

THE UNIVERSITY OF MICHIGAN

Final Report

Analysis of Micrometeorological and Related Data obtained at
the U.S. Army SIPRE Keweenaw Field Station
Houghton, Michigan

Part I

Thermal Radiation Data
Snow Seasons 1954-55 and 1955-56

Donald J. Portman
Associate Research Meteorologist

Edward Ryznar
Graduate Research Assistant

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PREFACE

The data given in this report were processed and tabulated as part of the requirement in Contract Number DA-11-190-ENG-30 with the U.S. Army Snow, Ice and Permafrost Research Establishment, Corps of Engineers. Work on the contract included, in addition, (1) an analysis of micrometeorological and related data on heat transfer processes of a snow cover, and (2) participation in the data collection program for the snow seasons 1957-58 and 1958-59. The results of the analysis and an account of the field participation are reported in Part II of the Final Report.

The overall effort on the contract was directed toward evaluating heat transfer between a snow cover and its environment in order to predict physical snow cover characteristics from meteorological information.

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DESCRIPTION OF DATA

1. Location and Periods of Measurement

Measurements of radiative fluxes over snow were made at the U.S. Army Keweenaw Field Station, Houghton, Michigan, 47°11'N, 88°33'W. The station is 1090 feet above sea level and about 500 feet above the level of Lake Superior, which is six miles to the northwest. The terrain within a 100 yard radius of the measurement site was level and obstructionless.

For the two snow seasons under investigation, continuous measurements of radiative fluxes were obtained from 12 January 1955 through 14 April 1955 and from 10 January 1956 through 4 March 1956.

2. Instrumentation

Incident and reflected solar radiation fluxes were measured with Eppley pyrhemometers mounted about 3 meters above the ground. The thermopile outputs of both pyrhemometers were continuously recorded by potentiometers calibrated to record units of solar radiation directly in terms of langleys per minute ($\text{gram cal cm}^{-2} \text{min}^{-1}$). Reference is made to articles by Hand (1) and Fuquay and Buettner (2) for detailed descriptions and performance characteristics of Eppley pyrhemometers.

Total hemispherical radiation, consisting of short wave direct and diffuse solar and long-wave atmospheric radiation incident upon a plane surface, was measured with an aspirated Gier and Dunkle total hemispherical radiometer.

Net radiation exchange, consisting of the difference between total hemispherical radiation and reflected solar, reflected atmospheric, and long wave terrestrial radiation emitted by the snow, was measured with a Gier and Dunkle aspirated net-exchange radiometer. Both radiometers were mounted about 3 meters above the ground surface and their thermopile outputs were continuously recorded by recording potentiometers. Reference is made to papers by Gier and Dunkle (3) and by Dunkle and others (4) for a description of the construction and operation of the radiometers.

3. Data Processing

The collected data were abstracted from the recorder strip charts partly by personnel from the Snow, Ice and Permafrost Research Establishment and partly by personnel from the University of Michigan meteorological laboratories. The completed abstracted data received from SIPRE were inspected and all detectable errors were corrected. A common visual-manual method of abstracting the data was used. It consisted of evaluating fifteen minute, half hourly, or hourly averages of each radiative flux. Instrument calibration factors and corrections were applied to all abstracted values of total and net radiation. Data processing was completed by computing hourly totals of each radiative flux in terms of the number of langleys received for the indicated hour ending, and finally by computing daily totals of each radiative flux.

4. Explanation of Tables

Each page includes four 24-hour days of tabulated data of incoming solar,

reflected solar, total hemispherical and net exchange radiation. Totals are given for each hour ending at the time indicated (langleys/hr) and for each 24-hour day ending at midnight (langleys/day) to the nearest tenth of a langley. The tables cover the period from 12 January 1955 through 31 March 1955 and from 10 January 1956 through 4 March 1956.

REFERENCES

1. Hand, Irving F., Pyrheliometers and Pyrheliometric Measurements, U. S. Weather Bureau, Washington, D. C., 55pp, November, 1946.
2. Fuquay, Don and Konrad Buettner, "Laboratory Investigation of Some Characteristics of the Eppley Pyrheliometer," Trans. Amer. Geophys. Union, Vol. 38, 38-43, 1947.
3. Gier, J. T. and R. V. Dunkle, "Total Hemispherical Radiometers", AIEE Transactions, Vol. 70, 1951.
4. University of California, Department of Engineering, Division of Engineering Research, Non-Selective Radiometers for Hemispherical Irradiation and Net Radiation Interchange Measurements, Report No. 9, Report Code NR-015-202, 27pp, October, 1949.

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
January 11, 1955				January 12, 1955				
01	MSG.	MSG.	0.0	0.0	23.9	-1.1	0.0	0.0
02	"	"	"	"	23.8	0.0	"	"
03	"	"	"	"	19.8	0.0	"	"
04	"	"	"	"	19.9	-1.1	"	"
05	"	"	"	"	21.0	0.0	"	"
06	"	"	"	"	21.1	0.0	"	"
07	"	"	"	"	20.8	-1.1	"	"
08	"	"	"	"	22.3	-1.1	"	"
09	"	"	"	"	22.3	-1.1	"	"
10	"	"	4.4	3.3	25.4	0.0	3.6	2.3
11	"	"	9.3	9.0	31.9	0.0	9.0	7.9
12	"	"	26.4	23.9	37.4	1.1	12.8	12.6
13	"	"	29.1	26.7	41.6	1.1	17.6	16.7
14	"	"	29.9	27.8	40.2	0.0	17.3	17.3
15	"	"	19.5	20.1	40.2	"	17.1	15.9
16	"	"	8.1	8.6	33.7	"	16.2	9.9
17	"	"	3.8	4.8	28.3	"	9.0	3.6
18	22.2	-2.1	0.0	0.0	24.3	-2.1	0.0	0.0
19	22.9	-1.1	"	"	22.9	-2.1	"	"
20	22.7	0.0	"	"	21.3	-3.2	"	"
21	20.1	-1.1	"	"	23.9	-2.1	"	"
22	20.1	-1.1	"	"	22.7	-2.1	"	"
23	21.3	-2.1	"	"	23.7	0.0	"	"
24	21.4	-1.1	"	"	23.6	0.0	"	"
TOTAL	150.7	-8.6	130.5	124.2	636.0	-14.9	102.6	86.2
January 13, 1955				January 14, 1955				
01	24.7	0.0	0.0	0.0	23.2	-1.1	0.0	0.0
02	24.6	0.0	"	"	23.1	-1.1	"	"
03	23.1	-1.1	"	"	23.2	-1.1	"	"
04	22.8	-1.1	"	"	24.5	0.0	"	"
05	24.0	0.0	"	"	24.4	"	"	"
06	23.9	0.0	"	"	23.4	"	"	"
07	22.6	-1.1	"	"	23.4	"	"	"
08	22.6	-1.1	"	"	22.6	"	"	"
09	22.6	-1.1	"	"	19.8	-2.1	"	"
10	27.9	0.0	4.8	3.0	20.0	-3.2	3.2	2.1
11	33.2	1.1	10.9	9.2	32.2	-4.3	17.4	16.9
12	40.7	1.1	19.5	17.7	45.4	-2.1	28.9	28.2
13	42.5	1.1	22.4	20.4	36.8	-3.2	22.8	22.5
14	45.2	2.1	23.6	21.6	36.7	-1.1	16.2	14.7
15	37.3	-3.2	21.3	20.4	28.0	-2.1	10.2	9.6
16	33.2	-2.1	17.9	19.5	30.5	-1.1	9.0	8.3
17	22.5	-2.1	11.3	5.1	25.4	0.0	3.0	3.2
18	20.0	-1.1	0.0	0.0	22.9	-1.1	0.0	0.0
19	24.1	0.0	"	"	24.1	-1.1	"	"
20	22.8	-1.1	"	"	24.3	0.0	"	"
21	22.9	-1.1	"	"	24.3	-1.1	"	"
22	23.1	-1.1	"	"	24.3	-1.1	"	"
23	23.1	-1.1	"	"	24.3	-1.1	"	"
24	23.1	-1.1	"	"	25.6	0.0	"	"
TOTAL	652.5	-14.1	131.7	116.9	632.4	-28.0	110.7	105.5

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
January 15, 1955				January 16, 1955				
01	23.8	0.0	MSG.	0.0	22.1	-1.1	0.0	0.0
02	25.4	-2.1	"	"	22.1	-1.1	"	"
03	24.9	-2.1	"	"	21.9	-1.1	"	"
04	24.5	-2.1	"	"	22.1	-1.1	"	"
05	23.7	-2.1	"	"	22.1	-1.1	"	"
06	23.6	-2.1	"	"	22.1	-1.1	"	"
07	24.6	-2.1	"	"	21.9	-1.1	"	"
08	23.2	-2.2	"	"	22.1	-1.1	"	"
09	23.1	-2.1	"	"	22.1	-1.1	"	"
10	24.6	-2.1	"	1.5	26.3	0.0	6.3	3.2
11	28.6	2.1	"	5.9	33.1	0.0	12.6	9.9
12	28.4	2.2	"	8.7	39.8	1.1	19.4	16.2
13	29.8	2.2	"	8.3	39.9	1.1	20.4	18.0
14	32.1	2.2	"	10.5	39.9	1.1	19.9	15.5
15	30.7	2.2	"	7.1	39.9	1.1	17.7	14.1
16	27.9	1.1	"	3.3	34.4	1.1	12.3	10.7
17	25.0	-1.1	"	.9	27.5	0.0	5.9	4.2
18	23.7	-1.1	"	0.0	26.2	-1.1	0.0	.6
19	22.3	-1.1	"	"	22.4	-1.1	"	0.0
20	22.4	-1.1	"	"	22.3	-1.1	"	"
21	22.1	-1.1	"	"	22.4	-1.1	"	"
22	22.1	-1.1	"	"	22.3	-1.1	"	"
23	22.1	-1.1	"	"	22.4	-1.1	"	"
24	22.1	0.0	"	"	22.2	-1.1	"	"
TOTAL	600.7	-14.7		46.2	639.5	-12.1	114.5	92.4

January 17, 1955				January 18, 1955				
01	22.3	-1.1	0.0	0.0	22.5	-1.1	0.0	0.0
02	22.2	-1.1	"	"	22.7	-1.1	"	"
03	22.1	-1.1	"	"	22.8	-1.1	"	"
04	22.1	-1.1	"	"	22.6	-1.1	"	"
05	21.9	-1.1	"	"	22.6	-1.1	"	"
06	21.9	-1.1	"	"	21.3	-1.1	"	"
07	21.9	-1.1	"	"	22.7	-1.1	"	"
08	21.9	-1.1	"	"	21.3	-1.1	"	"
09	21.8	-1.1	"	"	22.9	-1.1	"	"
10	27.2	-1.1	4.5	3.0	27.0	-1.1	5.3	2.9
11	34.1	1.1	11.1	9.3	33.9	0.0	12.6	11.4
12	37.9	0.0	16.8	12.8	44.3	-1.1	26.4	25.2
13	40.8	1.1	20.6	19.7	46.4	1.1	30.3	27.9
14	44.5	1.1	24.6	21.5	48.1	0.0	31.5	29.7
15	37.9	1.1	23.3	17.9	40.4	0.0	22.5	21.6
16	32.7	-1.1	20.1	11.7	29.8	0.0	11.1	9.5
17	25.9	-3.2	13.9	6.9	26.9	-2.2	6.2	5.4
18	19.4	-3.2	8.7	.8	23.0	-1.1	0.0	0.0
19	18.2	-3.2	0.0	0.0	20.9	-4.3	"	"
20	21.5	-2.2	"	"	17.8	-3.2	"	"
21	21.6	-1.1	"	"	17.7	-3.2	"	"
22	21.4	-2.2	"	"	21.2	-1.1	"	"
23	22.7	-1.1	"	"	23.0	-1.1	"	"
24	22.6	-1.1	"	"	21.6	-1.1	"	"
TOTAL	626.5	-25.0	143.6	103.6	643.4	-28.3	145.9	133.6

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
January 19, 1955				January 20, 1955				
01	22.5	-1.1	0.0	0.0	13.2	-3.3	0.0	0.0
02	20.0	-2.2	"	"	15.3	-3.3	"	"
03	22.1	-3.2	"	"	13.5	-3.3	"	"
04	21.9	-1.1	"	"	17.4	-2.2	"	"
05	18.2	-3.2	"	"	15.1	-3.3	"	"
06	20.9	-1.1	"	"	13.7	-1.1	"	"
07	21.3	-1.1	"	"	12.1	-5.5	"	"
08	22.9	0.0	"	"	13.5	-6.5	"	"
09	21.5	0.0	"	"	15.1	-5.4	"	"
10	27.8	0.0	11.7	7.4	23.4	-2.2	7.4	7.4
11	38.1	1.1	25.4	19.5	30.1	0.0	8.9	7.2
12	37.9	0.0	19.8	18.9	35.6	1.1	14.7	14.6
13	46.1	-3.2	27.9	27.6	43.1	1.1	19.5	17.7
14	40.1	-4.3	26.1	25.5	43.1	2.1	19.5	19.1
15	45.8	-1.1	31.8	30.9	55.6	2.1	34.5	28.7
16	39.2	-4.3	26.6	25.5	38.6	-3.2	31.5	25.2
17	25.6	-7.5	11.9	13.1	24.2	-6.4	15.0	13.2
18	17.3	-2.2	0.0	0.0	15.2	-6.4	1.9	1.4
19	16.2	-3.3	"	"	19.4	-3.2	0.0	0.0
20	13.8	-3.3	"	"	21.9	-2.1	"	"
21	13.1	-3.3	"	"	20.5	-2.1	"	"
22	14.2	-3.3	"	"	16.4	-4.3	"	"
23	13.3	-3.3	"	"	19.2	-3.2	"	"
24	13.4	-4.4	"	"	19.2	-2.1	"	"
TOTAL	593.2	-55.4	181.2	168.4	554.4	-62.7	152.9	134.5
January 21, 1955				January 22, 1955				
01	23.3	-2.1	0.0	0.0	18.3	-3.2	0.0	0.0
02	22.3	-1.1	"	"	19.4	-2.1	"	"
03	21.0	-1.1	"	"	19.2	-3.2	"	"
04	22.3	-1.1	"	"	19.6	-2.1	"	"
05	23.5	0.0	"	"	21.1	-1.1	"	"
06	23.6	"	"	"	20.8	-2.1	"	"
07	23.6	"	"	"	21.6	-1.1	"	"
08	23.5	"	"	"	25.6	0.0	"	"
09	23.6	"	"	"	22.3	-1.1	"	"
10	26.3	"	2.1	.6	23.8	-2.1	3.8	2.6
11	30.1	"	4.4	3.2	30.2	-1.1	10.9	11.1
12	32.9	1.1	9.5	8.1	34.9	-2.1	16.1	15.2
13	41.8	1.1	18.8	16.7	41.8	0.0	22.2	21.0
14	43.0	1.1	21.6	19.2	40.6	"	13.4	12.8
15	38.9	-1.1	17.9	16.4	37.8	"	13.7	13.1
16	35.5	0.0	11.4	9.8	32.5	"	9.0	8.3
17	23.6	0.0	5.1	4.9	28.4	"	3.8	3.2
18	22.1	-1.1	.8	1.1	24.6	"	.9	.3
19	23.4	-1.1	0.0	0.0	25.8	"	0.0	0.0
20	22.3	-1.1	"	"	24.4	"	"	"
21	21.0	-1.1	"	"	24.1	"	"	"
22	17.7	-2.1	"	"	24.1	"	"	"
23	20.0	-1.1	"	"	24.1	"	"	"
24	20.9	-1.1	"	"	23.9	"	"	"
TOTAL	626.2	-11.9	91.6	80.0	628.9	-21.3	93.8	87.6

