	MAX	MIN	MAX
MONTH	FAH	NEU	REH	CIM	REH	CIM
REL.	8	1	8	1	8	1
ABS.	0	24	3	49	7	99
	0.0	0.6	0.6	2.3	1.2	4.8

	DOL	PAY	WYN	SAE	AIG	MLS	FAH	MVE	CHA
JAN	3.90 ( 31) -0.16 / -4 0.73 / 19	3.22 ( 31) -0.25 / -8 0.94 / 29	0.00 ( 0) 0.00 / 0 0.00 / 0	4.81 ( 31) -0.08 / -2 1.12 / 23	0.00 ( 0) 0.00 / 0 0.00 / 0	4.32 ( 31) -0.22 / -5 0.94 / 22	2.94 ( 31) 0.08 / 3 0.92 / 32	4.81 ( 31) -0.22 / -5 1.05 / 22	3.90 ( 31) -0.40 / -10 0.91 / 23
FEB	7.46 ( 29) -0.28 / -4 1.42 / 19	6.51 ( 29) 0.13 / 2 1.02 / 16	5.78 ( 29) 0.45 / 8 1.20 / 21	7.36 ( 29) 0.41 / 6 1.58 / 22	0.00 ( 0) 0.00 / 0 0.00 / 0	7.60 ( 29) -0.14 / -2 1.53 / 20	5.48 ( 29) 0.47 / 9 1.59 / 29	8.80 ( 29) -0.58 / -7 1.40 / 16	7.00 ( 29) -0.58 / -8 1.39 / 20
MAR	9.13 ( 31) 0.25 / 3 2.35 / 26	8.48 ( 31) -0.36 / -4 1.37 / 16	7.24 ( 31) 0.24 / 3 1.42 / 20	8.32 ( 31) 1.44 / 17 2.60 / 31	0.00 ( 0) 0.00 / 0 0.00 / 0	9.12 ( 31) 0.15 / 2 2.28 / 25	6.87 ( 31) 1.09 / 16 2.18 / 32	10.76 ( 31) 0.21 / 2 1.77 / 16	9.08 ( 31) -1.28 / -14 2.06 / 23
APR	14.90 ( 30) -0.04 / 0 2.88 / 19	14.58 ( 30) 0.59 / 4 2.15 / 15	14.00 ( 30) -0.07 / -1 1.49 / 11	19.58 ( 30) -1.67 / -9 2.94 / 15	0.00 ( 0) 0.00 / 0 0.00 / 0	16.60 ( 30) -0.59 / -4 2.55 / 15	14.14 ( 30) 0.73 / 5 2.77 / 20	17.63 ( 30) -0.19 / -1 2.09 / 12	16.35 ( 30) -0.91 / -6 2.86 / 17
MAY	13.86 ( 31) 1.13 / 8 2.73 / 20	17.33 ( 31) -0.31 / -2 1.74 / 10	17.67 ( 31) -1.42 / -8 2.37 / 13	18.74 ( 31) -0.99 / -5 3.43 / 18	16.69 ( 31) 0.92 / 5 2.93 / 18	14.69 ( 31) 0.93 / 6 2.94 / 20	14.63 ( 31) 1.03 / 7 2.38 / 16	19.18 ( 31) -1.80 / -9 3.82 / 20	13.90 ( 31) -0.03 / 0 2.82 / 20
JUN	17.21 ( 30) 0.27 / 2 4.35 / 25	21.27 ( 30) -0.97 / -5 2.20 / 10	20.03 ( 30) -1.48 / -7 2.25 / 11	17.39 ( 30) 0.52 / 3 3.66 / 21	18.71 ( 30) 1.72 / 9 2.89 / 15	15.98 ( 30) 1.70 / 11 4.14 / 26	18.67 ( 30) 1.34 / 7 3.03 / 16	0.00 ( 0) 0.00 / 0 0.00 / 0	17.10 ( 30) 0.35 / 2 2.58 / 15
JUL	19.68 ( 31) 1.27 / 6 3.28 / 17	21.25 ( 31) -0.39 / -2 2.10 / 10	20.23 ( 31) -0.77 / -4 1.81 / 9	20.49 ( 31) -1.51 / -7 4.20 / 21	20.81 ( 31) 1.21 / 6 2.40 / 12	20.51 ( 31) 0.52 / 3 4.43 / 22	19.27 ( 31) 0.03 / 0 2.24 / 12	24.34 ( 31) -1.76 / -7 3.02 / 12	18.51 ( 31) 0.76 / 4 2.86 / 15
AUG	16.77 ( 31) 0.94 / 6 2.94 / 18	17.99 ( 31) -0.21 / -1 1.20 / 7	16.67 ( 31) -0.78 / -5 1.80 / 11	16.39 ( 31) -0.67 / -4 2.10 / 13	0.00 ( 0) 0.00 / 0 0.00 / 0	17.83 ( 31) -0.20 / -1 2.92 / 16	17.21 ( 31) 0.00 / 0 1.69 / 10	18.46 ( 31) -0.04 / 0 2.30 / 12	16.80 ( 31) -0.19 / -1 2.41 / 14
SEP	12.68 ( 30) 0.60 / 5 2.31 / 18	12.73 ( 30) -0.19 / -1 1.34 / 10	11.83 ( 30) -0.53 / -4 1.14 / 10	12.99 ( 30) 0.57 / 4 2.66 / 20	0.00 ( 0) 0.00 / 0 0.00 / 0	12.27 ( 30) 0.90 / 7 3.09 / 25	11.05 ( 30) 0.76 / 7 1.64 / 15	14.90 ( 30) -0.85 / -6 2.00 / 13	12.83 ( 30) -0.70 / -5 2.24 / 17
OCT	7.78 ( 31) -0.07 / -1 1.69 / 22	5.69 ( 31) 0.83 / 15 1.43 / 25	5.64 ( 31) 0.47 / 8 1.17 / 21	9.57 ( 31) -0.19 / -2 1.56 / 16	0.00 ( 0) 0.00 / 0 0.00 / 0	8.50 ( 31) -0.57 / -7 1.94 / 23	6.89 ( 31) -0.32 / -5 1.37 / 20	8.63 ( 31) 0.04 / 0 1.99 / 23	8.59 ( 31) -0.48 / -6 1.06 / 12
NOV	6.44 ( 30) 0.01 / 0 0.89 / 14	4.07 ( 30) 0.02 / 0 0.78 / 19	0.00 ( 0) 0.00 / 0 0.00 / 0	7.25 ( 30) -0.44 / -6 0.84 / 12	0.00 ( 0) 0.00 / 0 0.00 / 0	6.56 ( 30) 0.00 / 0 0.98 / 15	4.42 ( 30) -0.09 / -2 1.31 / 30	6.88 ( 30) 0.08 / 1 0.89 / 13	6.78 ( 30) -0.62 / -9 0.88 / 13
DEC	4.33 ( 31) -0.10 / -2 0.72 / 17	2.95 ( 31) -0.06 / -2 0.40 / 14	0.00 ( 0) 0.00 / 0 0.00 / 0	4.01 ( 31) 0.10 / 3 0.61 / 15	0.00 ( 0) 0.00 / 0 0.00 / 0	4.29 ( 31) -0.18 / -4 0.82 / 19	2.28 ( 31) 0.29 / 13 0.77 / 34	4.25 ( 31) 0.48 / 11 1.24 / 29	4.38 ( 31) -0.71 / -16 0.96 / 22
YEAR	11.18 (366) 0.32 / 3 2.44 / 22	11.35 (366) -0.10 / -1 1.49 / 13	13.26 (274) -0.44 / -3 1.69 / 13	12.25 (366) -0.21 / -2 2.54 / 21	18.74 ( 92) 1.28 / 7 2.75 / 15	11.53 (366) 0.19 / 2 2.64 / 23	10.33 (366) 0.45 / 4 1.94 / 19	12.62 (366) -0.42 / -3 2.13 / 17	11.27 (366) -0.40 / -4 2.07 / 18

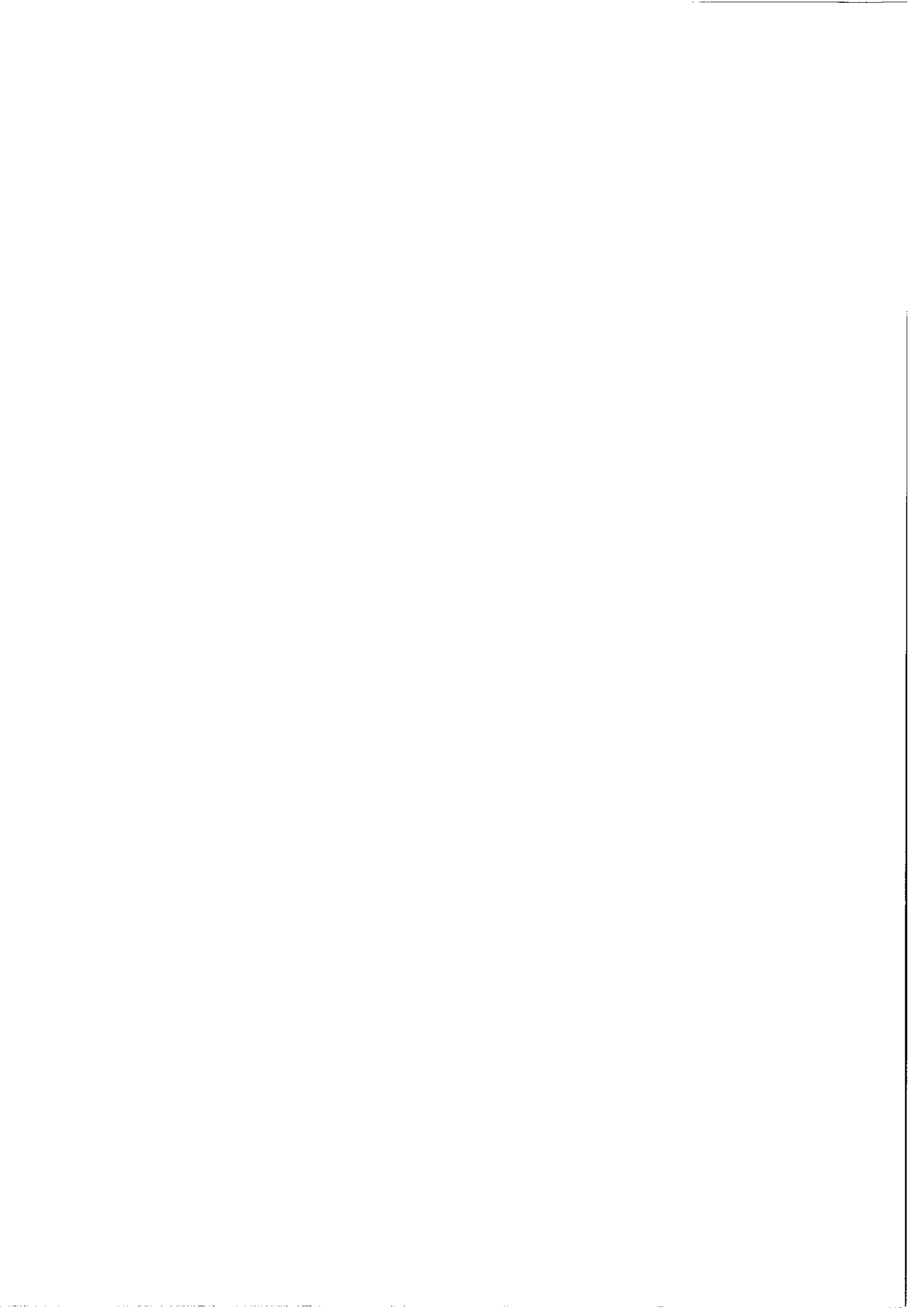
	PIL	LUG	NAP	SIO	MAG	NEU	STA	INT	STG
JAN	4.64 ( 31) -0.50 / -11 0.76 / 16	0.00 ( 0) 0.00 / 0 0.00 / 0	4.06 ( 31) 0.29 / 7 0.69 / 17	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	2.53 ( 31) 0.62 / 24 0.94 / 37	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
FEB	7.21 ( 29) -0.12 / -2 0.77 / 11	0.00 ( 0) 0.00 / 0 0.00 / 0	6.38 ( 29) 0.63 / 10 1.24 / 19	0.00 ( 0) 0.00 / 0 0.00 / 0	7.97 ( 29) 0.62 / 8 0.92 / 11	6.09 ( 29) 0.37 / 6 1.01 / 17	7.43 ( 29) 0.53 / 7 1.79 / 24	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
MAR	8.90 ( 31) 0.25 / 3 1.30 / 15	11.17 ( 31) 0.66 / 6 0.93 / 8	7.64 ( 31) 0.98 / 13 1.84 / 24	0.00 ( 0) 0.00 / 0 0.00 / 0	12.00 ( 31) 0.73 / 6 1.19 / 10	7.59 ( 31) 0.90 / 12 1.91 / 25	11.47 ( 31) 0.39 / 3 1.20 / 10	0.00 ( 0) 0.00 / 0 0.00 / 0	7.71 ( 31) 0.32 / 4 1.32 / 17
APR	16.05 ( 30) 0.56 / 4 3.06 / 19	11.51 ( 30) 1.01 / 9 1.35 / 12	13.03 ( 30) 1.67 / 13 2.99 / 23	17.13 ( 30) 0.15 / 1 2.03 / 12	13.08 ( 30) 0.97 / 7 1.94 / 15	15.19 ( 30) -0.37 / -2 2.07 / 14	11.34 ( 30) 0.50 / 4 1.42 / 13	0.00 ( 0) 0.00 / 0 0.00 / 0	14.86 ( 30) 1.43 / 10 2.17 / 15
MAY	15.59 ( 31) 1.01 / 6 3.53 / 23	0.00 ( 0) 0.00 / 0 0.00 / 0	13.74 ( 31) 2.09 / 15 3.18 / 23	18.73 ( 31) -0.24 / -1 2.05 / 11	12.60 ( 31) 0.84 / 7 1.67 / 13	17.65 ( 31) -1.07 / -6 2.98 / 17	11.90 ( 31) 1.33 / 11 3.24 / 27	16.43 ( 31) 0.86 / 5 2.60 / 16	17.46 ( 31) 0.58 / 3 2.19 / 13
JUN	14.35 ( 30) 2.38 / 17 4.02 / 28	0.00 ( 0) 0.00 / 0 0.00 / 0	15.23 ( 30) 0.78 / 5 3.25 / 21	20.53 ( 30) -1.00 / -5 2.97 / 14	17.55 ( 30) 1.90 / 11 2.76 / 16	20.64 ( 30) -0.56 / -3 2.46 / 12	16.51 ( 30) 2.32 / 14 4.10 / 25	18.62 ( 30) 0.41 / 2 2.47 / 13	18.57 ( 30) 1.42 / 8 2.99 / 16
JUL	16.93 ( 31) 2.70 / 16 5.02 / 30	0.00 ( 0) 0.00 / 0 0.00 / 0	18.80 ( 31) 0.05 / 0 2.25 / 12	24.16 ( 31) -1.10 / -5 2.61 / 11	19.33 ( 31) 1.24 / 6 2.29 / 12	20.70 ( 31) 0.04 / 0 2.26 / 11	18.73 ( 31) 2.09 / 11 3.84 / 21	20.24 ( 31) 1.44 / 7 3.02 / 15	20.22 ( 31) 0.35 / 2 1.87 / 9
AUG	15.09 ( 31) 0.58 / 4 2.12 / 14	17.95 ( 31) 0.04 / 0 1.09 / 6	15.48 ( 31) 0.42 / 3 1.88 / 12	18.85 ( 31) 0.03 / 0 2.17 / 12	17.44 ( 31) 0.80 / 5 1.41 / 8	17.59 ( 31) -0.13 / -1 1.33 / 8	18.27 ( 31) 0.54 / 3 1.97 / 11	0.00 ( 0) 0.00 / 0 0.00 / 0	15.77 ( 31) 0.19 / 1 1.62 / 10
SEP	12.28 ( 30) 0.98 / 8 3.08 / 25	13.97 ( 30) -0.50 / -4 1.04 / 7	11.08 ( 30) 0.58 / 5 2.25 / 20	14.47 ( 30) -0.02 / 0 1.25 / 9	13.35 ( 30) 0.63 / 5 1.03 / 8	12.51 ( 30) -0.08 / -1 1.45 / 12	13.84 ( 30) 0.74 / 5 1.52 / 11	0.00 ( 0) 0.00 / 0 0.00 / 0	10.99 ( 30) 0.09 / 1 1.77 / 16
OCT	9.24 ( 31) -0.44 / -5 1.39 / 15	6.85 ( 31) -0.06 / -1 0.62 / 9	7.96 ( 31) 0.01 / 0 1.27 / 16	0.00 ( 0) 0.00 / 0 0.00 / 0	6.50 ( 31) 0.54 / 8 0.84 / 13	6.27 ( 31) 0.03 / 0 1.08 / 17	6.86 ( 31) 0.13 / 2 0.93 / 14	0.00 ( 0) 0.00 / 0 0.00 / 0	6.20 ( 31) 0.10 / 2 1.81 / 29
NOV	6.46 ( 30) 0.00 / 0 0.68 / 11	0.00 ( 0) 0.00 / 0 0.00 / 0	5.59 ( 30) 0.66 / 12 1.33 / 24	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.89 ( 30) 0.26 / 7 0.96 / 25	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
DEC	3.76 ( 31) 0.13 / 3 0.61 / 16	0.00 ( 0) 0.00 / 0 0.00 / 0	3.60 ( 31) 0.23 / 6 0.65 / 18	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	2.68 ( 31) 0.08 / 3 0.64 / 24	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0
YEAR	10.88 (366) 0.63 / 6 2.63 / 24	12.29 (153) 0.23 / 2 1.03 / 8	10.23 (366) 0.70 / 7 2.09 / 20	19.00 (183) -0.36 / -2 2.25 / 12	13.34 (274) 0.92 / 7 1.68 / 13	11.12 (366) 0.01 / 0 1.74 / 16	12.96 (274) 0.95 / 7 2.49 / 19	18.43 ( 92) 0.91 / 5 2.71 / 15	13.96 (245) 0.55 / 4 2.02 / 14



