

**SOLAR AND ATMOSPHERIC RADIATION DATA FOR BROUGHTON ISLAND  
EASTERN BAFFIN ISLAND, CANADA, 1971-73**

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Occasional Paper No. 11

**INSTITUTE OF ARCTIC AND ALPINE RESEARCH . UNIVERSITY OF COLORADO**



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**Boulder, Colorado**

**1974**



Broughton Island, early July, 1971. The airstrip and settlement lie in the foreground adjacent to Broughton Harbor with 1000 m summits of the coastal highlands of Baffin Island visible to the northwest. Unbroken fast ice to the north and low stratiform clouds are characteristic of the mid-summer period.

## 1. Introduction

The data presented in this volume were obtained as part of a continuing study of the synoptic energy budget climatology of Eastern Baffin Island and Davis Strait. The principal concern of this program is to produce accurate estimates of energy exchange at snow, ice, and water surfaces in response to weather events on a synoptic scale and in the context of interannual and longer term climatic variations. The main features of the program have been described elsewhere (cf. Barry, et al., 1974, and Jacobs, et al., 1974).

Accurate estimates of the radiation balance are obviously essential to energy budget calculations. While the Canadian radiation measurements network provides coverage over much of the Canadian Arctic (Latimer and Truhlar, 1967), no regular observations are made on Baffin Bay and Davis Strait. Therefore, in order to obtain adequate coverage for purposes of the research program described, the Institute of Arctic and Alpine Research (INSTAAR) began a program of radiation measurements in the summer of 1971 at Broughton Island, just off the eastern Baffin Island Coast.<sup>1</sup> The object was to obtain continuous records of global solar radiation and net radiation over a representative surface to be related to special studies on the sea ice, glacier,

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<sup>1</sup> Radiation measurements were included in a program of glacio-climatic studies by INSTAAR in 1970 on the Boas Glacier ( $67^{\circ}35'N$ ,  $65^{\circ}16'W$ ), some 50 km west of Broughton Island (Jacobs, et al., 1972, Andrews and Barry, 1972)

and tundra surfaces in the area. Data on these two parameters for the summers 1971 through 1973 form the main part of this report. During the latter year, observations continued through December and included measurements of the downward atmospheric flux component and of the direct solar flux component for purposes of calculating transmissivity and turbidity factors, and these are reported here as well.

These data along with some explanation of the measurements program are summarized here. The results of further analysis and interpretation will be published elsewhere.

## 2. Site and Situation

The settlement of Broughton Island, N.W.T. ( $67^{\circ}34'N$ ,  $64^{\circ}03'W$ ) is located near sea level on the west side of the island of the same name and facing the Baffin Island mainland across a narrow strait (Frontispiece and Fig.1). The population of the village is about 350, the majority Eskimo, and there are some 60 dwellings and other primary structures there. The main industries are seal hunting and native crafts. An airstrip is located 2 km south of the village and, on the east side of the island and some 10 km from the village at an elevation of 580 m.a.s.l., there is a Distant Early Warning (DEW-line) radar station which is also the official synoptic weather station Broughton Island in the Canadian register.

A climatological station (Stevenson screen) was established in the village by INSTAAR in June, 1971. The continuing temperature

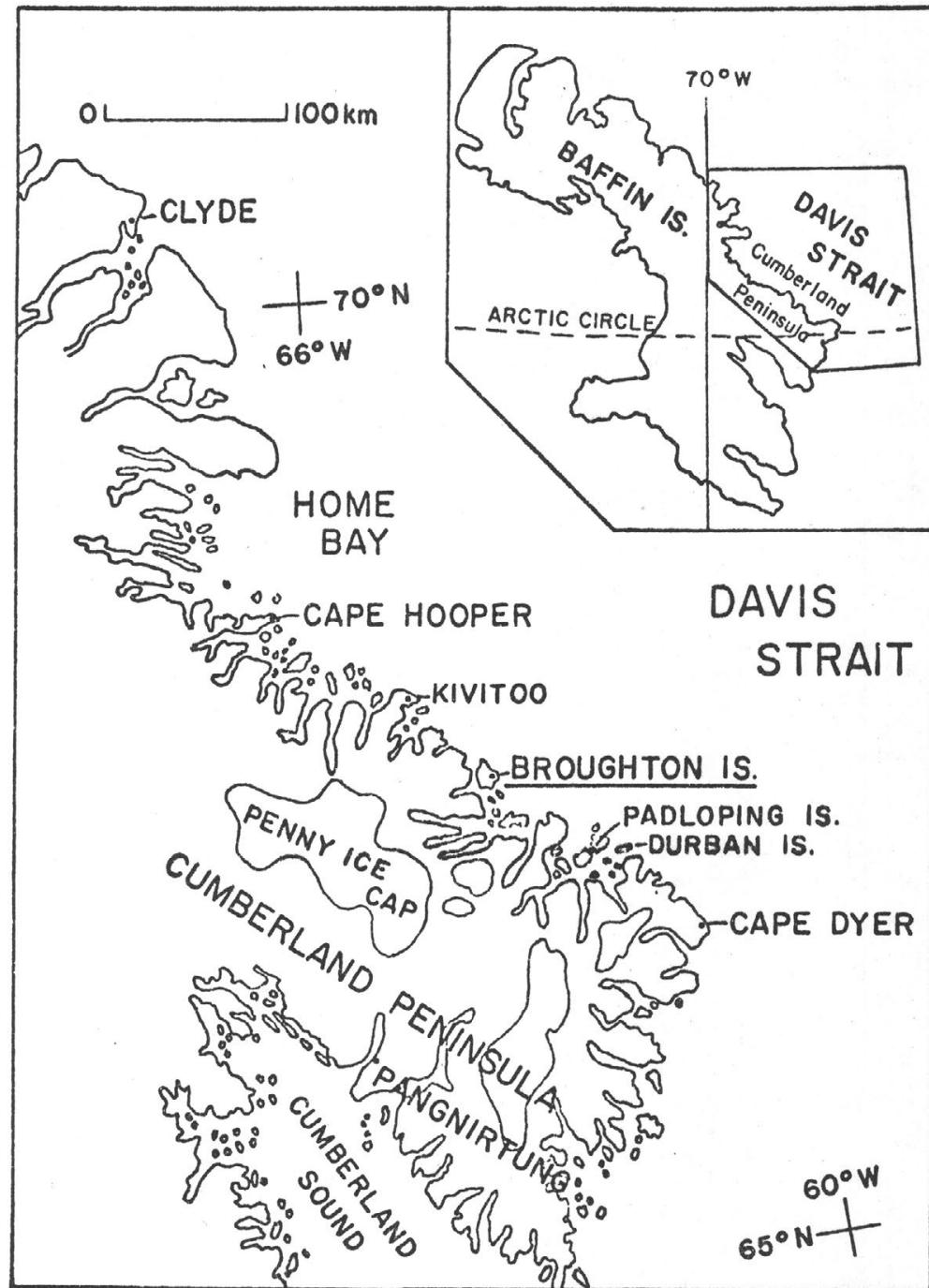


Figure 1. Eastern Baffin Island

record from this station, listed as Broughton Village, appears in the Monthly Summary of the Atmospheric Environment Service of Canada.

The principal observing site is the INSTAAR House, located about 30 m from a low bluff overlooking Broughton Harbor on the west side of the village. There are no significant obstructions to view at this point, but hills rising to 500 m, 3 km south of the village bring about a slightly earlier onset of polar "night" to the village than latitudinal considerations alone would dictate. The summer sun remains well above these hills from the point of view of the village and the midnight sun is virtually unobstructed to the north. West of Broughton Island, the highlands of Cumberland Peninsula rise abruptly to culminate in the 2000 m.a.s.l. summit of the Penny Ice Cap.

### 3. Brief Summary of Climatic Conditions

The eastern Baffin Island coast is characterized by a persistent annual sea ice pack and an extensive fast ice sheet. Breakup of the nearshore ice has in recent years generally occurred near the end of July with substantial amounts of drift ice remaining throughout August and in some years (e.g. 1972) into subsequent freezeup in late October. These ice conditions, coupled with the extensive permanent ice bodies on Baffin Island, are indicative of a severe climate.

The record for the Broughton DEW-line station (Atmospheric Environment Service, 1972) shows a mean annual temperature of  $-11^{\circ}\text{C}$  with January and July means of  $-24^{\circ}\text{C}$  and  $5^{\circ}\text{C}$ , respectively. Average annual

precipitation is 305 mm of which 89 percent falls as snow. Significant snowcover is present on the land near sea level from early November through mid-to-late June.

Stratus cloud is common to this region in the summer months, although the number of overcast days is highly variable from year to year (50 to 70 percent of days). Winds are predominantly N to NW in all seasons along the coast and generally do not exceed 20 m/sec, although channeling effects in fiords and valleys may result in local winds being much greater.

Details of temperature and precipitation trends in Baffin Island for the period of record are described by Bradley (1973). Aspects of the synoptic climatology of the region are discussed by Barry (1974) and Barry (et al, 1974), and sea ice conditions, glaciology, energy budget climatology, and related topics in the report by Jacobs, et al (1974).

#### 4. The Measurements

The data given in Tables 1 - 7 of this report are described in the following paragraphs in terms of the respective radiation parameters. It will be noted that Eastern Standard Time ( $75^{\circ}$ W time) is used rather than Local Apparent Time (LAT), contrary to accepted practice in radiation studies. This was done for purposes of combining hourly and instantaneous values with other meteorological data in energy budget calculations. An exception is in the measurements of direct solar radiation and result-

ing turbidity calculations, where LAT is used. The time base used does not affect daily radiation totals. The symbols used for the various radiation terms are according to W.M.O. practice (W.M.O., 1965). The basic energy flux unit used is the  $\text{cal-cm}^{-2}\text{-min}^{-1}$ , where 1 cal. = 4.185 joules.

4.1 Cloud Cover. An indicator of the daily amount of cloud cover is given in Tables 1 - 3. It is intended to show the average amount (0 to 10 tenths) of sky obscured by clouds on a given day (midnight to midnight). Clouds were distinguished by height according to the following rule: Low clouds lie between sea level and 1 km, as judged from mountain summits, Middle clouds are those above 1 km, but not including As, Ac, or Ci forms, the latter being classed as High clouds. A uniform cloud pattern rarely persists for an entire day; however, in the absence of regular hourly observations of cloud cover and for the sake of simplicity in the analysis, it was found preferable to specify a mean daily figure of cloudiness based on the twice-daily climatological schedule and conditions observed during the working day. In Table 6, the percentages of days with cloud cover in approximate categories of clear, scattered-broken, and overcast, are given for each month along with mean daily totals of global and net radiation.

#### 4.2 Global Solar Radiation ( $K\downarrow$ )

The total solar flux on a horizontal surface, the global flux  $K\downarrow$  (Table 1), was measured by means of a Kipp and Zonen pyranometer (Model CM 6) and, during 1973, with an Eppley precision spectral pyranometer (Model 2). The characteristics of these instruments are described by

Latimer (1972). Simultaneous operation of both sensors during 1973 gave the opportunity for comparisons and, hence, possible correction of the previous two summers records. A systematic difference between the two instruments at low solar angles is attributable to the large cosine-response error in the Kipp instrument. Differences in instantaneous values for solar elevations above 20 degrees and for daily totals during the summer months were less than 3 per cent, therefore no correction was deemed necessary. The Kipp pyranometer is not temperature compensated, the temperature coefficient being  $-0.2\%/{^\circ}\text{C}$  (Latimer, 1972). No correction for temperature is included in the 1971 and 1972 solar radiation data; the maximum uncertainty due to temperature over the typical seasonal and diurnal range of some  $25^{\circ}\text{C}$  is about 5%. All 1973 data are from the Eppley pyranometer which is temperature compensated to  $-20^{\circ}\text{C}$ . This sensor was subsequently calibrated against standards at the radiation laboratory of the Atmospheric Environment Service, Downsview, Ontario, and the results found to agree with the calibration coefficient supplied by the manufacturer.<sup>1</sup>

The radiation data were recorded on Esterline - Angus galvo-recorders during 1971, 1972 and during the 1973 period on an E-A digital datalogger. In the former case, 15 minute averages were read from the analog record to compute an average hourly flux while, with the datalogger, instantaneous values were recorded every ten minutes and averaged for the hour.

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<sup>1</sup> We are grateful to J. R. Latimer of the Atmospheric Environment Service for arranging this calibration.

#### 4.3 Net Radiation (Q\*)

The net combined flux of solar and atmospheric radiation  $Q^*$  (Table 2) was measured at a height of 4 m over a typical dry tundra surface. Albedos measured over this surface ranged from 0.55 to 0.90 when snow-covered and from 0.16 to 0.22 when clear. The sensor used is a Science Associates, Inc. Fritschen net radiometer (cf. Fritschen, 1963, Latimer, 1972), which is continuously ventilated with dry air. The recording systems used in 1971-1973 were identical to those used for global solar radiation, the multi-channel datalogger recording both quantities simultaneously in 1973.

#### 4.4 Atmospheric Radiation ( $L\downarrow$ )

The downward atmospheric flux  $L\downarrow$  (Table 3) was obtained from measurements of the total downward flux  $Q\downarrow$  by means of a pyradiometer and subtracting from this the global solar flux. The sensor used is a Funk-type net radiometer (Solar Radiation Instruments) with a black cavity covering the lower hemisphere. A thermocouple imbedded in the cavity is connected in opposition to a constant temperature reference junction, the resultant voltage being proportional to the temperature of the cavity  $T_c$ . This voltage was recorded simultaneously with the radiometer output on the datalogger. The value for  $L\downarrow$  is then obtained from the expression:

$$L\downarrow = Q\downarrow - K\downarrow + \sigma T_c^4$$

Measurements relating to this term were made only for the period 13 August through 31 December 1973.

#### 4.5 Direct Solar Flux (I) and Atmospheric Turbidity

During the period June through October 1973, measurements of direct solar flux were made whenever a clear day occurred or on those days when a small amount of cloud was present but none within 30 degrees of the sun. These conditions were met during only 22 days during the five month period for a total of 105 separate observations.

The measurements were made with a Eppley normal incidence pyrheliometer on which were mounted Schott OG-1, RG-2, and RG-8 filters. Readout was with a Rubicon-Honeywell potentiometer known to be accurate within 1 percent from comparison with a standard kept in the University of Colorado Physics Department.

Three separate measures of atmospheric transmissivity were calculated: the transmissivity coefficient  $q$ , the Linke turbidity factor  $T$ , and the turbidity coefficient of Ångström  $\beta$ . The first of these was calculated from measurements of the direct flux without a filter ( $I$ ) and according to the expression

$$I = I_0' q^m$$

where  $I_0'$  is the solar constant  $I_0$  adjusted to the actual sun-earth distance and  $m$  is the atmospheric air mass<sup>1</sup>. Calculations of  $T$  and  $\beta$  were made according to the methods described in the IGY Instruction Manual (1958) and with reference to the discussions of Ångström (1961) and Robinson (1966).  $T$  is a measure of the attenuation by the atmos-

<sup>1</sup> The value for  $I_0$  used in these calculations is  $1.98 \text{ cal-cm}^{-2}\text{-min}^{-1}$ , consistent with the International Pyrheliometric Standard of 1956 and on which the calibration of the instrument and the tables for turbidity calculations are based.

sphere over the entire spectral range of the instrument (0.250 - 4.00  $\mu\text{m}$ ) but adjusted for the relative optical air mass,  $m$ . The Ångström coefficient  $\beta$  is based on that portion of the flux below 0.630  $\mu\text{m}$ , determined by subtracting the flux measured using the RG-2 filter (corrected for filter factor) from the total flux  $I$ . Because it excludes the effects of absorption by water vapor,  $\beta$  is a better indicator of the scattering and absorbing effects of aerosols, dust, and haze than are  $T$  and  $q$ . The values for these various measured and derived quantities are given in Tables 4 and 5.

#### 4.6 Error Considerations

The various sources of instrumental error in radiation measurements are discussed in the WMO Guide (1965) and more specifically, including some of the instruments used in this study, in Latimer (1972). Taking into consideration the combined effects of calibration uncertainty, temperature effects, azimuth and cosine response, and nonlinearity, Latimer estimates the r.m.s. errors for the Eppley, Kipp, and Fritsch sensors at 2.3, 4.1, and 3.4 per cent, respectively.

An additional source of error is the deposition of dew, frost, and rime on the sensors, a common problem in the Arctic coastal environment. Such accumulations in small amounts do not significantly reduce the shortwave component; however, the longwave flux to net radiometers and pyradiometers become meaningless when a thin film of

ice or water is present on the polythene hemispheres. Particular care was taken in this study to insure that the various sensors were kept clear.

Frequent calibration of the recording instruments showed no variation in this part of the system, and an absolute error of  $\pm$  1 percent in accordance with the precision of the calibration standard is assumed. Some error was introduced in the manual reduction of analog chart records (1971 and 1972). Parallel operation of the analog and digital systems for net radiation during two weeks in June 1972 showed differences of from 2 to 7 percent for daily totals on the order of  $100 \text{ cal-cm}^{-2}\text{-day}^{-1}$ , the percentage difference decreasing with higher flux values.

Taking all such factors into consideration, maximum r.m.s. errors for the radiation data presented here are estimated to be as follows:

K $\downarrow$	(1971 and 1972)	5%
K $\downarrow$	(1973)	3
Q*	(1971 - 1973)	10
L $\downarrow$	(1973)	10
I	(1973)	2

### 5. Discussion

In the mean, the atmosphere at Broughton Island is one of high transparency. Midday values for the transmission coefficient  $q$  are in the range .76 to .81 for the summer months. Because of the dependence of  $q$  on the optical air mass  $m$  (Robinson, 1966), values of  $q$  are not particularly meaningful during the fall and winter months when  $m$  is large even at midday. The turbidity factor  $T$  is a better measure of the overall transparency of the atmosphere, average values for  $T$  at Broughton Island being consistent with those reported elsewhere (cf. Robinson, 1966). Similarly the aerosol content, as expressed by the turbidity coefficient  $\beta$ , is comparable to the mean value for this latitude given by Ångström (1961)<sup>1</sup>.

Where it was possible to measure  $I$  throughout the day, the diurnal variations in  $T$  and  $\beta$  were found to be small. For example, on June 9, 1973, the mean and standard deviation in  $T$  were 2.48 and 0.24, respectively, and for  $\beta$ , .028 and .004. There was a tendency for both terms to be slightly higher near midday, but the number of measurements was insufficient to demonstrate a clear trend.

The seasonal variation in atmospheric turbidity is evident in terms of both  $T$  and  $\beta$ , (Table 5). The dominance of cleaner and drier air is seen in values for the autumn months.

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<sup>1</sup> From Ångström's empirical formula, which gives  $\beta$  as a function of latitude and elevation, the value for 67.5°N at sea level is .040, compared with the average measured value at Broughton Island of .042.