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
January 23, 1955				January 24, 1955				
01	23.9	0.0	0.0	0.0	19.9	-2.2	0.0	0.0
02	23.9	0.0	"	"	20.7	-1.1	"	"
03	23.6	0.0	"	"	19.2	-2.2	"	"
04	23.4	-1.1	"	"	20.5	-1.1	"	"
05	23.1	-1.1	"	"	18.8	-3.3	"	"
06	23.1	-1.1	"	"	17.1	-3.3	"	"
07	23.1	-1.1	"	"	14.4	-4.4	"	"
08	21.7	-1.1	"	"	14.5	-3.3	"	"
09	21.4	-3.2	"	"	17.8	-2.2	"	"
10	26.9	-4.3	7.1	5.1	25.7	-1.1	7.5	6.0
11	33.6	-1.1	18.2	16.1	38.4	1.1	16.5	15.6
12	44.2	-1.1	27.3	15.9	37.5	0.0	18.2	16.8
13	51.7	-1.1	34.9	31.9	45.7	1.1	27.8	25.8
14	48.9	-1.1	33.9	31.7	52.9	0.0	35.9	32.6
15	43.9	-1.1	28.5	26.1	48.1	1.1	25.7	23.6
16	35.2	0.0	16.1	12.8	33.5	-4.3	17.7	16.5
17	28.2	-1.1	9.8	9.8	30.7	-1.1	8.4	7.9
18	21.2	-3.2	1.4	1.8	19.8	-3.2	1.9	1.9
19	21.4	-2.2	0.0	0.0	22.8	-1.1	0.0	0.0
20	21.5	-2.2	"	"	18.9	-2.2	"	"
21	20.0	-1.1	"	"	17.3	-4.3	"	"
22	19.9	-1.1	"	"	21.5	-1.1	"	"
23	19.9	-1.1	"	"	21.7	-1.1	"	"
24	19.7	-2.2	"	"	21.5	-1.1	"	"
TOTAL	663.4	-32.7	177.2	151.2	618.9	-40.4	159.6	146.7
January 25, 1955				January 26, 1955				
01	21.5	-2.2	0.0	0.0	20.8	-1.1	0.0	0.0
02	22.8	0.0	"	"	20.4	0.0	"	"
03	22.8	-1.1	"	"	20.3	-2.2	"	"
04	22.5	0.0	"	"	20.2	-1.1	"	"
05	21.2	-1.1	"	"	21.4	-1.1	"	"
06	22.6	-1.1	"	"	21.9	0.0	"	"
07	22.7	0.0	"	"	20.5	-1.1	"	"
08	22.5	-1.1	"	"	20.2	-3.3	"	"
09	22.5	-1.1	"	"	19.9	-1.1	"	"
10	27.9	-1.1	4.9	2.9	23.9	0.0	6.9	5.1
11	32.8	0.0	15.0	12.5	30.5	2.2	17.3	15.9
12	45.8	1.1	24.8	23.1	37.1	2.2	22.5	21.2
13	44.4	1.1	26.1	24.3	37.8	1.1	20.9	19.9
14	46.6	2.2	28.4	27.2	36.5	1.1	18.0	17.6
15	41.6	-1.1	23.1	22.4	36.4	0.0	19.7	19.2
16	35.1	0.0	18.9	17.7	30.9	1.1	12.2	11.6
17	28.2	-2.2	10.8	10.9	24.3	0.0	4.8	4.9
18	20.5	-1.1	1.7	1.9	19.9	0.0	1.1	1.1
19	22.1	-1.1	0.0	0.0	20.2	0.0	0.0	0.0
20	22.1	-1.1	"	"	20.1	-1.1	"	"
21	19.1	-2.2	"	"	20.1	0.0	"	"
22	21.6	-1.1	"	"	20.1	0.0	"	"
23	20.4	-1.1	"	"	19.9	-1.1	"	"
24	20.9	-1.1	"	"	19.9	-1.1	"	"
TOTAL	650.2	-16.5	153.7	142.9	583.2	-6.6	123.4	116.5

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	January 27, 1955				January 28, 1955			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	19.9	-1.1	0.0	0.0	20.1	0.0	0.0	0.0
02	19.9	0.0	"	"	20.1	"	"	"
03	18.7	-2.2	"	"	20.2	"	"	"
04	18.5	-1.1	"	"	20.9	"	"	"
05	19.9	-1.1	"	"	20.7	-1.1	"	"
06	19.9	-1.1	"	"	20.5	-1.1	"	"
07	18.6	-1.1	"	"	20.4	-1.1	"	"
08	18.7	-2.2	"	"	20.5	-1.1	"	"
09	20.3	-1.1	"	"	20.7	-2.2	"	"
10	25.2	-1.1	7.2	4.5	25.4	-3.3	8.1	7.1
11	37.4	-1.1	18.9	16.7	34.4	-3.3	21.6	20.3
12	48.3	-1.1	32.7	30.6	47.3	-4.3	37.8	34.2
13	49.6	1.1	31.5	29.7	56.2	-3.3	43.2	41.9
14	54.9	2.2	37.2	35.3	53.2	0.0	42.0	38.1
15	56.2	1.1	34.7	32.7	44.6	1.1	26.1	24.0
16	37.9	1.1	21.0	18.5	35.5	-1.1	20.1	19.5
17	29.3	-2.2	15.2	12.6	27.5	-1.1	8.9	8.4
18	16.1	-2.2	2.3	1.4	22.3	0.0	1.7	1.8
19	17.3	-3.3	0.0	0.0	21.4	-1.1	0.0	0.0
20	14.5	-4.4	"	"	21.4	-1.1	"	"
21	14.8	-3.3	"	"	21.4	-1.1	"	"
22	16.1	-3.3	"	"	21.0	-1.1	"	"
23	20.1	-1.1	"	"	20.9	-1.1	"	"
24	19.9	0.0	"	"	21.0	-1.1	"	"
TOTAL	632.0	-28.6	200.7	182.0	657.6	-28.5	209.5	195.3
	January 29, 1955				January 30, 1955			
01	20.7	-1.1	0.0	0.0	16.5	-3.3	0.0	0.0
02	20.3	-1.1	"	"	20.3	-1.1	"	"
03	18.9	-2.2	"	"	18.8	-2.2	"	"
04	17.6	-2.2	"	"	18.9	-2.2	"	"
05	18.9	-2.2	"	"	20.3	-1.1	"	"
06	18.8	-3.3	"	"	18.7	-2.2	"	"
07	15.7	-4.4	"	"	17.6	-2.2	"	"
08	13.1	-4.4	"	"	17.7	-3.3	"	"
09	15.7	-3.3	3.6	2.1	21.8	0.0	.9	.2
10	23.2	-5.5	15.0	11.3	27.3	-1.1	9.0	7.7
11	33.9	-5.5	28.7	25.2	39.1	-2.2	26.1	23.7
12	40.9	-4.3	38.4	34.5	43.1	-1.1	31.2	30.2
13	52.2	-4.4	41.3	38.9	48.4	1.1	35.1	33.5
14	51.2	-2.2	43.5	40.9	52.4	2.2	33.3	31.9
15	48.4	-2.2	41.7	39.3	43.0	1.1	29.3	27.9
16	42.4	-4.4	28.5	27.8	30.0	-2.0	21.3	20.1
17	27.1	-2.2	10.1	10.9	20.0	-3.0	11.6	11.7
18	19.0	-3.3	1.7	2.3	17.0	-3.0	1.4	1.7
19	20.5	-1.1	0.0	0.0	22.0	-2.0	0.0	0.0
20	21.0	0.0	"	"	22.0	-1.0	"	"
21	20.7	-1.1	"	"	20.0	-1.0	"	"
22	19.2	-2.2	"	"	19.0	-2.0	"	"
23	17.9	-3.3	"	"	19.0	-2.0	"	"
24	16.3	-4.4	"	"	19.0	-2.0	"	"
TOTAL	613.6	-70.3	252.5	233.2	611.9	-35.6	199.2	188.6

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	January 31, 1955		February 1, 1955		February 1, 1955		February 1, 1955	
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	20.2	-1.1	0.0	0.0	23.4	0.0	0.0	0.0
02	20.2	1.1	"	"	23.6	1.1	"	"
03	20.2	1.1	"	"	23.7	1.1	"	"
04	20.2	1.1	"	"	24.3	0.0	"	"
05	20.2	0.0	"	"	24.3	"	"	"
06	20.2	1.1	"	"	23.7	"	"	"
07	20.2	0.0	"	"	23.3	"	"	"
08	20.2	-1.1	"	"	23.1	1.1	"	"
09	20.2	1.1	"	"	22.8	1.1	1.7	.3
10	27.4	1.1	6.0	4.5	34.6	1.1	13.5	12.2
11	35.2	1.1	9.3	8.6	43.7	2.2	23.1	21.0
12	35.4	1.1	12.3	11.3	47.7	2.1	27.7	25.9
13	40.1	2.1	18.5	15.9	50.8	2.1	31.1	28.4
14	44.8	2.2	21.3	21.5	51.1	5.3	29.3	27.2
15	43.5	1.1	25.1	24.3	51.1	3.2	26.1	24.2
16	39.6	0.0	22.7	20.9	35.7	1.1	12.6	12.0
17	30.3	-1.1	9.9	10.4	30.3	1.1	7.2	6.9
18	21.1	-1.1	2.1	2.7	24.7	0.0	1.7	1.9
19	19.5	-1.1	0.0	0.0	20.7	-2.2	0.0	0.0
20	17.5	-2.2	"	"	20.8	-1.1	"	"
21	14.8	-2.2	"	"	21.9	-1.1	"	"
22	15.9	-3.3	"	"	19.9	-3.2	"	"
23	19.9	-1.1	"	"	15.7	-6.5	"	"
24	23.2	1.1	"	"	15.7	-5.4	"	"
TOTAL	610.0	1.0	127.2	120.1	696.6	3.1	174.0	160.0

Time, EST Hr. Ending	February 2, 1955		February 2, 1955		February 3, 1955		February 3, 1955	
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	15.5	-5.4	0.0	0.0	15.2	-5.4	0.0	0.0
02	15.4	-5.4	"	"	16.7	-3.3	"	"
03	16.9	-5.4	"	"	21.9	-1.1	"	"
04	19.5	-3.2	"	"	21.9	-1.1	"	"
05	20.9	-1.1	"	"	21.9	-1.1	"	"
06	20.7	-2.2	"	"	21.7	-1.1	"	"
07	20.7	-1.1	"	"	21.6	0.0	"	"
08	20.7	-1.1	"	"	21.7	-1.1	"	"
09	21.9	0.0	"	"	21.6	-1.1	"	"
10	28.7	0.0	7.9	6.2	28.5	-2.2	13.8	13.0
11	32.4	-1.1	17.5	16.5	38.1	-4.3	28.2	27.4
12	43.5	1.1	28.3	27.2	44.8	-2.2	33.1	32.1
13	57.9	2.1	44.3	40.8	50.2	0.0	36.0	33.4
14	52.1	1.1	37.1	34.4	61.1	1.1	43.1	39.2
15	48.3	-1.1	28.3	28.1	49.3	2.1	33.6	30.8
16	36.8	-2.2	21.3	19.9	35.9	-1.1	19.2	17.7
17	28.5	-3.2	10.9	10.9	32.2	-2.1	13.8	13.2
18	20.7	-4.3	2.5	2.9	17.2	-5.4	4.3	4.8
19	20.9	-2.2	0.0	0.0	16.0	-5.4	0.0	0.0
20	22.2	-1.1	"	"	19.3	-4.3	"	"
21	22.4	-1.1	"	"	20.6	-2.2	"	"
22	22.1	-1.1	"	"	14.9	-4.3	"	"
23	20.9	-1.1	"	"	14.2	-6.5	"	"
24	24.1	-1.1	"	"	12.9	-5.4	"	"
TOTAL	653.7	-40.2	198.1	186.9	639.4	-57.5	225.1	211.6

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	February 4, 1955				February 5, 1955			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	12.9	-4.3	0.0	0.0	24.3	0.0	0.0	0.0
02	13.1	-5.4	"	"	24.5	"	"	"
03	13.3	-3.2	"	"	24.3	"	"	"
04	11.1	-3.3	"	"	20.8	-3.2	"	"
05	11.2	-3.3	"	"	21.5	-1.1	"	"
06	11.7	-3.3	"	"	23.5	-1.1	"	"
07	12.6	-3.3	"	"	23.4	-1.1	"	"
08	11.6	-4.4	"	"	24.8	0.0	"	"
09	11.9	-5.5	"	"	24.5	-1.1	"	"
10	26.3	-5.4	13.2	13.5	25.9	0.0	2.5	1.4
11	34.6	-4.3	23.6	24.2	34.1	1.1	9.0	7.0
12	41.6	-3.2	27.9	28.1	39.2	1.1	14.7	12.9
13	51.2	-5.3	28.2	27.6	41.9	1.1	19.9	17.7
14	50.2	2.1	30.9	29.1	40.4	1.1	18.0	16.5
15	46.1	1.1	24.8	23.7	33.8	-1.1	10.7	9.8
16	39.6	-1.1	18.8	17.7	32.9	-1.1	10.9	9.2
17	28.2	-1.1	9.6	9.2	27.9	-1.1	5.9	5.6
18	24.2	-1.1	2.1	2.4	24.5	0.0	1.5	1.6
19	21.7	-1.1	0.0	0.0	24.5	-1.1	0.0	0.0
20	21.7	-1.1	"	"	20.7	-4.3	"	"
21	21.6	-1.1	"	"	24.3	-1.1	"	"
22	22.7	0.0	"	"	24.1	-1.1	"	"
23	23.9	0.0	"	"	22.9	-1.1	"	"
24	24.1	0.0	"	"	22.9	0.0	"	"
TOTAL	587.1	-57.6	179.1	175.5	651.6	-15.2	93.1	81.7
	February 6, 1955				February 7, 1955			
01	21.6	-2.1	0.0	0.0	23.3	-1.1	0.0	0.0
02	23.9	-1.1	"	"	23.1	0.0	"	"
03	23.9	-1.1	"	"	23.1	"	"	"
04	23.9	-1.1	"	"	22.9	"	"	"
05	23.8	-1.1	"	"	22.9	"	"	"
06	23.6	-1.1	"	"	22.7	"	"	"
07	23.6	-1.1	"	"	23.1	"	"	"
08	20.9	-2.1	"	"	23.4	"	"	"
09	22.2	-2.1	1.9	1.4	24.9	"	1.4	.6
10	28.9	-2.1	9.6	9.2	32.9	1.1	15.8	10.1
11	32.8	1.1	13.2	11.6	36.4	-1.1	26.7	21.0
12	40.6	2.1	19.8	17.6	43.6	2.1	29.9	27.6
13	45.8	3.2	27.6	24.5	45.8	2.1	29.1	26.3
14	54.8	2.1	34.7	30.3	43.3	1.1	24.5	22.4
15	45.8	2.1	32.3	28.9	56.3	6.4	36.6	32.9
16	38.0	1.1	16.9	15.0	30.2	1.1	14.4	13.5
17	31.5	1.1	10.2	9.2	36.6	-1.1	20.7	20.1
18	25.1	0.0	1.8	2.4	20.8	-2.1	4.4	4.8
19	22.1	-1.1	0.0	0.0	17.2	-3.2	0.0	0.0
20	23.4	-1.1	"	"	16.6	-3.3	"	"
21	23.3	-1.1	"	"	18.5	-3.2	"	"
22	23.3	-1.1	"	"	17.3	-4.3	"	"
23	23.4	-1.1	"	"	19.7	-1.1	"	"
24	23.4	-1.1	"	"	17.5	-1.1	"	"
TOTAL	689.6	-8.8	168.0	150.1	662.1	-7.7	203.5	179.3

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	February 8, 1955				February 9, 1955			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	17.6	-2.2	0.0	0.0	24.8	0.0	0.0	0.0
02	19.9	-2.2	"	"	25.0	"	"	"
03	16.9	-3.3	"	"	25.0	"	"	"
04	19.9	-2.2	"	"	24.8	"	"	"
05	21.1	-1.1	"	"	24.9	"	"	"
06	22.1	0.0	"	"	25.0	"	"	"
07	21.1	-1.1	"	"	25.0	"	"	"
08	21.3	-1.1	"	"	25.0	"	"	"
09	23.9	0.0	.9	.3	26.3	"	.5	.3
10	29.5	0.0	9.0	7.2	27.4	"	3.2	1.5
11	36.8	0.0	18.6	16.8	32.6	1.1	9.2	6.8
12	45.2	-1.1	30.3	27.0	43.1	2.1	21.3	18.0
13	43.6	1.1	28.4	25.7	41.0	4.3	19.5	18.3
14	46.4	2.1	26.4	23.6	49.6	3.2	25.7	22.2
15	46.4	0.0	30.5	27.5	42.9	3.2	22.7	20.1
16	38.5	-1.1	24.6	21.9	37.9	1.1	17.6	15.5
17	31.0	-1.1	9.5	9.0	33.9	0.0	11.6	10.1
18	25.7	-1.1	4.2	4.7	24.8	-2.1	3.2	2.9
19	25.0	-1.1	0.0	.5	21.3	-2.1	.2	0.0
20	24.9	0.0	"	0.0	22.5	-2.1	0.0	"
21	24.9	"	"	"	23.8	-1.1	"	"
22	24.9	"	"	"	21.9	-1.1	"	"
23	24.7	"	"	"	23.1	-1.1	"	"
24	24.7	"	"	"	22.9	-1.1	"	"
TOTAL	676.0	-15.5	182.4	164.2	694.5	4.3	134.7	115.7