	GVE	KLO	GUE	PUY	GSB	VIS	CDF	RUE	BUS
JAN	2.99 ( 31) 0.14 / 5 0.59 / 20	2.97 ( 31) -0.02 / -1 0.47 / 16	0.00 ( 0) 0.00 / 0 0.00 / 0	3.02 ( 31) 0.19 / 6 0.78 / 26	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.61 ( 31) -0.11 / -3 0.68 / 19	3.48 ( 31) -0.13 / -4 0.78 / 22	2.72 ( 31) 0.36 / 13 0.74 / 27
FEB	6.64 ( 29) 0.35 / 5 1.24 / 19	6.07 ( 29) -0.12 / -2 0.60 / 10	10.02 ( 29) -1.40 / -14 2.15 / 21	6.36 ( 29) 0.59 / 9 1.16 / 18	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	6.74 ( 29) -0.26 / -4 1.23 / 18	6.40 ( 29) -0.42 / -7 0.88 / 14	6.00 ( 29) 0.11 / 2 0.82 / 14
MAR	9.72 ( 31) -0.03 / 0 1.43 / 15	7.84 ( 31) -0.08 / -1 0.69 / 9	14.25 ( 31) -2.64 / -19 3.01 / 21	8.21 ( 31) 0.93 / 11 1.96 / 24	13.48 ( 31) -1.81 / -13 2.82 / 21	10.60 ( 31) 0.55 / 5 2.51 / 24	8.92 ( 31) -0.64 / -7 1.70 / 19	7.38 ( 31) -0.16 / -2 1.34 / 18	7.58 ( 31) -0.21 / -3 1.29 / 17
APR	14.85 ( 30) 0.59 / 4 1.84 / 12	15.02 ( 30) -0.25 / -2 1.00 / 7	21.28 ( 30) -3.22 / -15 4.48 / 21	15.10 ( 30) 0.33 / 2 1.88 / 12	18.14 ( 30) -1.03 / -6 4.42 / 24	18.69 ( 30) -2.45 / -13 3.21 / 17	15.02 ( 30) 0.30 / 2 1.90 / 13	14.65 ( 30) -0.74 / -5 1.31 / 9	13.71 ( 30) 0.55 / 4 1.22 / 9
MAY	16.48 ( 31) 0.47 / 3 1.48 / 9	18.55 ( 31) -0.77 / -4 1.38 / 7	18.83 ( 31) -1.40 / -7 3.96 / 21	17.23 ( 31) -0.49 / -3 2.23 / 13	18.32 ( 31) -0.67 / -4 4.00 / 22	19.99 ( 31) -2.38 / -12 3.77 / 19	13.85 ( 31) 0.35 / 3 2.50 / 18	16.25 ( 31) 0.62 / 4 1.60 / 10	16.97 ( 31) 0.14 / 1 1.67 / 10
JUN	21.36 ( 30) -0.34 / -2 2.29 / 11	20.22 ( 30) -0.50 / -2 1.31 / 6	20.37 ( 30) -3.04 / -15 4.89 / 24	20.77 ( 30) -0.63 / -3 2.08 / 10	18.26 ( 30) -0.39 / -2 4.94 / 27	20.62 ( 30) -0.99 / -5 2.38 / 12	18.37 ( 30) -1.61 / -9 2.97 / 16	18.62 ( 30) 0.74 / 4 1.84 / 10	18.63 ( 30) 0.47 / 3 1.85 / 10
JUL	21.15 ( 31) 0.41 / 2 1.37 / 6	20.61 ( 31) -0.25 / -1 0.97 / 5	21.61 ( 31) -1.34 / -6 3.88 / 18	21.10 ( 31) -0.13 / -1 2.07 / 10	22.33 ( 31) 0.69 / 3 3.87 / 17	24.53 ( 31) -1.77 / -7 2.52 / 10	19.56 ( 31) -0.58 / -3 2.93 / 15	19.47 ( 31) -0.03 / 0 1.39 / 7	18.70 ( 31) 1.10 / 6 1.95 / 10
AUG	18.18 ( 31) -0.26 / -1 1.37 / 8	16.47 ( 31) -0.05 / 0 0.78 / 5	17.63 ( 31) -0.47 / -3 2.47 / 14	17.78 ( 31) 0.32 / 2 1.26 / 7	18.42 ( 31) 0.43 / 2 2.32 / 13	19.20 ( 31) -0.34 / -2 1.37 / 7	16.78 ( 31) -0.14 / -1 2.52 / 15	16.09 ( 31) -0.11 / -1 1.09 / 7	14.63 ( 31) 1.48 / 10 1.80 / 12
SEP	13.93 ( 30) -0.59 / -4 1.48 / 11	11.81 ( 30) -0.31 / -3 0.57 / 5	15.03 ( 30) -1.06 / -7 3.17 / 21	12.71 ( 30) 0.17 / 1 1.17 / 9	13.98 ( 30) 0.32 / 2 2.28 / 16	15.65 ( 30) -1.31 / -8 2.17 / 14	12.33 ( 30) 0.02 / 0 1.51 / 12	11.45 ( 30) -0.23 / -2 1.05 / 9	10.63 ( 30) 0.82 / 8 1.33 / 13
OCT	7.24 ( 31) -0.23 / -3 1.29 / 18	6.20 ( 31) -0.13 / -2 0.53 / 9	8.06 ( 31) 1.08 / 13 2.71 / 34	7.08 ( 31) -0.46 / -6 1.59 / 23	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	7.86 ( 31) -0.19 / -2 1.33 / 17	6.70 ( 31) -0.71 / -11 1.47 / 22	5.35 ( 31) 0.78 / 15 1.20 / 22
NOV	3.83 ( 30) 0.12 / 3 1.00 / 26	3.98 ( 30) 0.03 / 1 0.57 / 14	0.00 ( 0) 0.00 / 0 0.00 / 0	4.56 ( 30) -0.74 / -16 1.60 / 35	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	5.73 ( 30) 0.67 / 12 1.04 / 18	4.56 ( 30) -0.65 / -14 1.20 / 26	3.45 ( 30) 0.72 / 21 1.11 / 32
DEC	3.22 ( 31) -0.16 / -5 0.35 / 11	2.11 ( 31) 0.02 / 1 0.31 / 15	0.00 ( 0) 0.00 / 0 0.00 / 0	3.12 ( 31) -0.13 / -4 0.79 / 25	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.43 ( 31) 0.67 / 20 1.08 / 31	2.49 ( 31) -0.18 / -7 0.58 / 23	0.00 ( 0) 0.00 / 0 0.00 / 0
YEAR	11.64 (366) 0.04 / 0 1.40 / 12	11.00 (366) -0.20 / -2 0.83 / 8	16.36 (274) -1.49 / -9 3.52 / 22	11.43 (366) 0.00 / 0 1.62 / 14	17.57 (214) -0.35 / -2 3.65 / 21	18.47 (214) -1.24 / -7 2.66 / 14	11.02 (366) -0.12 / -1 1.93 / 18	10.63 (366) -0.17 / -2 1.26 / 12	10.78 (335) 0.58 / 5 1.42 / 13