The day-to-day differences in the atmospheric transmission characteristics are striking, especially during the summer months. These differences are related to differing sources and trajectories of air masses moving into the region. For example (Table 5) the extremely turbid conditions observed on June 29, July 23, and August 6 were in each case associated with strong advection of warm air from the southwest, with substantial haze in evidence. For this region then, large departures from the means of the various turbidity parameters are to be expected in relation to the variable regime of synoptic activity.

Year-to-year differences in mean values of the global ( $K_t$ ) and net ( $Q^*$ ) radiation are seen in Table 6 for the summer months in relation to cloud cover. Such differences may be substantial, perhaps greater than would be expected from associated differences in cloudiness, although the fairly crude character of the latter measure should be kept in mind. Heavy snow cover in the early summer months can effect  $K_t$  through an increase in the diffuse component due to multiple reflection, and  $Q^*$ , which is reduced when a snow cover of high albedo persists, as was the case in June, 1973.

A comparison of the 1973 Broughton Island record with those for other Canadian Arctic stations is shown in Table 7. Differences in  $K_t$  among stations are often large and should be explainable in terms of differences in cloudiness. Those in  $Q^*$  are perhaps not as large as might be expected, since this term is determined in part by the nature of the surface which necessarily differs somewhat among stations. The

relative differences in  $Q^*$  during the autumn and winter months, when all surfaces are likely to be snow-covered, are large, however. Variations in cloud cover as it affects the atmospheric flux  $L^+$  might explain these differences in part, but measurement errors are probably more important.

The three years partial record of radiation for Broughton Island reported here tends to support the thesis already demonstrated elsewhere for other climatological parameters (Barry, et al., 1974) that conditions on the eastern coast of Baffin Island and, implicitly, in Davis Strait are quite different from those elsewhere in Baffin Island. For this reason, continued monitoring of the main parameters, including radiation, in this area seems justified.

#### Acknowledgements

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Table 1.

Global Solar Radiation (Kt)

1971	June - July
1972	June - August
1973	June - December

BROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 m.A.S.L.

GLOBAL SOLAR RADIATION (K+)  
INSTRUMNT: KIPD AND ZONEN PYRANOMETER  
AVERAGE FLUX (CAL./SQ-CM/MIN)

	DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DAILY AVG.	TOTAL CLOUD COVER %
1																											
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											
13																											
14																											
15		.06	.06	.13	.24	.36	.50	.57	.69	.79	.84	.91	.86	.84	.83	.76	.61	.47	.29	.15	.05	.02	.02	.02	.614.4	.0L	
16		.03	.04	.07	.12	.18	.24	.32	.47	.64	.69	.73	.73	.69	.64	.55	.34	.28	.18	.06	.03	.02	.02	.01	.468.6	.10L	
17		.01	.03	.07	.12	.30	.47	.49	.45	.65	.74	.92	1.02	.81	.75	.61	.56	.39	.24	.15	.08	.04	.02	.01	.536.4	.10L	
18		.01	.03	.07	.12	.15	.24	.35	.37	.45	.62	.73	.64	.78	.73	.62	.45	.30	.25	.07	.04	.03	.01	.01	.466.8	.10L	
19		.02	.04	.08	.18	.25	.31	.46	.78	.91	.87	.94	1.00	1.10	1.02	.85	.69	.59	.48	.29	.12	.06	.03	.02	.01	.664.8	.0L
20		.02	.05	.08	.14	.23	.46	.66	.89	.83	.94	.89	.88	.84	.85	.73	.63	.55	.33	.25	.16	.10	.05	.02	.01	.589.8	.0L
21		.02	.03	.07	.09	.16	.26	.62	.79	.79	.94	1.01	1.01	.98	.92	.78	.53	.46	.32	.21	.12	.06	.05	.03	.01	.568.2	.0L
22		.01	.02	.07	.12	.27	.30	.42	.60	.75	.73	.73	.62	.67	.64	.56	.44	.34	.23	.14	.06	.04	.03	.02	.02	.476.4	.10L
23		.02	.03	.07	.12	.20	.44	.61	.74	.84	.92	.92	.96	1.00	.95	.75	.54	.40	.28	.18	.13	.07	.02	.01	.01	.574.4	.0L
24		.02	.04	.10	.31	.33	.38	.52	.69	1.03	1.04	.94	.92	1.03	.97	.89	.82	.50	.25	.15	.09	.05	.02	.01	.671.4	.06M	
25		.01	.06	.16	.39	.51	.67	.80	.92	1.01	1.03	1.11	1.04	1.00	.82	.77	.63	.54	.30	.15	.09	.08	.04	.03	.03	.745.2	.02M
26		.03	.06	.17	.15	.24	.34	.48	.47	.71	.88	.90	.80	.61	.51	.57	.25	.12	.08	.06	.07	.03	.01	.00	.445.8	.10L	
27		.01	.02	.03	.05	.13	.24	.39	.47	.63	.71	.93	.74	.72	.54	.50	.41	.27	.15	.08	.04	.02	.01	.00	.455.4	.09L	
28		.00	.01	.04	.09	.16	.23	.28	.33	.51	.61	.61	.76	.59	.56	.38	.24	.17	.14	.09	.04	.02	.01	.01	.382.8	.08L	
29		.02	.03	.11	.13	.20	.25	.33	.43	.53	.69	.81	1.03	1.05	.99	.89	.77	.52	.35	.19	.10	.05	.02	.01	.01	.604.2	.03M
30		.01	.05	.12	.20	.39	.55	.53	.91	.93	1.01	1.06	1.08	1.05	.97	.88	.77	.64	.45	.27	.11	.05	.02	.01	.00	.717.6	.09L
MEAN		.02	.04	.08	.14	.23	.33	.46	.59	.74	.82	.88	.87	.82	.71	.59	.45	.34	.21	.11	.06	.03	.01	.01	.561.4		
S.D.		.01	.02	.03	.07	.09	.11	.12	.18	.20	.16	.13	.17	.16	.14	.15	.14	.14	.09	.05	.02	.02	.01	.01	.106.0		
N		16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	17	17	17	17	17	16		

\* CAL/SQ-CM/DAY

PROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

GLOBAL SOLAR RADIATION (Kw)

INSTRUMENT: KIPP AND ZONEN PYRANOMETER

AVERAGE FLUX (CAL/SQ-CM/MIN)

1971 JULY  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	HOUR (EASTERN STANDARD TIME)												DAILY AVG																
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	*	CLOUD COVER			
1	.01	.03	.08	.12	.26	.25	.37	.48	.58	.68	.84	.96	.97	.95	.90	.79	.66	.51	.35	.21	.11	.05	.03	.01	.609	.4	10L		
2	.02	.03	.06	.14	.29	.62	.72	.83	.78	.99	.98	.88	.77	.63	.49	.34	.22	.10	.05	.02	.01	.720	.6	.01					
3	.02	.06	.16	.30	.45	.67	.75	.83	.92	1.02	1.06	1.11	1.05	.98	.89	.77	.63	.49	.34	.21	.10	.05	.02	.02	.774	.5	01H		
4	.01	.05	.16	.29	.42	.64	.84	.80	.90	.97	1.02	1.04	1.02	.96	.88	.78	.64	.49	.34	.21	.09	.04	.02	.01	.757	.2	01H		
5	.01	.09	.14	.23	.35	.50	.64	.76	.89	.96	.97	1.04	1.04	.80	.48	.34	.21	.09	.04	.02	.01	.652	.2	.01					
6	.02	.05	.10	.23	.36	.49	.70	.79	1.00	.99	1.04	1.06	1.05	.98	.88	.76	.62	.47	.34	.22	.10	.05	.02	.01	.738	.0	01H		
7	.01	.04	.10	.22	.36	.49	.64	.78	.91	.99	1.05	1.07	1.04	.98	.90	.77	.63	.48	.33	.22	.10	.03	.01	.00	.729	.0	02H		
8	.01	.03	.06	.11	.28	.48	.62	.76	.87	.97	1.04	1.01	.69	.74	.57	.41	.38	.35	.18	.12	.08	.02	.01	.01	.588	.0	05H		
9	.01	.02	.03	.08	.14	.24	.33	.37	.79	.88	.97	1.06	.89	.95	.83	.77	.62	.46	.32	.18	.05	.02	.01	.00	.643	.8	02H		
10	.02	.05	.09	.21	.35	.50	.62	.75	.87	.95	1.01	1.05	.99	.67	.30	.35	.25	.19	.11	.09	.06	.02	.00	.00	.570	.0	05H		
11	.01	.04	.10	.15	.38	.52	.55	.63	.84	1.01	1.02	1.04	1.01	.88	.50	.60	.45	.37	.32	.19	.07	.02	.00	.00	.642	.0	04H		
12	.00	.02	.05	.07	.13	.17	.24	.35	.34	.34	.34	.34	.34	.34	.21	.22	.15	.11	.08	.08	.04	.01	.00	.00	.00	.00	10H		
13	.00	.00	.02	.05	.09	.15	.24	.31	.35	.52	.65	1.02	.78	.66	.56	.41	.22	.17	.15	.07	.03	.01	.00	.00	.387	.6	10L		
14	.00	.01	.03	.09	.14	.20	.29	.54	.49	.97	1.07	1.23	1.20	.78	.66	.56	.41	.22	.17	.13	.11	.06	.01	.00	.00	.587	.4	07H	
15	.00	.01	.05	.06	.16	.33	.23	.14	.20	.45	.53	.35	.31	.27	.29	.21	.22	.17	.17	.06	.03	.00	.00	.00	.00	.00	.254	.4	08H
16	.00	.02	.04	.06	.03	.08	.16	.30	.37	.30	.52	.46	.53	.28	.21	.13	.09	.05	.04	.01	.00	.00	.00	.00	.00	.00	.231	.6	10H
17	.00	.01	.02	.05	.12	.19	.28	.36	.44	.59	.66	.69	.82	.94	.64	.43	.37	.32	.16	.09	.06	.01	.00	.00	.00	.00	.436	.2	10L
18	.00	.02	.07	.16	.12	.26	.33	.36	.36	.29	.42	.44	.40	.27	.24	.25	.16	.15	.08	.05	.01	.00	.00	.00	.00	.00	.266	.4	10L
19	.00	.00	.01	.03	.09	.14	.20	.29	.43	.65	.42	.53	.37	.27	.26	.14	.09	.05	.03	.02	.00	.00	.00	.00	.00	.00	.587	.4	07L
20	.00	.00	.01	.01	.02	.05	.16	.30	.30	.23	.23	.22	.36	.22	.17	.20	.11	.05	.03	.01	.00	.00	.00	.00	.00	.00	.156	.6	10L
21	.00	.01	.04	.08	.16	.35	.36	.39	.64	.45	.62	.44	.42	.24	.29	.33	.22	.12	.07	.03	.01	.00	.00	.00	.00	.00	.331	.8	10L
22	.00	.00	.02	.02	.04	.06	.12	.26	.33	.36	.36	.29	.17	.09	.09	.07	.08	.05	.02	.01	.00	.00	.00	.00	.00	.00	.75	.0	10L
23	.00	.00	.02	.06	.09	.12	.26	.28	.30	.44	.58	.59	.45	.37	.21	.20	.15	.08	.05	.02	.00	.00	.00	.00	.00	.00	.273	.6	10L
24	.00	.00	.01	.02	.03	.06	.08	.11	.15	.29	.43	.65	.42	.53	.37	.27	.26	.14	.09	.05	.02	.00	.00	.00	.00	.00	.343	.2	09L
25	.00	.00	.02	.04	.09	.17	.25	.33	.44	.46	.70	.73	.52	.66	.64	.51	.36	.23	.14	.09	.03	.01	.00	.00	.00	.00	.358	.2	10L
26	.00	.00	.01	.04	.04	.05	.14	.21	.33	.55	.57	.66	.75	.87	.81	.69	.55	.35	.25	.11	.03	.01	.00	.00	.00	.00	.465	.6	09H
27	.00	.00	.04	.04	.14	.25	.40	.55	.69	.62	.61	.70	.74	.59	.49	.25	.27	.14	.11	.01	.00	.00	.00	.00	.00	.00	.433	.2	10H
28	.00	.00	.01	.03	.04	.07	.06	.06	.09	.06	.09	.06	.03	.09	.14	.15	.14	.10	.06	.02	.01	.00	.00	.00	.00	.00	.81	.0	10L
29	.00	.00	.01	.03	.05	.13	.19	.20	.20	.27	.28	.33	.32	.32	.28	.19	.11	.04	.04	.01	.00	.00	.00	.00	.00	.00	.182	.4	10L
30	.00	.00	.02	.05	.13	.20	.30	.45	.69	.61	.72	.73	.90	.86	.77	.56	.36	.20	.08	.04	.01	.00	.00	.00	.00	.00	.460	.8	10L
31	.00	.01	.05	.09	.16	.23	.33	.36	.36	.42	.38	.57	.55	.64	.61	.30	.18	.15	.09	.06	.02	.00	.00	.00	.00	.00	.312	.0	10L
MEAN	.00	.02	.05	.10	.18	.28	.37	.45	.55	.64	.68	.73	.72	.63	.52	.44	.35	.26	.17	.10	.04	.01	.00	.00	.00	.00	.443	.4	
S.D.	.01	.02	.04	.08	.13	.19	.23	.26	.29	.31	.32	.32	.32	.29	.26	.24	.20	.16	.11	.07	.04	.02	.01	.01	.01	.01	.212	.7	
N	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30		

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND N.W.T.  
67°57' N 64°05' W  
ELEV 10 M. A.S.L.

GLOBAL SOLAR RADIATION (Kw)  
INSTRUMENT: KIPP AND ZONEN PYRANOMETER  
AVERAGE FLUX (CAL/SQ-CM/MIN)

DATE	01	02	03	04	05	06	07	08	09	HOUR (EASTERN STANDARD TIME)						DAILY TOTAL 03M	DAILY AVG TOTAL CLOUD COVER		
										10	11	12	13	14	15	16	17		
1																			
2																			
3																			
4																			
5																			
6																			
7	.02	.06	.07	.12	.20	.34	.49	.52	.97	1.07	1.08	1.10	.96	.90	.77	.57	.24	.06	
8	.02	.03	.05	.10	.17	.27	.38	.52	.63	.78	.80	.80	.74	.64	.58	.46	.25	.06	
9	.02	.03	.07	.16	.24	.38	.46	.53	.68	.84	1.00	.96	.94	.85	.70	.61	.48	.06	
10	.01	.02	.05	.12	.21	.31	.44	.50	.63	.80	.79	.90	.86	.78	.68	.50	.36	.05	
11	.03	.06	.14	.21	.32	.42	.50	.54	.61	.74	.86	.94	.88	.80	.67	.54	.40	.06	
12	.04	.06	.14	.21	.32	.42	.50	.54	.62	.75	.86	.94	.86	.78	.67	.54	.40	.06	
13	.00	.02	.06	.16	.28	.46	.62	.93	1.04	1.14	1.10	1.04	1.02	.90	.77	.56	.26	.05	
14	.00	.00	.04	.10	.24	.49	.74	1.02	.78	.86	1.06	1.08	.92	.76	.64	.54	.44	.05	
15	.02	.04	.06	.14	.23	.36	.50	.62	.70	1.05	.90	.78	.96	.90	.66	.42	.38	.05	
16	.02	.04	.06	.14	.22	.36	.50	.62	.78	.80	1.10	1.10	.98	1.05	1.00	.78	.76	.46	.05
17	.05	.10	.07	.17	.36	.51	.66	.44	.62	.84	.76	.70	.66	.76	.76	.82	.44	.05	
18	.02	.03	.06	.10	.15	.24	.34	.48	.62	.79	.72	.80	.66	.56	.48	.64	.52	.05	
19	.03	.05	.08	.12	.20	.32	.44	.55	.64	.84	.74	.64	.62	.58	.46	.32	.26	.05	
20	.02	.03	.06	.14	.24	.36	.48	.56	.64	.80	1.10	1.00	1.00	.68	.54	.40	.34	.06	
21	.02	.03	.05	.10	.20	.40	.44	.46	.50	.62	.78	.76	.70	.66	.56	.46	.36	.06	
22	.03	.04	.06	.12	.20	.30	.43	.50	.63	.84	1.03	1.03	1.12	1.09	.92	.72	.66	.06	
23	.03	.04	.08	.14	.25	.38	.51	.66	.72	.84	1.03	1.03	1.10	1.12	.90	.86	.74	.06	
24	.02	.03	.05	.08	.16	.29	.40	.48	.54	.74	.74	.76	.62	.70	.66	.50	.40	.06	
25	.01	.02	.04	.08	.12	.22	.32	.40	.48	.60	.66	.66	.86	.98	.90	.70	.50	.06	
26	.02	.03	.04	.07	.16	.33	.40	.48	.56	.68	.76	.66	.64	.56	.46	.36	.24	.06	
27	.01	.03	.06	.12	.18	.23	.30	.42	.48	.72	.70	.84	.66	.59	.54	.46	.30	.06	
28	.02	.05	.07	.10	.25	.36	.56	.66	.80	.64	.78	.70	.72	.77	.58	.46	.34	.06	
29	.03	.03	.06	.10	.16	.24	.36	.46	.54	.64	.62	.60	.52	.48	.44	.30	.18	.07	
30	.02	.03	.06	.10	.15	.23	.32	.44	.60	.70	.82	.78	.78	.90	.74	.55	.30	.06	
MEAN	.02	.04	.06	.13	.23	.35	.46	.60	.73	.83	.87	.85	.83	.76	.65	.55	.42	.06	
S.D.	.01	.02	.07	.09	.11	.13	.16	.16	.16	.18	.18	.16	.17	.15	.17	.13	.10	.04	
N	23	23	23	22	22	22	22	23	23	23	23	23	23	23	23	24	24	21	

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

GLOBAL SOLAR RADIATION (K<sub>s</sub>)  
INSTRUMNT: KIPP AND ZONEN PYRANOMETER  
AVERAGE FLUX (CAL/SQ-CM/MIN)