Time, EST Hr. Ending	February 10, 1955				February 11, 1955			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	22.8	-1.1	0.0	0.0	19.9	-1.1	0.0	0.0
02	22.4	-1.1	"	"	19.8	-1.1	"	"
03	22.2	-1.1	"	"	19.9	-1.1	"	"
04	21.9	-1.1	"	"	19.9	-1.1	"	"
05	21.9	-1.1	"	"	19.6	-1.1	"	"
06	21.8	-1.1	"	"	19.8	-1.1	"	"
07	21.4	-1.1	"	"	19.7	-1.1	"	"
08	21.0	-1.1	"	"	19.8	-1.1	"	"
09	24.9	-1.1	2.4	.6	20.9	-1.1	2.1	.5
10	32.5	0.0	12.3	10.9	27.7	-1.1	11.9	9.3
11	44.5	0.0	24.8	23.4	42.5	0.0	24.0	21.6
12	50.9	1.1	33.5	31.9	46.4	1.1	30.8	28.7
13	53.0	2.2	34.4	32.7	52.9	2.2	34.8	33.2
14	51.9	1.1	31.4	29.9	53.1	2.2	34.9	32.9
15	48.1	1.1	31.1	28.9	47.7	1.1	31.5	29.6
16	40.0	1.1	22.1	20.9	43.9	0.0	26.1	24.6
17	33.6	-1.1	11.4	11.9	30.9	1.1	12.8	12.5
18	24.5	0.0	3.0	3.8	24.5	0.0	3.9	3.9
19	20.6	-1.1	.2	.2	22.1	-1.1	.2	.2
20	20.7	-1.1	0.0	0.0	19.6	-1.1	0.0	0.0
21	21.9	-1.1	"	"	20.9	-1.1	"	"
22	20.6	-1.1	"	"	21.0	-1.1	"	"
23	20.4	-1.1	"	"	21.1	0.0	"	"
24	20.2	-1.1	"	"	21.1	0.0	"	"
TOTAL	703.7	-11.0	206.6	195.1	674.7	-7.7	213.0	197.0

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
February 12, 1955				February 13, 1955				
01	21.1	-1.1	0.0	0.0	21.1	-1.1	0.0	0.0
02	21.0	-1.1	"	"	20.9	-1.1	"	"
03	20.9	-1.1	"	"	18.3	-3.3	"	"
04	20.9	0.0	"	"	18.3	-2.2	"	"
05	20.6	"	"	"	15.2	-5.5	"	"
06	20.5	"	"	"	17.3	-2.2	"	"
07	20.3	"	"	"	19.3	-1.1	"	"
08	20.2	"	"	"	19.4	0.0	"	"
09	21.7	-1.1	2.1	1.1	22.3	-1.1	1.9	1.1
10	29.7	-1.1	11.3	10.2	31.8	1.1	10.7	8.7
11	41.5	-1.1	25.4	23.7	40.1	2.2	19.7	17.4
12	44.7	-1.1	33.2	31.9	43.4	2.2	22.8	20.4
13	60.4	1.1	45.5	42.6	46.5	2.2	26.3	23.7
14	64.5	1.1	47.9	45.0	48.5	2.2	27.5	25.4
15	45.7	1.1	28.1	26.6	46.2	2.2	25.9	23.9
16	45.5	1.1	26.7	24.3	39.8	1.1	19.8	17.9
17	29.9	-2.2	13.1	12.0	32.2	1.1	11.6	10.7
18	23.3	-3.3	4.1	4.5	24.4	0.0	2.9	2.9
19	18.0	-3.3	.2	.2	21.9	-1.1	.2	0.0
20	19.8	-2.2	0.0	0.0	21.7	-1.1	0.0	"
21	21.4	-1.1	"	"	22.5	-1.1	"	"
22	20.3	-1.1	"	"	21.6	-1.1	"	"
23	19.6	0.0	"	"	21.5	-1.1	"	"
24	20.9	0.0	"	"	17.3	-2.2	"	"
TOTAL	692.4	-16.5	237.6	222.1	651.5	-11.0	169.3	152.1
February 14, 1955				February 15, 1955				
01	17.1	-3.2	0.0	0.0	15.1	-2.2	0.0	0.0
02	18.2	-2.2	"	"	15.3	-2.2	"	"
03	16.6	-4.3	"	"	18.6	-1.1	"	"
04	16.2	-3.3	"	"	21.9	1.1	"	"
05	17.1	-1.1	"	"	22.7	1.1	"	"
06	20.7	-1.1	"	"	24.1	1.1	"	"
07	22.2	-1.1	"	"	23.1	1.1	"	"
08	22.4	0.0	"	"	24.4	0.0	"	"
09	22.4	"	1.1	.3	24.3	0.0	1.2	.6
10	36.3	"	15.2	13.4	32.2	-1.1	18.0	15.0
11	41.5	"	20.1	17.4	42.6	2.1	20.7	19.7
12	48.1	-1.1	34.7	32.3	47.9	2.1	23.1	21.6
13	63.4	3.2	45.9	41.6	53.2	2.1	28.2	26.4
14	45.5	1.1	34.9	31.5	51.7	2.1	27.9	25.8
15	47.6	1.1	25.9	23.4	41.4	2.1	19.4	17.6
16	45.4	2.1	24.8	22.2	42.6	2.1	18.6	16.4
17	38.6	-3.2	24.6	23.1	35.9	1.1	13.5	11.9
18	23.9	-5.4	7.4	7.8	28.1	0.0	4.2	3.6
19	18.6	-3.2	.3	.3	24.3	-1.1	.2	0.0
20	16.7	-3.3	0.0	0.0	24.2	-1.1	0.0	"
21	16.7	-3.3	"	"	23.9	-1.1	"	"
22	15.5	-3.3	"	"	23.9	-1.1	"	"
23	15.0	-2.2	"	"	24.5	-1.1	"	"
24	14.7	-3.3	"	"	24.2	-1.1	"	"
TOTAL	660.4	-37.1	234.9	213.3	710.1	4.9	175.0	158.6

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
February 16, 1955				February 17, 1955				
01	22.9	-2.1	0.0	0.0	14.5	-3.3	0.0	0.0
02	22.9	-2.1	"	"	14.1	-3.3	"	"
03	24.1	-1.1	"	"	13.4	-3.3	"	"
04	23.9	-1.1	"	"	13.5	-3.3	"	"
05	23.8	-1.1	"	"	14.4	-3.3	"	"
06	23.6	-1.1	"	"	12.8	-3.3	"	"
07	23.3	-1.1	"	"	12.7	-3.3	"	"
08	23.2	-1.1	"	"	13.9	-3.3	"	"
09	26.9	0.0	1.9	1.1	16.9	-3.2	9.9	9.5
10	37.8	0.0	14.9	12.5	31.9	-3.2	25.2	25.5
11	43.7	-1.1	25.7	24.6	49.5	-1.1	37.2	36.0
12	66.2	2.1	48.6	45.3	62.6	2.1	46.4	43.1
13	65.7	2.1	47.4	43.2	70.7	3.2	57.5	48.5
14	56.4	1.1	43.8	30.9	73.8	4.2	54.0	46.2
15	58.2	-1.1	42.5	41.4	67.2	3.2	45.5	40.4
16	47.6	-3.2	36.9	34.7	53.1	1.1	32.1	28.7
17	35.5	-5.4	21.2	20.6	33.7	-1.1	13.4	12.8
18	19.4	-6.5	8.1	9.8	25.9	-1.1	6.8	7.1
19	14.8	-4.4	.2	.8	16.1	-5.3	.5	.8
20	17.5	-3.2	0.0	0.0	16.2	-5.3	0.0	0.0
21	22.9	-1.4	"	"	16.1	-6.4	"	"
22	21.6	-1.4	"	"	17.1	-5.3	"	"
23	14.9	-2.2	"	"	15.5	-5.3	"	"
24	12.9	-3.3	"	"	18.2	-5.3	"	"
TOTAL	749.7	-38.7	291.2	264.9	693.8	-55.2	328.5	298.6
February 18, 1955				February 19, 1955				
01	18.2	-4.3	0.0	0.0	24.7	1.1	0.0	0.0
02	19.6	-2.1	"	"	23.4	-1.1	"	"
03	18.2	-1.1	"	"	24.6	-1.1	"	"
04	17.9	-1.1	"	"	24.5	-1.1	"	"
05	20.7	-1.1	"	"	25.7	-1.1	"	"
06	20.7	-1.1	"	"	25.5	1.1	"	"
07	18.1	-4.3	"	"	25.6	1.1	"	"
08	19.4	-2.1	"	"	24.3	1.1	"	"
09	25.0	0.0	3.5	2.4	26.6	1.1	1.5	.5
10	36.6	1.1	13.8	13.1	30.3	1.1	3.8	2.4
11	39.2	1.1	18.9	15.9	34.2	2.1	8.1	6.5
12	51.3	2.1	28.5	24.5	40.8	3.2	13.8	11.7
13	53.0	3.2	31.9	27.9	44.5	4.2	19.1	17.3
14	60.9	4.2	39.8	34.7	48.5	4.2	22.9	20.9
15	53.4	1.1	30.0	26.9	40.7	3.2	14.9	14.1
16	48.3	2.1	21.3	18.9	38.2	2.1	10.9	10.2
17	34.3	-1.1	14.4	13.4	31.9	2.1	7.2	6.9
18	23.9	-3.2	4.1	4.7	30.7	1.1	3.5	3.8
19	25.1	0.0	.2	.2	26.9	1.1	.3	.3
20	20.9	-3.2	0.0	0.0	25.9	1.1	0.0	0.0
21	21.8	-2.1	"	"	25.9	1.1	"	"
22	23.3	-1.1	"	"	24.9	1.1	"	"
23	24.7	1.1	"	"	24.9	1.1	"	"
24	23.4	1.1	"	"	24.9	1.1	"	"
TOTAL	717.9	-10.8	206.4	182.6	718.1	31.0	106.0	94.6

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
February 20, 1955				February 21, 1955				
01	26.3	1.1	0.0	0.0	16.9	-5.4	0.0	0.0
02	26.3	1.1	"	"	16.3	-6.5	"	"
03	28.8	5.3	"	"	20.2	-1.1	"	"
04	30.0	6.3	"	"	19.9	-1.1	"	"
05	28.9	5.3	"	"	19.9	-1.1	"	"
06	27.6	5.3	"	"	20.9	-1.1	"	"
07	26.3	2.1	"	"	19.4	-2.2	"	"
08	23.8	1.1	"	"	17.8	-2.2	"	"
09	25.1	1.1	"	"	17.5	-4.3	6.2	3.9
10	29.5	4.2	3.3	2.4	27.3	-3.2	15.0	12.2
11	31.1	6.3	6.9	5.4	49.5	2.2	36.5	27.8
12	41.6	5.2	20.7	13.5	67.7	7.5	48.2	36.2
13	46.5	6.3	20.7	14.3	72.0	9.6	53.9	40.1
14	48.5	7.3	21.6	15.2	71.9	10.7	52.1	38.3
15	55.8	9.3	42.0	28.5	66.9	8.6	48.9	36.5
16	56.7	8.3	32.6	24.5	51.5	5.4	35.9	27.3
17	43.4	3.1	21.0	16.7	39.7	-1.1	23.3	18.3
18	27.7	-5.2	6.6	6.6	25.2	0.0	6.0	5.1
19	17.8	-7.4	0.0	0.0	21.5	-3.2	1.1	.5
20	14.4	-8.5	"	"	19.9	-2.2	0.0	0.0
21	17.4	-7.4	"	"	21.2	-1.1	"	"
22	22.3	-2.1	"	"	20.8	0.0	"	"
23	21.5	-1.1	"	"	21.9	-1.1	"	"
24	16.8	-4.3	"	"	20.8	-1.1	"	"
TOTAL	734.1	42.7	175.4	127.1	766.6	6.0	327.1	246.2

February 22, 1955				February 23, 1955				
01	19.5	-1.1	0.0	0.0	18.0	-1.1	0.0	0.0
02	19.6	0.0	"	"	21.9	-1.1	"	"
03	16.9	-1.1	"	"	21.9	0.0	"	"
04	17.8	-1.1	"	"	19.6	-1.1	"	"
05	16.2	-2.2	"	"	19.7	-1.1	"	"
06	16.4	-2.2	"	"	19.9	-1.1	"	"
07	18.8	-2.2	"	"	19.9	-1.1	"	"
08	16.0	-2.2	"	"	22.4	-1.1	"	"
09	23.9	-1.1	6.2	4.1	26.6	0.0	4.1	3.0
10	36.1	-1.1	22.1	19.8	37.3	0.0	15.0	13.4
11	51.1	4.3	31.1	28.9	50.5	1.1	34.9	30.5
12	47.8	3.2	25.4	23.3	50.4	3.2	29.9	27.3
13	65.0	4.3	44.6	40.8	51.5	3.2	33.8	30.3
14	64.5	4.3	46.8	42.5	60.6	3.2	41.9	37.8
15	73.0	4.3	60.3	53.4	57.8	2.1	40.2	35.9
16	53.1	-1.1	40.2	36.8	60.2	1.1	46.5	41.9
17	32.7	-1.1	15.8	14.4	39.4	-3.2	28.1	26.3
18	25.8	-3.3	10.7	9.5	23.4	-6.5	11.3	11.3
19	16.3	-3.3	2.4	1.7	16.9	-4.3	1.9	1.1
20	18.8	-1.1	0.0	0.0	15.7	-4.3	0.0	0.0
21	12.9	-4.3	"	"	15.6	-4.3	"	"
22	14.5	-2.2	"	"	18.4	-5.4	"	"
23	19.4	-1.1	"	"	18.4	-4.3	"	"
24	16.6	-2.2	"	"	18.4	-4.3	"	"
TOTAL	712.7	-13.6	305.6	275.2	724.4	-30.4	287.6	258.8

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Net		Total Refl.		Total Net		Total Refl.		
	Hemis.	Exch.	Solar	Solar	Hemis.	Exch.	Solar	Solar	
February 24, 1955					February 25, 1955				
01	20.0	-2.2	0.0	0 0	14.4	-2.2	0.0	0.0	
02	23.0	0.0	"	"	17.9	0.0	"	"	
03	22.9	-1.1	"	"	17.1	0.0	"	"	
04	22.7	-1.1	"	"	18.3	-1.1	"	"	
05	22.1	-1.1	"	"	19.9	0.0	"	"	
06	21.4	-1.1	"	"	19.9	"	"	"	
07	21.0	-1.1	"	"	20.4	"	"	"	
08	20.6	-1.1	"	"	19.3	"	"	"	
09	24.6	0.0	4.7	2.6	22.6	1.1	4.5	2.1	
10	33.5	1.1	11.7	9.8	34.9	2.6	14.1	10.5	
11	40.7	1.1	22.2	18.8	37.9	3.2	16.5	14.1	
12	58.7	3.3	37.9	32.9	39.5	3.2	16.5	13.5	
13	67.8	5.4	51.3	44.3	40.1	3.2	17.1	14.7	
14	63.6	5.5	49.8	43.4	37.9	1.1	14.7	12.9	
15	65.2	4.3	48.0	40.8	34.4	2.1	11.7	10.5	
16	47.2	0.0	31.2	27.9	38.5	3.2	14.1	11.7	
17	38.2	1.1	25.1	21.3	38.8	3.2	14.1	11.7	
18	23.5	-4.4	10.8	10.1	28.6	1.1	6.3	2.1	
19	13.9	-5.5	1.2	1.2	24.5	0.0	1.5	.9	
20	16.4	-4.4	0.0	0.0	24.9	"	0.0	0.0	
21	13.7	-4.4	"	"	24.9	"	"	"	
22	11.4	-5.6	"	"	25.1	"	"	"	
23	11.2	-4.5	"	"	25.1	"	"	"	
24	12.5	-3.4	"	"	25.1	"	"	"	
TOTAL	715.8	-19.2	293.9	253.1	650.0	20.7	131.1	104.7	

February 26, 1955					February 27, 1955				
01	25.2	0.0	0.0	0.0	17.4	-3.3	MSG.	0.0	
02	25.1	"	"	"	18.1	-4.3	"	"	
03	25.8	"	"	"	16.3	-5.4	"	"	
04	25.3	"	"	"	16.3	-5.4	"	"	
05	24.8	"	"	"	16.2	-3.3	"	"	
06	24.8	"	"	"	17.2	-3.3	"	"	
07	24.6	"	"	"	21.3	-2.2	"	"	
08	24.3	"	"	"	21.5	-1.1	"	"	
09	27.8	1.1	10.8	1.4	24.4	1.1	"	2.7	
10	32.9	-1.1	20.6	11.1	35.3	1.1	"	12.0	
11	46.6	1.1	28.9	19.5	46.1	6.5	"	22.4	
12	69.5	5.3	53.4	43.9	51.9	5.4	"	26.3	
13	68.7	9.6	52.1	42.5	54.2	6.4	"	30.2	
14	69.2	4.3	53.3	43.8	63.4	7.5	"	35.4	
15	69.4	4.3	53.7	44.3	42.6	3.2	"	18.8	
16	58.7	3.2	42.5	35.7	43.7	3.2	"	17.1	
17	38.1	1.1	20.9	17.9	35.6	2.2	"	11.1	
18	26.2	-1.1	7.9	7.1	28.8	1.1	"	5.3	
19	22.1	-1.1	1.2	.9	23.6	0.0	"	.6	
20	20.8	-1.1	0.0	0.0	23.5	"	"	0.0	
21	18.9	-3.3	"	"	23.4	"	"	"	
22	16.9	-4.4	"	"	23.7	1.1	"	"	
23	17.3	-3.3	"	"	23.7	0.0	"	"	
24	17.4	-3.3	"	"	23.7	0.0	"	"	
TOTAL	820.4	11.3	345.3	268.1	711.9	10.5		181.9	