	LUZ	SMA	WFJ	COV	BAS	CGI	FRE	BER	GUT
JAN	0.00 ( 0) 0.00 / 0 0.00 / 0	3.13 ( 31) -0.07 / -2 0.61 / 19	6.16 ( 31) -0.45 / -7 1.04 / 17	6.57 ( 31) -0.17 / -3 1.31 / 20	3.20 ( 31) -0.40 / -13 1.04 / 32	2.97 ( 31) 0.07 / 2 0.46 / 15	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.23 ( 31) 0.10 / 3 0.79 / 24
FEB	6.32 ( 29) 0.30 / 5 0.98 / 16	5.91 ( 29) 0.26 / 4 0.94 / 16	9.78 ( 29) -0.31 / -3 1.42 / 15	11.11 ( 29) -1.03 / -9 1.84 / 17	5.51 ( 29) 0.19 / 4 1.06 / 19	6.79 ( 29) -0.11 / -2 0.88 / 13	7.03 ( 29) -0.22 / -3 1.58 / 22	6.95 ( 29) -0.21 / -3 0.95 / 14	5.70 ( 29) 0.32 / 6 1.60 / 28
MAR	8.25 ( 31) 0.08 / 1 1.63 / 20	6.95 ( 31) 0.91 / 13 1.49 / 22	12.88 ( 31) -0.14 / -1 1.89 / 15	15.78 ( 31) -2.06 / -13 3.01 / 19	6.75 ( 31) 0.23 / 3 1.87 / 28	9.04 ( 31) 0.04 / 0 1.44 / 16	9.28 ( 31) -0.90 / -10 2.56 / 28	8.22 ( 31) -0.01 / 0 1.36 / 17	7.88 ( 31) -0.26 / -3 1.12 / 14
APR	12.61 ( 30) 2.00 / 16 2.74 / 22	14.20 ( 30) 0.42 / 3 1.09 / 8	20.94 ( 30) 0.38 / 2 2.49 / 12	22.14 ( 30) -2.36 / -11 3.64 / 16	13.87 ( 30) 0.57 / 4 1.73 / 12	15.13 ( 30) -0.07 / 0 1.81 / 12	0.00 ( 0) 0.00 / 0 0.00 / 0	14.47 ( 30) 0.46 / 3 1.53 / 11	15.84 ( 30) -0.95 / -6 1.98 / 12
MAY	15.91 ( 31) 1.33 / 8 2.29 / 14	17.23 ( 31) 0.41 / 2 1.45 / 8	20.27 ( 31) -0.22 / -1 3.63 / 18	21.30 ( 31) -1.40 / -7 4.61 / 22	16.08 ( 31) 0.10 / 1 2.64 / 16	17.07 ( 31) -0.39 / -2 1.47 / 9	0.00 ( 0) 0.00 / 0 0.00 / 0	17.15 ( 31) -0.41 / -2 2.37 / 14	18.23 ( 31) -0.77 / -4 2.50 / 14
JUN	16.61 ( 30) 1.91 / 12 3.50 / 21	18.80 ( 30) 0.92 / 5 1.57 / 8	18.92 ( 30) 0.36 / 2 2.40 / 13	20.04 ( 30) -0.98 / -5 3.34 / 17	19.21 ( 30) 0.14 / 1 2.45 / 13	21.28 ( 30) -0.35 / -2 2.01 / 9	0.00 ( 0) 0.00 / 0 0.00 / 0	20.15 ( 30) -0.58 / -3 2.32 / 12	20.67 ( 30) -1.38 / -7 3.30 / 16
JUL	18.65 ( 31) 1.15 / 6 2.69 / 14	19.84 ( 31) 0.48 / 2 1.35 / 7	21.30 ( 31) 0.35 / 2 2.41 / 11	23.41 ( 31) -1.91 / -8 3.70 / 16	19.34 ( 31) 0.11 / 1 1.68 / 9	21.53 ( 31) -0.67 / -3 1.70 / 8	0.00 ( 0) 0.00 / 0 0.00 / 0	21.39 ( 31) -1.08 / -5 2.21 / 10	20.61 ( 31) -0.30 / -1 2.15 / 10
AUG	14.97 ( 31) 0.94 / 6 1.61 / 11	16.03 ( 31) 0.18 / 1 0.93 / 6	16.26 ( 31) 0.96 / 6 2.18 / 13	18.67 ( 31) -1.16 / -6 2.33 / 12	17.06 ( 31) -0.37 / -2 1.82 / 11	18.01 ( 31) -0.34 / -2 1.58 / 9	0.00 ( 0) 0.00 / 0 0.00 / 0	17.42 ( 31) -0.26 / -2 1.83 / 10	15.96 ( 31) -0.25 / -2 1.98 / 12
SEP	10.96 ( 30) 0.62 / 6 1.85 / 17	11.36 ( 30) 0.19 / 2 0.91 / 8	14.71 ( 30) 0.20 / 1 1.88 / 13	16.96 ( 30) -1.56 / -9 2.56 / 15	11.30 ( 30) -0.15 / -1 1.50 / 13	13.00 ( 30) 0.18 / 1 1.50 / 12	12.45 ( 30) -0.25 / -2 2.79 / 22	11.99 ( 30) 0.52 / 4 1.21 / 10	11.03 ( 30) -0.28 / -3 1.95 / 18
OCT	5.69 ( 31) 0.54 / 9 1.37 / 24	5.98 ( 31) 0.04 / 1 0.64 / 11	10.03 ( 31) 0.33 / 3 1.28 / 13	11.02 ( 31) -1.22 / -11 2.03 / 18	6.48 ( 31) -0.03 / 0 1.62 / 25	6.76 ( 31) 0.25 / 4 0.96 / 14	7.00 ( 31) 0.62 / 9 1.96 / 28	6.09 ( 31) 0.01 / 0 1.57 / 26	6.17 ( 31) -0.30 / -5 1.75 / 28
NOV	0.00 ( 0) 0.00 / 0 0.00 / 0	3.84 ( 30) 0.10 / 3 0.65 / 17	7.77 ( 30) -0.14 / -2 0.96 / 12	8.90 ( 30) -0.96 / -11 1.25 / 14	4.26 ( 30) -0.06 / -1 0.87 / 20	3.86 ( 30) 0.20 / 5 0.77 / 20	0.00 ( 0) 0.00 / 0 0.00 / 0	0.00 ( 0) 0.00 / 0 0.00 / 0	3.76 ( 30) 0.05 / 1 1.42 / 38
DEC	0.00 ( 0) 0.00 / 0 0.00 / 0	1.93 ( 31) 0.22 / 11 0.34 / 17	5.00 ( 31) -0.14 / -3 0.61 / 12	6.11 ( 31) -0.65 / -11 1.29 / 21	2.44 ( 31) -0.05 / -2 0.38 / 16	3.00 ( 31) 0.14 / 5 0.46 / 15	4.02 ( 31) -0.06 / -2 0.56 / 14	0.00 ( 0) 0.00 / 0 0.00 / 0	2.02 ( 31) 0.05 / 2 0.40 / 20
YEAR	12.25 (274) 0.99 / 8 2.20 / 18	10.44 (366) 0.34 / 3 1.07 / 10	13.67 (366) 0.10 / 1 2.02 / 15	15.17 (366) -1.29 / -8 2.78 / 18	10.47 (366) 0.02 / 0 1.67 / 16	11.54 (366) -0.09 / -1 1.35 / 12	7.94 (152) -0.16 / -2 2.05 / 26	13.79 (274) -0.18 / -1 1.78 / 13	10.93 (366) -0.33 / -3 1.89 / 17

	WAE	TAE	REH	LOC	CIM	ALL
JAN	3.20 ( 31) 0.20 / 6 0.57 / 18	3.11 ( 31) 0.04 / 1 0.48 / 16	2.84 ( 31) 0.25 / 9 0.44 / 16	0.00 ( 0) 0.00 / 0 0.00 / 0	4.79 ( 31) 0.97 / 20 2.33 / 49	3.74 ( 806) 0.01 / 0 0.93 / 25
FEB	6.35 ( 29) 0.15 / 2 0.84 / 13	6.05 ( 29) 0.13 / 2 1.10 / 18	6.00 ( 29) -0.03 / -1 0.35 / 6	8.48 ( 29) 0.07 / 1 0.99 / 12	9.82 ( 29) -0.29 / -3 1.45 / 15	7.09 ( 986) 0.00 / 0 1.26 / 18
MAR	7.74 ( 31) 0.34 / 4 1.49 / 19	8.35 ( 31) -0.85 / -10 1.68 / 20	7.73 ( 31) -0.23 / -3 0.80 / 10	12.79 ( 31) 0.28 / 2 0.97 / 8	14.28 ( 31) -0.63 / -4 2.20 / 15	9.46 ( 1178) -0.03 / 0 1.83 / 19
APR	14.40 ( 30) -0.14 / -1 1.95 / 14	15.07 ( 30) 0.02 / 0 1.62 / 11	14.86 ( 30) -0.39 / -3 0.85 / 6	14.70 ( 30) -0.85 / -6 2.07 / 14	14.49 ( 30) 1.01 / 7 2.76 / 19	15.50 ( 1140) -0.05 / 0 2.37 / 15
MAY	17.46 ( 31) -0.61 / -4 2.26 / 13	17.44 ( 31) 0.56 / 3 1.83 / 10	18.11 ( 31) -0.42 / -2 1.06 / 6	14.24 ( 31) -1.16 / -8 2.08 / 15	12.42 ( 31) 2.03 / 16 3.68 / 30	16.67 ( 1209) -0.01 / 0 2.73 / 16
JUN	20.48 ( 30) -2.00 / -10 2.83 / 14	19.47 ( 30) 0.48 / 2 1.63 / 8	20.16 ( 30) -0.74 / -4 1.44 / 7	20.26 ( 30) -1.68 / -8 2.71 / 13	18.74 ( 30) 0.24 / 1 2.89 / 15	18.96 ( 1140) 0.03 / 0 2.95 / 16
JUL	19.91 ( 31) -0.12 / -1 2.36 / 12	20.15 ( 31) 0.02 / 0 2.18 / 11	20.67 ( 31) -0.56 / -3 1.05 / 5	21.03 ( 31) -0.87 / -4 1.70 / 8	20.78 ( 31) 0.62 / 3 2.87 / 14	20.56 ( 1209) 0.04 / 0 2.69 / 13
AUG	16.35 ( 31) -0.63 / -4 1.48 / 9	15.80 ( 31) 0.33 / 2 1.18 / 7	16.37 ( 31) -0.22 / -1 0.57 / 3	18.54 ( 31) -0.49 / -3 1.22 / 7	18.90 ( 31) -0.85 / -4 1.84 / 10	17.11 ( 1178) 0.00 / 0 1.84 / 11
SEP	11.49 ( 30) -0.07 / -1 1.48 / 13	11.16 ( 30) 0.23 / 2 1.30 / 12	11.80 ( 30) -0.26 / -2 0.65 / 5	14.10 ( 30) -0.25 / -2 1.06 / 8	14.23 ( 30) 0.33 / 2 2.79 / 20	12.76 ( 1170) 0.01 / 0 1.87 / 15
OCT	6.18 ( 31) -0.39 / -6 0.81 / 13	5.84 ( 31) 0.32 / 5 0.91 / 16	6.04 ( 31) 0.04 / 1 0.51 / 8	7.07 ( 31) -0.34 / -5 1.00 / 14	7.49 ( 31) 0.13 / 2 1.53 / 20	7.15 ( 1116) 0.00 / 0 1.42 / 20
NOV	3.84 ( 30) -0.01 / 0 0.86 / 22	3.84 ( 30) 0.00 / 0 0.87 / 23	3.84 ( 30) 0.24 / 6 0.55 / 14	0.00 ( 0) 0.00 / 0 0.00 / 0	7.16 ( 30) 0.37 / 5 1.39 / 19	5.21 ( 780) -0.01 / 0 1.02 / 20
DEC	0.00 ( 0) 0.00 / 0 0.00 / 0	2.09 ( 31) -0.09 / -4 0.37 / 18	2.10 ( 31) -0.05 / -2 0.21 / 10	0.00 ( 0) 0.00 / 0 0.00 / 0	5.53 ( 31) -0.32 / -6 1.56 / 28	3.41 ( 775) -0.02 / -1 0.75 / 22
YEAR	11.60 (335) -0.30 / -3 1.69 / 15	10.71 (366) 0.10 / 1 1.37 / 13	10.88 (366) -0.20 / -2 0.78 / 7	14.60 (274) -0.59 / -4 1.64 / 11	12.39 (366) 0.30 / 2 2.38 / 19	12.23 (12687) 0.00 / 0 2.02 / 17