1972 JULY  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	HOUR (EASTERN STANDARD TIME)			19	20	21	22	23	24	* DAILY CLOUD COVER			
																AV/s	TOTAL	CLOUD COVER										
1	.04	.06	.12	.16	.28	.30	.70	.80	.80	1.10	.98	.90	.76	.70	.80	.72	.64	.50	.34	.20	.10	.05	.03	.02	.666.0	.054		
2	.03	.06	.18	.24	.20	.39	.44	.52	.60	.52	.61	.68	.69	.64	.60	.50	.36	.26	.18	.12	.06	.03	.01	.01	.475.8	.10M		
3	.02	.03	.04	.07	.14	.24	.30	.30	.34	.50	.68	.70	.67	.68	.85	.89	.59	.59	.30	.14	.10	.06	.04	.04	.04	.510.6	.08M	
4	.04	.05	.08	.13	.15	.13	.22	.22	.36	.34	.36	.36	.32	.32	.26	.22	.22	.20	.14	.08	.05	.02	.01	.00	.00	.235.2	.10M	
5	.03	.04	.09	.16	.20	.27	.57	.49	.53	.54	.58	.58	.58	.56	.60	.38	.25	.17	.12	.09	.08	.06	.05	.03	.03	.423.0	.10L	
6	.05	.07	.09	.15	.23	.35	.78	.81	.94	.94	.72	.58	.76	.70	.72	.48	.40	.26	.18	.06	.02	.00	.00	.00	.568.2	.04L		
7	.01	.02	.05	.08	.11	.17	.28	.24	.22	.36	.49	.56	.62	.54	.48	.37	.30	.18	.12	.06	.02	.01	.00	.00	.316.8	.10L		
8	.00	.01	.03	.04	.03	.20	.31	.36	.52	.78	.96	.98	.84	.80	.64	.54	.26	.20	.10	.07	.03	.00	.00	.00	.515.4	.10M		
9	.01	.02	.03	.04	.02	.04	.20	.35	.36	.44	.42	.42	.42	.37	.34	.30	.25	.19	.13	.11	.07	.04	.03	.02	.01	.00	.252.0	.10L
10	.01	.02	.03	.04	.09	.12	.16	.17	.35	.42	.40	.66	.68	.78	.40	.30	.36	.22	.18	.12	.06	.03	.01	.01	.337.2	.08M		
11	.01	.04	.07	.04	.28	.38	.44	.76	.86	.95	1.02	1.14	.90	.90	.70	.72	.66	.48	.26	.20	.10	.04	.01	.01	.01	.658.2	.03H	
12	.01	.03	.06	.20	.32	.48	.62	.74	.66	.94	.96	1.02	1.01	.94	.86	.74	.57	.44	.28	.12	.04	.01	.00	.00	.664.2	.00		
13	.01	.02	.03	.10	.17	.20	.22	.40	.42	.52	.52	.57	.58	.56	.60	.50	.40	.25	.17	.10	.06	.02	.01	.00	.00	.351.6	.10L	
14	.01	.02	.05	.10	.24	.30	.39	.52	.64	.70	.72	.86	.93	.96	.50	.42	.26	.18	.12	.08	.03	.01	.01	.01	.512.4	.09L		
15	.02	.03	.08	.20	.32	.44	.63	.74	.86	.94	1.00	1.02	1.00	.94	.86	.62	.40	.26	.20	.12	.06	.03	.02	.01	.650.4	.04H		
16	.01	.05	.11	.20	.36	.38	.70	.80	.88	.86	.90	.76	.84	.87	.58	.42	.30	.22	.16	.06	.04	.03	.01	.01	.01	.579.0	.02H	
17	.01	.02	.04	.08	.15	.23	.34	.56	.96	.95	1.00	1.00	.86	.90	.83	.70	.58	.44	.28	.16	.06	.03	.01	.01	.607.2	.02H		
18	.02	.03	.08	.12	.30	.41	.60	.72	.84	.92	.96	.98	.96	.90	.82	.70	.56	.42	.26	.16	.08	.03	.01	.00	.656.4	.00		
19	.01	.03	.06	.17	.30	.44	.57	.70	.84	.92	.98	1.01	.99	.94	.86	.74	.60	.46	.28	.16	.07	.03	.01	.00	.670.2	.00		
20	.01	.02	.10	.19	.31	.46	.60	.74	.84	.92	.96	.98	.96	.90	.80	.90	.58	.42	.30	.14	.06	.02	.00	.00	.672.6	.00		
21	.01	.02	.03	.06	.14	.18	.31	.34	.44	.48	.46	.54	.50	.48	.36	.30	.20	.14	.06	.02	.01	.01	.00	.00	.309.0	.10L		
22	.01	.02	.05	.12	.30	.34	.32	.48	.80	.90	.84	1.00	.96	.94	.82	.70	.54	.42	.28	.14	.06	.02	.01	.00	.598.2	.01L		
23	.01	.02	.06	.16	.30	.44	.56	.70	.86	.90	.98	.99	.94	.90	.80	.66	.54	.40	.28	.14	.04	.02	.00	.00	.649.8	.01H		
24	.00	.01	.05	.14	.30	.44	.58	.72	.83	.90	.98	.99	.96	.90	.80	.70	.54	.40	.26	.14	.04	.01	.00	.00	.641.4	.00		
25	.00	.01	.04	.12	.12	.14	.22	.28	.46	.90	.90	.54	.90	.80	.50	.64	.60	.34	.20	.10	.04	.01	.00	.00	.471.6	.08M		
26	.00	.01	.05	.10	.26	.40	.50	.66	.82	.82	.60	.66	.36	.30	.36	.20	.10	.06	.03	.02	.01	.00	.00	.00	.382.2	.10M		
27	.00	.00	.01	.02	.04	.10	.14	.24	.46	.50	.60	.64	.74	.40	.30	.20	.14	.08	.04	.03	.01	.00	.00	.00	.319.8	.10L		
28	.00	.01	.02	.06	.10	.32	.36	.38	.82	.64	.54	.46	.46	.32	.22	.10	.09	.06	.03	.01	.00	.00	.00	.00	.321.6	.09M		
29	.01	.02	.03	.10	.15	.17	.24	.39	.43	.60	.84	.60	.38	.36	.30	.24	.16	.14	.05	.02	.00	.00	.00	.00	.349.2	.09M		
30	.00	.01	.02	.04	.10	.20	.24	.34	.44	.70	.72	.80	.70	.40	.30	.26	.14	.07	.03	.00	.00	.00	.00	.00	.397.8	.10M		
31	.00	.01	.04	.10	.14	.18	.22	.50	.50	.55	.60	.52	.68	.60	.52	.30	.18	.12	.07	.02	.01	.00	.00	.00	.308.4	.10L		

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

GLOBAL SOLAR RADIATION (K+)  
INSTRUMNT: KIPP AND ZONEN PYRANOMETER  
AVERAGE FLUX (CAL/SQ-CM/MIN)

1972 AUGUST  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	*	CLOUD COVER	DAILY AVG	TOTAL CLOUD COVER			
1	.00	.00	.00	.01	.02	.04	.06	.54	.30	.92	.78	.66	.90	.88	.58	.42	.30	.14	.08	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2	.00	.00	.01	.03	.14	.18	.22	.30	.23	.26	.18	.14	.18	.16	.14	.07	.07	.04	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3	.00	.01	.02	.06	.10	.14	.23	.34	.60	.90	.94	.95	.93	.83	.54	.54	.48	.30	.14	.06	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	
4	.00	.01	.02	.02	.12	.28	.34	.56	.67	.68	.80	.94	.88	.80	.68	.62	.60	.46	.30	.16	.06	.02	.00	.00	.00	.00	.00	.00	.00	.00	
5	.01	.02	.05	.20	.24	.34	.36	.52	.78	.86	.90	.93	.90	.86	.78	.56	.46	.32	.15	.06	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	
6	.00	.01	.03	.10	.24	.36	.50	.64	.74	.84	.90	.92	.90	.86	.74	.58	.50	.33	.19	.06	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	
7	.00	.00	.02	.10	.24	.36	.56	.64	.74	.84	.90	.92	.90	.84	.74	.62	.26	.30	.18	.06	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	
8	.00	.01	.02	.03	.06	.10	.18	.22	.46	.35	.38	.38	.36	.30	.32	.24	.11	.08	.05	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	
9	.00	.00	.00	.01	.06	.12	.26	.34	.66	.72	.84	.90	.80	.58	.26	.18	.08	.05	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
10	.00	.00	.01	.07	.24	.34	.46	.31	.44	.43	.24	.24	.22	.20	.21	.16	.10	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
11	.00	.00	.00	.01	.03	.10	.40	.62	.66	.76	.87	.90	.88	.82	.72	.60	.46	.30	.15	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12	.00	.00	.00	.02	.06	.15	.22	.32	.41	.68	.56	.68	.70	.76	.70	.58	.44	.28	.14	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
13	.00	.00	.01	.05	.18	.10	.45	.60	.78	.49	.28	.36	.34	.31	.60	.55	.40	.16	.07	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
14	.00	.00	.00	.00	.06	.06	.69	.18	.20	.26	.44	.28	.30	.50	.28	.24	.18	.09	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
15	.00	.00	.00	.03	.04	.10	.11	.20	.29	.78	.84	.56	.70	.45	.39	.23	.19	.11	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
16	.00	.00	.00	.02	.05	.12	.30	.50	.61	.70	.50	.62	.76	.68	.44	.28	.13	.06	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
17	.00	.00	.00	.01	.01	.03	.07	.12	.20	.22	.30	.34	.30	.24	.30	.29	.34	.15	.08	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
18	.00	.00	.00	.02	.05	.12	.19	.23	.32	.40	.31	.50	.53	.45	.42	.25	.18	.12	.06	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
19	.01	.00	.00	.02	.02	.15	.30	.42	.65	.78	.94	.74	.66	.74	.50	.46	.38	.22	.11	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
20	.01	.01	.01	.02	.06	.12	.19	.23	.34	.42	.42	.42	.47	.44	.47	.54	.32	.20	.09	.06	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
21	.00	.00	.00	.01	.12	.11	.18	.27	.27	.27	.29	.29	.27	.22	.23	.23	.23	.16	.10	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
22	.00	.00	.00	.00	.01	.03	.06	.10	.20	.26	.40	.50	.64	.64	.56	.38	.25	.15	.10	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
23	.00	.00	.00	.01	.01	.03	.12	.28	.48	.44	.54	.54	.46	.46	.56	.46	.34	.28	.17	.10	.03	.01	.01	.00	.00	.00	.00	.00	.00	.00	
24	.00	.00	.00	.05	.12	.22	.36	.56	.54	.46	.46	.46	.46	.46	.46	.46	.39	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	
25	.00	.01	.01	.02	.05	.08	.16	.30	.34	.27	.20	.23	.19	.19	.19	.19	.16	.11	.09	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
26	.00	.00	.00	.01	.03	.05	.10	.16	.26	.32	.34	.50	.48	.46	.37	.30	.20	.10	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
27	.00	.00	.01	.03	.09	.17	.26	.30	.30	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	.26	
MEAN	.00	.00	.01	.04	.10	.15	.25	.37	.47	.57	.56	.58	.58	.54	.46	.36	.28	.16	.08	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	
S.D.	.00	.01	.01	.04	.02	.11	.14	.17	.20	.24	.26	.25	.26	.26	.25	.19	.17	.14	.09	.05	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
N	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

## GLOBAL SOLAR RADIATION (KJ)

INSTRUMENT: EPPLEY MODEL 2 PYRANOMETER SN/1739F3

AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 JUN  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DAILY AVG CLOUD COVER				
																									DAILY AVG CLOUD COVER				
1	.01	.02	.05	.11	.18	.24	.37	.50	.50	.57	.62	.59	.59	.53	.49	.39	.29	.21	.13	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00
2	.01	.02	.05	.12	.16	.25	.38	.53	.80	1.03	1.08	1.21	1.17	.99	.74	.59	.41	.27	.17	.09	.05	.02	.01	.01	.01	.01	.01	.01	.01
3	.01	.03	.06	.10	.15	.27	.55	.69	.92	.98	1.07	1.05	1.05	.95	.81	.66	.53	.35	.29	.19	.12	.04	.02	.01	.01	.01	.01	.01	.01
4	.01	.02	.06	.13	.22	.30	.42	.47	.55	.59	.72	.88	1.05	1.03	.79	.66	.58	.27	.16	.08	.04	.01	.01	.00	.00	.00	.00	.00	.00
5	.01	.01	.03	.07	.11	.20	.38	.64	.74	.84	.86	.86	.84	.80	.69	.61	.41	.31	.20	.14	.10	.02	.01	.01	.01	.01	.01	.01	.01
6	.03	.05	.22	.38	.56	.79	.85	.82	.95	1.06	1.12	1.13	1.09	1.02	.91	.77	.61	.45	.30	.17	.08	.02	.01	.01	.01	.01	.01	.00	.00
7	.01	.07	.23	.34	.53	.76	.73	.71	.79	.91	1.00	1.05	1.10	.72	.84	.62	.40	.26	.16	.08	.04	.02	.01	.01	.01	.01	.01	.01	.01
8	.01	.03	.06	.11	.19	.28	.40	.55	.69	.83	.86	.88	.79	.72	.62	.51	.41	.28	.18	.10	.05	.02	.01	.01	.01	.01	.01	.01	.01
9	.01	.03	.07	.13	.20	.40	.64	.83	.96	1.05	1.11	1.12	1.09	1.01	.90	.77	.62	.46	.31	.18	.09	.03	.01	.01	.01	.01	.01	.01	.01
10	.02	.07	.15	.22	.25	.34	.47	.57	.70	.94	.90	.91	.97	.77	.69	.55	.38	.30	.19	.12	.06	.03	.02	.02	.02	.02	.02	.02	.01
11	.02	.03	.06	.11	.14	.23	.25	.48	.64	.76	.82	.82	.89	.95	1.09	.79	.49	.35	.25	.14	.05	.03	.01	.01	.01	.01	.01	.01	.01
12	.02	.04	.09	.12	.20	.33	.50	.63	.72	1.02	.95	.97	.88	.83	.71	.61	.46	.32	.23	.13	.07	.03	.01	.01	.01	.01	.01	.01	.01
13	.02	.04	.07	.13	.24	.35	.47	.59	.80	.90	.83	1.02	1.02	.91	.85	.71	.49	.36	.22	.13	.07	.03	.02	.02	.02	.02	.02	.02	.01
14	.02	.03	.05	.12	.25	.43	.61	.85	.95	1.03	1.07	.91	.82	.85	.76	.70	.44	.29	.18	.09	.04	.02	.02	.02	.02	.02	.02	.02	.01
15	.01	.02	.07	.13	.23	.36	.54	.71	.93	1.02	.93	.93	.86	.87	.80	.69	.42	.30	.22	.16	.09	.04	.02	.02	.02	.02	.02	.02	.01
16	.05	.12	.24	.32	.55	.72	.97	.92	.93	1.07	1.04	1.01	.96	.81	1.01	.50	.46	.30	.20	.11	.05	.03	.02	.02	.02	.02	.02	.01	
17	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
18	.03	.07	.13	.27	.47	.64	.75	.95	1.07	.92	1.12	.93	.89	.80	.75	.72	.59	.52	.32	.15	.07	.03	.01	.01	.01	.01	.01	.01	.01
19	.01	.04	.05	.16	.22	.36	.44	.51	.74	.82	.89	.90	.95	.68	.58	.45	.36	.26	.14	.10	.07	.04	.01	.01	.01	.01	.01	.01	.01
20	.02	.04	.10	.13	.26	.38	.57	.81	.82	.87	.97	1.07	.91	.84	.64	.44	.34	.29	.22	.12	.07	.03	.01	.01	.01	.01	.01	.01	.01
21	.02	.03	.06	.08	.13	.20	.33	.42	.59	.71	.80	.84	.85	.75	.64	.47	.39	.36	.32	.27	.16	.06	.03	.01	.01	.01	.01	.01	.01
22	.02	.03	.04	.05	.07	.09	.13	.62	.99	.85	.75	.95	.11	.98	.80	.59	.33	.21	.12	.07	.03	.02	.02	.02	.02	.02	.02	.02	.01
23	.01	.02	.06	.10	.18	.28	.41	.63	.80	.87	.91	.84	.82	.71	.52	.40	.32	.19	.11	.07	.03	.01	.01	.01	.01	.01	.01	.01	.01
24	.02	.04	.17	.24	.41	.44	.55	.92	1.11	1.14	.96	1.11	.96	.80	.54	.34	.29	.19	.10	.05	.03	.02	.02	.02	.02	.02	.02	.01	
25	.02	.03	.08	.14	.21	.30	.39	.46	.52	.71	.78	.67	.75	.65	.57	.51	.41	.29	.25	.12	.07	.04	.02	.02	.02	.02	.02	.02	.01
26	.02	.04	.08	.08	.21	.45	.60	.57	.90	1.33	1.29	1.10	1.16	.99	.81	.69	.41	.27	.18	.12	.06	.01	.00	.00	.00	.00	.00	.00	
27	.01	.02	.04	.11	.17	.27	.42	.52	.65	.65	.65	1.03	.84	.83	.78	.68	.62	.47	.32	.19	.09	.03	.02	.02	.02	.02	.02	.02	.01
28	.01	.04	.06	.11	.12	.16	.17	.24	.37	.52	.61	.57	.42	.41	.47	.39	.34	.21	.09	.06	.03	.02	.02	.02	.02	.02	.02	.01	
29	.01	.03	.09	.21	.31	.42	.49	.61	.82	1.00	1.02	.90	.69	.91	.74	.66	.44	.32	.24	.16	.07	.02	.01	.01	.01	.01	.01	.01	.01
30	.02	.05	.15	.17	.35	.38	.41	.51	.51	.62	.91	.93	.69	.86	.98	.55	.32	.21	.14	.09	.06	.03	.01	.01	.01	.01	.01	.01	.01
MEAN	.02	.04	.09	.15	.25	.37	.49	.63	.75	.87	.90	.91	.88	.82	.74	.59	.44	.32	.21	.13	.07	.03	.01	.01	.01	.01	.01	.01	.01
S.D.	.01	.02	.06	.08	.13	.17	.18	.17	.19	.21	.18	.19	.17	.17	.12	.10	.07	.05	.04	.02	.01	.01	.01	.01	.01	.01	.01	.01	.01
N	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