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
February 28, 1955				March 1, 1955				
01	23.8	0.0	0.0	0.0	24.9	-1.1	0.0	0.0
02	24.0	"	"	"	24.8	0.0	"	"
03	24.0	"	"	"	23.8	-1.1	"	"
04	24.1	"	"	"	24.9	-1.1	"	"
05	22.7	-1.1	"	"	24.5	-1.1	"	"
06	22.8	-1.1	"	"	23.0	-2.1	"	"
07	22.8	-1.1	"	"	23.9	-1.1	"	"
08	24.2	0.0	4.2	1.7	23.6	-1.1	"	"
09	25.9	1.1	12.6	9.5	26.1	0.0	1.6	.3
10	36.7	2.1	21.8	18.8	36.6	1.1	13.4	10.2
11	46.2	3.2	25.9	22.8	41.6	2.1	20.9	18.2
12	48.8	4.2	37.9	33.2	48.1	3.2	27.0	23.6
13	62.4	4.2	44.4	39.2	59.7	6.4	39.8	34.1
14	58.2	4.2	30.6	32.1	70.4	6.4	53.7	48.2
15	55.2	3.2	27.6	24.0	58.9	2.1	43.7	36.5
16	52.9	3.2	14.7	12.8	59.0	1.1	44.9	38.4
17	38.8	2.1	5.3	4.5	42.3	0.0	27.9	24.6
18	27.2	1.1	1.4	.5	27.8	-1.1	9.2	8.1
19	23.6	-1.1	0.0	0.0	24.2	-1.1	1.7	.8
20	23.6	0.0	"	"	23.0	-1.1	0.0	0.0
21	23.6	"	"	"	23.3	-1.1	"	"
22	23.8	"	"	"	24.5	0.0	"	"
23	23.8	"	"	"	25.9	1.1	"	"
24	23.9	-2.1	"	"	25.9	0.0	"	"
TOTAL	783.0	22.1	226.4	199.1	810.7	10.4	283.8	243.0
March 2, 1955				March 3, 1955				
01	25.1	1.1	0.0	0.0	22.8	0.0	0.0	0.0
02	24.9	0.0	"	"	22.8	"	"	"
03	24.2	"	"	"	22.9	"	"	"
04	23.9	"	"	"	23.3	-1.1	"	"
05	25.1	"	"	"	23.4	0.0	"	"
06	23.5	"	"	"	23.6	0.0	"	"
07	23.3	"	"	"	23.4	1.1	"	"
08	24.1	"	"	"	23.3	1.1	"	"
09	29.5	-1.1	8.6	7.1	27.7	1.1	4.4	3.6
10	40.8	0.0	25.1	23.9	31.6	2.1	8.1	6.9
11	50.1	2.1	27.5	25.9	40.7	5.3	17.9	15.9
12	62.9	4.3	39.8	36.9	43.3	5.3	20.1	18.6
13	63.1	4.3	46.4	42.6	46.8	6.4	24.0	22.5
14	64.5	4.3	46.7	42.2	48.3	7.5	25.2	22.7
15	62.9	2.1	45.5	41.4	46.9	6.4	25.2	22.8
16	46.4	2.1	26.9	24.6	43.2	7.5	24.0	21.3
17	37.0	1.1	18.9	17.4	36.7	4.3	15.0	13.1
18	29.2	-1.1	7.5	7.2	28.9	2.1	5.7	5.3
19	22.4	-1.1	.8	1.4	25.2	0.0	.8	.9
20	21.3	-2.2	0.0	0.0	22.6	0.0	0.0	0.0
21	21.1	-1.1	"	"	23.8	"	"	"
22	21.1	-1.1	"	"	23.8	"	"	"
23	22.5	0.0	"	"	23.9	"	"	"
24	22.5	0.0	"	"	23.9	"	"	"
TOTAL	811.4	13.7	293.7	270.6	722.8	49.1	170.4	153.6

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
	March 4, 1955				March 5, 1955			
01	23.9	0.0	0.0	0.0	20.4	-2.2	0.0	0.0
02	25.3	"	"	"	15.8	-4.3	"	"
03	23.9	"	"	"	15.7	-4.3	"	"
04	23.9	"	"	"	20.9	0.0	"	"
05	23.9	"	"	"	23.3	1.1	"	"
06	23.9	"	"	"	23.6	0.0	"	"
07	23.9	1.1	"	"	23.4	"	"	"
08	25.4	2.1	"	"	23.2	"	.6	.2
09	28.0	1.1	2.6	.6	27.4	"	4.5	2.9
10	33.1	1.1	8.7	6.3	35.1	2.1	10.9	9.3
11	41.1	3.2	20.7	17.6	41.9	3.2	17.4	15.5
12	56.7	3.2	32.6	29.1	52.4	4.3	26.3	24.5
13	58.8	5.3	43.9	38.4	53.7	4.3	27.2	25.5
14	70.4	7.4	56.1	47.9	56.5	4.2	31.4	29.6
15	59.5	4.2	42.6	37.1	48.4	3.2	27.0	25.7
16	52.6	2.1	27.6	24.3	44.8	6.5	25.9	24.0
17	38.5	1.1	24.5	21.6	36.6	2.2	15.9	16.2
18	26.4	-2.1	9.0	8.7	27.2	-1.1	6.0	5.4
19	23.8	-1.1	1.5	1.7	21.9	-1.1	.6	.9
20	22.5	-3.2	0.0	0.0	21.9	-1.1	0.0	0.0
21	23.4	-1.1	"	"	21.8	-1.1	"	"
22	23.4	-1.1	"	"	21.6	-1.1	"	"
23	23.4	0.0	"	"	21.4	-1.1	"	"
24	23.6	0.0	"	"	21.4	0.0	"	"
TOTAL	799.3	23.3	269.8	233.3	720.3	13.7	193.7	179.7
	March 6, 1955				March 7, 1955			
01	21.0	0.0	0.0	0.0	20.1	-1.1	0.0	0.0
02	20.8	0.0	"	"	19.8	-1.1	"	"
03	20.5	-1.1	"	"	19.9	0.0	"	"
04	20.4	-1.1	"	"	19.8	-1.1	"	"
05	20.4	-1.1	"	"	19.8	-1.1	"	"
06	20.3	-1.1	"	"	19.6	-1.1	"	"
07	18.7	-2.2	"	"	19.9	-1.1	"	"
08	21.5	-2.2	.6	.2	21.1	-1.1	2.4	"
09	29.3	-2.2	8.3	7.2	27.8	0.0	8.4	"
10	38.6	1.1	18.5	17.1	41.1	1.1	22.3	20.8
11	53.6	2.2	41.7	38.3	57.1	2.2	41.1	38.6
12	55.9	4.4	42.3	38.3	68.9	3.3	58.5	53.8
13	53.9	5.4	37.7	34.1	65.5	3.3	54.9	48.6
14	71.8	7.6	57.9	50.7	69.0	2.2	56.9	51.6
15	63.7	5.5	49.2	43.2	71.7	3.3	52.8	50.1
16	57.8	4.3	36.3	32.3	64.9	2.2	47.9	42.6
17	38.7	1.1	23.9	21.6	47.9	-2.2	34.1	31.9
18	26.9	-2.2	6.5	6.2	28.1	-5.5	16.3	16.8
19	21.7	-1.1	1.2	1.5	12.2	-7.7	0.0	3.6
20	21.8	-1.1	0.0	0.0	13.6	-6.6	"	0.0
21	20.3	-1.1	"	"	12.2	-6.6	"	"
22	21.6	0.0	"	"	13.7	-6.6	"	"
23	20.1	"	"	"	12.5	-6.6	"	"
24	20.1	-1.1	"	"	13.6	-5.5	"	"
TOTAL	779.4	14.0	324.1	290.7	779.8	-37.4	395.6	358.4

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total	Net	Total	Refl.	Total	Net	Total	Refl.
	Hemis.	Exch.	Solar	Solar	Hemis.	Exch.	Solar	Solar
	March 8, 1955				March 9, 1955			
01	13.6	-5.5	0.0	0.0	22.6	-3.1	0.0	0.0
02	17.7	-3.3	"	"	24.0	-2.1	"	"
03	18.0	-2.2	"	"	27.7	-8.4	"	"
04	16.7	-3.3	"	"	23.8	-4.2	"	"
05	16.6	-3.3	"	"	23.8	-3.1	"	"
06	19.9	-1.1	"	"	23.5	-4.2	"	"
07	22.8	0.0	"	"	19.2	-5.3	"	"
08	22.8	1.1	"	"	21.3	-7.4	"	"
09	28.0	1.1	5.9	4.8	28.4	-8.4	14.9	13.6
10	41.2	3.3	18.3	17.1	44.8	-3.1	31.3	26.8
11	46.8	3.2	24.7	22.9	61.3	3.1	46.7	38.1
12	51.5	4.3	31.9	28.9	74.4	7.3	57.7	45.8
13	57.4	3.2	37.8	34.2	81.8	11.5	64.8	49.2
14	57.1	2.1	36.1	32.7	72.4	7.3	54.1	40.9
15	46.3	2.1	23.7	22.0	72.4	7.3	54.5	40.8
16	47.8	1.1	23.4	22.0	63.6	5.2	49.9	36.8
17	35.2	0.0	11.9	11.7	47.3	-10.5	35.1	28.0
18	30.1	-1.1	6.1	5.8	30.5	-6.3	18.3	16.0
19	24.9	-1.1	0.0	1.0	18.6	-7.4	0.0	3.4
20	23.9	-1.1	"	0.0	17.9	-8.5	"	0.0
21	23.8	-1.1	"	"	16.8	-8.5	"	"
22	24.1	-2.1	"	"	20.6	-5.3	"	"
23	24.1	-2.1	"	"	18.2	-6.3	"	"
24	24.2	-2.1	"	"	20.6	-4.2	"	"
TOTAL	734.5	-7.9	219.8	203.1	875.5	-64.6	427.3	339.4
	March 10, 1955				March 11, 1955			
01	24.4	-2.1	0.0	0.0	24.6	0.0	0.0	0.0
02	24.9	-1.1	"	"	24.4	"	"	"
03	23.6	-3.2	"	"	23.1	"	"	"
04	19.2	-6.4	"	"	24.4	"	"	"
05	19.3	-5.3	"	"	23.7	"	"	"
06	22.3	-4.2	"	"	23.5	"	"	"
07	20.1	-6.3	"	"	23.6	"	"	"
08	25.7	-3.2	"	"	24.0	1.1	"	"
09	30.9	-1.1	10.2	8.2	32.9	2.2	7.8	5.6
10	41.4	2.1	15.3	9.8	42.2	4.3	20.4	16.4
11	42.5	3.1	16.8	13.5	55.6	5.3	35.5	29.1
12	42.7	4.1	17.9	14.6	68.8	6.4	53.7	44.2
13	49.3	7.2	23.7	18.6	80.4	9.6	64.3	50.7
14	47.2	5.2	19.9	16.2	80.9	9.5	64.5	51.0
15	47.6	5.2	23.4	17.7	75.7	7.4	56.3	45.3
16	46.8	6.2	22.7	17.2	58.9	3.2	44.4	36.2
17	44.5	4.1	20.7	15.6	46.8	0.0	31.1	26.7
18	31.5	1.0	5.5	4.8	29.5	-2.2	13.7	11.6
19	28.7	0.0	0.0	0.0	19.2	-3.2	0.0	2.4
20	26.4	-1.1	"	"	23.7	-2.2	"	0.0
21	27.5	-1.1	"	"	22.1	-2.2	"	"
22	26.6	-1.1	"	"	22.3	-1.1	"	"
23	25.6	0.0	"	"	23.8	0.0	"	"
24	25.2	0.0	"	"	24.1	0.0	"	"
TOTAL	763.9	2.0	176.1	136.2	898.2	38.1	391.7	319.2

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
March 12, 1955								
01	24.1	0.0	MSG.	0.0	22.7	-1.1	MSG.	0.0
02	24.3	"	"	"	19.5	-3.2	"	"
03	25.7	"	"	"	16.9	-5.4	"	"
04	25.8	"	"	"	18.2	-5.4	"	"
05	25.6	"	"	"	16.6	-5.4	"	"
06	26.2	"	"	"	23.2	-1.1	"	"
07	26.2	"	"	"	21.9	-1.1	"	"
08	26.6	"	"	"	23.2	0.0	"	"
09	33.4	1.1	"	4.4	32.9	-2.2	"	14.2
10	33.6	1.1	"	7.8	44.5	-2.2	"	31.4
11	43.2	2.1	"	14.6	58.4	2.1	"	39.6
12	45.7	6.3	"	21.0	74.8	4.3	"	51.6
13	54.4	4.2	"	25.9	71.3	4.3	"	47.6
14	56.7	7.4	"	30.4	62.2	3.2	"	40.4
15	48.6	3.2	"	22.9	56.9	3.2	"	33.2
16	48.6	3.2	"	24.0	50.4	4.3	"	23.8
17	39.9	1.1	"	15.8	38.8	2.1	"	17.1
18	30.9	0.0	"	6.3	31.3	2.1	"	6.3
19	26.0	"	"	1.4	25.2	0.0	"	0.0
20	24.5	"	"	0.0	24.3	"	"	"
21	25.2	"	"	"	24.5	-1.1	"	"
22	24.7	"	"	"	24.6	-1.1	"	"
23	23.0	"	"	"	24.7	-1.1	"	"
24	24.2	"	"	"	24.8	-2.1	"	"
TOTAL	787.1	29.7		174.5	831.8	-6.9		305.2

March 14, 1955				March 15, 1955				
01	23.6	0.0	0.0	0.0	25.4	0.0	0.0	0.0
02	24.1	"	"	"	24.1	1.1	"	"
03	25.5	"	"	"	26.5	2.1	"	"
04	26.8	"	"	"	24.0	-1.1	"	"
05	26.8	"	"	"	18.2	-6.4	"	"
06	26.8	1.1	"	"	20.4	-6.4	"	"
07	26.8	1.1	"	"	21.3	-3.2	"	"
08	26.7	1.1	2.3	.5	23.6	-4.3	3.6	3.0
09	28.1	1.1	9.9	7.1	28.4	-4.3	6.8	6.5
10	41.3	2.1	17.3	14.4	36.2	-4.3	15.5	15.0
11	45.6	1.1	20.4	17.6	59.7	-5.3	55.9	40.5
12	52.3	3.1	25.8	22.7	75.2	1.1	69.3	54.3
13	50.8	4.2	26.6	23.4	82.9	4.2	70.9	57.6
14	40.5	2.1	15.0	13.4	82.9	5.3	72.2	59.4
15	36.6	2.1	13.5	12.0	79.4	5.3	66.0	54.5
16	35.8	-2.1	9.8	9.0	67.6	2.1	56.7	47.1
17	35.7	3.2	13.4	11.6	49.7	-2.1	41.7	36.6
18	33.1	3.2	5.4	4.9	32.9	-6.4	25.9	24.8
19	28.0	1.1	2.3	2.1	19.8	-6.4	6.6	7.5
20	28.1	0.0	0.0	0.0	14.6	-6.4	0.0	.6
21	26.8	1.1	"	"	18.7	-5.4	"	0.0
22	22.7	0.0	"	"	18.7	-5.4	"	"
23	23.8	-1.1	"	"	21.3	-3.2	"	"
24	25.4	-1.1	"	"	22.6	-2.1	"	"
TOTAL	761.7	23.4	161.7	138.7	894.1	-51.5	491.1	407.4