**TABLE 4.1**

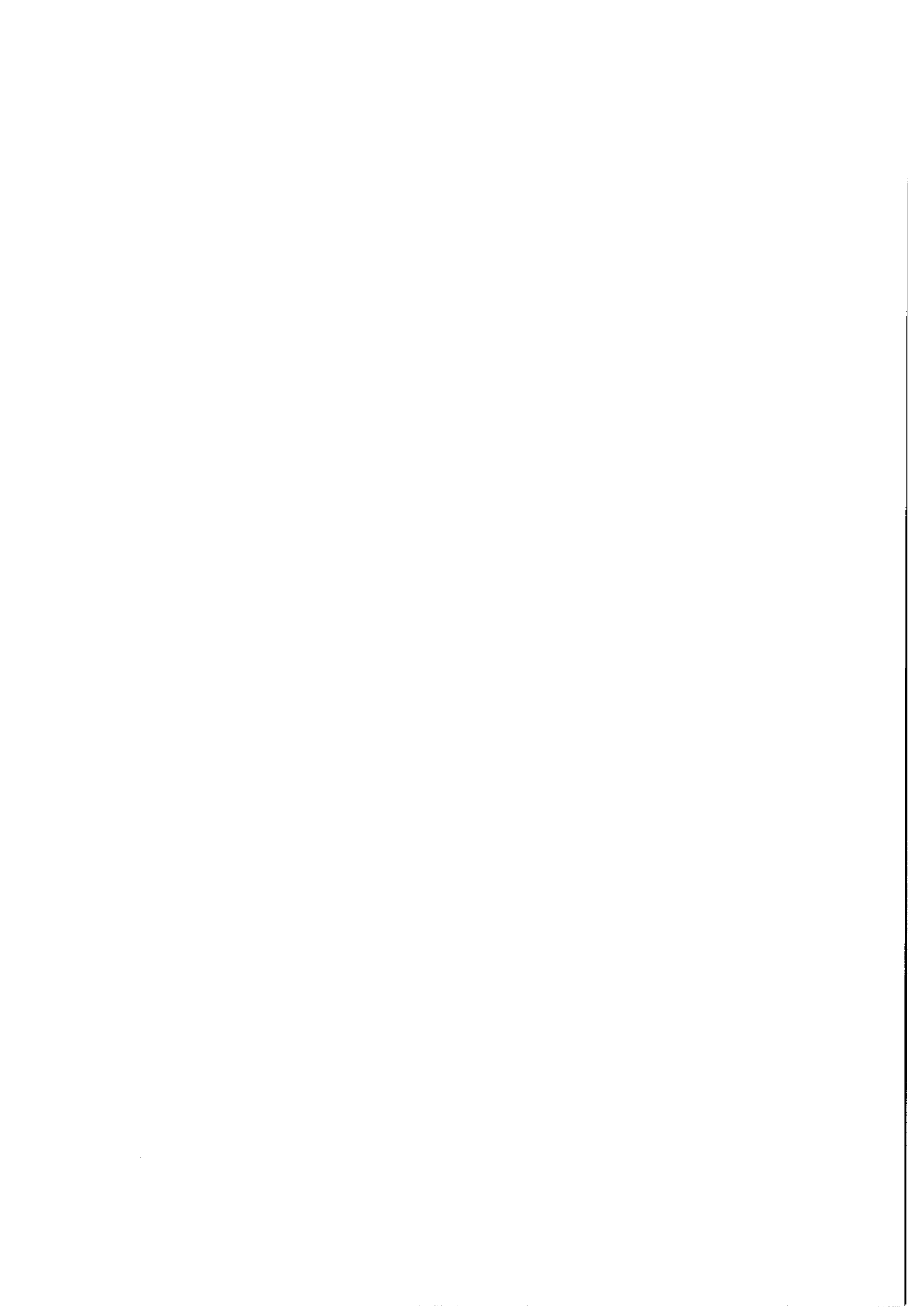
**Validation of METEOSAT-based daily insolation estimates  
for the DWD network.**

MBE and RMSE are expressed in % of the measured mean.

The linear regression model reads

Pyranometer measurements =  $a_0 + a_1 \times$  Satellite-estimates

Units are  $\text{Jcm}^{-2}/\text{day}$ . Division with 100 yields  $\text{MJm}^{-2}/\text{day}$ .



BOCHOLT

NO. OF COMPARISONS = 148 MBE = -3.4 % RMSE = 18.3 %  
MEAN (PYRANOMETER) = 1152. MIN = 115. MAX = 2979.  
STD.DEV. (PYRANOMETER) = 667.  
MEAN (SATELLITE) = 1113. MIN = 76. MAX = 2750.  
STD.DEV. (SATELLITE) = 684.  
CORRELATION COEFFICIENT = .953  
LIN.REGR. PYR(SAT) A0 = 116.7 A1 = .9306

BRAUNSCHWEIG

NO. OF COMPARISONS = 145 MBE = -2.8 % RMSE = 15.5 %  
MEAN (PYRANOMETER) = 1256. MIN = 23. MAX = 3094.  
STD.DEV. (PYRANOMETER) = 712.  
MEAN (SATELLITE) = 1220. MIN = 79. MAX = 2738.  
STD.DEV. (SATELLITE) = 701.  
CORRELATION COEFFICIENT = .963  
LIN.REGR. PYR(SAT) A0 = 62.8 A1 = .9775

BRAUNLAGE

NO. OF COMPARISONS = 148 MBE = -7.1 % RMSE = 22.7 %  
MEAN (PYRANOMETER) = 1213. MIN = 69. MAX = 3100.  
STD.DEV. (PYRANOMETER) = 689.  
MEAN (SATELLITE) = 1127. MIN = 51. MAX = 2755.  
STD.DEV. (SATELLITE) = 667.  
CORRELATION COEFFICIENT = .927  
LIN.REGR. PYR(SAT) A0 = 133.3 A1 = .9579

BREMEN

NO. OF COMPARISONS = 148 MBE = 3.7 % RMSE = 17.2 %  
MEAN (PYRANOMETER) = 1088. MIN = 86. MAX = 2889.  
STD.DEV. (PYRANOMETER) = 615.  
MEAN (SATELLITE) = 1128. MIN = 55. MAX = 2719.  
STD.DEV. (SATELLITE) = 668.  
CORRELATION COEFFICIENT = .963  
LIN.REGR. PYR(SAT) A0 = 88.2 A1 = .8863

BONN

NO. OF COMPARISONS = 138 MBE = .2 % RMSE = 16.2 %  
MEAN (PYRANOMETER) = 1086. MIN = 103. MAX = 2781.  
STD.DEV. (PYRANOMETER) = 637.  
MEAN (SATELLITE) = 1088. MIN = 100. MAX = 2752.  
STD.DEV. (SATELLITE) = 692.  
CORRELATION COEFFICIENT = .968  
LIN.REGR. PYR(SAT) A0 = 116.3 A1 = .8912

COBURG

NO. OF COMPARISONS = 148 MBE = -7.6 % RMSE = 18.3 %  
MEAN (PYRANOMETER) = 1308. MIN = 139. MAX = 2991.  
STD.DEV. (PYRANOMETER) = 731.  
MEAN (SATELLITE) = 1208. MIN = 79. MAX = 2759.  
STD.DEV. (SATELLITE) = 720.  
CORRELATION COEFFICIENT = .955  
LIN.REGR. PYR(SAT) A0 = 135.8 A1 = .9703



KASSEL

NO. OF COMPARISONS = 148 MBE = -6.3 % RMSE = 18.0 %

MEAN (PYRANOMETER) = 1222. MIN = 66. MAX = 2934.  
 STD.DEV. (PYRANOMETER) = 677.

MEAN (SATELLITE) = 1145. MIN = 54. MAX = 2771.  
 STD.DEV. (SATELLITE) = 690.

CORRELATION COEFFICIENT = .955

LIN.REGR. PYR(SAT) A0 = 149.1 A1 = .9374

FREIBURG

NO. OF COMPARISONS = 135 MBE = -3.8 % RMSE = 15.6 %

MEAN (PYRANOMETER) = 1548. MIN = 117. MAX = 2971.  
 STD.DEV. (PYRANOMETER) = 797.

MEAN (SATELLITE) = 1490. MIN = 90. MAX = 2804.  
 STD.DEV. (SATELLITE) = 828.

CORRELATION COEFFICIENT = .959

LIN.REGR. PYR(SAT) A0 = 172.4 A1 = .9236

GELSENKIRCHEN

NO. OF COMPARISONS = 148 MBE = -.7 % RMSE = 19.7 %

MEAN (PYRANOMETER) = 1105. MIN = 120. MAX = 2906.  
 STD.DEV. (PYRANOMETER) = 691.

MEAN (SATELLITE) = 1097. MIN = 99. MAX = 2746.  
 STD.DEV. (SATELLITE) = 707.

CORRELATION COEFFICIENT = .952

LIN.REGR. PYR(SAT) A0 = 85.1 A1 = .9297

GEISENHEIM

NO. OF COMPARISONS = 145 MBE = -8.4 % RMSE = 18.8 %

MEAN (PYRANOMETER) = 1272. MIN = 127. MAX = 2970.  
 STD.DEV. (PYRANOMETER) = 747.

MEAN (SATELLITE) = 1166. MIN = 95. MAX = 2724.  
 STD.DEV. (SATELLITE) = 710.

CORRELATION COEFFICIENT = .958

LIN.REGR. PYR(SAT) A0 = 96.7 A1 = 1.0083

GIESSEN

NO. OF COMPARISONS = 147 MBE = -5.5 % RMSE = 17.4 %

MEAN (PYRANOMETER) = 1273. MIN = 96. MAX = 3006.  
 STD.DEV. (PYRANOMETER) = 721.

MEAN (SATELLITE) = 1202. MIN = 141. MAX = 2777.  
 STD.DEV. (SATELLITE) = 700.

CORRELATION COEFFICIENT = .957

LIN.REGR. PYR(SAT) A0 = 88.8 A1 = .9846

HOHENPEISSENBERG

NO. OF COMPARISONS = 146 MBE = -6.8 % RMSE = 15.1 %

MEAN (PYRANOMETER) = 1418. MIN = 71. MAX = 3054.  
 STD.DEV. (PYRANOMETER) = 813.

MEAN (SATELLITE) = 1322. MIN = 57. MAX = 2830.  
 STD.DEV. (SATELLITE) = 808.

CORRELATION COEFFICIENT = .972

LIN.REGR. PYR(SAT) A0 = 124.1 A1 = .9786

KONSTANZ

NO. OF COMPARISONS = 148 MBE = -5.9 % RMSE = 14.7 %

MEAN (PYRANOMETER) = 1465. MIN = 109. MAX = 2971.  
 STD.DEV. (PYRANOMETER) = 817.

MEAN (SATELLITE) = 1378. MIN = 66. MAX = 2794.  
 STD.DEV. (SATELLITE) = 801.

CORRELATION COEFFICIENT = .970

LIN.REGR. PYR(SAT) A0 = 100.8 A1 = .9899

LUEDENSCHIED

NO. OF COMPARISONS = 148 MBE = -3.2 % RMSE = 18.5 %

MEAN (PYRANOMETER) = 1117. MIN = 86. MAX = 2998.  
 STD.DEV. (PYRANOMETER) = 698.

MEAN (SATELLITE) = 1081. MIN = 63. MAX = 2804.  
 STD.DEV. (SATELLITE) = 713.

CORRELATION COEFFICIENT = .959

LIN.REGR. PYR(SAT) A0 = 101.7 A1 = .9389

LIPPSRINGE

NO. OF COMPARISONS = 148 MBE = .2 % RMSE = 16.8 %

MEAN (PYRANOMETER) = 1139. MIN = 118. MAX = 3044.  
 STD.DEV. (PYRANOMETER) = 696.

MEAN (SATELLITE) = 1141. MIN = 99. MAX = 2737.  
 STD.DEV. (SATELLITE) = 703.

CORRELATION COEFFICIENT = .963

LIN.REGR. PYR(SAT) A0 = 50.9 A1 = .9537

LIST

NO. OF COMPARISONS = 148 MBE = -5.9 % RMSE = 15.4 %

MEAN (PYRANOMETER) = 1247. MIN = 67. MAX = 2966.  
 STD.DEV. (PYRANOMETER) = 732.

MEAN (SATELLITE) = 1173. MIN = 87. MAX = 2768.  
 STD.DEV. (SATELLITE) = 759.

CORRELATION COEFFICIENT = .972

LIN.REGR. PYR(SAT) A0 = 146.2 A1 = .9384

MANNHEIM

NO. OF COMPARISONS = 148 MBE = -1.3 % RMSE = 17.7 %

MEAN (PYRANOMETER) = 1261. MIN = 155. MAX = 2823.  
 STD.DEV. (PYRANOMETER) = 733.

MEAN (SATELLITE) = 1245. MIN = 138. MAX = 2769.  
 STD.DEV. (SATELLITE) = 762.

CORRELATION COEFFICIENT = .956

LIN.REGR. PYR(SAT) A0 = 115.5 A1 = .9203

NUERNBERG

NO. OF COMPARISONS = 127 MBE = -5.6 % RMSE = 16.9 %

MEAN (PYRANOMETER) = 1290. MIN = 161. MAX = 2895.  
 STD.DEV. (PYRANOMETER) = 779.

MEAN (SATELLITE) = 1218. MIN = 93. MAX = 2751.  
 STD.DEV. (SATELLITE) = 784.