## GLOBAL SOLAR RADIATION (KJ)

INSTRUMENT: EPPLEY MODEL 2 PYRANOMETER SN/1739F3

## AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 JULY  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	HOUR (EASTERN STANDARD TIME)												DAILY AVG.														
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	% CLOUD COVER		
1	.02	.04	.06	.18	.33	.48	.64	.79	.92	.97	1.08	1.05	.89	.83	.75	.64	.44	.26	.19	.08	.05	.02	.01	.01	643.8	.014	
2	.02	.04	.10	.20	.32	.47	.63	.77	.90	1.00	1.06	1.07	1.05	.98	.87	.74	.59	.44	.30	.17	.09	.03	.01	.02	712.2	.00	
3	.04	.09	.16	.21	.33	.47	.65	.68	.92	.96	.94	.97	.79	.89	.76	.68	.46	.11	.14	.14	.05	.03	.01	.01	.00	630.6	.054
4	.01	.03	.05	.15	.17	.29	.50	.57	.72	.75	.85	.74	.74	.69	.59	.30	.22	.17	.10	.05	.03	.01	.01	.00	.00	464.4	.071
5	.01	.02	.04	.08	.19	.27	.31	.47	.40	.40	.56	.59	.50	.53	.40	.41	.29	.21	.14	.08	.03	.01	.00	.00	.00	354.6	.101
6	.00	.02	.03	.04	.07	.10	.15	.21	.33	.40	.49	.44	.37	.34	.30	.24	.18	.12	.09	.05	.04	.01	.00	.00	.00	241.2	.101
7	.01	.03	.05	.07	.16	.22	.32	.47	.62	.80	.81	.94	.85	.82	.58	.61	.40	.30	.25	.18	.09	.03	.01	.00	.00	517.2	.091
8	.01	.04	.07	.28	.40	.69	.74	.69	.66	.92	.95	1.00	.74	.70	.48	.34	.18	.12	.11	.13	.05	.02	.00	.00	.00	559.2	.074
9	.00	.01	.03	.05	.12	.20	.32	.65	.68	.76	.91	.77	.81	.68	.54	.42	.20	.14	.08	.03	.01	.00	.00	.00	.00	445.2	.094
10	.01	.03	.08	.12	.27	.49	.61	.69	.87	.97	1.03	1.05	1.05	1.02	.96	.86	.73	.59	.43	.29	.16	.08	.03	.01	.00	682.8	.00
11	.01	.02	.04	.16	.27	.42	.53	.65	.84	.94	1.00	.81	.73	.79	.41	.34	.43	.31	.12	.06	.04	.00	.00	.00	.00	536.4	.011
12	.00	.00	.01	.01	.02	.07	.14	.18	.22	.26	.49	.52	.61	.39	.36	.31	.22	.23	.12	.11	.06	.01	.00	.00	.00	261.0	.101
13	.01	.02	.05	.10	.18	.31	.62	.73	.86	.96	1.01	.95	.95	.85	.72	.58	.42	.24	.08	.03	.01	.00	.00	.00	.00	643.2	.014
14	.00	.01	.03	.06	.14	.24	.38	.60	.74	.90	.98	.78	.86	.88	.70	.61	.51	.20	.14	.03	.01	.01	.00	.00	.00	528.6	.101
15	.00	.00	.02	.03	.04	.05	.13	.15	.10	.19	.18	.16	.23	.23	.24	.21	.22	.14	.09	.10	.05	.01	.00	.00	.00	160.8	.101
16	.00	.00	.01	.01	.02	.04	.07	.09	.09	.14	.15	.14	.10	.10	.08	.09	.07	.06	.08	.07	.01	.00	.00	.00	.00	82.2	.101
17	.00	.00	.01	.01	.04	.11	.21	.35	.59	.58	.54	.82	.63	.61	.53	.48	.37	.13	.04	.01	.01	.00	.00	.00	.00	421.8	.091
18	.00	.00	.00	.02	.07	.07	.09	.20	.31	.37	.46	.34	.27	.24	.38	.37	.24	.15	.11	.07	.04	.01	.00	.00	.00	228.6	.101
19	.00	.00	.01	.01	.03	.03	.07	.13	.20	.26	.26	.36	.42	.35	.36	.37	.39	.21	.18	.12	.06	.03	.01	.00	.00	229.8	.101
20	.00	.00	.01	.01	.04	.07	.15	.19	.27	.33	.48	.75	.63	.52	.24	.18	.20	.17	.07	.04	.02	.01	.00	.00	.00	273.0	.101
21	.00	.01	.03	.06	.12	.19	.43	.46	.33	.28	.26	.27	.31	.32	.28	.27	.18	.10	.06	.04	.02	.01	.00	.00	.00	241.8	.101
22	.00	.01	.05	.12	.22	.37	.67	.65	.64	.60	.57	.56	.52	.56	.56	.56	.66	.40	.37	.18	.10	.02	.00	.00	.00	0.0	.00
23	.00	.01	.04	.06	.11	.19	.46	.57	.72	.85	.93	.98	.87	.72	.70	.41	.22	.25	.16	.04	.02	.00	.00	.00	.00	498.6	.044
24	.00	.00	.03	.10	.14	.13	.03	.05	.07	.08	.12	.18	.17	.07	.09	.07	.06	.04	.03	.01	.00	.00	.00	.00	.00	93.6	.104
25	.00	.00	.01	.04	.07	.13	.28	.44	.38	.84	.86	.88	.58	.58	.35	.30	.19	.09	.03	.00	.00	.00	.00	.00	.00	389.4	.091
26	.00	.01	.04	.09	.16	.22	.34	.56	.55	.56	.62	.52	.56	.76	.66	.54	.41	.24	.11	.04	.01	.00	.00	.00	.00	420.0	.091
27	.00	.01	.05	.13	.23	.29	.46	.66	.80	.91	.97	1.02	.97	.91	.80	.67	.51	.36	.23	.06	.01	.00	.00	.00	.00	603.0	.00
28	.00	.00	.02	.06	.11	.18	.20	.21	.19	.18	.22	.24	.15	.12	.11	.07	.04	.02	.01	.00	.00	.00	.00	.00	.00	158.4	.101
29	.00	.00	.00	.01	.02	.04	.06	.29	.38	.39	.32	.44	.37	.41	.34	.19	.17	.13	.07	.03	.02	.00	.00	.00	.00	220.8	.101
30	.00	.00	.01	.04	.07	.15	.25	.40	.43	.40	.59	.65	.61	.55	.33	.19	.13	.09	.03	.01	.00	.00	.00	.00	.00	340.8	.101
31	.00	.01	.03	.05	.08	.13	.20	.28	.41	.46	.46	.55	.46	.33	.21	.18	.12	.07	.02	.01	.00	.00	.00	.00	.00	240.0	.101
MEAN	.00	.02	.04	.09	.15	.24	.35	.45	.52	.60	.65	.62	.60	.50	.41	.30	.20	.13	.07	.03	.01	.00	.00	.00	.00	394.1	
S.D.	.01	.02	.03	.07	.10	.16	.21	.23	.27	.31	.32	.31	.28	.27	.24	.20	.16	.11	.07	.05	.03	.01	.00	.00	.00	185.5	
N	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	30	

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

GLOBAL SOLAR RADIATION (Kw)

INSTRUMENT: EPPLEY MODEL 2 PYRANOMETER SN/1739F3

AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 AUGUST  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINER RESEARCH

DATE	01	02	03	04	05	06	07	08	09	HOUR (EASTERN STANDARD TIME)						21	22	23	24	* COVFR		
										10	11	12	13	14	15							
1	.00	.00	.01	.03	.03	.05	.08	.12	.16	.20	.34	.75	.39	.30	.21	.23	.18	.16	.09	.03	.01	.00
2	.00	.00	.01	.03	.06	.10	.17	.22	.60	.57	.84	.69	.83	.77	.62	.48	.32	.19	.08	.01	.00	.00
3	.00	.00	.01	.04	.05	.09	.13	.20	.31	.37	.35	.20	.33	.78	.87	.78	.63	.39	.12	.06	.03	.00
4	.00	.00	.01	.02	.05	.14	.44	.50	.27	.20	.36	.79	.96	.76	.55	.55	.27	.21	.16	.03	.01	.00
5	.00	.00	.01	.05	.13	.30	.42	.44	.52	.55	.65	.79	.82	.79	.69	.67	.57	.48	.26	.15	.06	.01
6	.00	.00	.01	.06	.16	.28	.41	.55	.67	.79	.98	.88	.85	.79	.68	.53	.41	.27	.15	.05	.01	.00
7	.00	.00	.01	.05	.12	.23	.37	.55	.67	.77	.82	.84	.82	.75	.66	.53	.39	.24	.12	.04	.00	.00
8	.00	.00	.00	.05	.14	.26	.40	.55	.67	.76	.82	.85	.82	.76	.67	.59	.39	.23	.14	.08	.03	.00
9	.00	.00	.00	.06	.09	.16	.22	.32	.45	.56	.72	.82	.87	.80	.73	.64	.43	.24	.19	.07	.03	.00
10	.00	.00	.00	.02	.09	.14	.15	.27	.32	.37	.52	.64	.78	.84	.86	.77	.67	.54	.39	.24	.13	.03
11	.00	.00	.00	.01	.07	.23	.41	.55	.68	.78	.84	.86	.83	.77	.63	.54	.41	.27	.15	.05	.01	.00
12	.00	.00	.01	.03	.05	.14	.29	.34	.53	.47	.46	.46	.48	.18	.08	.11	.07	.04	.03	.13	.03	.00
13	.00	.00	.00	.04	.13	.26	.41	.56	.69	.77	.92	.84	.83	.76	.66	.54	.38	.22	.11	.03	.00	.00
14	.00	.00	.00	.02	.09	.23	.38	.53	.64	.64	.56	.71	.62	.54	.52	.33	.21	.10	.02	.00	.00	.00
15	.00	.00	.00	.03	.13	.15	.26	.24	.69	.73	.85	.91	.81	.73	.63	.50	.35	.21	.08	.01	.00	.00
16	.00	.00	.00	.03	.14	.20	.29	.49	.64	.64	.66	.58	.68	.63	.58	.58	.35	.32	.12	.05	.01	.00
17	.00	.00	.01	.07	.10	.21	.20	.31	.39	.26	.27	.35	.28	.22	.23	.13	.04	.02	.00	.00	.00	.00
18	.00	.00	.00	.00	.01	.03	.04	.05	.07	.10	.10	.09	.13	.16	.12	.06	.03	.02	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.01	.07	.11	.13	.20	.30	.35	.41	.50	.46	.35	.24	.17	.06	.01	.00	.00
20	.00	.00	.00	.00	.00	.03	.11	.27	.36	.45	.50	.56	.62	.31	.35	.49	.62	.39	.25	.10	.01	.00
21	.00	.00	.00	.00	.02	.12	.24	.16	.18	.53	.69	.64	.37	.46	.47	.40	.19	.06	.03	.02	.00	.00
22	.00	.00	.00	.00	.00	.01	.02	.03	.05	.10	.15	.15	.16	.18	.15	.16	.11	.08	.04	.02	.00	.00
23	.00	.00	.00	.00	.00	.03	.07	.14	.18	.18	.15	.17	.12	.13	.12	.10	.07	.09	.07	.04	.01	.00
24	.00	.00	.00	.00	.02	.04	.07	.10	.13	.12	.14	.13	.12	.10	.07	.06	.04	.05	.05	.00	.00	.00
25	.00	.00	.00	.00	.04	.18	.32	.49	.62	.74	.77	.79	.76	.67	.60	.46	.31	.17	.05	.00	.00	.00
26	.00	.00	.00	.00	.06	.18	.33	.48	.61	.67	.75	.77	.74	.67	.58	.43	.25	.19	.03	.00	.00	.00
27	.00	.00	.00	.01	.05	.10	.13	.16	.14	.22	.27	.33	.18	.16	.11	.08	.03	.02	.00	.00	.00	.00
28	.00	.00	.00	.01	.08	.25	.35	.46	.59	.68	.74	.75	.72	.65	.55	.41	.27	.13	.03	.00	.00	.00
29	.00	.00	.00	.03	.06	.13	.33	.62	.62	.67	.72	.73	.69	.54	.31	.25	.12	.02	.00	.00	.00	.00
30	.00	.00	.00	.02	.08	.15	.16	.19	.21	.33	.29	.25	.27	.33	.26	.19	.07	.02	.00	.00	.00	.00
31	.00	.00	.00	.01	.04	.05	.14	.18	.27	.28	.23	.17	.15	.11	.10	.06	.01	.00	.00	.00	.00	.00
MEAN	.00	.00	.00	.02	.06	.14	.23	.31	.43	.47	.52	.54	.49	.43	.34	.24	.14	.07	.02	.00	.00	.00
S.D.	.00	.00	.00	.02	.05	.09	.14	.19	.23	.26	.28	.29	.25	.23	.19	.13	.09	.05	.02	.00	.00	.00
N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND-N.W.T.  
67°57' N 64°05' W  
FLEV 10 M.A.S.L.

## GLOBAL SOLAR RADIATION (K+)

INSTRUMENT: EPPLEY MODEL 2 PYRANOMETER SN/1739F3

## AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 SEPTEMBER  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	DAILY AVG								
																								TOTAL	CLOUD COVER							
1	.00	.00	.00	.00	.00	.02	.04	.15	.13	.24	.13	.10	.11	.10	.09	.12	.07	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00				
2	.00	.00	.00	.00	.00	.02	.05	.11	.15	.24	.37	.30	.52	.36	.26	.17	.04	.02	.00	.01	.00	.00	.00	.00	.00	.00	.210.0	.10L				
3	.00	.00	.00	.00	.00	.01	.03	.08	.15	.17	.24	.25	.31	.32	.28	.30	.27	.14	.04	.01	.00	.00	.00	.00	.00	.00	.00	.156.0	.10L			
4	.00	.00	.00	.00	.00	.01	.05	.12	.19	.22	.30	.32	.33	.47	.57	.49	.37	.22	.08	.01	.00	.00	.00	.00	.00	.00	.00	.00	.08L			
5	.00	.00	.00	.00	.00	.02	.13	.25	.40	.49	.60	.62	.66	.62	.66	.63	.45	.17	.11	.06	.00	.00	.00	.00	.00	.00	.00	.00	.05L			
6	.00	.00	.00	.00	.00	.01	.05	.12	.20	.29	.33	.39	.39	.32	.33	.32	.18	.12	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.185.4	.10L		
7	.00	.00	.00	.00	.00	.01	.04	.09	.14	.20	.20	.27	.31	.34	.25	.16	.13	.08	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.135.6	.10L		
8	.00	.00	.00	.00	.00	.01	.05	.14	.21	.27	.36	.36	.29	.43	.31	.25	.18	.11	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.180.0	.10L		
9	.00	.00	.00	.00	.00	.01	.07	.16	.38	.58	.73	.73	.79	.76	.66	.57	.46	.32	.18	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03L		
10	.00	.00	.00	.00	.00	.00	.08	.20	.37	.46	.56	.56	.52	.48	.48	.56	.52	.41	.27	.07	.04	.00	.00	.00	.00	.00	.00	.00	.00	.05H		
11	.00	.00	.00	.00	.00	.00	.05	.10	.14	.20	.44	.56	.46	.46	.46	.15	.22	.18	.11	.05	.01	.00	.00	.00	.00	.00	.00	.00	.00	.160.2	.10M	
12	.00	.00	.00	.00	.00	.00	.02	.06	.10	.13	.15	.19	.31	.30	.21	.23	.09	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.110.4	.10L		
13	.00	.00	.00	.00	.00	.00	.03	.04	.12	.21	.24	.22	.20	.20	.20	.18	.18	.18	.07	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.103.8	.10L	
14	.00	.00	.00	.00	.00	.00	.02	.09	.11	.17	.23	.23	.25	.24	.24	.18	.13	.06	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.103.8	.10L	
15	.00	.00	.00	.00	.00	.00	.02	.09	.18	.27	.37	.53	.61	.57	.57	.49	.36	.25	.12	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.232.2	.04H	
16	.00	.00	.00	.00	.00	.00	.07	.25	.44	.45	.52	.58	.59	.55	.48	.30	.24	.11	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.275.4	.00	
17	.00	.00	.00	.00	.00	.00	.02	.08	.18	.23	.37	.36	.50	.35	.35	.20	.16	.10	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.175.2	.08H	
18	.00	.00	.00	.00	.00	.00	.01	.04	.10	.12	.17	.27	.27	.28	.16	.12	.07	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.98.4	.10M	
19	.00	.00	.00	.00	.00	.00	.00	.01	.04	.08	.14	.19	.38	.37	.37	.25	.20	.14	.09	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.115.2	.10M	
20	.00	.00	.00	.00	.00	.00	.02	.05	.09	.13	.24	.33	.33	.28	.22	.19	.13	.07	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.106.8	.06M	
21	.00	.00	.00	.00	.00	.00	.01	.03	.04	.07	.08	.10	.10	.09	.11	.08	.06	.05	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.10L
22	.00	.00	.00	.00	.00	.00	.01	.05	.09	.12	.15	.21	.21	.17	.09	.09	.09	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04M
23	.00	.00	.00	.00	.00	.01	.06	.01	.06	.13	.23	.45	.35	.35	.35	.39	.28	.20	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06L
24	.00	.00	.00	.00	.00	.00	.01	.06	.13	.35	.44	.50	.51	.49	.38	.24	.15	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.03	.18	.35	.44	.50	.51	.49	.38	.26	.22	.08	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.114.0
26	.00	.00	.00	.00	.00	.00	.01	.05	.12	.22	.23	.23	.23	.23	.23	.26	.26	.20	.08	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.03	.10	.17	.23	.31	.46	.42	.35	.25	.13	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.05	.12	.35	.25	.18	.16	.16	.17	.09	.05	.05	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.02	.07	.10	.15	.25	.33	.31	.26	.20	.12	.16	.12	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.04	.15	.25	.33	.31	.25	.24	.20	.19	.03	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MEAN	.00	.00	.00	.00	.00	.03	.09	.17	.24	.31	.34	.37	.34	.30	.23	.14	.07	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.158.9
S.D.	.00	.00	.00	.00	.00	.01	.03	.06	.10	.12	.16	.16	.17	.16	.13	.09	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.74.7
N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