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
March 16, 1955				March 17, 1955				
01	21.2	-3.2	0.0	0.0	14.1	-5.5	0.0	0.0
02	22.5	-3.2	"	"	14.9	-4.4	"	"
03	23.1	-2.1	"	"	14.9	-3.3	"	"
04	23.8	-1.1	"	"	14.9	-3.3	"	"
05	23.1	0.0	"	"	14.4	-2.2	"	"
06	22.9	0.0	"	"	15.6	-2.2	"	"
07	22.8	1.1	"	"	14.2	-3.3	"	"
08	23.7	1.1	1.2	.7	19.6	-2.2	6.5	4.9
09	28.8	1.1	10.8	7.3	29.7	-2.2	21.2	18.6
10	43.2	1.1	30.0	25.4	46.3	-2.2	32.9	27.2
11	57.5	3.2	45.0	38.3	55.7	-3.2	39.0	32.9
12	61.8	3.2	49.0	43.5	56.9	4.3	39.9	34.1
13	68.9	6.5	51.6	45.7	62.3	5.4	45.3	39.6
14	64.6	6.5	48.0	43.4	65.3	5.4	47.7	42.3
15	63.0	6.5	48.0	42.8	62.9	4.3	45.6	40.7
16	51.4	4.3	37.2	32.0	57.6	5.4	39.0	34.5
17	39.8	1.1	26.4	21.2	39.4	3.2	19.7	17.7
18	27.9	-1.1	10.8	7.0	31.3	1.1	10.1	9.2
19	21.5	0.0	3.6	1.8	24.6	1.1	3.2	2.7
20	20.3	-2.2	0.0	0.0	22.1	1.1	0.0	.2
21	17.9	-4.3	"	"	22.1	1.1	"	0.0
22	16.1	-5.5	"	"	23.5	1.1	"	"
23	14.6	-6.5	"	"	23.5	1.1	"	"
24	14.4	-5.5	"	"	21.9	1.1	"	"
TOTAL	794.8	1.0	361.6	309.1	767.7	1.7	350.1	304.6
March 18, 1955				March 19, 1955				
01	21.9	-1.1	0.0	0.0	23.7	0.0	0.0	0.0
02	20.8	-1.1	"	"	22.4	-1.1	"	"
03	20.7	-1.1	"	"	22.4	0.0	"	"
04	21.8	0.0	"	"	22.4	"	"	"
05	18.7	-2.2	"	"	22.5	"	"	"
06	15.5	-4.4	"	"	22.6	-1.1	"	"
07	15.4	-4.4	"	"	24.0	0.0	"	"
08	18.6	-4.4	6.9	6.0	26.8	1.1	3.6	2.3
09	32.4	-5.4	22.5	22.8	32.4	3.2	11.3	9.8
10	49.5	-2.2	40.5	38.4	42.9	4.3	20.9	18.2
11	66.3	2.2	55.5	51.0	54.9	5.3	33.5	29.6
12	78.1	4.3	67.5	59.4	69.5	7.4	46.9	41.4
13	83.3	4.3	73.5	62.4	76.3	8.4	53.1	47.3
14	84.6	4.3	74.1	63.6	66.3	6.3	44.1	39.9
15	78.3	4.3	68.7	60.0	67.6	6.3	48.0	46.7
16	65.4	1.1	58.5	52.2	61.9	3.1	42.5	38.1
17	49.8	-4.3	44.1	40.8	42.3	1.1	18.5	17.1
18	32.5	-5.4	27.3	26.4	34.3	-1.1	13.2	12.5
19	21.7	-3.3	9.3	8.4	24.9	-2.1	2.4	2.6
20	17.2	-3.3	.6	.6	26.5	0.0	0.0	0.0
21	19.9	-1.1	0.0	0.0	26.5	"	"	"
22	21.8	-1.1	"	"	26.5	"	"	"
23	23.3	0.0	"	"	25.7	"	"	"
24	23.7	0.0	"	"	25.1	"	"	"
TOTAL	901.2	-24.3	549.0	492.0	890.4	41.1	338.0	305.5

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total	Net	Total	Refl	Total	Net	Total	Refl.
	Hemis.	Exch.	Solar	Solar	Hemis.	Exch.	Solar	Solar
	March 20, 1955				March 21, 1955			
01	24.9	0.0	0.0	0.0	24.8	0.0	0.0	0.0
02	22.1	-2.1	"	"	24.9	"	"	"
03	23.3	-1.1	"	"	25.0	"	"	"
04	22.5	-1.1	"	"	25.2	"	"	"
05	15.6	-5.4	"	"	25.4	"	"	"
06	15.9	-4.4	"	"	25.6	"	"	"
07	17.2	-3.3	"	"	25.9	"	"	"
08	23.1	-4.3	6.6	6.9	25.9	"	1.1	.2
09	36.6	-3.2	23.9	22.8	29.8	1.1	4.5	3.5
10	54.9	0.0	42.5	38.1	33.7	0.0	10.5	9.2
11	70.5	2.1	57.6	49.8	34.0	0.0	10.2	9.5
12	80.7	4.2	68.1	58.1	47.5	1.1	24.6	22.2
13	85.9	5.3	72.3	60.8	54.6	2.1	31.4	29.4
14	77.1	3.2	63.6	54.8	50.9	2.1	27.8	25.8
15	75.8	4.2	58.7	50.9	53.4	2.1	30.3	27.9
16	63.5	3.2	46.5	41.1	50.5	2.1	27.3	25.2
17	47.9	-1.1	33.2	29.4	44.7	2.1	21.5	19.4
18	29.7	-2.1	14.4	13.6	34.1	1.1	11.3	10.1
19	21.7	-3.2	3.2	3.8	27.7	0.0	3.5	2.9
20	19.0	-3.2	0.0	.2	25.1	"	0.0	.2
21	20.0	-3.2	"	0.0	25.1	"	"	0.0
22	19.9	-3.2	"	"	24.9	"	"	"
23	22.8	-1.1	"	"	25.0	"	"	"
24	24.4	0.0	"	"	24.8	"	"	"
TOTAL	915.0	-19.8	490.6	430.3	788.5	13.8	204.0	185.5

	March 22, 1955				March 23, 1955			
01	24.6	0.0	0.0	0.0	18.7	-5.4	0.0	0.0
02	24.4	"	"	"	17.3	-6.4	"	"
03	24.2	"	"	"	15.9	-7.5	"	"
04	24.3	"	"	"	15.6	-7.5	"	"
05	24.4	"	"	"	15.5	-7.5	"	"
06	24.3	"	"	"	15.3	-7.5	"	"
07	24.1	"	"	"	16.4	-6.5	"	"
08	25.5	"	1.4	.6	20.9	-7.5	6.8	7.5
09	29.5	"	5.9	4.5	36.8	-5.3	25.5	23.7
10	34.6	1.1	12.3	10.9	55.0	-1.1	43.5	38.1
11	44.9	3.2	23.1	21.9	70.6	3.2	59.1	50.1
12	45.2	3.2	23.1	22.1	82.0	5.3	69.9	57.3
13	54.4	5.4	32.6	30.9	88.4	7.4	74.1	61.5
14	52.9	4.3	34.7	33.3	88.4	7.4	73.5	62.1
15	49.4	3.2	29.7	28.2	72.0	4.2	53.6	47.4
16	41.4	2.1	22.9	20.9	65.9	2.1	50.4	43.4
17	35.1	1.1	11.9	11.4	45.6	0.0	27.3	24.3
18	31.4	1.1	8.9	8.4	36.1	-1.1	17.3	15.8
19	26.5	0.0	3.8	3.6	28.4	0.0	3.0	3.5
20	24.3	-1.1	.3	.8	24.5	"	0.0	.2
21	22.9	-2.1	0.0	0.0	24.4	"	"	0.0
22	18.9	-5.4	"	"	24.5	"	"	"
23	17.5	-6.4	"	"	24.1	"	"	"
24	18.8	-5.4	"	"	24.1	"	"	"
TOTAL	743.5	4.3	210.6	197.5	926.4	-33.7	504.0	434.9

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	March 24, 1955				March 25, 1955			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	23.9	0.0	0.0	0.0	15.5	-6.5	0.0	0.0
02	23.9	"	"	"	15.1	-6.5	"	"
03	23.7	"	"	"	14.9	-6.5	"	"
04	23.1	-1.1	"	"	14.8	-6.5	"	"
05	22.8	-1.1	"	"	18.6	-3.3	"	"
06	22.5	-1.1	"	"	19.9	-2.2	"	"
07	22.6	-1.1	"	"	18.4	-3.3	"	"
08	25.4	-2.2	4.1	2.6	22.4	-3.3	5.3	3.6
09	34.3	-1.1	16.7	13.9	35.6	1.1	15.8	13.5
10	45.8	2.2	27.9	24.6	50.3	2.2	33.3	29.1
11	52.1	4.3	32.3	28.5	60.2	3.3	45.0	39.8
12	62.2	6.5	41.9	37.4	73.4	5.4	57.6	49.7
13	63.8	6.5	43.8	38.6	82.8	7.5	63.3	55.1
14	74.7	8.5	55.8	47.9	94.4	9.7	77.4	65.6
15	80.9	10.7	64.8	54.6	87.6	8.6	71.3	58.9
16	70.6	5.4	55.9	47.9	71.0	5.4	52.2	45.2
17	54.0	-1.1	42.3	39.2	57.8	1.1	40.4	35.6
18	35.9	-3.2	25.8	26.1	36.9	-3.3	22.9	20.7
19	18.9	-6.5	7.8	10.1	20.0	-5.4	6.9	6.8
20	15.0	-7.5	.2	.6	14.3	-6.6	.5	.3
21	14.9	-7.6	0.0	0.0	13.9	-5.5	0.0	0.0
22	16.0	-6.5	"	"	13.9	-5.5	"	"
23	15.9	-6.5	"	"	14.0	-5.5	"	"
24	15.7	-6.5	"	"	14.1	-5.5	"	"
TOTAL	858.6	-9.0	419.3	372.0	879.8	-31.1	491.9	423.9
	March 26, 1955				March 27, 1955			
01	13.9	-5.5	0.0	0.0	16.4	-5.4	0.0	0.0
02	15.1	-4.4	"	"	18.0	-4.3	"	"
03	13.6	-4.4	"	"	18.9	-3.3	"	"
04	17.8	-2.2	"	"	20.2	-2.2	"	"
05	21.8	0.0	"	"	20.1	-2.2	"	"
06	17.5	-1.1	"	"	20.0	-2.2	"	"
07	13.9	-4.4	"	"	21.3	-1.1	"	"
08	22.5	-2.2	7.1	5.6	25.2	-3.3	9.6	9.0
09	35.3	1.1	16.5	14.9	38.7	-3.3	28.8	27.0
10	45.7	6.4	25.2	23.4	58.3	0.0	46.8	41.4
11	56.4	7.4	34.1	31.7	75.3	5.4	63.0	53.4
12	68.8	7.4	47.9	43.8	85.8	8.6	73.2	61.2
13	73.9	6.4	52.7	47.4	90.9	9.6	78.0	64.8
14	73.2	6.4	51.0	45.9	91.1	9.6	76.8	64.2
15	68.7	6.4	47.6	42.9	83.5	5.4	69.6	59.4
16	62.1	5.3	40.8	36.3	72.1	4.3	58.8	50.4
17	46.7	3.2	25.1	22.8	55.3	-1.1	43.2	38.4
18	38.5	2.2	15.6	14.1	36.9	-5.4	25.2	24.6
19	26.4	0.0	4.1	4.4	21.1	-6.5	8.4	9.0
20	16.9	-5.4	.2	.5	15.4	-6.5	0.0	0.0
21	14.4	-7.6	0.0	0.0	MSG.	MSG.	"	"
22	14.4	-7.6	"	"	"	"	"	"
23	14.2	-7.6	"	"	"	"	"	"
24	14.2	-7.6	"	"	"	"	"	"
TOTAL	805.9	-7.8	367.9	333.7	884.5	-3.9	581.4	502.8

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
March 28, 1955				March 29, 1955				
01	MSG.	MSG.	0.0	0.0	18.1	-3.2	0.0	0.0
02	"	"	"	"	18.1	-3.2	"	"
03	"	"	"	"	19.2	-2.1	"	"
04	"	"	"	"	19.4	-3.2	"	"
05	"	"	"	"	19.0	-3.2	"	"
06	"	"	"	"	19.0	-3.2	"	"
07	"	"	.3	.2	17.8	-4.3	"	"
08	"	"	8.4	7.9	24.3	-4.3	9.3	6.6
09	39.7	-4.3	31.8	29.4	37.7	-3.2	26.1	22.8
10	54.9	-1.1	45.6	39.0	57.5	0.0	42.9	36.6
11	79.4	3.2	60.6	50.4	73.7	4.2	57.3	48.6
12	87.5	6.3	71.4	58.8	85.4	7.3	68.1	55.8
13	92.8	8.4	77.4	61.8	92.1	10.3	74.7	58.2
14	90.3	6.3	77.4	62.4	91.2	11.3	74.1	57.0
15	81.5	4.2	71.4	58.2	86.3	10.3	68.1	52.2
16	73.8	2.1	60.6	49.8	75.3	8.3	58.5	45.6
17	56.3	-2.1	47.4	39.0	59.9	2.1	45.3	35.4
18	33.2	-6.3	29.4	24.6	43.5	-3.1	28.5	23.4
19	23.8	-7.4	11.4	9.0	26.7	-5.3	11.1	9.6
20	18.2	-4.3	0.0	0.0	19.9	-5.3	0.0	0.0
21	17.2	-4.3	"	"	20.5	-5.3	"	"
22	16.6	-3.2	"	"	21.3	-4.2	"	"
23	18.4	-3.2	"	"	20.5	-4.2	"	"
24	18.1	-2.2	"	"	20.7	-3.2	"	"
TOTAL	801.7	-7.9	593.1	490.5	987.1	-6.7	564.0	451.8

March 30, 1955				March 31, 1955				
01	20.7	-3.2	0.0	0.0	22.5	-5.2	0.0	0.0
02	20.1	-3.2	"	"	23.2	-4.2	"	"
03	19.6	-3.2	"	"	23.1	-4.2	"	"
04	20.0	-2.1	"	"	23.2	-4.2	"	"
05	20.1	-2.1	"	"	23.5	-4.2	"	"
06	20.9	-2.1	"	"	24.2	-3.1	"	"
07	20.5	-2.1	"	"	23.0	-4.1	.6	"
08	26.3	-1.1	10.2	8.4	26.1	-3.1	8.4	5.4
09	39.6	0.0	27.0	22.2	39.4	0.0	24.6	17.4
10	57.3	5.2	43.8	35.4	56.2	6.1	41.4	28.8
11	74.3	10.4	58.2	44.4	72.6	12.2	56.4	37.2
12	84.2	15.4	67.8	49.8	81.4	18.2	64.8	42.0
13	92.1	19.4	72.0	50.4	88.9	20.2	70.2	43.8
14	90.5	19.5	71.4	49.8	91.4	22.2	69.6	43.2
15	85.7	17.4	66.0	45.6	86.2	21.3	63.6	40.2
16	74.7	13.3	55.8	39.0	76.2	17.3	52.8	34.2
17	60.1	7.2	41.4	29.4	62.1	11.2	37.8	25.8
18	43.9	1.0	24.6	17.4	44.0	4.1	21.6	16.2
19	31.3	-2.1	7.8	6.6	29.7	-2.1	6.6	5.4
20	24.8	-4.1	0.0	0.0	23.2	-3.1	.2	.3
21	23.6	-5.2	"	"	25.1	-3.1	0.0	0.0
22	23.6	-5.2	"	"	24.3	-3.1	"	"
23	23.1	-5.2	"	"	24.3	-3.1	"	"
24	22.9	-5.2	"	"	21.7	-4.1	"	"
TOTAL	1019.9	62.7	546.0	398.4	1035.5	81.9	518.6	339.9

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	January 11, 1956				January 12, 1956			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	25.6	MSG.	MSG.	MSG.	16.1	-3.2	0.0	0.0
02	26.2	0.0	0.0	0.0	15.9	-3.2	"	"
03	26.2	"	"	"	16.0	-3.2	"	"
04	26.2	"	"	"	18.2	-2.7	"	"
05	25.6	"	"	"	17.3	-1.1	"	"
06	25.5	"	"	"	17.6	-2.7	"	"
07	25.4	"	"	"	17.8	-2.7	"	"
08	25.4	"	"	"	19.4	-0.5	"	"
09	25.7	"	.2	.2	22.9	-1.6	.5	.3
10	30.5	-0.6	2.7	2.3	26.3	-1.1	8.7	8.4
11	33.8	0.0	8.7	6.6	36.0	-1.1	19.8	18.2
12	39.7	"	13.8	11.7	49.1	3.2	22.1	20.6
13	41.7	"	18.6	13.2	53.7	3.7	30.2	27.8
14	38.6	-3.2	13.2	11.4	51.4	1.6	25.9	23.9
15	37.9	-2.1	12.3	10.8	46.1	-0.5	28.8	25.9
16	34.8	-2.1	9.0	7.8	36.9	-3.7	23.3	19.1
17	29.7	-0.6	3.9	4.2	26.5	-5.3	11.7	10.1
18	25.9	-0.6	.2	.2	19.1	-5.9	.8	.5
19	24.3	0.0	0.0	0.0	19.2	-3.2	0.0	0.0
20	24.3	-0.6	"	"	20.5	-2.1	"	"
21	19.1	-4.3	"	"	21.9	-1.1	"	"
22	18.0	-4.3	"	"	22.7	-1.1	"	"
23	18.7	-3.2	"	"	23.6	-1.1	"	"
24	18.3	-3.8	"	"	22.8	-1.1	"	"
TOTAL	667.1	-25.4	82.6	68.4	637.0	-39.7	171.8	154.8