CORRELATION COEFFICIENT = .965

LIN.REGR. PYR(SAT) A0 = 122.0 A1 = .9591

NORDERNEY

NO. OF COMPARISONS = 148 MBE = -8.9 % RMSE = 17.4 %  
MEAN (PYRANOMETER) = 1250. MIN = 144. MAX = 3178.  
STD.DEV. (PYRANOMETER) = 731.  
MEAN (SATELLITE) = 1139. MIN = 92. MAX = 2721.  
STD.DEV. (SATELLITE) = 745.  
CORRELATION COEFFICIENT = .968  
LIN.REGR. PYR(SAT) A0 = 168.0 A1 = .9498

OSNABRUECK

NO. OF COMPARISONS = 148 MBE = -2.4 % RMSE = 15.0 %  
MEAN (PYRANOMETER) = 1153. MIN = 117. MAX = 3050.  
STD.DEV. (PYRANOMETER) = 695.  
MEAN (SATELLITE) = 1125. MIN = 86. MAX = 2735.  
STD.DEV. (SATELLITE) = 688.  
CORRELATION COEFFICIENT = .970  
LIN.REGR. PYR(SAT) A0 = 49.5 A1 = .9808

PASSAU

NO. OF COMPARISONS = 148 MBE = -5.1 % RMSE = 15.1 %  
MEAN (PYRANOMETER) = 1419. MIN = 83. MAX = 2987.  
STD.DEV. (PYRANOMETER) = 839.  
MEAN (SATELLITE) = 1347. MIN = 57. MAX = 2801.  
STD.DEV. (SATELLITE) = 822.  
CORRELATION COEFFICIENT = .971  
LIN.REGR. PYR(SAT) A0 = 85.3 A1 = .9902

HAMBURG-SA

NO. OF COMPARISONS = 148 MBE = -1.0 % RMSE = 18.6 %  
MEAN (PYRANOMETER) = 1144. MIN = 110. MAX = 3165.  
STD.DEV. (PYRANOMETER) = 653.  
MEAN (SATELLITE) = 1132. MIN = 102. MAX = 2697.  
STD.DEV. (SATELLITE) = 652.  
CORRELATION COEFFICIENT = .947  
LIN.REGR. PYR(SAT) A0 = 70.4 A1 = .9483

SCHLESWIG

NO. OF COMPARISONS = 148 MBE = -1.7 % RMSE = 18.8 %  
MEAN (PYRANOMETER) = 1160. MIN = 117. MAX = 3039.  
STD.DEV. (PYRANOMETER) = 677.  
MEAN (SATELLITE) = 1140. MIN = 123. MAX = 2704.  
STD.DEV. (SATELLITE) = 677.  
CORRELATION COEFFICIENT = .949  
LIN.REGR. PYR(SAT) A0 = 78.4 A1 = .9490

SAARBRUECKEN

NO. OF COMPARISONS = 148 MBE = -2.7 % RMSE = 12.0 %  
MEAN (PYRANOMETER) = 1321. MIN = 94. MAX = 2894.  
STD.DEV. (PYRANOMETER) = 762.  
MEAN (SATELLITE) = 1285. MIN = 74. MAX = 2786.  
STD.DEV. (SATELLITE) = 757.  
CORRELATION COEFFICIENT = .979  
LIN.REGR. PYR(SAT) A0 = 53.4 A1 = .9861

STUTTGART

NO. OF COMPARISONS = 148 MBE = -4.2 % RMSE = 14.8 %  
MEAN (PYRANOMETER) = 1347. MIN = 146. MAX = 2948.  
STD.DEV. (PYRANOMETER) = 777.  
MEAN (SATELLITE) = 1291. MIN = 102. MAX = 2818.  
STD.DEV. (SATELLITE) = 781.  
CORRELATION COEFFICIENT = .970  
LIN.REGR. PYR(SAT) A0 = 103.5 A1 = .9637

TRIER

NO. OF COMPARISONS = 148 MBE = -5.2 % RMSE = 14.7 %  
MEAN (PYRANOMETER) = 1324. MIN = 95. MAX = 2982.  
STD.DEV. (PYRANOMETER) = 762.  
MEAN (SATELLITE) = 1255. MIN = 54. MAX = 2777.  
STD.DEV. (SATELLITE) = 743.  
CORRELATION COEFFICIENT = .971  
LIN.REGR. PYR(SAT) A0 = 74.1 A1 = .9956

WEISSENBURG

NO. OF COMPARISONS = 148 MBE = -4.7 % RMSE = 15.5 %  
MEAN (PYRANOMETER) = 1357. MIN = 138. MAX = 2953.  
STD.DEV. (PYRANOMETER) = 807.  
MEAN (SATELLITE) = 1293. MIN = 112. MAX = 2776.  
STD.DEV. (SATELLITE) = 796.  
CORRELATION COEFFICIENT = .969  
LIN.REGR. PYR(SAT) A0 = 88.1 A1 = .9814

WEIHENSTEPHAN

NO. OF COMPARISONS = 148 MBE = -3.9 % RMSE = 15.4 %

MEAN (PYRANOMETER) = 1399. MIN = 118. MAX = 2891.  
 STD.DEV. (PYRANOMETER) = 800.

MEAN (SATELLITE) = 1344. MIN = 68. MAX = 2833.  
 STD.DEV. (SATELLITE) = 809.

CORRELATION COEFFICIENT = .966

LIN.REGR. PYR(SAT) A0 = 114.8 A1 = .9555

WUERZBURG

NO. OF COMPARISONS = 148 MBE = -3.8 % RMSE = 17.4 %

MEAN (PYRANOMETER) = 1333. MIN = 157. MAX = 3058.  
 STD.DEV. (PYRANOMETER) = 750.

MEAN (SATELLITE) = 1282. MIN = 97. MAX = 2810.  
 STD.DEV. (SATELLITE) = 743.

CORRELATION COEFFICIENT = .954

LIN.REGR. PYR(SAT) A0 = 98.5 A1 = .9631

WHOLE NETWORK

NO. OF COMPARISONS = 4239 MBE = -4.1 % RMSE = 16.8 %

MEAN (PYRANOMETER) = 1264. MIN = 23. MAX = 3178.  
 STD.DEV. (PYRANOMETER) = 733.

MEAN (SATELLITE) = 1212. MIN = 51. MAX = 2833.  
 STD.DEV. (SATELLITE) = 736.

CORRELATION COEFFICIENT = .961

LIN.REGR. PYR(SAT) A0 = 98.7 A1 = .9610



**TABLE 4.2**

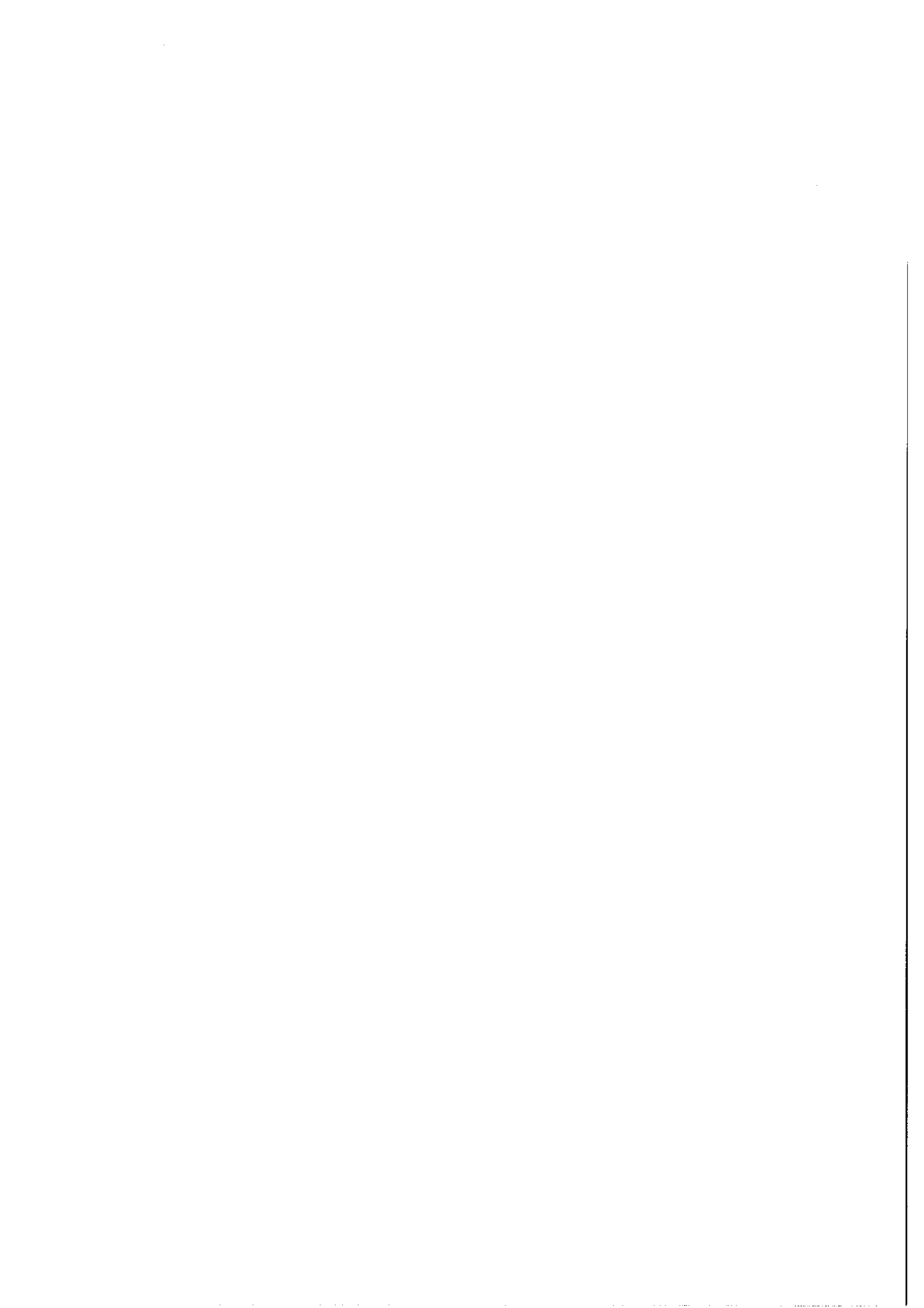
**Validation of METEOSAT-based daily insolation estimates  
for the ANETZ network.**

MBE and RMSE are expressed in % of the measured mean.

The linear regression model reads

Pyranometer measurements =  $a_0 + a_1 \times$  Satellite-estimates

Units are  $\text{Jcm}^{-2}/\text{day}$ . Division with 100 yields  $\text{MJm}^{-2}/\text{day}$ .



LA DOLE

NO. OF COMPARISONS = 148 MBE = 5.4 % RMSE = 19.1 %

MEAN (PYRANOMETER) = 1475. MIN = 100. MAX = 3093.  
 STD.DEV. (PYRANOMETER) = 761.

MEAN (SATELLITE) = 1554. MIN = 121. MAX = 3081.  
 STD.DEV. (SATELLITE) = 805.

CORRELATION COEFFICIENT = .942

LIN.REGR. PYR(SAT) A0 = 90.5 A1 = .8907

PAYERNE

NO. OF COMPARISONS = 148 MBE = -7.2 % RMSE = 16.9 %

MEAN (PYRANOMETER) = 1548. MIN = 104. MAX = 2868.  
 STD.DEV. (PYRANOMETER) = 812.

MEAN (SATELLITE) = 1437. MIN = 143. MAX = 2749.  
 STD.DEV. (SATELLITE) = 775.

CORRELATION COEFFICIENT = .956

LIN.REGR. PYR(SAT) A0 = 109.3 A1 = 1.0014

WYNAU

NO. OF COMPARISONS = 148 MBE = -.2 % RMSE = 16.2 %

MEAN (PYRANOMETER) = 1437. MIN = 114. MAX = 2876.  
 STD.DEV. (PYRANOMETER) = 792.

MEAN (SATELLITE) = 1435. MIN = 81. MAX = 2809.  
 STD.DEV. (SATELLITE) = 815.

CORRELATION COEFFICIENT = .959

LIN.REGR. PYR(SAT) A0 = 101.3 A1 = .9313

SAENTIS

NO. OF COMPARISONS = 148 MBE = 1.3 % RMSE = 28.4 %

MEAN (PYRANOMETER) = 1538. MIN = 233. MAX = 3282.  
 STD.DEV. (PYRANOMETER) = 819.

MEAN (SATELLITE) = 1559. MIN = 89. MAX = 3221.  
 STD.DEV. (SATELLITE) = 910.

CORRELATION COEFFICIENT = .877

LIN.REGR. PYR(SAT) A0 = 307.4 A1 = .7899

AIGLE

NO. OF COMPARISONS = 61 MBE = -11.3 % RMSE = 17.5 %

MEAN (PYRANOMETER) = 2001. MIN = 507. MAX = 2791.  
 STD.DEV. (PYRANOMETER) = 677.

MEAN (SATELLITE) = 1774. MIN = 240. MAX = 2769.  
 STD.DEV. (SATELLITE) = 766.

CORRELATION COEFFICIENT = .938

LIN.REGR. PYR(SAT) A0 = 528.1 A1 = .8299

MOLESON

NO. OF COMPARISONS = 148 MBE = 10.7 % RMSE = 28.9 %

MEAN (PYRANOMETER) = 1488. MIN = 147. MAX = 3120.  
 STD.DEV. (PYRANOMETER) = 743.

MEAN (SATELLITE) = 1648. MIN = 153. MAX = 3084.  
 STD.DEV. (SATELLITE) = 886.