GLOBAL SOLAR RADIATION (K+)  
INSTRUMENT: EPPLEY MODEL 2 PYRANOMETER SN/1739F3  
AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 OCTOBER  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	HOUR (EASTERN STANDARD TIME)						21	22	23	24	* CLOUD COVER	DAILY TOTAL CLOUD COVER	AVERAGE		
										10	11	12	13	14	15									
1	.00	.00	.00	.00	.00	.00	.03	.15	.32	.39	.42	.43	.40	.32	.15	.06	.01	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.02	.10	.27	.30	.25	.24	.22	.20	.10	.05	.01	.00	.00	.00	.00	.00	.00	.05
3	.00	.00	.00	.00	.00	.00	.03	.09	.19	.17	.20	.17	.09	.07	.03	.02	.00	.00	.00	.00	.00	.00	.00	.06
4	.00	.00	.00	.00	.00	.00	.04	.12	.27	.29	.38	.42	.35	.22	.15	.07	.01	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.03	.09	.19	.30	.24	.23	.18	.15	.09	.02	.00	.00	.00	.00	.00	.00	.00	.05
6	.00	.00	.00	.00	.00	.00	.03	.08	.17	.18	.19	.22	.18	.11	.04	.02	.00	.00	.00	.00	.00	.00	.00	.10
7	.00	.00	.00	.00	.00	.00	.02	.07	.18	.26	.20	.17	.16	.11	.07	.02	.00	.00	.00	.00	.00	.00	.00	.06
8	.00	.00	.00	.00	.00	.00	.02	.06	.22	.31	.35	.31	.24	.13	.03	.00	.00	.00	.00	.00	.00	.00	.00	.05
9	.00	.00	.00	.00	.00	.00	.02	.07	.13	.20	.35	.38	.31	.23	.13	.02	.00	.00	.00	.00	.00	.00	.00	.05
10	.00	.00	.00	.00	.00	.00	.02	.08	.21	.29	.34	.33	.23	.10	.06	.03	.00	.00	.00	.00	.00	.00	.00	.01
11	.00	.00	.00	.00	.00	.00	.02	.02	.08	.22	.15	.17	.18	.16	.16	.08	.02	.00	.00	.00	.00	.00	.00	.08
12	.00	.00	.00	.00	.00	.00	.01	.04	.19	.27	.32	.32	.28	.21	.10	.01	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.01	.06	.10	.09	.27	.21	.12	.09	.06	.02	.00	.00	.00	.00	.00	.00	.00	.02
14	.00	.00	.00	.00	.00	.00	.01	.04	.18	.30	.34	.31	.18	.14	.04	.01	.00	.00	.00	.00	.00	.00	.00	.01
15	.00	.00	.00	.00	.00	.00	.01	.05	.09	.17	.17	.17	.10	.07	.04	.01	.00	.00	.00	.00	.00	.00	.00	.04
16	.00	.00	.00	.00	.00	.00	.02	.05	.08	.05	.05	.09	.08	.05	.03	.01	.00	.00	.00	.00	.00	.00	.00	.04
17	.00	.00	.00	.00	.00	.00	.00	.01	.06	.06	.06	.08	.16	.12	.06	.02	.00	.00	.00	.00	.00	.00	.00	.05
18	.00	.00	.00	.00	.00	.00	.00	.04	.22	.34	.42	.38	.30	.09	.03	.00	.00	.00	.00	.00	.00	.00	.00	.05
19	.00	.00	.00	.00	.00	.00	.00	.02	.07	.13	.17	.32	.11	.10	.08	.01	.00	.00	.00	.00	.00	.00	.00	.06
20	.00	.00	.00	.00	.00	.00	.00	.00	.03	.11	.10	.14	.12	.08	.05	.03	.00	.00	.00	.00	.00	.00	.00	.06
21	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.10	.11	.10	.05	.03	.00	.00	.00	.00	.00	.00	.00	.00	.06
22	.00	.00	.00	.00	.00	.00	.00	.02	.06	.10	.09	.07	.05	.09	.07	.05	.02	.00	.00	.00	.00	.00	.00	.06
23	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07	.08	.11	.15	.08	.03	.00	.00	.00	.00	.00	.00	.00	.00	.06
24	.00	.00	.00	.00	.00	.00	.00	.02	.05	.08	.13	.12	.09	.06	.02	.00	.00	.00	.00	.00	.00	.00	.00	.05
25	.00	.00	.00	.00	.00	.00	.00	.03	.11	.22	.27	.20	.17	.07	.02	.00	.00	.00	.00	.00	.00	.00	.00	.06
26	.00	.00	.00	.00	.00	.00	.00	.01	.04	.08	.09	.10	.09	.05	.02	.00	.00	.00	.00	.00	.00	.00	.00	.06
27	.00	.00	.00	.00	.00	.00	.00	.01	.03	.09	.06	.07	.13	.05	.01	.00	.00	.00	.00	.00	.00	.00	.00	.06
28	.00	.00	.00	.00	.00	.00	.00	.01	.03	.10	.16	.18	.15	.08	.01	.00	.00	.00	.00	.00	.00	.00	.00	.06
29	.00	.00	.00	.00	.00	.00	.00	.01	.03	.09	.16	.18	.15	.08	.01	.00	.00	.00	.00	.00	.00	.00	.00	.06
30	.00	.00	.00	.00	.00	.00	.00	.01	.03	.08	.15	.17	.13	.07	.01	.00	.00	.00	.00	.00	.00	.00	.00	.06
31	.00	.00	.00	.00	.00	.00	.00	.02	.07	.14	.15	.12	.06	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06
MEAN	.00	.00	.00	.00	.00	.00	.00	.01	.05	.13	.18	.21	.17	.11	.05	.01	.00	.00	.00	.00	.00	.00	.00	.07
S.D.	.00	.00	.00	.00	.00	.00	.00	.01	.04	.09	.10	.11	.09	.07	.04	.02	.00	.00	.00	.00	.00	.00	.00	.06
N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND-N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

GLOBAL SOLAR RADIATION (Kw)

INSTRUMENT: EPPLEY MODEL 2 PYRANOMETER SN/1739F3

AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 NOVEMBER  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	HOUR (EASTERN STANDARD TIME)										DAILY TOTAL	AVERAGE CLOUD COVER		
										10	11	12	13	14	15	16	17	18	19	20			
1	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.05	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	12.6	10*
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	10.2	10L
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.06	.07	.06	.03	.00	.00	.00	.00	.00	.00	16.2	0XL
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.02	.04	.05	.04	.02	.01	.00	.00	.00	.00	.00	12.6	10L
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.02	.04	.02	.01	.00	.00	.00	.00	.00	7.2	10L
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.06	.02	.04	.07	.02	.00	.00	.00	.00	.00	13.8	0XL
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.05	.05	.04	.03	.00	.00	.00	.00	.00	.00	13.2	10L
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.13	.10	.09	.03	.00	.00	.00	.00	.00	.00	24.0	07*
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.06	.07	.05	.02	.00	.00	.00	.00	.00	.00	15.6	0RM
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.08	.09	.05	.01	.00	.00	.00	.00	.00	.00	15.6	01H
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.04	.04	.04	.01	.00	.00	.00	.00	.00	.00	9.6	10L
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.01	.00	.00	.00	.00	.00	.00	9.6	10H
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.06	.07	.04	.01	.00	.00	.00	12.6	05H
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.04	.07	.04	.01	.00	.00	.00	.00	.00	.00	11.4	01H
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.03	.03	.01	.00	.00	.00	.00	.00	.00	7.8	05L
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03	.03	.02	.01	.00	.00	.00	.00	.00	.00	6.0	10L
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.03	.02	.00	.00	.00	.00	6.0	10L
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.02	.01	.00	.00	.00	.00	4.2	10L
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.02	.03	.00	.00	.00	.00	4.8	10L
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.02	.00	.00	.00	.00	.00	.00	5.4	05L
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.02	.01	.00	.00	.00	.00	.00	3.0	05L
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.02	.01	.00	.00	.00	.00	3.6	10L
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.02	.01	.00	.00	.00	.00	3.6	10L
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00	2.4	09L
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.01	.02	.00	.00	.00	.00	3.0	10L
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01	.00	.00	.00	.00	.00	1.2	10L
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.01	.00	.00	.00	.00	.00	3.0	10W
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.00	.00	.00	.00	1.8	10L
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.00	.00	.00	.00	1.8	08W
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	1.2	10L
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.04	.03	.00	.00	.00	.00	A.1
S.D.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01	.02	.02	.00	.00	.00	.00	5.7
N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND N.W.T.  
67.57° N 54.05° W  
ELFV 10 M.A.S.L.

GLOBAL SOLAR RADIATION (K↓)

INSTRUMENT: EPPLEY MODEL 2 PYRANOMETER SN/1739F3

1973 DECEMBER  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

AVERAGE FLUX (CAL/SQ-CM/MIN)

DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	* DAILY TOTAL CLOUD COVER	AVG: TOTAL CLOUD COVER	
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.01	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.06	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.04	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.05	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.04	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.05	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.03	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
S.D.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

\* CAL/SQ-CM/DAY

Table 2. Net Radiation (Q\*)

1971 June - July

1972 June - August

1973 June - December

BROUGHTON ISI AND N.W.T.  
67.57 N 64.05 W  
ELFV 10 M.A.S.L.

NFT RADIATION (Q\*)

INSTRUMENT: FRITSCHEN NET RADIOMETER

AVERAGE FLUX (CAL/SQ-CM/MIN)

DATE	01	02	03	04	05	06	07	08	09	HOUR (EASTERN STANDARD TIME)						DAILY AVG, TOTAL CLOUD COVERED		
										10	11	12	13	14	15	16	17	
1																		0
2																		10L
3																		10L
4																		10L
5																		10L
6																		10L
7	-0.02	-0.01	0.00	0.02	0.19	0.18	0.20	0.23	0.28	0.31	0.36	0.39	0.36	0.33	0.26	0.19	0.09	0.02
8	-0.01	-0.01	0.01	0.01	0.03	0.04	0.07	0.07	0.12	0.21	0.23	0.27	0.37	0.40	0.34	0.25	0.17	-0.04
9																		0
10																		0
11																		0
12																		0
13																		0
14	-0.09	-0.08	0.01	0.09	0.19	0.20	0.23	0.28	0.31	0.36	0.42	0.51	0.56	0.62	0.70	0.70	0.61	0.54
15	-0.08	-0.04	0.03	0.07	0.15	0.25	0.36	0.41	0.50	0.57	0.64	0.65	0.64	0.65	0.64	0.65	0.58	0.54
16	-0.11	-0.09	-0.04	0.03	0.09	0.13	0.20	0.30	0.40	0.46	0.48	0.47	0.47	0.46	0.47	0.46	0.48	0.44
17	-0.03	-0.01	0.03	0.07	0.21	0.32	0.33	0.29	0.43	0.49	0.63	0.66	0.53	0.50	0.40	0.35	0.24	0.15
18	0.00	0.01	0.03	0.07	0.10	0.17	0.25	0.26	0.32	0.43	0.50	0.47	0.54	0.50	0.42	0.28	0.22	0.18
19	-0.01	0.00	0.03	0.09	0.09	0.15	0.26	0.49	0.54	0.52	0.57	0.57	0.59	0.59	0.59	0.51	0.42	0.33
20	0.00	0.02	0.04	0.07	0.13	0.30	0.38	0.54	0.50	0.56	0.53	0.40	0.52	0.60	0.36	0.31	0.18	0.15
21	0.00	0.02	0.04	0.06	0.11	0.16	0.35	0.44	0.53	0.59	0.59	0.59	0.55	0.49	0.32	0.27	0.19	0.13
22	-0.02	-0.02	0.02	0.02	0.04	0.15	0.18	0.30	0.47	0.49	0.41	0.41	0.42	0.37	0.28	0.21	0.16	0.14
23	-0.01	-0.01	0.01	0.03	0.07	0.14	0.25	0.37	0.44	0.49	0.49	0.55	0.58	0.52	0.43	0.29	0.22	0.16
24	-0.06	-0.04	0.02	0.16	0.14	0.24	0.33	0.44	0.66	0.71	0.60	0.49	0.64	0.58	0.49	0.39	0.20	0.12
25	-0.06	-0.05	0.03	0.08	0.14	0.23	0.31	0.41	0.42	0.55	0.53	0.60	0.59	0.51	0.41	0.35	0.26	0.18
26	-0.05	-0.03	-0.01	0.03	0.02	0.14	0.26	0.29	0.35	0.52	0.45	0.35	0.37	0.32	0.15	0.08	0.03	-0.07
27	0.00	0.00	0.01	0.03	0.06	0.13	0.23	0.29	0.43	0.47	0.54	0.46	0.44	0.34	0.30	0.18	0.09	0.06
28	-0.01	-0.01	-0.01	0.00	0.03	0.07	0.12	0.15	0.19	0.32	0.39	0.36	0.32	0.34	0.21	0.15	0.08	0.03
29	-0.04	-0.04	0.01	-0.01	0.09	0.14	0.21	0.27	0.33	0.43	0.48	0.60	0.54	0.49	0.36	0.24	0.12	0.04
30	-0.05	-0.05	0.00	0.04	0.04	0.17	0.30	0.33	0.48	0.55	0.62	0.66	0.63	0.52	0.39	0.29	0.18	0.11
MEAN	-0.03	-0.02	0.01	0.05	0.11	0.14	0.27	0.35	0.42	0.50	0.52	0.51	0.46	0.39	0.31	0.22	0.15	0.07
S.D.	0.03	0.02	0.04	0.05	0.08	0.09	0.13	0.14	0.12	0.13	0.13	0.13	0.12	0.11	0.08	0.07	0.04	0.03
N	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	17

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND, H.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

## NET RADIATION (Q\*)

## INSTRUMENT: FRITSCHEN NFT RADIOMETER

## AVERAGE FLUX (CAL/SQ-CM/MIN)

1971 JULY  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	HOUR (EASTERN STANDARD TIME)						19	20	21	22	23	24	* COVER		
										10	11	12	13	14	15	16	17	18	DAILY	Avg	TOTAL	CLOUD		
1	-0.02	0.03	0.03	0.05	0.18	0.12	0.21	0.25	0.35	0.43	0.51	0.57	0.51	0.52	0.48	0.39	0.29	0.23	1.3	0.05	0.02	-0.02		
2	-0.03	0.01	0.03	0.02	0.18	0.36	0.42	0.44	0.46	0.56	0.56	0.55	0.50	0.43	0.31	0.22	0.21	1.3	0.06	-0.01	-0.05	-0.06		
3	-0.04	-0.02	0.05	0.08	0.15	0.22	0.31	0.40	0.47	0.56	0.56	0.59	0.60	0.59	0.42	0.36	0.26	0.17	0.9	0.04	-0.01	-0.03		
4	-0.00	0.02	0.02	0.13	0.21	0.27	0.35	0.39	0.47	0.55	0.60	0.60	0.59	0.59	0.48	0.42	0.33	0.24	0.17	0.03	-0.03	-0.07		
5	-0.07	-0.05	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
6	-0.09	-0.09	-0.06	0.02	0.09	0.20	0.35	0.42	0.55	0.59	0.64	0.66	0.63	0.59	0.50	0.38	0.29	0.17	0.09	-0.01	-0.07	-0.10	-0.11	
7	-0.11	-0.11	-0.06	0.02	0.10	0.20	0.31	0.42	0.50	0.56	0.60	0.62	0.60	0.53	0.47	0.36	0.25	0.17	0.06	0.02	-0.05	-0.10	-0.10	
8	-0.06	-0.06	-0.03	0.02	0.10	0.19	0.28	0.39	0.45	0.52	0.53	0.53	0.48	0.43	0.37	0.27	0.18	0.14	0.13	0.05	-0.01	-0.04	-0.07	
9	-0.04	-0.04	-0.03	-0.01	0.03	0.19	0.23	0.40	0.47	0.54	0.59	0.59	0.58	0.52	0.39	0.37	0.28	0.16	0.07	-0.01	-0.06	-0.07	-0.08	
10	-0.07	-0.07	-0.04	0.04	0.11	0.22	0.32	0.40	0.47	0.50	0.56	0.56	0.56	0.41	0.15	0.12	0.08	0.03	0.01	-0.03	-0.04	-0.06	-0.06	
11	-0.07	-0.06	-0.03	0.01	0.13	0.22	0.24	0.34	0.43	0.50	0.52	0.52	0.51	0.44	0.21	0.15	0.10	0.08	0.03	-0.04	-0.07	-0.07	-0.06	
12	-0.05	-0.04	-0.03	-0.01	0.03	0.09	0.17	0.21	0.21	0.14	0.18	0.15	0.11	0.15	0.11	0.07	0.05	0.04	0.03	-0.01	-0.04	-0.07	-0.07	
13	-0.06	-0.06	-0.04	-0.03	0.03	0.05	0.08	0.15	0.22	0.33	0.41	0.60	0.44	0.34	0.28	0.20	0.08	0.05	0.03	-0.02	-0.03	-0.04	-0.06	
14	-0.09	-0.07	-0.03	0.00	0.04	0.07	0.13	0.31	0.55	0.61	0.66	0.66	0.66	0.73	0.44	0.33	0.23	0.16	0.04	0.03	0.01	0.00	0.00	
15	0.00	0.00	0.01	0.02	0.07	0.17	0.14	0.08	0.13	0.30	0.36	0.26	0.20	0.19	0.19	0.14	0.15	0.10	0.04	0.03	0.01	0.01	0.00	
16	-0.02	-0.03	-0.01	0.03	0.02	0.04	0.09	0.11	0.18	0.23	0.19	0.33	0.29	0.33	0.19	0.14	0.11	M	M	M	M	M	M	1.04
17	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
18	-0.07	-0.05	0.01	0.01	0.05	0.3	0.17	0.20	0.21	0.17	0.17	0.25	0.25	0.17	0.15	0.15	0.15	0.08	0.11	-0.03	-0.06	-0.07	-0.07	
19	-0.06	-0.09	-0.07	-0.06	-0.04	-0.03	-0.01	0.00	0.03	0.12	0.24	0.30	0.26	0.35	0.25	0.18	0.16	0.09	0.07	0.05	0.03	0.02	0.02	
20	0.01	-0.02	-0.04	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
21	-0.04	-0.04	-0.05	-0.07	-0.04	-0.05	-0.07	-0.04	-0.07	0.07	0.12	0.19	0.12	0.04	0.28	0.27	0.15	0.19	0.22	0.15	0.08	0.05	0.03	
22	0.00	0.00	0.01	0.02	0.03	0.02	0.01	0.04	0.07	0.05	0.05	0.06	0.09	0.07	0.08	0.06	0.05	0.05	0.04	0.03	0.02	0.02	0.01	
23	0.02	0.01	0.02	0.03	0.05	0.07	0.15	0.15	0.19	0.20	0.30	0.30	0.39	0.30	0.25	0.15	0.14	0.10	0.07	0.05	0.03	0.02	0.01	
24	0.00	0.00	0.00	0.02	0.06	0.07	0.12	0.18	0.24	0.33	0.33	0.31	0.29	0.23	0.19	0.14	0.08	0.06	0.04	0.02	0.00	-0.02	-0.03	
25	-0.02	-0.02	-0.01	0.01	0.03	0.08	0.14	0.18	0.24	0.34	0.43	0.33	0.40	0.39	0.31	0.23	0.16	0.11	0.08	0.05	0.03	0.02	0.01	
26	0.01	0.00	0.01	0.02	0.04	0.07	0.12	0.18	0.28	0.33	0.39	0.44	0.47	0.40	0.41	0.32	0.21	0.10	0.05	-0.02	-0.05	-0.07	-0.07	
27	-0.04	-0.04	-0.01	0.06	0.13	0.22	0.39	0.34	0.37	0.39	0.42	0.41	0.31	0.25	0.13	0.06	0.04	0.00	-0.02	-0.03	-0.03	-0.03	0.00	
28	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
29	0.05	0.05	0.06	0.07	0.10	0.14	0.15	0.15	0.13	0.20	0.22	0.23	0.21	0.16	0.11	0.07	0.06	0.06	0.04	0.03	0.03	0.03	0.01	
30	0.04	0.04	0.05	0.07	0.11	0.15	0.22	0.30	0.43	0.47	0.46	0.53	0.49	0.42	0.30	0.20	0.11	0.03	0.02	0.01	-0.01	-0.01	-0.01	
31	-0.01	-0.01	0.00	0.02	0.04	0.08	0.13	0.19	0.26	0.30	0.37	0.39	0.34	0.39	0.34	0.22	0.18	0.10	0.05	0.03	0.01	0.00	0.00	
MEAN	-0.03	-0.00	0.03	0.08	0.13	0.19	0.26	0.30	0.37	0.39	0.42	0.39	0.35	0.29	0.23	0.17	0.12	0.07	0.03	-0.01	-0.03	-0.03	0.00	
S.D.	0.04	0.04	0.05	0.07	0.09	0.11	0.14	0.17	0.18	0.17	0.15	0.12	0.10	0.07	0.05	0.03	0.02	0.01	0.04	0.04	0.04	0.04	0.01	
N	29	29	29	29	27	27	27	28	30	30	31	31	30	30	30	30	30	30	30	30	30	30	30	25

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND N.W.T.  
67°57' N 64°05' W  
ELFV 10 M.A.S.L.