Time, EST Hr. Ending	January 13, 1956				January 14, 1956			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	21.6	-2.7	0.0	0.0	14.9	-8.6	0.0	0.0
02	21.2	-2.1	"	"	16.3	-6.4	"	"
03	21.9	-1.1	"	"	15.3	-5.4	"	"
04	22.6	-1.1	"	"	16.2	-5.4	"	"
05	21.8	-2.1	"	"	16.9	-5.4	"	"
06	22.4	-1.6	"	"	17.7	-1.6	"	"
07	23.7	-1.1	"	"	19.3	-3.2	"	"
08	20.7	-2.1	"	"	18.5	-3.2	"	"
09	18.4	-4.3	.3	"	21.5	-1.3	.6	.3
10	23.4	-1.1	3.8	3.0	26.8	-1.6	6.0	6.3
11	27.8	-0.5	8.7	8.7	30.7	.5	10.7	9.2
12	33.7	-0.5	26.3	25.7	32.9	.5	12.9	10.8
13	42.4	-1.1	33.3	29.9	36.0	1.6	13.9	11.7
14	48.5	-1.1	37.5	28.8	41.4	3.2	17.4	14.6
15	47.7	-1.6	32.1	23.7	37.5	2.1	12.3	10.2
16	42.8	-3.7	19.1	15.5	33.9	.5	7.9	6.9
17	32.9	-5.3	8.7	7.4	28.8	-1.1	5.1	4.2
18	23.5	-6.9	.6	.3	24.1	-1.6	.2	.2
19	17.3	-5.9	0.0	0.0	23.3	-2.6	0.0	0.0
20	16.8	-5.3	"	"	22.6	-3.2	"	"
21	17.0	-5.4	"	"	23.2	-2.1	"	"
22	17.2	-3.7	"	"	23.2	-2.6	"	"
23	16.3	-5.4	"	"	23.4	-2.6	"	"
24	15.5	-5.4	"	"	23.3	-2.1	"	"
TOTAL	617.1	-71.1	170.4	143.0	587.7	-51.6	87.0	74.4

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	January 15, 1956				January 16, 1956			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	23.3	-1.6	0.0	0.0	16.7	-7.4	0.0	0.0
02	23.6	-2.1	"	"	17.9	-6.9	"	"
03	22.4	-3.2	"	"	16.7	-5.8	"	"
04	20.1	-4.8	"	"	21.8	-2.6	"	"
05	22.6	-2.1	"	"	22.4	-2.6	"	"
06	22.3	-2.1	"	"	22.6	-1.1	"	"
07	19.8	-4.8	"	"	23.8	-1.1	"	"
08	19.5	-5.3	"	"	22.1	-1.1	"	"
09	20.2	-5.3	.3	"	23.2	-1.1	"	.2
10	23.1	-2.1	5.7	3.5	25.7	-1.1	2.4	1.9
11	38.6	1.1	16.5	13.2	29.9	-0.5	6.6	5.9
12	41.1	.5	17.7	13.7	33.7	0.0	9.8	8.3
13	48.3	2.1	25.5	21.3	36.2	1.1	13.4	11.4
14	44.6	1.1	21.0	17.7	36.5	1.1	14.3	12.0
15	39.5	0.0	18.9	14.9	36.7	1.1	13.9	11.9
16	29.9	-2.1	9.8	6.9	32.3	-1.6	12.5	10.5
17	25.8	-3.7	3.3	2.1	24.3	-3.2	10.8	11.1
18	21.9	-5.3	.5	0.0	22.7	-2.1	1.1	1.1
19	20.9	-5.3	0.0	"	23.6	-1.1	0.0	0.0
20	20.8	-5.3	"	"	22.9	-1.6	"	"
21	20.6	-4.8	"	"	24.4	-0.5	"	"
22	18.7	-5.8	"	"	22.6	-1.1	"	"
23	19.2	-5.3	"	"	22.6	-1.6	"	"
24	17.9	-5.8	"	"	22.6	-1.6	"	"
TOTAL	624.7	-72.0	119.2	93.3	603.9	-42.4	84.8	74.3

Time, EST Hr. Ending	January 17, 1956				January 18, 1956			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	22.9	-1.1	0.0	0.0	22.1	-2.2	0.0	0.0
02	22.8	-2.1	"	"	21.2	-1.6	"	"
03	22.8	-2.1	"	"	21.3	-1.1	"	"
04	22.8	-2.1	"	"	20.8	-2.2	"	"
05	22.5	-2.1	"	"	19.3	-2.2	"	"
06	22.4	-2.1	"	"	21.3	-2.2	"	"
07	22.5	-2.1	"	"	22.1	-2.1	"	"
08	22.5	-2.1	"	"	22.4	-2.1	"	"
09	22.3	-2.1	.2	.3	23.7	-2.1	.2	.5
10	25.4	-1.1	2.7	2.9	25.8	-2.1	4.2	4.1
11	30.6	-0.5	7.8	7.2	32.5	-0.5	10.8	10.5
12	39.1	1.1	17.4	15.2	32.7	-2.7	20.4	21.5
13	38.3	1.1	19.2	15.9	39.8	-2.1	25.2	22.1
14	37.7	.5	16.9	14.1	42.9	.5	23.9	22.2
15	38.6	1.1	20.1	16.7	43.8	.5	22.5	19.4
16	31.7	-1.1	9.8	8.3	32.6	-1.6	11.6	9.6
17	26.3	-2.1	5.3	3.9	24.0	-3.2	4.2	3.3
18	21.6	-2.1	.5	.3	22.0	-3.2	.5	0.0
19	21.5	-2.1	0.0	0.0	21.9	-3.2	0.0	"
20	23.2	-2.1	"	"	22.0	-3.2	"	"
21	22.9	-2.1	"	"	21.9	-2.1	"	"
22	21.5	-2.1	"	"	21.5	-2.1	"	"
23	21.7	-2.1	"	"	21.8	-3.2	"	"
24	20.8	-2.2	"	"	21.7	-2.1	"	"
TOTAL	624.4	-33.7	99.9	84.8	621.1	-48.1	123.5	113.2

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Net		Total	Refl.	Total Net		Total	Refl.
	Hemis.	Exch.	Solar	Solar	Hemis.	Exch.	Solar	Solar
	January 19, 1956				January 20, 1956			
01	21.7	-2.1	0.0	0.0	23.2	-1.1	0.0	0.0
02	22.7	-1.1	"	"	23.2	-1.6	"	"
03	21.6	-1.1	"	"	25.6	-2.1	"	"
04	21.8	-2.1	"	"	22.3	-1.1	"	"
05	19.0	-3.7	"	"	19.2	-1.1	"	"
06	18.2	-4.3	"	"	19.5	-1.1	"	"
07	19.6	-3.2	"	"	19.8	-0.5	"	"
08	20.5	-3.2	"	"	20.9	-1.6	"	"
09	20.5	-3.7	.3	"	20.0	-1.1	"	"
10	26.3	-0.5	5.7	4.2	24.8	0.0	3.5	3.0
11	32.6	0.0	11.6	10.9	27.6	-2.2	7.8	7.8
12	39.2	0.0	18.0	17.3	31.2	0.0	12.6	12.3
13	45.2	-1.6	24.6	23.3	33.9	2.2	15.9	15.6
14	42.1	-1.1	28.1	25.5	35.2	3.2	19.5	18.5
15	42.1	-1.1	19.9	18.8	35.9	3.2	19.4	18.3
16	38.3	-1.6	11.1	10.2	33.0	.5	19.2	18.6
17	27.9	-2.6	4.8	4.7	20.8	-5.9	9.3	10.5
18	24.7	-3.2	.6	.2	11.9	-5.5	1.1	1.5
19	21.9	-3.2	0.0	0.0	11.9	-5.5	0.0	0.0
20	23.5	-2.1	"	"	14.8	-2.7	"	"
21	20.9	-1.6	"	"	14.9	-3.8	"	"
22	23.3	-1.6	"	"	15.5	-2.2	"	"
23	23.3	-2.1	"	"	13.1	-3.3	"	"
24	22.1	-1.1	"	"	13.0	-4.4	"	"
TOTAL	639.0	-47.9	124.7	115.1	531.2	-37.7	108.3	106.1

	January 21, 1956				January 22, 1956			
01	17.5	-3.3	0.0	0.0	11.8	-3.3	0.0	0.0
02	16.2	-0.5	"	"	14.5	-3.3	"	"
03	13.3	-3.9	"	"	15.1	-2.7	"	"
04	10.9	-5.1	"	"	16.5	-1.6	"	"
05	12.2	-3.9	"	"	16.8	-2.7	"	"
06	11.5	-3.9	"	"	14.8	-3.3	"	"
07	13.5	-3.3	"	"	17.5	-2.2	"	"
08	12.2	-4.4	"	"	18.5	-1.6	"	"
09	14.8	-3.9	2.4	3.0	20.7	-0.5	.5	.5
10	18.1	-3.9	11.4	12.0	25.0	-0.5	5.1	4.5
11	27.8	-1.1	22.8	22.2	31.8	-0.5	12.8	12.0
12	39.7	-1.1	30.0	29.4	45.7	0.0	21.5	19.4
13	49.1	-1.1	36.6	34.2	38.5	-0.5	19.8	20.3
14	46.6	-1.1	39.6	32.4	42.2	-1.1	22.6	21.5
15	42.1	-2.2	30.6	27.6	43.3	-0.5	24.5	24.8
16	32.7	-2.2	16.8	16.2	38.1	0.0	19.9	19.7
17	24.7	-1.6	6.6	6.6	26.2	-2.2	8.6	10.2
18	17.2	-2.2	1.8	1.8	22.8	0.0	.9	1.4
19	18.9	0.0	0.0	0.0	23.7	"	0.0	0.0
20	17.3	-2.7	"	"	23.7	"	"	"
21	18.0	-1.6	"	"	21.8	-1.1	"	"
22	12.9	-4.4	"	"	20.9	-1.1	"	"
23	10.7	-3.3	"	"	24.4	0.0	"	"
24	9.2	-3.3	"	"	23.9	0.0	"	"
TOTAL	507.1	-64.0	198.6	185.4	598.2	-28.7	136.2	134.3

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
January 23, 1956				January 24, 1956				
01	23.9	0.0	0.0	0.0	21.9	0.0	0.0	MSG.
02	21.3	0.0	"	"	21.8	-1.1	"	"
03	21.4	-1.6	"	"	21.7	-1.1	"	"
04	21.2	-1.1	"	"	21.7	-1.1	"	"
05	19.9	0.0	"	"	22.5	-1.1	"	"
06	21.2	-1.1	"	"	21.6	-1.1	"	"
07	21.1	-1.1	"	"	21.5	0.0	"	"
08	23.9	0.0	"	"	24.2	"	"	"
09	23.9	"	.8	"	24.2	"	.3	"
10	25.9	"	4.1	3.9	28.9	"	4.1	"
11	31.8	"	10.5	9.6	39.5	"	16.2	"
12	37.9	"	15.3	14.4	46.8	"	38.7	"
13	40.9	"	21.2	19.4	44.2	"	23.9	"
14	50.4	1.1	30.5	23.3	51.1	.5	31.8	"
15	46.3	0.0	25.5	24.2	51.0	.5	31.4	"
16	43.2	-1.6	21.9	21.2	46.2	0.0	28.4	"
17	25.3	-2.2	8.3	9.5	24.9	-3.2	8.1	"
18	19.7	-1.6	1.2	.9	15.8	-3.2	2.1	"
19	17.9	-2.2	0.0	0.0	12.8	-2.2	0.0	"
20	15.8	-3.2	"	"	13.2	-2.7	"	"
21	17.9	-1.6	"	"	11.0	-2.2	"	"
22	19.2	-0.5	"	"	13.5	-2.7	"	"
23	19.2	-2.2	"	"	13.1	-1.7	"	"
24	21.6	0.0	"	"	13.4	-1.7	"	"
TOTAL	630.8	-18.9	139.3	126.4	626.5	-24.1	185.0	

January 25, 1956				January 26, 1956				
01	16.3	-1.6	0.0	MSG.	13.9	-3.3	0.0	MSG.
02	15.7	-1.6	"	"	14.5	-2.2	"	"
03	18.4	0.0	"	"	16.1	-0.6	"	"
04	15.9	-2.2	"	"	16.3	-1.6	"	"
05	18.8	0.0	"	"	14.4	-2.2	"	"
06	19.1	-0.5	"	"	14.2	-2.2	"	"
07	19.3	-1.1	"	"	12.6	-2.8	"	"
08	21.3	0.0	"	"	14.1	-2.2	"	"
09	24.8	"	.5	"	18.2	-1.1	2.3	"
10	26.6	"	5.3	"	23.3	-1.1	9.5	"
11	33.6	"	14.7	"	37.2	-1.1	24.6	"
12	40.9	"	22.1	"	48.9	0.0	34.9	"
13	44.1	"	26.6	"	48.3	-1.1	37.9	"
14	47.2	"	37.1	"	50.4	-1.1	41.9	"
15	36.8	-1.1	18.8	"	44.2	-1.6	31.4	"
16	36.0	-1.6	18.0	"	35.3	-3.2	24.6	"
17	26.3	-2.7	7.5	"	21.5	-2.7	7.2	"
18	17.9	-3.7	1.2	"	18.4	-1.6	.8	"
19	17.4	-2.7	0.0	"	18.8	-1.1	0.0	"
20	15.2	-2.2	"	"	18.6	-0.4	"	"
21	13.9	-3.2	"	"	19.7	0.0	"	"
22	14.3	-3.3	"	"	19.5	"	"	"
23	13.6	-3.3	"	"	20.7	"	"	"
24	13.8	-3.3	"	"	19.9	"	"	"
TOTAL	567.2	-34.1	151.8		579.0	-33.2	215.1	

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	January 27, 1956				January 28, 1956			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	18.9	-1.1	0.0	MSG.	20.8	-1.1	0.0	0.0
02	21.1	0.0	"	"	21.5	-1.1	"	"
03	21.3	1.1	"	"	21.3	-1.1	"	"
04	22.2	0.0	"	"	21.3	-1.1	"	"
05	22.0	0.0	"	"	21.6	-1.1	"	"
06	21.0	1.1	"	"	21.8	-1.1	"	"
07	20.0	-3.2	"	"	21.8	-0.5	"	"
08	19.0	-3.2	"	"	21.8	-1.1	"	"
09	20.0	-4.3	1.7	"	20.1	.5	1.1	"
10	24.2	-1.1	13.5	"	28.7	.6	2.1	.9
11	34.5	-0.5	25.1	"	27.5	0.0	4.9	4.1
12	43.9	-0.5	29.1	"	28.9	-0.5	6.6	5.6
13	50.9	0.0	38.9	"	32.2	.5	10.7	9.5
14	49.4	0.0	40.2	"	37.5	1.1	12.9	13.1
15	46.4	-1.1	34.5	"	35.8	1.1	12.3	8.4
16	37.9	-2.7	24.2	"	29.6	0.0	6.8	7.5
17	24.7	-4.3	11.1	"	25.9	-1.1	2.9	3.6
18	16.5	-6.4	1.2	"	23.5	0.0	.6	.9
19	14.6	-7.5	0.0	"	22.8	"	0.0	0.0
20	12.9	-6.5	"	"	24.2	"	"	"
21	13.4	-7.5	"	"	24.6	"	"	"
22	15.3	-5.9	"	"	23.5	"	"	"
23	17.7	-3.2	"	"	24.2	"	"	"
24	20.0	-1.6	"	"	23.6	-1.1	"	"
TOTAL	607.8	-58.4	219.5		604.5	-7.1	60.9	53.6

Time, EST Hr. Ending	January 29, 1956				January 30, 1956			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	25.5	MSG.	0.0	0.0	22.9	0.0	0.0	0.0
02	22.8	-0.5	"	"	23.1	-0.5	"	"
03	22.5	-0.5	"	"	22.8	0.0	"	"
04	22.5	-0.5	"	"	21.5	-1.1	"	"
05	22.3	-0.5	"	"	22.7	-1.1	"	"
06	21.9	-0.5	"	"	22.7	0.0	"	"
07	22.9	-0.5	"	"	22.5	"	"	"
08	22.7	0.0	"	"	22.4	"	"	"
09	27.6	-0.5	.3	.5	23.0	"	.5	.3
10	27.4	0.0	5.3	5.1	25.8	"	5.4	4.8
11	29.8	1.1	9.8	9.2	29.9	-1.1	13.5	12.0
12	38.3	2.1	20.6	18.6	42.3	-3.2	25.5	23.3
13	42.9	1.6	23.9	22.1	49.8	-2.1	39.5	36.5
14	44.4	2.7	27.9	26.1	47.9	-1.1	38.6	37.9
15	41.2	1.6	15.8	15.3	45.6	-1.1	32.7	30.0
16	29.3	.5	8.7	8.6	36.2	-0.5	21.6	20.9
17	25.1	.5	4.5	3.6	26.3	0.0	7.8	5.9
18	23.0	-0.5	.6	1.1	19.6	-3.2	2.1	1.9
19	21.7	-0.5	0.0	0.0	20.9	-0.5	0.0	0.0
20	21.8	-0.5	"	"	22.6	0.0	"	"
21	21.9	-0.5	"	"	22.8	"	"	"
22	22.5	0.0	"	"	22.1	"	"	"
23	22.0	"	"	"	22.4	"	"	"
24	23.1	"	"	"	22.3	"	"	"
TOTAL	645.1	4.6	117.4	110.2	660.1	-15.5	187.2	173.5