CORRELATION COEFFICIENT = .895

LIN.REGR. PYR(SAT) A0 = 251.7 A1 = .7502

FAHY

NO. OF COMPARISONS = 148 MBE = 3.2 % RMSE = 15.5 %  
MEAN (PYRANOMETER) = 1423. MIN = 122. MAX = 2818.  
STD.DEV. (PYRANOMETER) = 722.  
MEAN (SATELLITE) = 1468. MIN = 91. MAX = 2851.  
STD.DEV. (SATELLITE) = 802.  
CORRELATION COEFFICIENT = .965  
LIN.REGR. PYR(SAT) A0 = 148.1 A1 = .8683

MONTANA

NO. OF COMPARISONS = 122 MBE = 1.3 % RMSE = 15.8 %  
MEAN (PYRANOMETER) = 1632. MIN = 174. MAX = 3074.  
STD.DEV. (PYRANOMETER) = 777.  
MEAN (SATELLITE) = 1654. MIN = 113. MAX = 2968.  
STD.DEV. (SATELLITE) = 819.  
CORRELATION COEFFICIENT = .950  
LIN.REGR. PYR(SAT) A0 = 141.6 A1 = .9011

CHASSERAL

NO. OF COMPARISONS = 148 MBE = 2.5 % RMSE = 24.1 %  
MEAN (PYRANOMETER) = 1452. MIN = 181. MAX = 3175.  
STD.DEV. (PYRANOMETER) = 719.  
MEAN (SATELLITE) = 1487. MIN = 111. MAX = 3059.  
STD.DEV. (SATELLITE) = 811.  
CORRELATION COEFFICIENT = .904  
LIN.REGR. PYR(SAT) A0 = 259.4 A1 = .8015

PILATUS

NO. OF COMPARISONS = 148 MBE = 13.2 % RMSE = 38.9 %  
MEAN (PYRANOMETER) = 1358. MIN = 176. MAX = 3050.  
STD.DEV. (PYRANOMETER) = 690.  
MEAN (SATELLITE) = 1538. MIN = 81. MAX = 3177.  
STD.DEV. (SATELLITE) = 861.  
CORRELATION COEFFICIENT = .817  
LIN.REGR. PYR(SAT) A0 = 351.2 A1 = .6546

LUGANO

NO. OF COMPARISONS = 87 MBE = 3.4 % RMSE = 14.6 %  
MEAN (PYRANOMETER) = 1230. MIN = 64. MAX = 2501.  
STD.DEV. (PYRANOMETER) = 626.  
MEAN (SATELLITE) = 1272. MIN = 83. MAX = 2597.  
STD.DEV. (SATELLITE) = 673.  
CORRELATION COEFFICIENT = .967  
LIN.REGR. PYR(SAT) A0 = 86.7 A1 = .8988

NAPF

NO. OF COMPARISONS = 148 MBE = 12.5 % RMSE = 26.5 %  
MEAN (PYRANOMETER) = 1352. MIN = 132. MAX = 2950.  
STD.DEV. (PYRANOMETER) = 717.  
MEAN (SATELLITE) = 1521. MIN = 93. MAX = 3004.  
STD.DEV. (SATELLITE) = 852.  
CORRELATION COEFFICIENT = .933  
LIN.REGR. PYR(SAT) A0 = 158.3 A1 = .7850

SION

NO. OF COMPARISONS = 113 MBE = -7.2 % RMSE = 19.3 %

MEAN (PYRANOMETER) = 1956. MIN = 284. MAX = 2952.  
 STD.DEV. (PYRANOMETER) = 651.

MEAN (SATELLITE) = 1816. MIN = 152. MAX = 2833.  
 STD.DEV. (SATELLITE) = 701.

CORRELATION COEFFICIENT = .869

LIN.REGR. PYR(SAT) A0 = 491.4 A1 = .8065

LOCARNO-MAGADINO

NO. OF COMPARISONS = 148 MBE = 1.6 % RMSE = 16.3 %

MEAN (PYRANOMETER) = 1479. MIN = 70. MAX = 2793.  
 STD.DEV. (PYRANOMETER) = 743.

MEAN (SATELLITE) = 1502. MIN = 87. MAX = 2762.  
 STD.DEV. (SATELLITE) = 799.

CORRELATION COEFFICIENT = .954

LIN.REGR. PYR(SAT) A0 = 147.0 A1 = .8867

NEUCHATEL

NO. OF COMPARISONS = 148 MBE = -10.9 % RMSE = 22.1 %

MEAN (PYRANOMETER) = 1521. MIN = 152. MAX = 2850.  
 STD.DEV. (PYRANOMETER) = 784.

MEAN (SATELLITE) = 1355. MIN = 91. MAX = 2739.  
 STD.DEV. (SATELLITE) = 740.

CORRELATION COEFFICIENT = .928

LIN.REGR. PYR(SAT) A0 = 187.1 A1 = .9844

STABIO

NO. OF COMPARISONS = 148 MBE = 10.5 % RMSE = 18.3 %  
MEAN (PYRANOMETER) = 1450. MIN = 40. MAX = 2587.  
STD.DEV. (PYRANOMETER) = 665.  
MEAN (SATELLITE) = 1601. MIN = 80. MAX = 2818.  
STD.DEV. (SATELLITE) = 801.  
CORRELATION COEFFICIENT = .973  
LIN.REGR. PYR(SAT) A0 = 157.4 A1 = .8071

INTERLAKEN

NO. OF COMPARISONS = 61 MBE = -10.7 % RMSE = 17.6 %  
MEAN (PYRANOMETER) = 1948. MIN = 304. MAX = 2807.  
STD.DEV. (PYRANOMETER) = 651.  
MEAN (SATELLITE) = 1740. MIN = 156. MAX = 2850.  
STD.DEV. (SATELLITE) = 752.  
CORRELATION COEFFICIENT = .934  
LIN.REGR. PYR(SAT) A0 = 541.1 A1 = .8085

ST.GALLEN

NO. OF COMPARISONS = 148 MBE = -.1 % RMSE = 15.2 %  
MEAN (PYRANOMETER) = 1414. MIN = 105. MAX = 2967.  
STD.DEV. (PYRANOMETER) = 830.  
MEAN (SATELLITE) = 1412. MIN = 71. MAX = 2900.  
STD.DEV. (SATELLITE) = 829.  
CORRELATION COEFFICIENT = .966  
LIN.REGR. PYR(SAT) A0 = 47.1 A1 = .9680



GENEVE-COINTRIN

NO. OF COMPARISONS = 148 MBE = -8.7 % RMSE = 18.3 %

MEAN (PYRANOMETER) = 1622. MIN = 111. MAX = 2857.  
 STD.DEV. (PYRANOMETER) = 744.

MEAN (SATELLITE) = 1480. MIN = 154. MAX = 2811.  
 STD.DEV. (SATELLITE) = 740.

CORRELATION COEFFICIENT = .938

LIN.REGR. PYR(SAT) A0 = 224.8 A1 = .9435

ZUERICH-KLOTEN

NO. OF COMPARISONS = 148 MBE = -2.9 % RMSE = 15.8 %

MEAN (PYRANOMETER) = 1468. MIN = 121. MAX = 2931.  
 STD.DEV. (PYRANOMETER) = 802.

MEAN (SATELLITE) = 1425. MIN = 67. MAX = 2847.  
 STD.DEV. (SATELLITE) = 822.

CORRELATION COEFFICIENT = .961

LIN.REGR. PYR(SAT) A0 = 131.3 A1 = .9382

GUETSCH

NO. OF COMPARISONS = 148 MBE = -8.4 % RMSE = 25.9 %

MEAN (PYRANOMETER) = 1658. MIN = 249. MAX = 3179.  
 STD.DEV. (PYRANOMETER) = 790.

MEAN (SATELLITE) = 1519. MIN = 95. MAX = 3109.  
 STD.DEV. (SATELLITE) = 853.

CORRELATION COEFFICIENT = .880

LIN.REGR. PYR(SAT) A0 = 419.4 A1 = .8151

FULLY

NO. OF COMPARISONS = 148 MBE = -8.2 % RMSE = 16.1 %

MEAN (PYRANOMETER) = 1565. MIN = 77. MAX = 2859.  
STD.DEV. (PYRANOMETER) = 792.

MEAN (SATELLITE) = 1437. MIN = 125. MAX = 2599.  
STD.DEV. (SATELLITE) = 763.

CORRELATION COEFFICIENT = .962

LIN.REGR. PYR(SAT) A0 = 130.6 A1 = .9982

GRAND ST.BERNARD

NO. OF COMPARISONS = 120 MBE = 4.5 % RMSE = 25.3 %

MEAN (PYRANOMETER) = 1832. MIN = 67. MAX = 3186.  
STD.DEV. (PYRANOMETER) = 799.

MEAN (SATELLITE) = 1914. MIN = 254. MAX = 3031.  
STD.DEV. (SATELLITE) = 778.

CORRELATION COEFFICIENT = .833

LIN.REGR. PYR(SAT) A0 = 194.5 A1 = .8555

VISP

NO. OF COMPARISONS = 120 MBE = -8.4 % RMSE = 18.2 %

MEAN (PYRANOMETER) = 1956. MIN = 289. MAX = 2958.  
STD.DEV. (PYRANOMETER) = 683.

MEAN (SATELLITE) = 1791. MIN = 151. MAX = 2894.  
STD.DEV. (SATELLITE) = 725.

CORRELATION COEFFICIENT = .901

LIN.REGR. PYR(SAT) A0 = 432.9 A1 = .8503

LA CHAUX-DE-FONDS

NO. OF COMPARISONS = 148 MBE = -3.5 % RMSE = 18.2 %  
MEAN (PYRANOMETER) = 1471. MIN = 198. MAX = 2940.  
STD.DEV. (PYRANOMETER) = 709.  
MEAN (SATELLITE) = 1420. MIN = 155. MAX = 2964.  
STD.DEV. (SATELLITE) = 772.  
CORRELATION COEFFICIENT = .941  
LIN.REGR. PYR(SAT) A0 = 244.1 A1 = .8642

RUENENBERG

NO. OF COMPARISONS = 148 MBE = 1.0 % RMSE = 16.4 %  
MEAN (PYRANOMETER) = 1405. MIN = 104. MAX = 2821.  
STD.DEV. (PYRANOMETER) = 742.  
MEAN (SATELLITE) = 1419. MIN = 85. MAX = 2849.  
STD.DEV. (SATELLITE) = 824.  
CORRELATION COEFFICIENT = .962  
LIN.REGR. PYR(SAT) A0 = 175.3 A1 = .8664

BUCHS-SUHR

NO. OF COMPARISONS = 148 MBE = 5.5 % RMSE = 20.4 %  
MEAN (PYRANOMETER) = 1324. MIN = 115. MAX = 2815.  
STD.DEV. (PYRANOMETER) = 741.  
MEAN (SATELLITE) = 1397. MIN = 88. MAX = 2817.  
STD.DEV. (SATELLITE) = 825.  
CORRELATION COEFFICIENT = .951  
LIN.REGR. PYR(SAT) A0 = 131.4 A1 = .8535

LUZERN

NO. OF COMPARISONS = 148 MBE = 5.0 % RMSE = 17.9 %  
MEAN (PYRANOMETER) = 1320. MIN = 154. MAX = 2731.  
STD.DEV. (PYRANOMETER) = 722.  
MEAN (SATELLITE) = 1387. MIN = 77. MAX = 2831.  
STD.DEV. (SATELLITE) = 803.  
CORRELATION COEFFICIENT = .961  
LIN.REGR. PYR(SAT) A0 = 121.4 A1 = .8645

ZUERICH SMA

NO. OF COMPARISONS = 148 MBE = 2.7 % RMSE = 15.2 %  
MEAN (PYRANOMETER) = 1405. MIN = 136. MAX = 2882.  
STD.DEV. (PYRANOMETER) = 794.  
MEAN (SATELLITE) = 1443. MIN = 72. MAX = 2867.  
STD.DEV. (SATELLITE) = 837.  
CORRELATION COEFFICIENT = .968  
LIN.REGR. PYR(SAT) A0 = 81.3 A1 = .9177

WEISSFLUHJOCH

NO. OF COMPARISONS = 148 MBE = 1.0 % RMSE = 25.8 %  
MEAN (PYRANOMETER) = 1643. MIN = 177. MAX = 3337.  
STD.DEV. (PYRANOMETER) = 741.  
MEAN (SATELLITE) = 1658. MIN = 120. MAX = 3299.  
STD.DEV. (SATELLITE) = 911.  
CORRELATION COEFFICIENT = .889  
LIN.REGR. PYR(SAT) A0 = 444.8 A1 = .7224

CORVATSCH

NO. OF COMPARISONS = 148 MBE = -5.2 % RMSE = 26.1 %  
MEAN (PYRANOMETER) = 1827. MIN = 183. MAX = 3286.  
STD.DEV. (PYRANOMETER) = 717.  
MEAN (SATELLITE) = 1733. MIN = 123. MAX = 3347.  
STD.DEV. (SATELLITE) = 901.  
CORRELATION COEFFICIENT = .857  
LIN.REGR. PYR(SAT) A0 = 644.3 A1 = .6826

BASEL-BINNINGEN

NO. OF COMPARISONS = 148 MBE = 3.0 % RMSE = 14.8 %  
MEAN (PYRANOMETER) = 1420. MIN = 88. MAX = 2834.  
STD.DEV. (PYRANOMETER) = 753.  
MEAN (SATELLITE) = 1462. MIN = 64. MAX = 2812.  
STD.DEV. (SATELLITE) = 805.  
CORRELATION COEFFICIENT = .967  
LIN.REGR. PYR(SAT) A0 = 97.2 A1 = .9047

CHANGINS

NO. OF COMPARISONS = 148 MBE = -8.7 % RMSE = 17.7 %  
MEAN (PYRANOMETER) = 1585. MIN = 113. MAX = 2892.  
STD.DEV. (PYRANOMETER) = 784.  
MEAN (SATELLITE) = 1447. MIN = 136. MAX = 2724.  
STD.DEV. (SATELLITE) = 733.  
CORRELATION COEFFICIENT = .950  
LIN.REGR. PYR(SAT) A0 = 115.1 A1 = 1.0159

LA FRETAZ

NO. OF COMPARISONS = 64 MBE = .5 % RMSE = 21.9 %

MEAN (PYRANOMETER) = 980. MIN = 136. MAX = 2053.  
 STD.DEV. (PYRANOMETER) = 478.