NFT RADIATION (Q\*)

INSTRUMENT: FRITSCHEN NET RADIOMETER

AVERAGE FLUX (CAL/SQ-CM/MIN)

DATE	HOURLY (ESTER STANDARD TIME)												DAILY AVERAGE													
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	*	COVER
1																										03M
2																										10L
3*																										00
4																										10L
5																										01H
6																										03L
7																										09H
8																										10L
9																										10M
10																										10L
11																										10L
12																										10L
13																										02H
14																										07M
15																										09M
16																										04H
17																										09M
18																										10M
19																										10L
20																										01L
21																										01L
22																										01L
23																										01L
24																										10M
25																										10L
26																										10L
27																										10M
28																										10L
29																										10L
30																										10L
MEAN--	-0.01	-0.01	-0.00	-0.03	-0.08	-0.15	-0.22	-0.31	-0.39	-0.46	-0.49	-0.48	-0.48	-0.43	-0.37	-0.27	-0.18	-0.12	-0.08	-0.04	-0.01	-0.01	-0.01	-0.01		
S.D.	-0.02	-0.02	-0.03	-0.04	-0.06	-0.09	-0.10	-0.12	-0.10	-0.11	-0.11	-0.09	-0.08	-0.07	-0.04	-0.03	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02		
N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	23	23	23	23	23	21	

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND, N.W.T.  
67.57 N 64.05 W  
ELEV 10 M.A.S.L.

NFT RADIATION (Q\*)

INSTRUMENT: FRITSCHEN NET RADIOMETER

AVERAGE FLUX (CAL/SQ-CM/MIN)

1972 JULY  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	* COVER	DAILY AVERAGE				
																										CLOUD	TOTAL	AVI		
1	.02	.04	.07	.09	.15	.19	.32	.43	.47	.60	.56	.52	.42	.38	.46	.36	.26	.15	.07	.03	-.05	-.05	-.04	-.05	-.04	-.05	-.04	325.2	05	
2	-.02	-.00	-.00	-.00	-.09	-.10	.24	.27	.31	.32	.38	.38	.32	.38	.36	.30	.46	.44	.26	.18	.10	.08	.04	-.01	-.03	-.02	-.03	231.6	10	
3	-.04	-.04	-.04	-.02	-.02	-.03	.12	.14	.22	.36	.38	.36	.30	.38	.38	.30	.44	.44	.26	.14	.06	.04	-.02	-.02	-.01	-.02	211.2	08		
4	-.01	-.01	-.01	-.02	-.02	-.05	.07	.06	.12	.12	.20	.22	.20	.18	.18	.14	.12	.10	.10	.06	.04	.03	.01	.01	.01	.01	123.0	10		
5	.01	.01	.02	.03	.03	.04	.07	.04	.07	.09	.11	.16	.16	.19	.22	.24	.20	.26	.24	.20	.15	.12	.08	.06	.04	.01	.01	.01	137.4	10
6	.04	.05	.06	.08	.11	.18	.38	.46	.56	.54	.43	.46	.40	.38	.38	.38	.30	.40	.38	.24	.18	.10	.06	.04	.01	.07	.04	309.0	04	
7	.02	.01	.03	.05	.07	.10	.16	.20	.18	.22	.28	.28	.32	.36	.32	.32	.28	.20	.16	.09	.02	-.01	-.02	-.01	-.01	183.6	10			
8	-.02	-.00	-.00	-.00	-.00	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.02	279.0	10			
9	-.02	-.00	-.00	-.00	-.00	-.02	-.02	-.04	-.12	-.24	-.28	-.24	-.22	-.18	-.18	-.12	-.11	-.08	-.06	-.04	-.03	-.02	-.01	-.01	-.01	-.01	157.2	10		
10	-.01	-.01	-.02	-.02	-.04	-.05	.67	.10	.11	.23	.27	.23	.42	.41	.46	.22	.14	.18	.09	.06	.03	-.01	-.03	-.04	-.02	183.0	08			
11	-.01	-.00	-.01	-.01	-.06	.12	.14	.22	.41	.48	.57	.62	.48	.48	.38	.38	.30	.14	.30	.34	.30	.14	.04	.01	-.04	-.06	-.06	306.6	03	
12	-.06	-.05	-.05	-.00	.10	.16	.26	.34	.46	.53	.54	.53	.54	.55	.50	.46	.38	.30	.18	.04	.00	.00	.00	.00	.00	.00	346.2	00		
13	.00	.00	.01	.04	.12	.16	.24	.25	.32	.34	.36	.32	.34	.36	.31	.24	.14	.10	.06	.03	.00	.00	.00	.01	.01	.01	212.4	10		
14	-.01	-.01	-.01	-.01	-.01	-.04	-.12	-.16	-.21	-.30	-.38	-.46	-.46	-.46	-.54	-.60	-.54	-.30	-.21	-.14	-.09	-.04	-.02	-.02	-.01	-.01	228.6	03		
15	-.02	-.02	-.02	-.02	-.07	-.14	-.24	-.34	-.44	-.51	-.60	-.60	-.58	-.58	-.54	-.45	-.30	-.16	-.10	-.04	-.00	-.04	-.06	-.06	-.06	323.4	04			
16	-.07	-.05	-.02	-.02	-.04	-.14	-.16	-.34	-.44	-.50	-.58	-.57	-.46	-.52	-.54	.30	.21	.14	.12	.08	.02	.00	.00	.02	.02	298.8	02			
17	-.01	-.00	-.02	-.02	-.04	-.10	-.14	-.21	-.36	-.50	-.57	-.62	-.62	-.52	-.54	-.46	-.38	-.25	-.16	.06	.02	-.06	-.07	-.07	-.06	318.0	02			
18	-.06	-.05	-.03	-.05	-.05	-.14	-.18	-.30	-.40	-.46	-.53	-.56	-.54	-.57	-.55	-.50	-.43	-.34	-.26	-.14	-.03	-.01	-.06	-.09	-.09	298.2	00			
19	-.08	-.07	-.05	-.03	-.11	-.19	-.29	-.38	-.46	-.52	-.56	-.58	-.54	-.58	-.54	-.50	-.42	-.34	-.26	-.14	-.04	-.00	-.06	-.07	-.07	294.0	00			
20	-.04	-.02	-.03	-.12	-.17	-.21	-.30	-.39	-.46	-.51	-.56	-.54	-.58	-.54	-.49	-.42	-.34	-.23	-.12	-.03	-.02	-.05	-.05	-.04	-.04	315.0	00			
21	-.03	-.03	-.01	-.02	-.05	-.08	-.11	-.18	-.22	-.31	-.30	-.30	-.34	-.30	-.29	-.22	-.17	-.11	-.09	-.03	-.02	-.02	-.02	-.02	-.02	181.8	10			
22	-.03	-.02	-.01	-.01	-.04	-.12	-.18	-.26	-.46	-.46	-.50	-.46	-.46	-.46	-.46	-.42	-.34	-.25	-.12	-.05	-.04	-.05	-.06	-.06	-.06	280.2	01			
23	-.02	-.01	-.05	-.05	-.15	-.24	-.30	-.35	-.40	-.47	-.50	-.56	-.57	-.54	-.49	-.42	-.34	-.23	-.12	-.04	-.01	-.05	-.07	-.07	-.07	328.2	01			
24	-.06	-.06	-.04	-.03	-.10	-.19	-.30	-.40	-.51	-.54	-.54	-.57	-.54	-.49	-.40	-.33	-.23	-.11	-.04	-.02	-.05	-.06	-.07	-.07	-.06	294.0	00			
25	-.06	-.05	-.04	-.04	-.03	-.14	-.18	-.27	-.30	-.50	-.48	-.50	-.40	-.40	-.40	-.25	-.26	-.12	-.06	-.02	-.04	-.06	-.06	-.06	-.06	229.8	08			
26	-.03	-.04	-.02	-.03	-.12	-.19	-.24	-.39	-.46	-.46	-.46	-.34	-.32	-.20	-.14	-.08	-.04	-.02	-.01	-.00	-.00	-.00	-.00	-.00	-.00	181.8	10			
27	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	10			
28	.03	.02	.03	.07	.05	.24	.24	.48	.51	.44	.38	.30	.32	.20	.14	.06	.05	.03	.02	-.02	-.05	-.07	-.07	-.06	-.06	-.06	216.6	09		
29	-.03	-.02	-.00	-.02	-.06	.10	.13	.23	.24	.50	.50	.38	.23	.22	.17	.18	.14	.10	.06	.05	-.01	-.05	-.04	-.04	-.04	-.04	-.04	189.0	09	
30	.00	.00	.01	.02	.03	.06	.13	.14	.20	.30	.42	.38	.40	.44	.36	.17	.12	.04	.01	-.01	-.01	-.02	-.02	-.02	-.02	-.02	216.6	10		
31	-.05	-.02	-.01	-.01	-.01	.07	.11	.18	.30	.33	.33	.42	.34	.27	.20	.14	.06	.04	.03	-.01	-.02	-.02	-.02	-.02	-.02	-.02	160.8	10		
MEAN	-0.02	-0.01	0.01	0.05	0.10	0.15	0.22	0.29	0.37	0.43	0.44	0.45	0.42	0.39	0.33	0.26	0.19	0.11	0.05	0.01	0.02	0.03	0.03	0.03	0.03	247.3				
S.D.	0.03	0.03	0.04	0.05	0.05	0.09	0.12	0.13	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.10	0.08	0.05	0.03	0.02	0.02	0.03	0.03	0.03	66.1					
N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30				

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND-N.W.T.  
67.57 N 64.05 W  
ELEV 10 M.A.S.L.

NFT RADIATION (Q\*)

INSTRUMENT: FRITSCHFN NET RADIOMETER

AVERAGE FLUX (CAL/SQ-CM/MIN)

1972 AUGUST  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	HOUR (ESTERN STANDARD TIME)												DAILY AVG.											
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-0.01	-0.01	-0.01	-0.02	-0.04	-0.07	-0.06	-0.15	-0.24	-0.35	-0.30	-0.34	-0.52	-0.52	-0.26	-0.15	-0.06	-0.04	-0.02	-0.00	-0.00	-0.00	-0.00	0.9L
2	-0.00	-0.00	-0.00	-0.05	-0.04	-0.05	-0.01	-0.11	-0.18	-0.16	-0.14	-0.17	-0.12	-0.12	-0.06	-0.06	-0.11	-0.10	-0.07	-0.03	-0.02	-0.02	-0.02	90.0
3	-0.03	-0.03	-0.02	-0.01	-0.05	-0.07	-0.13	-0.23	-0.34	-0.51	-0.56	-0.51	-0.40	-0.40	-0.20	-0.24	-0.14	-0.04	-0.06	-0.08	-0.09	-0.08	-0.08	208.2
4	-0.08	-0.07	-0.06	-0.01	-0.10	-0.14	-0.28	-0.34	-0.44	-0.52	-0.48	-0.44	-0.36	-0.36	-0.29	-0.26	-0.14	-0.05	-0.01	-0.05	-0.04	-0.04	-0.02	229.2
5	-0.01	-0.01	-0.01	-0.14	-0.14	-0.12	-0.16	-0.30	-0.46	-0.48	-0.50	-0.50	-0.46	-0.44	-0.36	-0.24	-0.14	-0.04	-0.03	-0.05	-0.07	-0.07	-0.06	249.0
6	-0.03	-0.04	-0.05	-0.02	-0.02	-0.08	-0.16	-0.26	-0.34	-0.42	-0.48	-0.49	-0.50	-0.46	-0.43	-0.34	-0.26	-0.15	-0.04	-0.02	-0.06	-0.08	-0.07	234.6
7	-0.07	-0.07	-0.05	-0.00	-0.10	-0.16	-0.25	-0.35	-0.43	-0.46	-0.50	-0.48	-0.46	-0.40	-0.33	-0.24	-0.10	-0.03	-0.02	-0.05	-0.07	-0.07	-0.05	229.2
8	-0.01	-0.01	-0.00	-0.01	-0.03	-0.05	-0.10	-0.14	-0.28	-0.20	-0.23	-0.21	-0.17	-0.18	-0.12	-0.07	-0.03	-0.02	-0.01	-0.00	-0.00	-0.00	-0.00	20.0
9	-0.00	-0.00	-0.00	-0.01	-0.03	-0.07	-0.10	-0.17	-0.21	-0.32	-0.40	-0.44	-0.46	-0.38	-0.26	-0.17	-0.10	-0.04	-0.03	-0.01	-0.00	-0.00	-0.00	192.0
10	-0.01	-0.01	-0.00	-0.00	-0.03	-0.09	-0.15	-0.18	-0.24	-0.32	-0.38	-0.40	-0.44	-0.45	-0.34	-0.24	-0.13	-0.11	-0.08	-0.05	-0.02	-0.01	-0.00	123.6
11	-0.00	-0.00	-0.00	-0.01	-0.03	-0.07	-0.13	-0.22	-0.32	-0.38	-0.40	-0.40	-0.44	-0.41	-0.34	-0.24	-0.10	-0.01	-0.05	-0.07	-0.08	-0.07	-0.06	10.0
12	-0.00	-0.01	-0.01	-0.01	-0.03	-0.08	-0.13	-0.17	-0.22	-0.34	-0.30	-0.30	-0.31	-0.41	-0.40	-0.25	-0.10	-0.02	-0.04	-0.06	-0.07	-0.07	-0.06	8.0
13	-0.09	-0.08	-0.07	-0.05	-0.03	-0.12	-0.22	-0.33	-0.42	-0.26	-0.21	-0.19	-0.17	-0.16	-0.32	-0.23	-0.14	-0.04	-0.01	-0.01	-0.00	-0.00	-0.00	9.0M
14	-0.00	-0.00	-0.01	-0.01	-0.02	-0.04	-0.10	-0.14	-0.26	-0.17	-0.18	-0.24	-0.21	-0.28	-0.28	-0.16	-0.14	-0.07	-0.05	-0.06	-0.01	-0.00	-0.00	112.8
15	-0.00	-0.01	-0.01	-0.03	-0.06	-0.07	-0.13	-0.17	-0.50	-0.54	-0.52	-0.58	-0.52	-0.48	-0.24	-0.13	-0.10	-0.05	-0.05	-0.02	-0.01	-0.01	-0.01	123.6
16	-0.01	-0.01	-0.01	-0.01	-0.00	-0.01	-0.03	-0.14	-0.26	-0.34	-0.38	-0.26	-0.32	-0.32	-0.20	-0.14	-0.09	-0.03	-0.01	-0.04	-0.02	-0.01	-0.01	181.2
17	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.04	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.01	-0.02	-0.01	-0.02	-0.04	-0.02	-0.01	-0.01	10.0L
18	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.00	-0.00	-0.01	-0.02	-0.03	-0.05	-0.06	-0.11	-0.10	-0.08	-0.05	-0.03	-0.02	-0.00	-0.00	-0.01	-0.01	31.8
19	-0.02	-0.03	-0.06	-0.05	-0.06	-0.07	-0.10	-0.16	-0.23	-0.22	-0.18	-0.17	-0.18	-0.18	-0.08	-0.07	-0.07	-0.06	-0.03	-0.01	-0.01	-0.00	-0.00	90.6
20	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.06	-0.08	-0.12	-0.16	-0.15	-0.14	-0.16	-0.15	-0.17	-0.20	-0.10	-0.08	-0.03	-0.01	-0.00	-0.00	-0.00	89.4
21	-0.01	-0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.04	-0.08	-0.09	-0.10	-0.09	-0.07	-0.07	-0.07	-0.04	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	10.0L
22	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.03	-0.06	-0.10	-0.11	-0.11	-0.11	-0.11	-0.11	-0.13	-0.10	-0.09	-0.06	-0.03	-0.01	-0.02	-0.03	-0.04	54.6
23	-0.04	-0.04	-0.03	-0.02	-0.01	-0.01	-0.03	-0.10	-0.18	-0.16	-0.22	-0.21	-0.23	-0.20	-0.19	-0.14	-0.09	-0.05	-0.02	-0.01	-0.03	-0.02	-0.01	95.4
24	-0.02	-0.02	-0.02	-0.02	-0.00	-0.05	-0.09	-0.16	-0.06	-0.24	-0.19	-0.20	-0.14	-0.23	-0.15	-0.17	-0.12	-0.04	-0.03	-0.01	-0.00	-0.00	-0.00	98.4
25	-0.00	-0.00	-0.00	-0.00	-0.01	-0.02	-0.08	-0.14	-0.17	-0.12	-0.08	-0.03	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01	-0.02	-0.02	-0.02	-0.04	-0.04	43.2
26	-0.04	-0.04	-0.04	-0.04	-0.04	-0.03	-0.03	-0.02	-0.01	-0.00	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.04	-0.04	-0.04	-0.04	2.4
27	-0.05	-0.05	-0.06	-0.04	-0.02	-0.00	-0.08	-0.04	-0.08	-0.08	-0.10	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	M
MEAN	-0.02	-0.02	-0.00	0.03	0.06	0.11	0.19	0.22	0.27	0.27	0.25	0.19	0.14	0.08	0.03	0.00	-0.02	-0.03	-0.02	-0.02	-0.02	-0.02	-0.02	136.7
S.D.	-0.03	-0.02	-0.03	0.03	0.04	0.06	0.08	0.10	0.14	0.15	0.17	0.16	0.11	0.08	0.05	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	72.7
N	27	27	27	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	25