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
January 31, 1956				February 1, 1956				
01	21.9	-1.6	0.0	0.0	20.1	-0.5	0.0	0.0
02	22.1	0.0	"	"	21.4	0.0	"	"
03	22.1	"	"	"	21.8	"	"	"
04	22.1	"	"	"	21.7	"	"	"
05	21.9	"	"	"	21.5	-0.5	"	"
06	21.3	-0.5	"	"	22.2	0.0	"	"
07	21.6	0.0	"	"	19.5	-1.6	"	"
08	23.4	-1.1	"	"	19.0	-0.5	"	"
09	22.8	-0.5	.9	1.1	22.9	-0.5	.9	1.5
10	26.2	-0.5	7.4	7.4	27.5	-0.5	7.7	8.4
11	34.1	2.7	18.8	15.0	33.5	-0.5	17.4	17.4
12	49.8	1.6	33.0	30.2	41.2	.5	22.8	21.4
13	52.3	3.7	37.1	35.4	45.1	1.6	25.4	24.0
14	45.6	6.9	29.7	28.9	45.1	0.0	25.4	24.5
15	42.3	4.8	28.2	26.7	41.5	0.0	25.2	21.9
16	42.9	1.1	18.5	16.9	35.3	-0.5	20.7	14.1
17	30.7	1.1	9.8	10.1	27.4	-2.7	11.7	11.4
18	23.2	0.0	1.9	2.4	21.1	-1.1	2.4	2.4
19	22.4	"	0.0	0.0	20.2	-1.1	0.0	0.0
20	22.4	"	"	"	20.9	0.0	"	"
21	22.6	"	"	"	21.3	0.0	"	"
22	22.1	"	"	"	19.8	-2.2	"	"
23	22.1	"	"	"	21.2	-2.2	"	"
24	21.9	"	"	"	21.9	-1.1	"	"
TOTAL	679.8	17.7	185.3	174.1	633.1	-13.4	159.6	147.0

	February 2, 1956				February 3, 1956			
01	21.3	-1.6	0.0	0.0	14.3	-2.3	0.0	0.0
02	21.5	-1.6	"	"	14.3	-2.3	"	"
03	20.8	-2.2	"	"	13.5	-2.3	"	"
04	21.9	0.0	"	"	11.0	-1.7	"	"
05	23.1	"	"	"	11.3	-2.7	"	"
06	22.3	"	"	"	12.5	-4.9	"	"
07	22.1	"	"	"	12.4	-3.8	"	"
08	21.8	-1.1	"	"	12.5	-5.5	"	"
09	22.2	-1.6	1.5	1.7	15.2	-8.2	4.7	4.1
10	28.8	0.0	10.1	9.8	22.7	-9.8	20.1	19.7
11	33.9	0.0	15.8	14.4	34.8	-4.9	31.7	30.9
12	36.7	.5	18.8	17.3	46.8	-3.2	42.2	38.6
13	36.3	.5	17.7	16.5	56.5	-3.2	53.7	42.8
14	36.8	1.1	20.6	19.1	54.9	-1.6	40.7	37.1
15	32.9	1.6	13.2	14.3	50.8	-0.5	32.3	28.9
16	33.7	1.6	14.9	13.8	45.5	-1.6	27.8	26.9
17	22.4	-4.3	9.8	10.5	26.8	-3.7	14.7	18.0
18	18.7	-5.4	2.4	4.7	20.8	-5.3	3.5	7.2
19	19.1	-2.7	0.0	0.0	17.1	-5.3	0.0	0.0
20	16.9	-2.2	"	"	19.3	-3.2	"	"
21	15.8	-3.3	"	"	22.1	-1.1	"	"
22	13.7	-3.3	"	"	22.1	-1.6	"	"
23	12.0	-2.8	"	"	22.3	-2.7	"	"
24	13.8	-2.2	"	"	21.7	-2.1	"	"
TOTAL	568.5	-29.0	124.8	122.1	601.2	-83.5	271.4	254.2

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	February 4, 1956				February 5, 1956			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	16.7	-5.8	0.0	0.0	23.4	-1.1	0.0	0.0
02	19.9	-2.2	"	"	22.7	-2.1	"	"
03	18.5	-3.8	"	"	23.2	-2.1	"	"
04	18.7	-2.7	"	"	23.1	-2.1	"	"
05	19.1	-2.2	"	"	21.7	-2.1	"	"
06	18.4	-1.1	"	"	22.4	-2.1	"	"
07	17.3	-2.7	"	"	22.9	-1.6	"	"
08	18.4	-1.6	"	"	22.3	-1.1	"	"
09	18.4	-4.3	.9	1.1	24.2	-1.1	1.1	1.1
10	23.6	-3.3	7.9	5.9	26.9	-1.1	4.8	4.8
11	30.8	-1.1	17.4	16.1	28.9	0.0	6.2	5.9
12	37.5	.5	23.6	21.3	33.6	"	11.7	10.9
13	43.3	0.0	30.0	26.9	37.1	"	15.5	12.9
14	40.7	1.1	25.4	22.9	37.6	"	16.1	14.3
15	33.9	.5	13.2	12.8	31.4	-1.1	10.5	9.8
16	30.4	1.1	10.2	9.3	29.8	-1.1	7.8	8.3
17	28.9	0.0	5.6	4.9	26.4	-1.1	5.7	5.1
18	24.3	0.0	.8	.9	22.3	-1.1	1.1	.9
19	23.9	-1.1	0.0	0.0	20.6	-2.1	0.0	0.0
20	23.8	-1.1	"	"	20.9	-2.1	"	"
21	23.9	-1.1	"	"	21.0	-2.1	"	"
22	24.1	-1.1	"	"	21.1	-3.2	"	"
23	23.9	-1.1	"	"	20.0	-3.2	"	"
24	23.6	-1.1	"	"	20.1	-3.2	"	"
TOTAL	602.0	-34.2	135.0	122.1	603.6	-36.8	80.5	74.0

Time, EST Hr. Ending	February 6, 1956				February 7, 1956			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	20.0	-3.2	0.0	0.0	14.1	-3.3	0.0	0.0
02	19.8	-2.1	"	"	17.3	-2.2	"	"
03	21.8	-2.1	"	"	18.3	-3.2	"	"
04	22.4	-1.6	"	"	18.2	-2.7	"	"
05	21.3	-3.2	"	"	24.4	0.0	"	"
06	22.5	-1.1	"	"	25.1	"	"	"
07	22.6	-1.6	"	"	25.2	"	"	"
08	24.9	0.0	"	"	25.4	"	"	"
09	27.5	0.0	.6	.6	25.7	"	1.1	1.1
10	29.9	1.1	4.9	4.9	29.7	1.1	6.2	6.2
11	33.1	1.1	10.4	9.6	39.9	-0.5	20.1	20.1
12	35.8	2.1	15.2	11.1	50.1	-1.1	36.5	36.5
13	39.4	1.1	19.8	18.8	54.3	0.0	37.7	37.7
14	41.2	2.6	20.7	18.8	55.5	0.0	46.2	39.0
15	41.9	2.1	20.9	19.2	49.9	-0.5	37.5	34.5
16	36.7	2.1	15.8	14.7	37.0	-0.5	22.1	20.7
17	30.3	-1.1	11.3	9.2	22.1	0.0	15.3	14.7
18	23.1	-4.2	5.3	6.5	24.6	-4.8	5.3	5.3
19	19.5	-3.7	0.0	.2	18.3	-5.8	.2	.2
20	18.4	-3.2	"	0.0	21.1	-2.1	0.0	0.0
21	17.9	-2.1	"	"	23.8	0.0	"	"
22	17.4	-2.4	"	"	24.1	-0.5	"	"
23	16.5	-2.7	"	"	24.8	0.0	"	"
24	16.2	-3.3	"	"	24.3	0.0	"	"
TOTAL	620.1	-25.4	124.9	113.6	693.2	-26.1	228.2	216.0

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Refl.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
	February 8, 1956				February 9, 1956			
01	24.5	0.0	0.0	0.0	15.3	-3.8	0.0	0.0
02	24.6	-1.1	"	"	15.1	-2.7	"	"
03	24.6	0.0	"	"	15.9	-5.4	"	"
04	23.9	-0.5	"	"	15.1	-5.9	"	"
05	20.6	-4.2	"	"	14.6	-3.8	"	"
06	19.5	-2.7	"	"	13.5	-4.9	"	"
07	23.6	-1.1	"	"	14.4	-5.4	"	"
08	24.9	-0.5	"	"	21.7	-1.6	"	"
09	26.9	0.0	1.1	1.1	24.8	-1.1	2.3	2.3
10	30.4	.5	7.8	6.9	29.3	-0.5	8.1	7.2
11	33.2	1.1	12.3	10.1	36.6	1.1	14.1	12.6
12	36.9	2.1	14.1	12.9	41.1	2.1	20.7	18.2
13	44.8	2.6	21.5	19.9	44.7	2.6	22.7	20.9
14	47.8	2.6	27.6	26.3	48.3	2.6	27.2	23.7
15	42.9	1.6	24.2	22.1	46.9	3.7	22.8	21.9
16	40.2	2.1	24.5	22.7	44.8	1.6	22.5	20.9
17	33.6	-3.7	19.2	18.8	32.2	0.0	10.2	9.2
18	20.8	-6.9	5.1	6.8	24.3	-1.1	2.3	2.6
19	16.9	-5.9	.2	.5	24.6	-1.6	0.0	0.0
20	16.5	-4.8	0.0	0.0	22.6	-2.1	"	"
21	15.9	-3.2	"	"	21.3	-3.7	"	"
22	15.3	-3.8	"	"	21.8	-3.2	"	"
23	14.4	-3.8	"	"	24.2	-3.2	"	"
24	14.7	-4.3	"	"	25.6	-3.2	"	"
TOTAL	637.4	-33.9	157.6	148.1	638.7	-39.5	152.9	139.5
	February 10, 1956				February 11, 1956			
01	26.3	0.0	0.0	0.0	25.9	0.0	0.0	0.0
02	23.7	-1.1	"	"	25.9	"	"	"
03	23.1	-1.3	"	"	24.3	"	"	"
04	25.8	-0.5	"	"	24.0	"	"	"
05	25.1	0.0	"	"	24.2	"	"	"
06	26.3	"	"	"	24.3	"	"	"
07	25.0	"	"	"	24.7	"	"	"
08	26.7	"	"	"	23.7	"	"	"
09	26.7	"	1.7	2.1	25.2	"	.8	.5
10	27.1	1.1	6.8	6.3	27.3	"	3.6	4.2
11	30.8	0.0	8.3	8.3	31.2	1.1	8.6	8.4
12	34.7	3.7	15.4	15.2	32.7	1.6	12.6	12.0
13	41.3	3.7	19.9	17.7	39.3	2.1	16.5	16.2
14	40.5	3.2	19.1	17.4	37.4	1.6	16.1	15.0
15	39.1	3.2	17.3	16.4	32.1	2.1	12.6	12.0
16	33.3	1.6	11.4	10.9	31.2	1.1	10.1	9.6
17	30.6	0.0	7.1	7.1	27.5	0.0	4.7	4.8
18	26.7	"	2.4	2.7	27.7	"	1.4	1.8
19	25.0	"	0.0	.2	26.3	"	0.0	0.0
20	24.8	"	"	0.0	26.3	"	"	"
21	24.5	"	"	"	23.9	"	"	"
22	24.4	"	"	"	23.9	"	"	"
23	24.7	"	"	"	26.4	"	"	"
24	25.9	"	"	"	26.5	"	"	"
TOTAL	682.1	13.6	109.4	104.3	661.9	9.6	87.0	84.5

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	February 12, 1956		February 13, 1956		February 13, 1956		February 13, 1956	
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	25.0	0.0	0.0	0.0	24.1	-1.1	0.0	0.0
02	25.5	"	"	"	19.5	-2.7	"	"
03	25.6	"	"	"	21.7	-3.8	"	"
04	25.9	"	"	"	18.1	-4.3	"	"
05	25.7	"	"	"	17.6	-5.4	"	"
06	25.7	"	"	"	16.4	-4.3	"	"
07	25.7	"	"	"	17.1	-3.8	"	"
08	25.9	"	"	"	15.0	-3.3	"	"
09	25.8	"	.2	.5	20.4	-3.8	7.4	7.1
10	27.5	"	1.7	1.8	30.1	-2.7	22.5	21.9
11	32.5	-1.6	7.9	7.5	33.7	-0.5	23.1	22.5
12	42.7	3.2	22.5	20.4	43.6	1.6	25.1	24.5
13	44.6	2.6	26.1	24.8	42.4	1.6	24.0	23.1
14	44.7	3.7	22.7	21.5	39.0	1.1	15.3	15.6
15	53.7	3.6	35.4	32.1	32.6	1.1	9.8	10.1
16	39.9	2.1	18.8	17.7	32.6	.5	8.9	9.2
17	34.6	.5	14.9	13.9	28.1	2.1	3.9	4.1
18	27.4	0.0	3.9	4.1	24.9	2.1	1.8	2.1
19	19.6	-3.2	.2	.8	23.6	2.1	0.0	0.0
20	21.3	-1.6	0.0	0.0	23.6	1.6	"	"
21	23.8	0.0	"	"	23.5	1.6	"	"
22	20.8	-2.7	"	"	23.6	1.6	"	"
23	22.5	-1.1	"	"	18.2	-4.8	"	"
24	24.8	0.0	"	"	15.5	-5.4	"	"
TOTAL	711.2	5.5	154.3	145.1	604.9	-28.9	141.8	140.2

Time, EST Hr. Ending	February 14, 1956		February 14, 1956		February 15, 1956		February 15, 1956	
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	21.6	-2.1	0.0	0.0	23.4	0.0	0.0	0.0
02	23.6	0.0	"	"	23.3	"	"	"
03	22.2	-4.8	"	"	23.0	"	"	"
04	17.6	-5.9	"	"	23.0	"	"	"
05	19.3	-4.3	"	"	22.9	"	"	"
06	20.1	MSG.	"	"	22.9	"	"	"
07	21.1	MSG.	"	"	23.0	"	"	"
08	19.6	-2.2	"	"	23.1	"	"	"
09	23.8	-1.6	3.0	2.7	24.5	"	2.6	2.1
10	29.6	-1.1	12.0	10.2	29.9	"	11.6	10.9
11	43.7	1.6	27.3	24.2	37.8	"	23.6	21.6
12	52.5	3.3	38.6	34.9	43.5	1.1	30.8	28.5
13	56.1	5.4	43.1	38.7	57.0	0.0	42.3	39.3
14	56.9	6.5	41.9	38.9	57.9	1.6	45.2	44.1
15	42.1	3.8	26.7	24.2	49.5	2.7	36.9	35.7
16	38.7	2.7	20.7	18.8	40.9	0.0	29.1	31.8
17	31.6	5.4	11.4	11.3	31.0	"	13.2	12.6
18	26.2	0.0	3.0	3.5	24.4	"	4.1	4.4
19	23.3	"	0.0	.5	23.3	"	0.0	.2
20	23.3	"	"	0.0	23.4	"	"	0.0
21	23.6	"	"	"	21.4	-0.5	"	"
22	23.4	"	"	"	17.5	-3.3	"	"
23	23.1	"	"	"	15.2	-3.3	"	"
24	23.5	"	"	"	14.2	-2.7	"	"
TOTAL	706.5	6.7	227.7	207.9	696.0	-4.4	239.4	231.2

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	February 16, 1956		February 17, 1956		February 17, 1956		February 17, 1956	
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	17.9	-1.6	0.0	0.0	22.1	0.0	0.0	0.0
02	18.3	-1.1	"	"	24.8	"	"	"
03	19.5	-0.5	"	"	24.8	"	"	"
04	18.9	-1.1	"	"	25.0	"	"	"
05	17.8	-0.5	"	"	25.2	"	"	"
06	18.5	-1.1	"	"	24.6	"	"	"
07	20.2	-0.5	"	"	23.3	"	"	"
08	22.7	0.0	"	"	22.6	"	"	"
09	26.0	.5	2.6	2.6	25.5	-0.5	1.4	1.5
10	32.8	1.6	11.1	10.7	32.5	-1.1	9.3	7.9
11	39.9	3.7	20.6	18.9	40.6	2.7	18.8	16.5
12	47.6	3.2	29.9	28.2	53.6	2.7	31.7	28.1
13	47.5	4.3	31.8	29.3	55.8	1.6	44.3	38.3
14	48.5	2.7	30.3	29.4	46.1	3.1	27.8	25.4
15	43.9	.6	24.8	22.7	43.2	2.2	20.9	19.2
16	38.1	0.0	19.9	18.0	35.2	1.6	16.7	15.6
17	30.3	-1.6	10.4	9.5	28.7	.5	8.7	9.3
18	24.4	-0.5	3.5	3.6	24.9	0.0	2.4	3.0
19	22.5	-1.1	0.0	0.0	22.4	-1.6	.2	.8
20	22.5	-1.1	"	"	22.7	-2.2	0.0	0.0
21	22.0	-1.1	"	"	23.1	0.0	"	"
22	21.5	-1.1	"	"	22.7	-0.5	"	"
23	20.9	-1.1	"	"	23.1	0.0	"	"
24	21.7	-1.1	"	"	23.5	0.0	"	"
TOTAL	663.9	1.5	184.9	172.9	716.0	8.5	182.2	165.6