MEAN (SATELLITE) = 985. MIN = 124. MAX = 2153.  
 STD.DEV. (SATELLITE) = 512.

CORRELATION COEFFICIENT = .908

LIN.REGR. PYR(SAT) A0 = 144.4 A1 = .8482

BERN-LIEBEFELD

NO. OF COMPARISONS = 148 MBE = .5 % RMSE = 16.2 %

MEAN (PYRANOMETER) = 1515. MIN = 121. MAX = 2938.  
 STD.DEV. (PYRANOMETER) = 817.

MEAN (SATELLITE) = 1523. MIN = 94. MAX = 2841.  
 STD.DEV. (SATELLITE) = 834.

CORRELATION COEFFICIENT = .956

LIN.REGR. PYR(SAT) A0 = 89.8 A1 = .9359

GUETTINGEN

NO. OF COMPARISONS = 148 MBE = -5.9 % RMSE = 15.4 %

MEAN (PYRANOMETER) = 1463. MIN = 116. MAX = 2982.  
 STD.DEV. (PYRANOMETER) = 829.

MEAN (SATELLITE) = 1377. MIN = 73. MAX = 2792.  
 STD.DEV. (SATELLITE) = 802.

CORRELATION COEFFICIENT = .968

LIN.REGR. PYR(SAT) A0 = 87.0 A1 = .9995

WAEDENSWIL

NO. OF COMPARISONS = 148 MBE = -3.9 % RMSE = 15.1 %  
 MEAN (PYRANOMETER) = 1465. MIN = 179. MAX = 2921.  
 STD.DEV. (PYRANOMETER) = 824.  
 MEAN (SATELLITE) = 1407. MIN = 87. MAX = 2826.  
 STD.DEV. (SATELLITE) = 821.  
 CORRELATION COEFFICIENT = .966  
 LIN.REGR. PYR(SAT) A0 = 100.0 A1 = .9699

TAENIKON

NO. OF COMPARISONS = 148 MBE = .5 % RMSE = 15.5 %  
 MEAN (PYRANOMETER) = 1417. MIN = 115. MAX = 2902.  
 STD.DEV. (PYRANOMETER) = 793.  
 MEAN (SATELLITE) = 1424. MIN = 93. MAX = 2872.  
 STD.DEV. (SATELLITE) = 829.  
 CORRELATION COEFFICIENT = .964  
 LIN.REGR. PYR(SAT) A0 = 104.1 A1 = .9222

RECKENHOLZ

NO. OF COMPARISONS = 148 MBE = -2.0 % RMSE = 15.0 %  
 MEAN (PYRANOMETER) = 1460. MIN = 134. MAX = 2986.  
 STD.DEV. (PYRANOMETER) = 806.  
 MEAN (SATELLITE) = 1431. MIN = 70. MAX = 2847.  
 STD.DEV. (SATELLITE) = 823.  
 CORRELATION COEFFICIENT = .965  
 LIN.REGR. PYR(SAT) A0 = 109.0 A1 = .9445

LOCARNO-MONTI

NO. OF COMPARISONS = 148 MBE = -8.5 % RMSE = 19.9 %

MEAN (PYRANOMETER) = 1611. MIN = 52. MAX = 3014.  
STD.DEV. (PYRANOMETER) = 821.

MEAN (SATELLITE) = 1475. MIN = 90. MAX = 2802.  
STD.DEV. (SATELLITE) = 794.

CORRELATION COEFFICIENT = .936

LIN.REGR. PYR(SAT) A0 = 183.3 A1 = .9681

CIMETTA

NO. OF COMPARISONS = 148 MBE = 2.2 % RMSE = 18.5 %

MEAN (PYRANOMETER) = 1591. MIN = 84. MAX = 3119.  
STD.DEV. (PYRANOMETER) = 826.

MEAN (SATELLITE) = 1625. MIN = 102. MAX = 3080.  
STD.DEV. (SATELLITE) = 863.

CORRELATION COEFFICIENT = .941

LIN.REGR. PYR(SAT) A0 = 126.4 A1 = .9009

WHOLE NETWORK

NO. OF COMPARISONS = 5632 MBE = -.8 % RMSE = 20.5 %

MEAN (PYRANOMETER) = 1520. MIN = 40. MAX = 3337.  
STD.DEV. (PYRANOMETER) = 759.

MEAN (SATELLITE) = 1508. MIN = 64. MAX = 3347.  
STD.DEV. (SATELLITE) = 809.

CORRELATION COEFFICIENT = .926

LIN.REGR. PYR(SAT) A0 = 197.3 A1 = .8774



**TABLE 4.3**

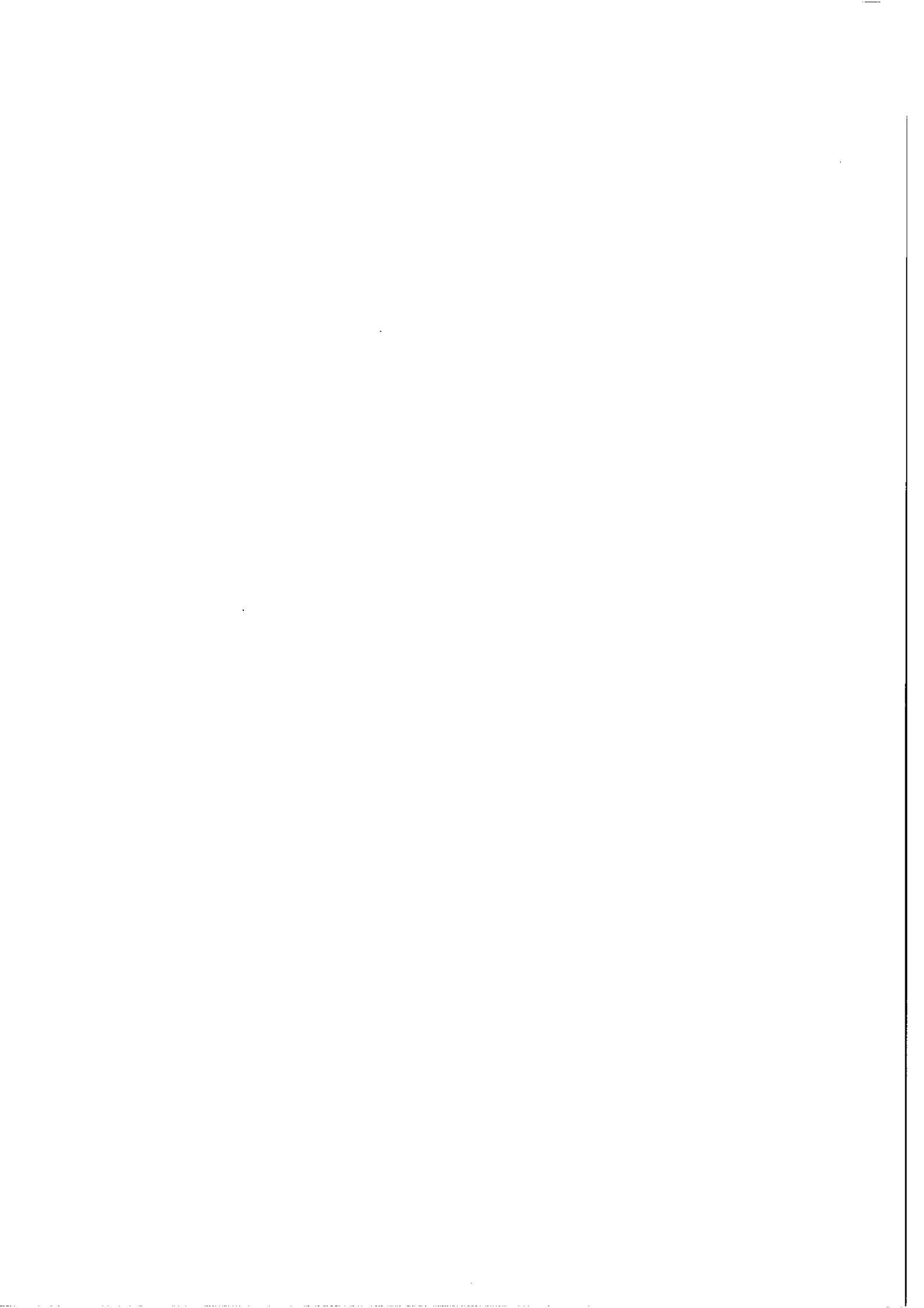
**Validation of GOES-based daily insolation estimates  
for the PNW network.**

MBE and RMSE are expressed in % of the measured mean.

The linear regression model reads

Pyranometer measurements =  $a_0 + a_1 \times$  Satellite-estimates

Units are  $\text{Jcm}^{-2}/\text{day}$ . Division with 100 yields  $\text{MJm}^{-2}/\text{day}$ .



PORTLAND

NO. OF COMPARISONS = 336 MBE = 3.3 % RMSE = 17.5 %

MEAN (PYRANOMETER) = 1133. MIN = 47. MAX = 2922.  
 STD.DEV. (PYRANOMETER) = 809.

MEAN (SATELLITE) = 1171. MIN = 207. MAX = 3046.  
 STD.DEV. (SATELLITE) = 818.

CORRELATION COEFFICIENT = .971

LIN.REGR. PYR(SAT) A0 = 8.7 A1 = .9606

HOOD RIVER

NO. OF COMPARISONS = 232 MBE = -1.1 % RMSE = 14.5 %

MEAN (PYRANOMETER) = 1522. MIN = 76. MAX = 3097.  
 STD.DEV. (PYRANOMETER) = 1001.

MEAN (SATELLITE) = 1504. MIN = 208. MAX = 3014.  
 STD.DEV. (SATELLITE) = 922.

CORRELATION COEFFICIENT = .977

LIN.REGR. PYR(SAT) A0 = -74.0 A1 = 1.0607

HERMISTON

NO. OF COMPARISONS = 333 MBE = -6.1 % RMSE = 15.6 %

MEAN (PYRANOMETER) = 1369. MIN = 86. MAX = 3037.  
 STD.DEV. (PYRANOMETER) = 903.

MEAN (SATELLITE) = 1286. MIN = 193. MAX = 2960.  
 STD.DEV. (SATELLITE) = 829.

CORRELATION COEFFICIENT = .978

LIN.REGR. PYR(SAT) A0 = -1.1 A1 = 1.0658

LA GRANDE

NO. OF COMPARISONS = 318 MBE = -3.2 % RMSE = 17.5 %  
MEAN (PYRANOMETER) = 1227. MIN = 113. MAX = 2887.  
STD.DEV. (PYRANOMETER) = 796.  
MEAN (SATELLITE) = 1188. MIN = 196. MAX = 2995.  
STD.DEV. (SATELLITE) = 844.  
CORRELATION COEFFICIENT = .969  
LIN.REGR. PYR(SAT) A0 = 141.8 A1 = .9137

COOS BAY

NO. OF COMPARISONS = 327 MBE = -10.3 % RMSE = 27.0 %  
MEAN (PYRANOMETER) = 1406. MIN = 50. MAX = 3210.  
STD.DEV. (PYRANOMETER) = 914.  
MEAN (SATELLITE) = 1261. MIN = 209. MAX = 3075.  
STD.DEV. (SATELLITE) = 857.  
CORRELATION COEFFICIENT = .923  
LIN.REGR. PYR(SAT) A0 = 164.1 A1 = .9845

EUGENE

NO. OF COMPARISONS = 336 MBE = -7.0 % RMSE = 21.5 %  
MEAN (PYRANOMETER) = 1280. MIN = 74. MAX = 3098.  
STD.DEV. (PYRANOMETER) = 886.  
MEAN (SATELLITE) = 1190. MIN = 208. MAX = 3082.  
STD.DEV. (SATELLITE) = 860.  
CORRELATION COEFFICIENT = .956  
LIN.REGR. PYR(SAT) A0 = 108.5 A1 = .9845

BEND

NO. OF COMPARISONS = 245 MBE = -15.8 % RMSE = 22.0 %  
MEAN (PYRANOMETER) = 1606. MIN = 167. MAX = 3278.  
STD.DEV. (PYRANOMETER) = 873.  
MEAN (SATELLITE) = 1353. MIN = 272. MAX = 3025.  
STD.DEV. (SATELLITE) = 814.  
CORRELATION COEFFICIENT = .960  
LIN.REGR. PYR(SAT) A0 = 213.7 A1 = 1.0297

BURNS

NO. OF COMPARISONS = 307 MBE = -12.5 % RMSE = 19.9 %  
MEAN (PYRANOMETER) = 1537. MIN = 132. MAX = 3092.  
STD.DEV. (PYRANOMETER) = 853.  
MEAN (SATELLITE) = 1345. MIN = 211. MAX = 3054.  
STD.DEV. (SATELLITE) = 865.  
CORRELATION COEFFICIENT = .961  
LIN.REGR. PYR(SAT) A0 = 262.1 A1 = .9478

WHITEHORSE RANCH

NO. OF COMPARISONS = 305 MBE = -10.4 % RMSE = 17.8 %  
MEAN (PYRANOMETER) = 1582. MIN = 138. MAX = 3100.  
STD.DEV. (PYRANOMETER) = 821.  
MEAN (SATELLITE) = 1417. MIN = 247. MAX = 3048.  
STD.DEV. (SATELLITE) = 836.  
CORRELATION COEFFICIENT = .962  
LIN.REGR. PYR(SAT) A0 = 242.0 A1 = .9455

WHOLE NETWORK

NO. OF COMPARISONS = 2739      MBE = -7.3 %      RMSE = 19.9 %

MEAN (PYRANOMETER) = 1394.      MIN = 47.      MAX = 3278.  
STD.DEV. (PYRANOMETER) = 871.