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

NFT RADIATION (Q\*)  
INSTRUMENT:FRITSCHEN NET RADIOMETER  
AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 JUNE  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	HOUR (EASTERN STANDARD TIME)										* AVG TOTAL CLOUD COVER		
										10	11	12	13	14	15	16	17	18	19	20		
1	.00	.00	.00	.00	.00	.01	.01	.02	.02	.00	.00	.02	.01	.01	.01	.01	.00	.00	.00	.00	.00	2.4
2	.00	.00	.00	.00	.00	.00	.01	.02	.05	.14	.11	.10	.08	.06	.05	.04	.02	.01	.00	.00	.00	51.6
3	.00	.00	.00	.00	.00	.06	.08	.12	.10	.15	.14	.11	.10	.08	.06	.05	.04	.03	.02	.01	.01	0.8L
4	-.01	-.00	-.00	-.00	-.00	.03	.04	.03	.04	.03	.03	.06	.08	.05	.05	.02	.03	-.01	-.01	-.01	-.01	0.7L
5	.00	.00	.00	.00	-.01	.01	.02	.03	.04	.06	.06	.04	.05	.04	.04	.04	.03	.03	.01	-.01	-.01	10L
6	-.01	-.00	-.00	-.00	-.00	.08	.09	.17	.08	.09	.11	.12	.13	.11	.08	.05	.02	-.03	-.06	-.06	-.04	10L
7	-.03	-.01	-.03	-.05	-.01	.03	.05	.10	.11	.07	.09	.10	.11	.10	.06	.16	.06	.10	.09	.05	.02	0.9L
8	.00	.00	.00	.00	.00	.01	.02	.04	.01	.07	.10	.10	.12	.11	.11	.09	.09	.05	.05	.02	.01	10L
9	-.01	-.01	-.00	-.00	-.01	.01	.05	.10	.16	.20	.22	.23	.21	.18	.13	.09	.04	.01	-.02	-.04	-.06	-.06
10	-.05	-.05	-.02	-.00	-.02	.04	.05	.07	.12	.12	.18	.18	.18	.21	.14	.12	.10	.05	.03	.01	.01	10L
11	-.00	-.00	-.00	-.00	-.00	.01	.01	.00	.00	.02	.05	.07	.11	.17	.16	.21	.15	.07	.05	.01	.00	10L
12	.00	.00	.00	.01	.01	.02	.04	.06	.10	.13	.21	.23	.21	.19	.17	.12	.10	.08	.05	.03	.01	0.9L
13	-.01	-.00	-.00	-.01	-.01	.03	.05	.08	.10	.17	.20	.16	.20	.18	.18	.15	.07	.05	.03	.01	.00	10L
14	-.02	-.01	-.00	-.01	-.01	.03	.09	.14	.20	.22	.26	.27	.24	.17	.18	.16	.17	.08	.06	.04	.01	0.7L
15	-.00	-.00	-.00	-.01	-.02	.01	.04	.07	.12	.14	.18	.24	.26	.25	.22	.24	.20	.16	.10	.07	.03	10L
16	-.00	-.00	-.02	-.00	-.07	.15	.18	.16	.22	.27	.34	.33	.31	.30	.24	.31	.13	.12	.07	.04	.02	0.2L
17	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	10L
18	-.01	-.01	-.00	-.01	-.00	.01	.05	.05	.12	.17	.25	.39	.43	.37	.46	.35	.36	.28	.29	.19	.15	0.9L
19	-.00	-.01	-.01	-.01	-.07	.09	.15	.19	.22	.35	.39	.45	.46	.45	.46	.49	.35	.30	.22	.17	.12	0.7L
20	-.00	-.00	-.00	-.01	-.01	.07	.13	.23	.40	.43	.43	.47	.47	.45	.58	.51	.47	.37	.24	.18	.15	0.4L
21	-.03	-.00	-.01	-.01	-.03	.06	.06	.09	.14	.17	.15	.16	.17	.14	.12	.11	.09	.08	.07	.03	.01	0.1L
22	.00	.00	.00	-.04	-.07	-.11	-.17	.12	.01	.09	.05	.12	.14	.20	.26	.16	.11	.06	.03	.01	.00	0.6L
23	-.00	-.00	-.00	-.00	-.02	.04	.07	.15	.25	.32	.37	.31	.34	.32	.32	.22	.16	.13	.07	.03	.01	0.1L
24	-.01	-.01	-.05	-.05	-.07	.17	.19	.24	.44	.55	.58	.46	.49	.56	.50	.46	.30	.17	.15	.09	.04	0.4L
25	-.00	-.01	-.01	-.02	-.06	.11	.17	.23	.27	.30	.42	.48	.40	.45	.38	.33	.29	.25	.16	.11	.02	0.1L
26	.00	.01	.03	.04	.12	.27	.39	.36	.60	.96	.88	.71	.75	.65	.50	.44	.26	.17	.11	.07	.02	0.6L
27	-.00	-.00	-.00	-.02	-.03	.07	.12	.20	.33	.37	.67	.55	.52	.45	.41	.35	.25	.16	.17	-.01	-.05	10L
28	-.03	-.01	-.02	-.07	-.08	.11	.12	.17	.26	.36	.41	.39	.28	.27	.32	.23	.18	.09	.02	.01	-.02	10L
29	-.00	-.00	-.00	-.02	-.12	.18	.26	.31	.40	.53	.67	.57	.43	.56	.46	.38	.25	.16	.11	.06	-.05	10L
30	-.04	-.03	-.02	-.06	.19	.22	.27	.34	.32	.39	.58	.61	.43	.49	.57	.32	.20	.12	.07	.04	-.05	0.5L
MEAN	-.01	-.00	-.01	-.03	.06	.09	.12	.17	.22	.27	.29	.28	.26	.24	.22	.17	.12	.08	.05	.02	-.01	-.02
S.D.	.01	.01	.02	.05	.07	.08	.11	.13	.16	.20	.22	.20	.18	.16	.12	.09	.07	.05	.03	.02	.02	.02
N	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	29

\* CAL/SQ-CM/DAY

BRIGHTON ISLAND-N.W.T.  
67°57' N 64°65' W  
ELEV 10 M.A.S.L.

NFT RADIATION (Q\*)

INSTRUMENT: FRITSCHEN NET RADIOMETER

AVERAGE FLUX (CAL/SQ-CM/MIN)

DATE	EASTERN STANDARD TIME												DAILY AVG.												
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	% COVER
1 -05 -04 -0.02	0.07	0.17	0.27	0.46	0.50	0.59	0.63	0.69	0.64	0.54	0.50	0.43	0.37	0.25	0.13	0.08	0.01	0.00	-0.06	-0.06	-0.05	358.2	01	1	
2 -05 -0.05 -0.0	0.08	0.16	0.25	0.35	0.48	0.56	0.61	0.66	0.64	0.63	0.56	0.49	0.39	0.29	0.18	0.07	0.02	-0.03	-0.05	-0.05	-0.04	-0.04	-0.05	370.2	00
3 -01 -0.01 -0.06	0.16	0.29	0.25	0.37	0.43	0.47	0.51	0.57	0.61	0.60	0.48	0.45	0.45	0.44	0.35	0.26	0.13	0.09	0.07	0.05	0.05	0.05	0.05	360.6	05
4 -04 -0.02 -0.01	0.02	0.10	0.17	0.27	0.34	0.41	0.45	0.51	0.45	0.45	0.40	0.45	0.45	0.36	0.18	0.13	0.09	0.05	0.05	0.05	0.05	0.05	0.05	264.6	07
5 -00 -0.01 -0.0	0.04	0.10	0.16	0.19	0.29	0.45	0.23	0.36	0.31	0.38	0.33	0.25	0.26	0.18	0.12	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	215.4	10
6 -00 -0.01 -0.02	0.02	0.03	0.02	0.07	0.11	0.18	0.23	0.28	0.25	0.21	0.19	0.17	0.12	0.09	0.06	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	128.4	10
7 -00 -0.01 -0.02	0.03	0.12	0.18	0.27	0.36	0.46	0.47	0.55	0.50	0.49	0.49	0.32	0.30	0.18	0.12	0.08	0.02	0.00	-0.06	-0.04	-0.02	266.4	09		
8 -01 -0.01 -0.0	0.01	0.17	0.26	0.35	0.37	0.40	0.39	0.56	0.54	0.40	0.37	0.26	0.17	0.07	0.05	0.04	0.05	0.02	0.00	-0.01	-0.01	300.6	07		
9 -00 -0.00 -0.0	0.01	0.02	0.07	0.11	0.17	0.37	0.38	0.43	0.49	0.42	0.45	0.38	0.28	0.22	0.09	0.05	0.02	0.00	-0.01	-0.01	-0.01	236.4	09		
10 -02 -0.01 -0.0	0.00	0.04	0.13	0.26	0.34	0.37	0.48	0.55	0.58	0.59	0.56	0.43	0.35	0.26	0.16	0.07	0.02	-0.03	-0.05	-0.05	-0.06	-0.05	338.4	00	
11 -05 -0.01 -0.02	0.07	0.13	0.20	0.27	0.35	0.48	0.54	0.58	0.44	0.41	0.43	0.20	0.16	0.11	0.01	0.00	0.00	-0.01	-0.01	271.8	01	1			
12 -00 -0.00 -0.0	0.00	0.00	0.00	0.07	0.09	0.12	0.14	0.27	0.29	0.35	0.21	0.19	0.16	0.11	0.05	-0.01	-0.04	-0.05	-0.03	-0.01	123.0	10			
13 -01 -0.01 -0.0	0.01	0.03	0.02	0.15	0.32	0.36	0.47	0.54	0.57	0.53	0.49	0.40	0.33	0.24	0.14	0.03	0.00	-0.01	-0.01	-0.01	311.4	01	1		
14 -01 -0.01 -0.0	0.00	0.02	0.06	0.11	0.20	0.34	0.41	0.51	0.57	0.41	0.50	0.52	0.39	0.30	0.26	0.09	0.05	0.01	0.00	0.00	0.00	0.00	284.4	10	
15 -00 -0.00 -0.0	0.01	0.02	0.07	0.08	0.05	0.11	0.10	0.09	0.13	0.19	0.14	0.11	0.12	0.07	0.04	0.01	0.00	-0.01	-0.01	-0.01	82.8	10			
16 -01 -0.01 -0.0	0.00	0.01	0.02	0.03	0.05	0.08	0.09	0.08	0.04	0.05	0.03	0.04	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	236.4	09	
17 -00 -0.00 -0.0	0.00	0.02	0.06	0.12	0.23	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.35	0.26	0.24	0.15	0.03	0.00	-0.02	-0.01	-0.01	-0.01	126.6	10	
18 -01 -0.01 -0.0	0.00	0.04	0.03	0.04	0.11	0.18	0.22	0.28	0.20	0.16	0.14	0.23	0.21	0.13	0.08	0.03	0.01	0.00	-0.01	-0.01	-0.01	-0.01	126.6	10	
19 -00 -0.00 -0.0	0.00	0.00	0.01	0.03	0.07	0.11	0.15	0.15	0.22	0.26	0.22	0.22	0.24	0.12	0.11	0.07	0.02	0.00	-0.02	-0.01	132.6	10			
20 -00 -0.00 -0.0	0.00	0.00	0.02	0.03	0.09	0.11	0.10	0.16	0.19	0.30	0.47	0.38	0.31	0.13	0.10	0.09	0.03	0.02	0.00	0.00	0.00	0.00	159.0	10	
21 -00 -0.00 -0.0	0.00	0.00	0.01	0.02	0.05	0.10	0.24	0.25	0.19	0.16	0.15	0.15	0.18	0.15	0.09	0.05	0.03	0.01	0.00	0.00	-0.01	-0.01	128.4	10	
22 -02 -0.04 -0.02	0.05	0.15	0.21	0.27	0.36	0.36	0.21	0.27	0.36	0.36	0.44	0.50	0.50	0.44	0.34	0.17	0.04	0.07	0.02	-0.01	-0.01	-0.01	0.00	0.00	0
23 -00 -0.01 -0.02	0.04	0.05	0.10	0.25	0.29	0.41	0.50	0.54	0.57	0.49	0.38	0.38	0.36	0.19	0.19	0.09	0.03	0.00	-0.02	-0.01	-0.01	-0.01	260.4	04	
24 -02 -0.03 -0.03	0.03	0.06	0.01	0.02	0.03	0.04	0.06	0.01	0.09	0.04	0.05	0.04	0.05	0.04	0.03	0.02	0.01	-0.01	-0.01	-0.01	-0.01	-0.01	37.2	10	
25 -00 -0.00 -0.01	0.01	0.03	0.06	0.15	0.25	0.22	0.50	0.53	0.54	0.35	0.35	0.20	0.17	0.14	0.06	0.03	-0.03	-0.02	-0.02	-0.03	-0.02	208.8	09		
26 -03 -0.01 -0.00	0.01	0.07	0.10	0.17	0.31	0.31	0.32	0.36	0.44	0.36	0.32	0.27	0.18	0.09	0.02	-0.02	-0.03	-0.06	-0.05	-0.05	-0.05	202.8	09		
27 -01 -0.00 -0.00	0.00	0.02	0.10	0.12	0.22	0.34	0.44	0.51	0.55	0.57	0.53	0.48	0.39	0.30	0.19	0.09	0.02	0.00	-0.01	-0.01	-0.01	-0.02	288.6	00	
28 -02 -0.01 -0.01	0.01	0.03	0.08	0.10	0.09	0.10	0.09	0.12	0.14	0.09	0.08	0.08	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.2	10	
29 -01 -0.00 -0.00	0.00	-0.01	-0.04	-0.06	-0.01	-0.03	-0.04	-0.03	-0.05	-0.03	-0.04	-0.03	-0.05	-0.03	-0.02	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	17.4	10	
30 -00 -0.00 -0.00	0.00	0.00	0.01	0.03	0.06	0.11	0.13	0.18	0.22	0.28	0.32	0.30	0.17	0.09	0.06	0.04	0.01	-0.01	-0.01	-0.01	-0.00	-0.00	136.8	10	
31 -00 -0.00 -0.00	0.01	0.02	0.04	0.09	0.13	0.15	0.23	0.26	0.28	0.32	0.32	0.26	0.18	0.11	0.09	0.06	0.02	0.00	-0.02	-0.04	-0.03	-0.02	125.4	10	

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND-N.W.T.  
67°57' N 64°05' W  
ELFV 10 M.A.S.L.

#### NFT RADIATION (Q\*)

INSTRUMENT:FRITSCHEN NET RADIOMETER

AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 AUGUST  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	HOURLY (EASTERN STANDARD TIME)		DAILY AVG									
																16	17	18	19	20	21	22	23	24	* CLOUD COVER		
1	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	23	23	12	0.9	0.08	0.03	0.00	-0.01	-0.01	97.2		
2	-0.01	-0.01	-0.00	-0.00	-0.00	-0.00	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	23	23	18	0.05	0.00	-0.04	-0.07	-0.07	-0.07	202.2		
3	-0.06	-0.03	-0.02	-0.00	-0.00	-0.00	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	21	21	43	0.41	0.47	0.40	0.28	0.18	0.00	0.9		
4	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	22	28	45	0.56	0.45	0.30	0.28	0.07	0.00	0.8		
5	-0.04	-0.05	-0.02	-0.00	-0.05	-0.05	-0.05	-0.14	-0.05	-0.20	-0.27	-0.36	-0.44	-0.42	-0.34	23	25	33	0.33	0.25	0.21	0.13	0.04	-0.01	-0.04		
6	-0.02	-0.05	-0.05	-0.01	-0.05	-0.01	-0.05	-0.12	-0.05	-0.20	-0.29	-0.36	-0.44	-0.48	-0.46	23	22	41	0.33	0.22	0.13	0.03	-0.02	-0.05	-0.05		
7	-0.04	-0.04	-0.03	-0.01	-0.05	-0.03	-0.12	-0.20	-0.05	-0.29	-0.37	-0.43	-0.46	-0.47	-0.44	38	32	23	0.32	0.12	0.03	-0.02	-0.05	-0.06	-0.05		
8	-0.06	-0.05	-0.05	-0.03	-0.03	-0.03	-0.11	-0.19	-0.29	-0.36	-0.43	-0.47	-0.47	-0.40	-0.40	23	18	0.09	0.03	0.01	-0.01	-0.02	-0.01	-0.01			
9	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.11	0.19	0.17	0.19	0.17	0.19	24	13	10	0.07	0.03	0.01	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.05	0.08	0.09	0.16	0.19	0.22	0.12	0.13	12	11	0.04	0.02	0.01	0.00	0.00	0.00	0.00			
11	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.08	0.22	0.29	0.37	0.43	0.47	0.45	0.40	33	23	13	0.04	-0.01	-0.06	-0.07	-0.07	-0.06	216.0		
12	-0.06	-0.06	-0.03	-0.01	-0.03	-0.01	-0.06	-0.13	-0.16	-0.30	-0.25	-0.23	-0.10	-0.04	-0.06	20	0.04	0.06	0.02	0.03	0.01	-0.03	-0.04	-0.06	-0.06	64.2	
13	-0.05	-0.05	-0.02	-0.03	-0.03	-0.03	-0.11	-0.19	-0.29	-0.36	-0.43	-0.46	-0.46	-0.47	-0.38	30	30	21	0.09	0.01	-0.03	-0.06	-0.07	-0.07	-0.06	-0.06	197.4
14	-0.06	-0.05	-0.05	-0.03	-0.01	-0.01	-0.18	-0.27	-0.34	-0.34	-0.30	-0.39	-0.32	-0.27	27	25	14	0.11	0.06	0.02	-0.02	-0.04	-0.04	-0.05	-0.05	162.0	
15	-0.06	-0.05	-0.04	-0.02	-0.04	-0.02	-0.05	-0.14	-0.13	-0.42	-0.41	-0.50	-0.53	-0.45	37	30	21	0.08	0.00	-0.04	-0.06	-0.06	-0.06	-0.06	-0.06	187.2	
16	-0.05	-0.05	-0.04	-0.02	-0.02	-0.02	-0.05	-0.10	-0.13	-0.25	-0.34	-0.31	-0.36	-0.36	27	36	31	0.15	0.11	0.01	-0.02	-0.04	-0.04	-0.04	-0.04	60.8	
17	-0.03	-0.02	-0.01	-0.00	-0.03	-0.00	-0.04	-0.05	-0.11	-0.17	-0.22	-0.14	-0.15	-0.20	15	20	15	0.12	0.07	0.01	-0.01	-0.01	-0.01	-0.01	-0.01	90.0	
18	-0.01	-0.01	-0.01	-0.00	-0.00	-0.00	-0.02	-0.02	-0.02	-0.04	-0.06	-0.05	-0.05	-0.04	0.07	0.08	0.07	0.03	0.01	0.00	0.04	0.00	0.00	0.00	33.6		
19	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.06	0.07	0.12	0.17	0.21	0.24	0.29	27	18	15	0.06	0.02	0.01	-0.02	-0.04	-0.04	-0.05	-0.05	10.0
20	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.13	0.19	0.24	0.27	0.30	0.33	0.14	17	25	31	0.04	-0.01	-0.02	-0.02	-0.04	-0.04	-0.05	-0.05	0.8
21	-0.04	-0.03	-0.02	-0.00	-0.04	-0.00	-0.04	-0.13	-0.09	-0.11	-0.30	-0.41	-0.37	-0.19	-0.23	22	23	19	0.07	0.01	0.00	-0.01	-0.02	-0.02	-0.01	-0.01	36.0
22	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	-0.02	0.05	0.09	10	0.09	0.04	0.01	0.00	0.00	0.00	0.00	0.00	10.0	
23	-0.01	-0.01	-0.00	-0.00	-0.00	-0.00	-0.04	-0.04	-0.06	-0.07	-0.12	-0.17	-0.21	-0.24	29	27	18	0.15	0.06	0.02	-0.02	-0.04	-0.04	-0.05	-0.05	44.4	
24	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.04	-0.05	-0.05	-0.07	-0.08	-0.08	-0.08	-0.08	0.05	0.03	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.4	
25	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.06	-0.13	-0.23	-0.34	-0.42	-0.43	-0.40	-0.33	-0.28	17	06	07	0.02	0.01	0.00	-0.01	-0.02	-0.02	-0.03	-0.03	168.6
26	-0.07	-0.07	-0.07	-0.06	-0.03	-0.05	-0.14	-0.23	-0.30	-0.34	-0.39	-0.41	-0.38	-0.31	-0.23	17	07	07	0.02	-0.05	-0.07	-0.06	-0.04	-0.04	-0.05	-0.05	148.2
27	0.00	-0.01	-0.00	-0.00	-0.00	-0.01	-0.04	-0.06	-0.07	-0.11	-0.14	-0.17	-0.09	-0.08	0.05	0.03	0.00	0.03	0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	49.2	
28	-0.02	-0.05	-0.07	-0.06	-0.01	-0.13	-0.14	-0.21	-0.28	-0.40	-0.38	-0.36	-0.31	-0.23	12	03	03	0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	139.2	
29	-0.02	-0.05	-0.03	-0.04	-0.04	-0.09	-0.16	-0.32	-0.35	-0.37	-0.36	-0.35	-0.29	-0.23	07	07	05	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	123.6	
30	-0.06	-0.06	-0.06	-0.06	-0.05	-0.01	-0.04	-0.09	-0.10	-0.23	-0.23	-0.16	-0.14	-0.16	14	16	16	0.10	0.06	0.02	0.00	0.03	0.00	0.00	0.00	66.0	
31	0.00	-0.02	-0.04	-0.03	-0.01	-0.01	-0.01	-0.02	-0.07	-0.10	-0.15	-0.15	-0.09	-0.08	0.05	0.04	0.02	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	49.2	
MEAN	-0.03	-0.02	-0.01	0.02	0.05	0.11	0.16	0.24	0.26	0.29	0.30	0.29	0.25	0.21	15	0.08	0.02	-0.01	-0.02	-0.04	-0.03	-0.03	-0.03	-0.03	130.5		
S.D.	0.03	0.02	0.02	0.02	0.04	0.07	0.10	0.12	0.15	0.15	0.16	0.15	0.13	0.11	0.08	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	62.2		
N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