Time, EST Hr. Ending	February 18, 1956		February 19, 1956		February 19, 1956		February 19, 1956	
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	23.6	0.0	0.0	0.0	21.0	-1.1	0.0	0.0
02	23.6	-2.1	"	"	21.8	-1.6	"	"
03	22.9	-2.7	"	"	22.7	-0.5	"	"
04	22.1	-3.8	"	"	21.7	-0.5	"	"
05	20.7	-5.4	"	"	20.8	-1.1	"	"
06	21.7	-3.2	"	"	21.9	-2.2	"	"
07	21.5	-2.2	"	"	20.6	-1.1	"	"
08	22.4	-1.1	"	"	21.1	-0.5	"	"
09	24.6	0.0	1.9	2.3	23.7	-1.1	1.7	1.8
10	35.5	4.3	14.7	12.2	29.2	1.1	9.5	8.9
11	46.4	8.5	28.2	25.7	36.2	2.2	22.8	21.9
12	54.7	8.5	41.7	37.4	41.9	1.6	35.1	31.1
13	59.8	5.9	51.6	46.8	49.7	3.2	36.9	34.4
14	59.0	3.7	53.4	45.9	56.9	2.7	39.8	36.8
15	55.8	1.1	43.9	38.7	57.3	4.3	40.7	39.2
16	49.1	-2.1	39.2	37.9	38.3	1.1	22.5	22.3
17	36.2	-4.8	23.9	25.7	30.5	1.1	10.9	11.3
18	21.8	-5.4	7.1	9.5	24.7	-0.5	4.2	3.3
19	15.6	-5.9	.3	1.2	22.4	0.0	.2	.6
20	14.4	-4.3	0.0	0.0	21.1	-1.1	0.0	0.0
21	16.7	-3.2	"	"	20.9	-1.6	"	"
22	18.9	-2.7	"	"	22.2	-1.6	"	"
23	22.5	0.0	"	"	20.2	-2.2	"	"
24	21.7	-1.6	"	"	20.3	-1.1	"	"
TOTAL	731.2	-18.5	305.9	283.3	687.1	-0.5	224.3	211.6

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
February 20, 1956				February 21, 1956				
01	20.9	-1.6	0.0	0.0	20.3	-2.2	0.0	0.0
02	20.8	-2.2	"	"	19.8	-2.2	"	"
03	19.7	-1.6	"	"	19.9	-2.2	"	"
04	20.4	-1.6	"	"	20.4	-2.2	"	"
05	20.3	-2.2	"	"	20.5	-2.2	"	"
06	19.5	-3.2	"	"	20.5	-2.2	"	"
07	20.1	-2.7	"	"	20.4	-2.2	"	"
08	18.8	-3.8	"	"	20.3	-2.2	"	"
09	22.4	-3.2	5.7	5.7	22.9	-1.6	4.1	4.1
10	35.9	1.1	16.7	15.6	31.3	-0.5	16.1	16.5
11	39.7	1.1	29.4	28.8	38.7	.5	23.2	21.0
12	59.1	5.9	41.7	39.6	43.9	1.6	31.9	29.1
13	54.4	4.8	37.8	36.0	63.1	3.7	54.5	53.7
14	58.2	3.7	40.8	39.5	66.2	3.2	55.8	53.6
15	52.2	2.7	38.6	37.9	58.3	0.0	48.8	43.4
16	45.7	.5	27.0	27.3	53.9	-0.5	41.3	34.5
17	34.4	0.0	13.8	12.8	36.6	-3.2	25.5	23.7
18	24.6	-1.1	4.1	3.6	18.8	-7.6	9.3	9.8
19	21.3	-2.2	.2	.5	14.2	-7.6	.5	1.1
20	21.5	-2.2	0.0	0.0	13.7	-7.6	0.0	0.0
21	21.5	-2.2	"	"	14.2	-7.6	"	"
22	21.4	-2.2	"	"	15.4	-8.1	"	"
23	21.3	-2.2	"	"	14.5	-7.6	"	"
24	20.9	-2.2	"	"	16.9	-5.4	"	"
TOTAL	715.0	-16.6	255.8	247.3	684.7	-65.9	311.0	290.5

February 22, 1956				February 23, 1956				
01	20.5	-2.2	0.0	0.0	14.8	-5.0	0.0	0.0
02	20.8	-1.4	"	"	14.2	-5.5	"	"
03	22.4	-2.2	"	"	15.1	-5.5	"	"
04	21.1	-2.2	"	"	15.3	-5.5	"	"
05	20.5	-2.8	"	"	14.3	-5.5	"	"
06	20.1	-2.2	"	"	12.5	-5.0	"	"
07	19.8	-2.2	"	"	12.9	-3.4	"	"
08	20.0	-2.2	"	"	14.7	-3.4	.5	1.1
09	19.4	-1.1	3.5	3.2	18.7	-3.3	6.8	8.6
10	29.4	0.0	13.9	13.1	25.9	-5.5	20.7	25.9
11	38.1	1.6	28.8	25.9	45.9	-3.2	37.8	37.8
12	58.0	1.1	47.4	42.6	61.9	-1.6	49.2	43.5
13	68.0	0.0	57.3	51.6	61.9	0.0	53.9	45.6
14	67.8	1.1	57.0	50.1	60.7	"	51.8	44.4
15	58.3	0.0	50.5	45.8	54.9	"	40.9	35.3
16	48.2	-1.6	40.5	37.5	49.4	1.1	36.0	32.1
17	35.2	-4.3	26.6	25.4	36.2	0.0	20.4	16.8
18	20.6	-8.1	10.2	9.0	24.5	-4.3	7.5	6.9
19	14.3	-7.6	.5	0.0	21.2	-4.8	.3	.5
20	12.8	-6.0	0.0	"	23.7	-1.6	0.0	0.0
21	14.1	-5.5	"	"	19.4	-2.7	"	"
22	14.9	-6.5	"	"	19.2	-2.1	"	"
23	13.8	-5.4	"	"	19.7	-0.5	"	"
24	13.7	-5.5	"	"	23.1	-0.5	"	"
TOTAL	691.8	-65.2	336.2	304.2	680.1	-67.8	325.8	298.5

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	February 24, 1956				February 25, 1956			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	25.9	0.0	0.0	0.0	22.4	-2.7	0.0	0.0
02	23.9	"	"	"	18.2	-3.2	"	"
03	23.9	"	"	"	15.7	-5.9	"	"
04	24.3	"	"	"	15.6	-5.4	"	"
05	22.4	-0.5	"	"	19.6	-2.1	"	"
06	20.9	-4.3	"	"	21.3	-1.1	"	"
07	23.0	0.0	"	"	21.0	0.0	"	"
08	23.0	-2.1	"	"	20.7	"	"	"
09	25.1	-1.6	1.2	1.8	23.9	"	3.8	2.9
10	27.2	-0.5	4.1	4.4	30.9	1.6	11.9	11.1
11	30.6	-0.5	7.5	7.5	36.9	2.7	21.2	19.4
12	33.4	-1.6	12.2	11.6	46.0	2.7	30.5	27.6
13	35.4	-0.5	11.3	11.1	47.9	5.4	30.5	28.2
14	35.4	0.0	13.2	13.1	47.3	4.3	27.3	25.2
15	33.9	-4.2	11.9	10.7	41.0	2.7	24.5	22.5
16	31.7	-3.2	8.6	7.9	37.2	2.2	19.1	17.7
17	30.9	0.0	5.1	4.9	34.2	1.1	14.3	12.9
18	28.8	"	2.7	3.0	26.7	0.0	6.8	7.4
19	27.6	"	.2	.5	20.1	-2.2	.5	.9
20	26.7	"	0.0	0.0	17.4	-4.3	0.0	0.0
21	26.7	"	"	"	16.8	-4.3	"	"
22	26.7	"	"	"	15.4	-4.3	"	"
23	25.5	"	"	"	15.5	-5.4	"	"
24	23.6	-1.6	"	"	14.5	-4.3	"	"
TOTAL	656.5	-20.6	78.0	76.5	626.2	-22.5	190.4	175.8

Time, EST Hr. Ending	February 26, 1956				February 27, 1956			
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	15.2	-5.4	0.0	0.0	13.6	-5.4	0.0	0.0
02	17.1	-4.9	"	"	18.8	-5.4	"	"
03	20.4	-1.6	"	"	20.7	-3.3	"	"
04	22.7	0.0	"	"	20.8	-1.1	"	"
05	22.6	"	"	"	20.6	0.0	"	"
06	22.7	"	"	"	20.7	"	"	"
07	22.5	"	"	"	20.5	"	"	"
08	22.5	"	.2	.2	20.9	"	.3	.3
09	26.2	-0.5	4.9	5.4	27.9	-2.2	7.8	7.8
10	33.0	.5	16.1	15.9	34.3	-2.2	24.5	22.8
11	46.3	.5	35.1	35.7	47.5	-2.1	35.3	34.4
12	55.9	3.8	40.2	39.2	53.9	5.4	42.9	42.8
13	55.4	3.2	38.4	36.6	63.5	4.3	52.5	50.1
14	68.6	7.0	55.2	52.8	65.3	3.7	52.8	50.3
15	48.5	3.2	30.8	29.6	54.5	0.0	45.2	40.4
16	41.0	2.7	22.4	21.5	51.8	-3.7	42.2	37.9
17	34.3	3.2	14.4	13.9	38.2	-5.3	27.9	30.2
18	27.4	-1.1	8.1	8.6	20.1	-7.0	9.8	12.2
19	18.2	-4.9	.5	1.1	14.9	-6.5	1.1	2.4
20	17.9	-3.8	0.0	0.0	13.8	-7.1	0.0	0.0
21	16.3	-4.3	"	"	14.0	-6.6	"	"
22	16.2	-3.3	"	"	15.2	-5.5	"	"
23	17.5	-3.8	"	"	13.9	-5.5	"	"
24	15.8	-4.3	"	"	13.5	-3.8	"	"
TOTAL	704.2	-13.8	266.3	260.5	698.9	-59.3	342.3	331.6

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	February 28, 1956		February 29, 1956		February 29, 1956		February 29, 1956	
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	13.6	-3.3	0.0	0.0	19.7	-3.2	0.0	0.0
02	13.1	-4.9	"	"	20.9	-1.1	"	"
03	14.1	-3.8	"	"	22.1	-1.1	"	"
04	13.8	-3.3	"	"	21.4	-2.2	"	"
05	13.4	-3.3	"	"	21.4	-2.2	"	"
06	12.9	-3.3	"	"	18.1	-4.3	"	"
07	13.0	-3.3	"	"	15.8	-4.9	"	"
08	14.4	-3.3	1.1	.8	14.8	-3.3	1.2	.8
09	20.8	-4.4	15.6	14.3	20.2	-6.0	15.3	13.4
10	33.0	-5.4	31.4	27.3	32.4	-4.9	30.3	27.2
11	47.3	-3.3	45.6	38.4	45.6	.5	36.2	34.2
12	59.9	-0.5	56.3	47.1	62.2	.5	48.6	45.3
13	67.9	0.0	60.0	47.6	64.5	0.0	58.2	52.1
14	64.1	-0.5	55.5	45.2	66.9	0.0	59.1	52.4
15	61.0	0.0	48.0	45.8	62.4	-1.0	54.2	48.5
16	51.0	-2.7	44.4	40.8	52.5	-2.6	43.7	40.7
17	38.0	-5.9	29.9	29.6	46.2	-4.1	29.1	29.6
18	25.3	-8.1	13.2	15.3	27.2	-5.2	12.5	15.6
19	14.3	-7.6	1.3	1.9	17.5	-5.3	.8	2.3
20	13.1	-6.6	0.0	0.0	16.0	-5.9	0.0	0.0
21	12.8	-6.6	"	"	15.6	-5.4	"	"
22	13.7	-7.6	"	"	18.1	-4.3	"	"
23	13.7	-7.6	"	"	16.8	-4.3	"	"
24	19.2	-2.7	"	"	18.8	-4.3	"	"
TOTAL	663.4	-98.0	402.3	354.1	737.1	-74.6	389.2	362.1

Time, EST Hr. Ending	March 1, 1956		March 1, 1956		March 2, 1956		March 2, 1956	
	Total Hemis.	Net Exch.	Total Solar	Refl. Solar	Total Hemis.	Net Exch.	Total Solar	Refl. Solar
01	22.8	-2.7	0.0	0.0	20.5	-4.8	0.0	0.0
02	20.4	-3.2	"	"	25.8	-1.6	"	"
03	20.1	-3.7	"	"	25.1	0.0	"	"
04	17.8	-5.4	"	"	21.3	-4.2	"	"
05	18.7	-4.8	"	"	21.5	-3.7	"	"
06	18.9	-5.3	"	"	20.8	-3.7	"	"
07	17.9	-5.3	"	"	18.2	-4.3	"	"
08	18.5	-5.3	.6	1.9	19.4	-2.7	.5	.5
09	25.4	-5.3	8.4	9.8	26.1	0.0	7.4	5.3
10	40.1	-4.3	25.1	24.2	32.7	1.1	12.0	10.7
11	52.1	-2.6	39.8	36.2	39.3	1.1	16.5	15.2
12	60.0	0.0	48.2	42.8	47.2	1.6	22.5	20.4
13	66.1	1.5	51.0	44.1	54.8	2.1	34.9	27.8
14	57.5	0.0	40.9	34.7	56.7	2.6	39.3	31.8
15	49.8	-0.5	38.6	31.8	53.4	6.8	36.9	28.8
16	50.1	-0.5	35.4	29.1	40.5	2.6	22.5	20.6
17	43.7	-3.1	28.9	26.4	37.5	1.6	10.7	11.9
18	28.1	-6.3	11.3	14.9	30.5	.5	6.9	6.9
19	21.1	-6.9	1.3	1.9	25.2	-2.1	1.5	2.6
20	19.9	-6.4	0.0	0.0	17.6	-4.8	0.0	0.0
21	19.4	-5.9	"	"	15.7	-4.9	"	"
22	18.5	-3.7	"	"	15.9	-5.9	"	"
23	17.7	-4.3	"	"	18.5	-4.3	"	"
24	18.5	-5.4	"	"	23.3	0.0	"	"
TOTAL	743.1	-89.4	329.5	297.8	707.5	-27.0	211.6	182.5

THERMAL RADIATION DATA, KEWEENAW FIELD STATION
(Langleys)

Time, EST Hr. Ending	Total Net		Total Refl.		Total Net		Total Refl.	
	Hemis.	Exch.	Solar	Solar	Hemis.	Exch.	Solar	Solar
	March 3, 1956				March 4, 1956			
01	23.5	-0.5	0.0	0.0	14.7	-5.5	0.0	0.0
02	19.7	-2.7	"	"	15.9	-3.9	"	"
03	22.3	0.0	"	"	19.3	-1.6	"	"
04	25.4	"	"	"	17.9	-2.7	"	"
05	25.5	"	"	"	19.9	-1.1	"	"
06	25.5	"	"	"	16.8	-3.3	"	"
07	25.5	"	"	"	20.4	0.0	"	"
08	25.6	"	.2	.3	20.9	-1.1	.5	1.2
09	27.0	.5	4.2	4.1	24.6	0.0	3.5	4.2
10	31.5	1.6	10.7	10.4	28.1	0.0	5.9	6.0
11	40.7	3.7	21.6	19.9	35.2	1.6	13.9	13.8
12	50.4	3.7	37.5	33.8	39.9	2.7	18.8	18.6
13	49.2	4.2	35.7	31.4	43.4	1.6	20.9	20.4
14	50.2	2.1	30.0	25.8	42.7	1.6	19.2	18.6
15	49.0	2.6	28.4	25.4	44.8	1.6	24.2	22.8
16	51.2	3.2	33.3	31.2	44.3	1.1	22.9	20.4
17	41.8	2.6	25.9	24.2	36.4	0.0	10.2	10.2
18	26.3	-6.4	10.1	9.2	31.8	0.0	11.7	7.8
19	19.6	-7.4	2.3	2.7	24.7	-1.1	.9	1.8
20	15.3	-8.0	0.0	0.0	18.8	-4.3	0.0	0.0
21	19.9	-3.8	"	"	17.9	-3.2	"	"
22	16.8	-5.4	"	"	17.1	-3.2	"	"
23	16.2	-4.9	"	"	17.3	-4.3	"	"
24	16.2	-5.4	"	"	20.3	-1.1	"	"
TOTAL	<u>714.3</u>	<u>-20.3</u>	<u>239.9</u>	<u>218.4</u>	<u>633.1</u>	<u>-26.2</u>	<u>152.6</u>	<u>145.8</u>