MEAN (SATELLITE) = 1291.      MIN = 193.      MAX = 3082.  
STD.DEV. (SATELLITE) = 849.

CORRELATION COEFFICIENT = .957

LIN.REGR. PYR(SAT)    A0 = 114.1    A1 = .9910

**TABLE 4.4**

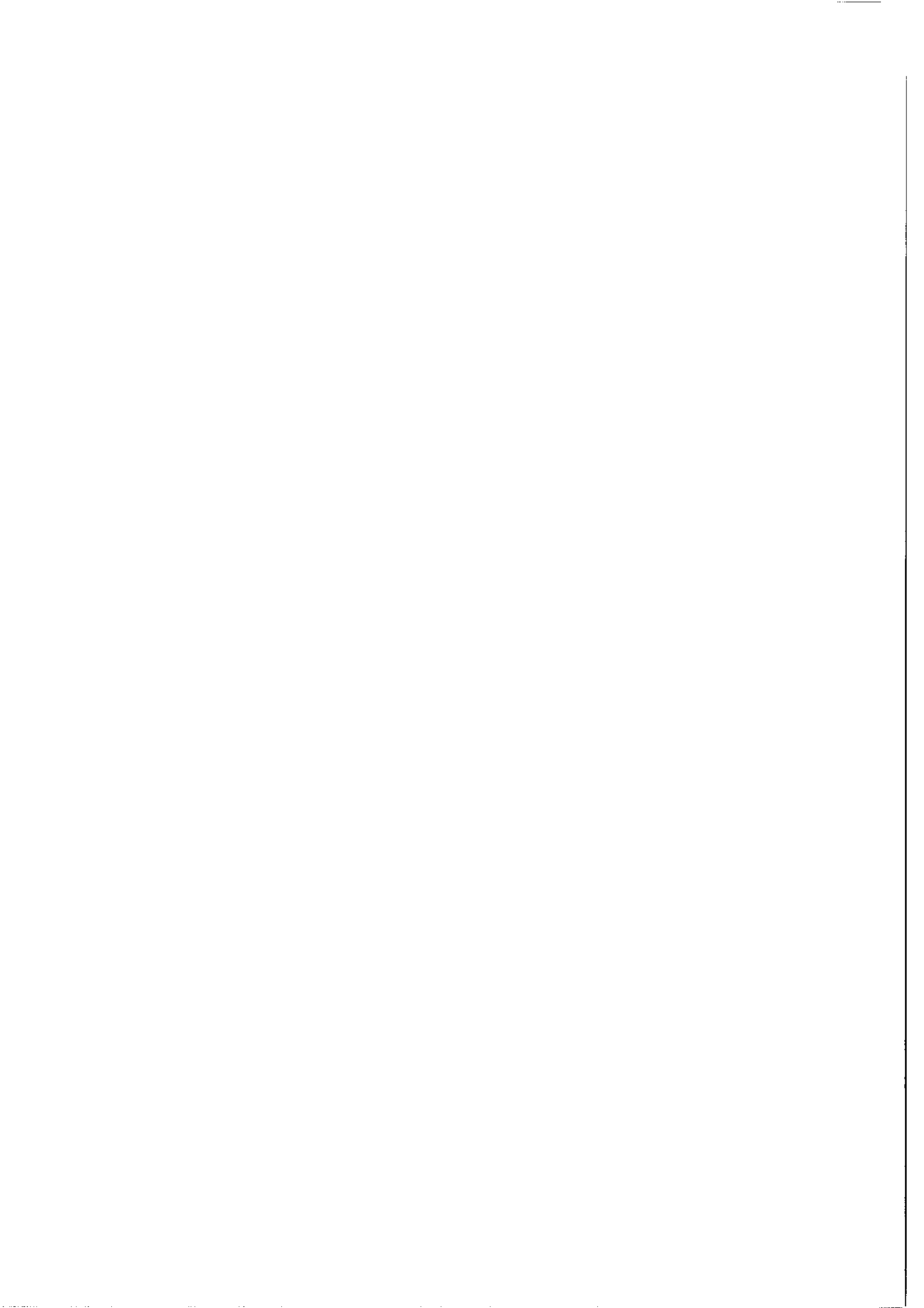
**Validation of GOES-based daily insolation estimates  
for the Northeast network.**

MBE and RMSE are expressed in % of the measured mean.

The linear regression model reads

Pyranometer measurements =  $a_0 + a_1 \times$  Satellite-estimates

Units are  $\text{Jcm}^{-2}/\text{day}$ . Division with 100 yields  $\text{MJm}^{-2}/\text{day}$ .





WATERFORD

NO. OF COMPARISONS = 134 MBE = -.6 % RMSE = 21.6 %  
 MEAN (PYRANOMETER) = 1281. MIN = 73. MAX = 3140.  
 STD.DEV. (PYRANOMETER) = 903.  
 MEAN (SATELLITE) = 1273. MIN = 211. MAX = 3049.  
 STD.DEV. (SATELLITE) = 860.  
 CORRELATION COEFFICIENT = .952  
 LIN.REGR. PYR(SAT) A0 = 9.0 A1 = .9993

MIDDLETOWN

NO. OF COMPARISONS = 134 MBE = 2.8 % RMSE = 21.3 %  
 MEAN (PYRANOMETER) = 1231. MIN = 85. MAX = 3034.  
 STD.DEV. (PYRANOMETER) = 885.  
 MEAN (SATELLITE) = 1265. MIN = 211. MAX = 3031.  
 STD.DEV. (SATELLITE) = 862.  
 CORRELATION COEFFICIENT = .956  
 LIN.REGR. PYR(SAT) A0 = -11.2 A1 = .9819

DEVON

NO. OF COMPARISONS = 134 MBE = -.9 % RMSE = 20.0 %  
 MEAN (PYRANOMETER) = 1302. MIN = 72. MAX = 3114.  
 STD.DEV. (PYRANOMETER) = 902.  
 MEAN (SATELLITE) = 1290. MIN = 228. MAX = 3030.  
 STD.DEV. (SATELLITE) = 868.  
 CORRELATION COEFFICIENT = .957  
 LIN.REGR. PYR(SAT) A0 = 18.8 A1 = .9946

WOODS HOLE

NO. OF COMPARISONS = 134 MBE = 2.6 % RMSE = 22.3 %

MEAN (PYRANOMETER) = 1280. MIN = 57. MAX = 2823.  
 STD.DEV. (PYRANOMETER) = 848.

MEAN (SATELLITE) = 1314. MIN = 209. MAX = 3093.  
 STD.DEV. (SATELLITE) = 883.

CORRELATION COEFFICIENT = .947

LIN.REGR. PYR(SAT) A0 = 83.8 A1 = .9104

ALBANY

NO. OF COMPARISONS = 134 MBE = 3.2 % RMSE = 18.8 %

MEAN (PYRANOMETER) = 1167. MIN = 86. MAX = 3048.  
 STD.DEV. (PYRANOMETER) = 899.

MEAN (SATELLITE) = 1204. MIN = 209. MAX = 3002.  
 STD.DEV. (SATELLITE) = 866.

CORRELATION COEFFICIENT = .971

LIN.REGR. PYR(SAT) A0 = -47.2 A1 = 1.0083

FARMINGDALE

NO. OF COMPARISONS = 134 MBE = 3.2 % RMSE = 20.7 %

MEAN (PYRANOMETER) = 1287. MIN = 81. MAX = 3072.  
 STD.DEV. (PYRANOMETER) = 896.

MEAN (SATELLITE) = 1329. MIN = 248. MAX = 3050.  
 STD.DEV. (SATELLITE) = 888.

CORRELATION COEFFICIENT = .957

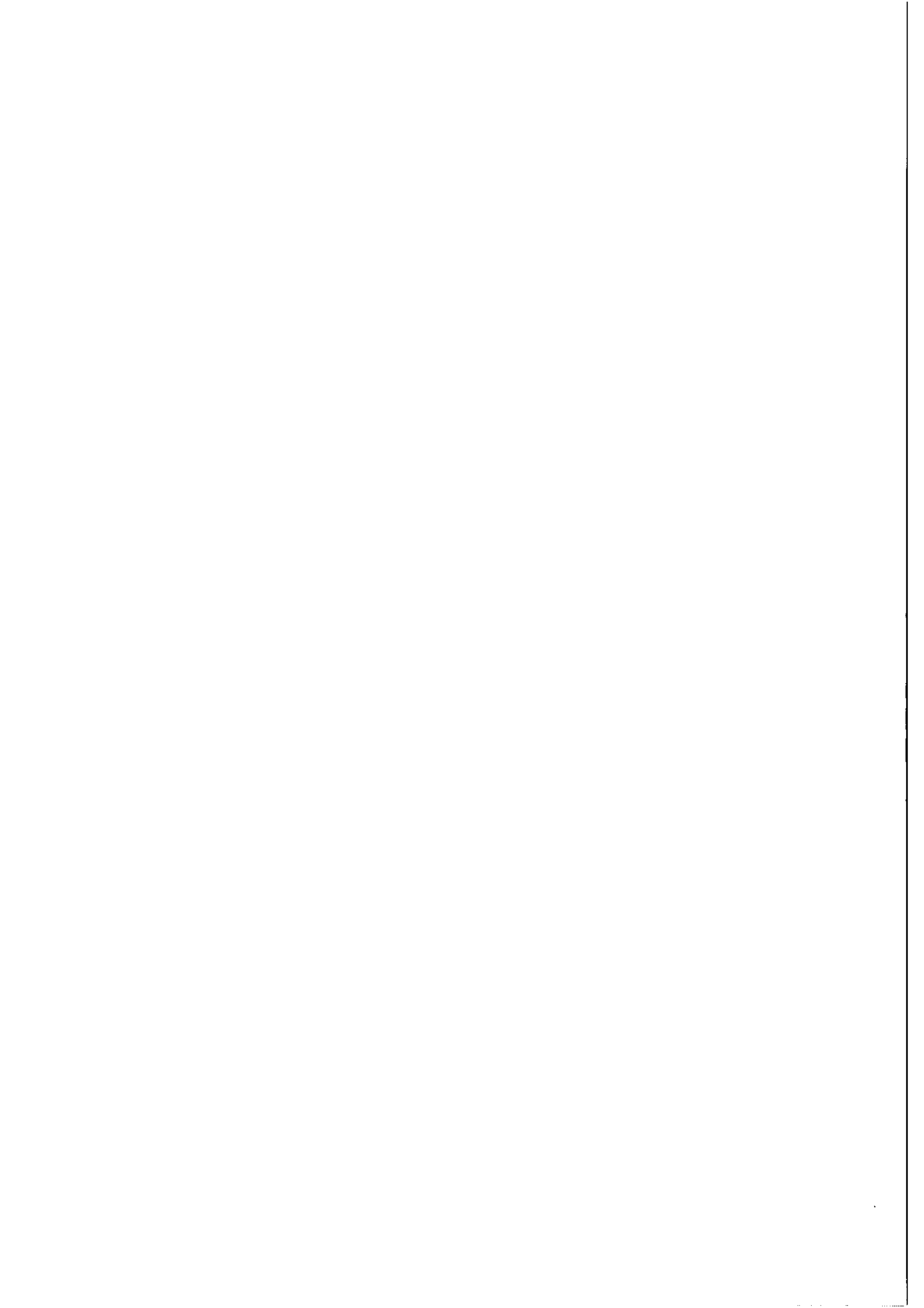
LIN.REGR. PYR(SAT) A0 = 4.9 A1 = .9650

QUEENS

NO. OF COMPARISONS = 134 MBE = 5.4 % RMSE = 20.3 %  
MEAN (PYRANOMETER) = 1265. MIN = 75. MAX = 3122.  
STD.DEV. (PYRANOMETER) = 915.  
MEAN (SATELLITE) = 1333. MIN = 250. MAX = 3053.  
STD.DEV. (SATELLITE) = 892.  
CORRELATION COEFFICIENT = .963  
LIN.REGR. PYR(SAT) A0 = -52.5 A1 = .9878

WHOLE NETWORK

NO. OF COMPARISONS = 938 MBE = 2.2 % RMSE = 20.8 %  
MEAN (PYRANOMETER) = 1259. MIN = 57. MAX = 3140.  
STD.DEV. (PYRANOMETER) = 893.  
MEAN (SATELLITE) = 1287. MIN = 209. MAX = 3093.  
STD.DEV. (SATELLITE) = 874.  
CORRELATION COEFFICIENT = .957  
LIN.REGR. PYR(SAT) A0 = 1.1 A1 = .9774



## Appendix

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