NFT RADIATION (Q\*)

INSTRUMENT: FRITSCHEN NET RADIOMETER

AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 SEPTEMBER  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	DAILY AVG																									
	TOTAL CLOUD COVER																									
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	*	
1	.00	.00	.00	.00	.00	.02	.04	.07	.13	.08	.05	.05	.05	.04	.06	.03	.03	.00	-.01	-.01	-.01	-.01	-.01	-.01	35.4	
2	-.01	-.02	-.02	-.02	-.02	-.00	-.02	-.00	-.03	-.13	.20	.21	.44	.28	.18	.09	.07	.01	-.01	-.02	-.01	-.01	-.01	-.01	99.0	
3	.00	.00	.00	.00	.00	.00	.01	.01	.02	.12	.14	.14	.18	.18	.15	.16	.15	.05	-.02	-.01	-.01	-.01	-.01	-.01	79.2	
4	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	.10	.12	.17	.19	.19	.16	.14	.07	.00	-.07	-.07	-.06	-.07	-.07	-.07	56.4	
5	-.07	-.07	-.07	-.07	-.07	-.04	-.01	.09	.17	.23	.30	.31	.31	.28	.18	.03	.00	-.03	-.06	-.05	-.04	-.02	-.03	-.03	97.8	
6	-.03	-.04	-.03	-.03	-.02	-.01	-.02	-.01	-.02	.05	.09	.14	.17	.19	.13	.13	.12	.04	.03	-.01	-.01	-.01	-.01	-.01	66.0	
7	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	.07	.11	.10	.15	.17	.19	.13	.08	.05	.03	.00	-.01	-.00	-.00	-.01	64.2	
8	-.02	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	.06	.10	.13	.18	.18	.13	.23	.13	.10	.08	.04	.00	-.01	-.01	-.01	75.0	
9	-.01	-.04	-.09	-.09	-.07	-.03	-.02	-.06	-.13	.24	.29	.32	.32	.23	.14	.04	.04	-.02	-.07	-.08	-.08	-.07	-.05	-.04	84.0	
10	-.06	-.07	-.07	-.07	-.06	-.06	-.06	-.02	-.06	.16	.23	.29	.14	.27	.30	.27	.22	.12	.05	-.03	-.05	-.06	-.03	-.02	73.2	
11	.00	-.01	-.02	-.02	-.04	-.01	-.01	-.01	-.01	.04	.07	.11	.22	.24	.07	.11	.09	.05	.02	-.01	-.01	-.01	-.01	-.02	69.6	
12	-.01	-.01	-.01	-.00	-.00	-.00	-.00	-.00	-.00	.03	.05	.07	.08	.10	.16	.11	.12	.04	.02	.00	.00	.00	.00	.00	55.8	
13	.01	.00	-.00	-.01	-.01	-.01	-.01	-.01	-.01	.06	.11	.13	.12	.10	.10	.09	.09	.03	.00	-.01	-.01	-.01	-.01	-.01	48.0	
14	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	.05	.09	.12	.13	.12	.08	.05	.01	-.01	-.02	-.03	-.02	-.01	-.01	-.01	37.2	
15	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	.09	.17	.24	.28	.24	.18	.10	.01	-.06	-.08	-.09	-.08	-.08	-.08	-.08	43.2	
16	-.08	-.08	-.08	-.08	-.08	-.07	-.03	-.01	-.01	.09	.17	.23	.26	.23	.17	.08	-.01	-.06	-.07	-.08	-.06	-.05	-.03	-.02	41.4	
17	-.01	-.02	-.01	-.01	-.00	-.01	-.01	-.01	-.01	.04	.08	.13	.20	.19	.19	.17	.17	.09	.06	-.01	-.04	-.05	-.04	-.03	64.8	
18	-.03	-.05	-.05	-.02	-.02	-.01	-.01	-.01	-.01	.05	.06	.09	.15	.14	.15	.07	.05	.03	-.01	-.01	-.01	-.01	-.01	-.01	36.0	
19	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.01	.03	.03	.07	.10	.20	.12	.09	.06	.04	-.00	-.01	-.01	-.01	-.01	-.01	45.0	
20	-.02	-.01	-.01	-.02	-.02	-.01	-.01	-.01	-.01	.03	-.02	.01	.01	.10	.13	.10	.08	.05	.01	-.01	-.02	-.02	-.02	-.02	18.0	
21	-.02	-.02	-.02	-.01	-.01	-.03	-.02	-.01	-.01	.01	.01	.01	.01	.01	.01	.02	.01	.01	-.01	-.01	-.01	-.01	-.01	-.01	5.4	
22	-.02	-.02	-.01	-.01	-.01	-.01	-.02	-.01	-.01	.02	.02	.01	.01	.01	.02	.01	.01	-.01	-.02	-.02	-.01	-.01	-.01	-.01	36.0	
23	-.05	-.07	-.04	-.02	-.04	-.06	-.04	-.04	-.06	.04	.05	.06	.05	.05	.05	.05	.05	.05	-.01	-.03	-.03	-.03	-.03	-.03	19.6	
24	-.07	-.06	-.05	-.04	-.05	-.07	-.06	-.05	-.07	.02	.02	.03	.04	.04	.04	.04	.04	.02	-.01	-.02	-.02	-.02	-.02	-.02	6.0	
25	-.08	-.08	-.07	-.06	-.06	-.05	-.05	-.07	-.10	.12	.11	.06	.01	.03	.06	.07	.07	.07	-.06	-.06	-.06	-.07	-.07	-.07	26.4	
26	-.05	-.05	-.05	-.05	-.03	-.03	-.02	-.02	-.02	.00	.02	.05	.08	.09	.10	.10	.09	.06	.01	-.02	-.01	-.01	-.01	-.01	18.0	
27	.00	.00	-.01	-.01	-.01	-.00	-.00	-.01	-.01	.03	.07	.10	.15	.17	.10	.03	-.03	-.06	-.06	-.04	-.04	-.06	-.03	-.02	22.2	
28	-.01	-.01	-.01	-.01	-.01	-.00	-.00	-.01	-.01	.07	.11	.09	.05	.05	.02	.02	.01	.00	.00	.00	.00	.00	.00	.00	24.6	
29	-.01	-.02	-.02	-.02	-.02	-.03	-.01	-.01	-.01	.03	.02	.01	.01	.01	.00	.00	.00	-.01	-.01	-.01	-.02	-.04	-.04	-.04	11.4	
30	-.01	-.02	-.02	-.02	-.02	-.03	-.01	-.01	-.01	.03	.02	.01	.01	.01	.00	.00	-.01	-.01	-.01	-.01	-.02	-.04	-.04	-.04	10.0	
MEAN	-.02	-.03	-.02	-.02	-.02	-.01	-.01	-.02	-.01	.02	.06	.10	.13	.15	.16	.14	.11	.07	.03	-.02	-.03	-.03	-.02	-.02	40.6	
S.D.	.03	.03	.03	.02	.02	.02	.03	.05	.06	.08	.09	.10	.09	.07	.05	.04	.03	.03	.02	.02	.02	.02	.02	.02	.02	35.2
N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29	

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

NFT RADIATION (Q\*)

INSTRUMENT: FRITSCHEN NET RADIOMETER

AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 OCTOBER  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	NFT RADIATION (Q*)											INSTRUMENT:FRITSCHEN NET RADIOMETER											Avg. TOTAL CLOUD COVER		
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	-0.04	-0.03	-0.04	-0.04	-0.03	-0.01	-0.01	0.02	0.00	0.00	-0.01	-0.04	-0.06	-0.07	-0.06	-0.04	-0.06	-0.07	-0.07	-0.06	-0.06	-0.06	-0.04	-53.4	
2	-0.05	-0.03	-0.01	-0.02	-0.04	-0.05	-0.03	0.08	-0.01	0.00	-0.01	-0.03	0.00	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	0.64	
3	-0.04	-0.05	-0.05	-0.05	-0.05	-0.07	-0.06	-0.04	0.01	0.00	-0.02	-0.02	0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.64	
4	-0.01	-0.00	-0.00	-0.00	-0.00	-0.01	-0.02	-0.02	0.00	0.00	-0.01	-0.03	0.09	-0.03	-0.04	-0.05	-0.05	-0.06	-0.06	-0.07	-0.06	-0.06	-0.06	0.00	
5	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.03	-0.01	-0.01	0.02	-0.02	-0.02	-0.01	0.00	0.00	0.00	-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-34.8	
6	-0.01	-0.00	-0.00	-0.00	-0.00	-0.04	-0.03	-0.01	-0.01	-0.02	-0.02	-0.02	-0.01	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.01	-23.4	
7	-0.01	-0.00	-0.00	-0.00	-0.00	-0.01	-0.00	-0.00	0.01	0.00	-0.01	-0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.03	-0.03	-0.04	-0.04	-0.04	10.1	
8	-0.02	-0.01	-0.01	-0.01	-0.02	-0.05	-0.06	-0.05	0.00	0.00	-0.02	-0.06	-0.08	-0.04	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.03	-0.03	0.64	
9	-0.03	-0.04	-0.04	-0.03	-0.01	-0.01	-0.01	0.00	0.01	-0.01	-0.00	-0.03	-0.06	-0.08	-0.07	-0.06	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	0.54	
10	-0.06	-0.07	-0.07	-0.07	-0.07	-0.06	-0.05	-0.05	-0.02	-0.01	-0.01	-0.02	-0.03	-0.02	-0.02	-0.02	-0.06	-0.06	-0.06	-0.03	-0.03	-0.03	-0.01	-61.2	
11	-0.02	-0.02	-0.05	-0.05	-0.05	-0.05	-0.03	-0.03	-0.02	-0.01	-0.00	-0.00	-0.01	-0.03	-0.03	-0.04	-0.04	-0.04	-0.05	-0.05	-0.02	-0.03	-0.05	44.4	
12	-0.04	-0.02	-0.01	-0.00	-0.01	-0.00	-0.00	-0.05	-0.02	-0.01	-0.02	-0.03	-0.03	-0.05	-0.05	-0.06	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	49.8	
13	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.04	-0.02	-0.01	-0.06	-0.02	-0.01	-0.00	-0.02	-0.06	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	49.2	
14	-0.05	-0.05	-0.05	-0.05	-0.05	-0.06	-0.05	-0.05	-0.04	-0.02	-0.00	-0.01	-0.04	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	61.8	
15	-0.05	-0.04	-0.05	-0.05	-0.05	-0.05	-0.03	-0.03	-0.02	-0.00	-0.01	-0.02	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	13.2	
16	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	10.1	
17	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.00	-0.00	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.00	
18	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.02	-0.02	-0.04	-0.05	-0.03	-0.01	-0.00	-0.00	-0.01	-0.02	-0.02	-0.00	-0.00	-0.00	-0.00	-13.8	
19	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.00	-0.02	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.02	-0.01	-0.00	-0.00	-0.00	-16.2	
20	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.00	-0.00	-0.00	5.4	
21	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.00	-0.00	-0.01	-0.01	-0.02	-0.02	-0.01	-0.00	-0.00	-0.00	-7.2	
22	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-5.4	
23	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-5.4	
24	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.03	-0.02	-0.04	-0.03	-0.03	-0.03	-0.05	-0.06	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	43.8	
25	-0.06	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.06	-0.06	-0.07	-0.08	-0.08	-0.07	-0.06	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	67.2	
26	-0.03	-0.03	-0.02	-0.02	-0.02	-0.02	-0.03	-0.02	-0.00	-0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	-0.02	-0.02	-0.01	-0.02	-0.03	-0.01	-0.01	23.4	
27	-0.01	-0.01	-0.01	-0.02	-0.01	-0.03	-0.04	-0.04	-0.02	-0.01	-0.00	-0.01	-0.06	-0.05	-0.05	-0.07	-0.07	-0.07	-0.07	-0.06	-0.06	-0.06	-0.06	0.84	
28	-0.08	-0.06	-0.04	-0.03	-0.03	-0.07	-0.07	-0.07	-0.06	-0.06	-0.07	-0.08	-0.11	-0.07	-0.08	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	0.00	
29	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.05	-0.06	-0.06	-0.07	-0.08	-0.09	-0.10	-0.07	-0.07	-0.05	-0.05	-0.03	-0.03	-0.02	-0.02	-0.02	82.2	
30	-0.05	-0.09	-0.08	-0.07	-0.08	-0.08	-0.08	-0.07	-0.07	-0.07	-0.07	-0.08	-0.09	-0.09	-0.10	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	101.4	
31	-0.06	-0.05	-0.03	-0.03	-0.04	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.08	-0.09	-0.08	-0.08	-0.08	-0.08	-0.08	-0.02	-0.02	-0.02	-0.02	-67.8	
MEAN	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.02	-0.01	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-35.4	
S.D.	0.02	0.03	0.02	0.02	0.03	0.03	0.02	0.03	0.03	0.03	0.04	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	2A.4	
N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

\* CAL/SQ-CM/DAY

PROUGHTON ISLAND N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

NFT RADIATION (Q\*)

INSTRUMENT: FRITSCHEN NET RADIOMETER

AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 NOVEMBER  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	HOUR (EASTERN STANDARD TIME)												DAILY AVG															
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	*	CLOUD COVER		
1	-0.06	-0.03	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-13.2	10%		
2	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-3.6	10%		
3	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-7.8	0%		
4	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-4.8	10%		
5	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-12.6	10%		
6	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-20.4	0%		
7	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-17.4	10%		
8	-0.01	-0.01	-0.01	-0.01	-0.01	-0.03	-0.05	-0.05	-0.03	-0.04	-0.05	-0.05	-0.05	-0.06	-0.07	-0.06	-0.06	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-48.6	0.7%		
9	-0.02	-0.04	-0.03	-0.01	-0.02	-0.05	-0.05	-0.02	-0.02	-0.03	-0.02	-0.04	-0.03	-0.02	-0.03	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-25.2	0.8%		
10	-0.06	-0.04	-0.07	-0.07	-0.06	-0.07	-0.08	-0.07	-0.07	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.07	-0.07	-0.07	-0.07	-0.07	-84.6	0.1%		
11	-0.05	-0.05	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-49.8	10%		
12	-0.03	-0.02	-0.01	-0.04	-0.05	-0.04	-0.04	-0.04	-0.04	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.02	-0.02	-0.02	-40.2	10%		
13	-0.02	-0.02	-0.05	-0.05	-0.05	-0.05	-0.05	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.05	-0.05	-0.05	-0.05	-0.05	-61.8	0.5%		
14	-0.04	-0.04	-0.04	-0.04	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-67.2	0.1%		
15	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-34.8	0.5%		
16	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-9.6	10%		
17	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-13.8	10%		
18	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-13.8	10%		
19	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-15.6	10%		
20	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-34.8	0.5%		
21	-0.04	-0.04	-0.04	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-34.2	0.5%	
22	-0.03	-0.02	-0.03	-0.02	-0.01	-0.02	-0.03	-0.02	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-24.0	10%	
23	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-13.2	10%		
24	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-7.2	0.9%		
25	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-4.2	10%		
26	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-1.2	10%		
27	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-10.8	10%		
28	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-3.0	10%		
29	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-12.0	0.8%		
30	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-2.4	10%		
MEAN	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-23.1			
S.D.	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	21.3			
N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	

\* CAL/SQ-CM/DAY

PROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' 4'  
ELEV 10 M.A.S.L.

NFT RADIATION (Q\*)

INSTRUMENT: FRITSCHEN NET RADIOMETER  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

AVERAGE FLUX (CAL/SQ-CM/MIN)

DATE	HOUR (EASTERN STANDARD TIME)											DAILY AVG												
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	* COVER
1	-0.01	-0.01	0.00	0.00	-0.01	-0.01	-0.03	-0.01	-0.01	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01	
2	-0.00	-0.00	0.00	0.00	-0.00	-0.01	-0.01	-0.00	-0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01	
3	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	-0.00	-0.01	-0.01	-0.03	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	0.01	
4	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.03	-0.02	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.01	
5	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01	
6	-0.01	-0.01	-0.01	-0.02	-0.01	-0.03	-0.03	-0.02	-0.02	-0.07	-0.07	-0.07	-0.06	-0.04	-0.03	-0.05	-0.03	-0.02	-0.01	-0.06	-0.05	-0.03	-0.01	0.04
7	-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01
8	-0.03	-0.03	-0.02	-0.02	-0.02	-0.02	-0.02	-0.04	-0.03	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01
9	-0.01	-0.01	-0.02	-0.02	-0.03	-0.04	-0.06	-0.06	-0.05	-0.05	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	0.01
10	-0.05	-0.05	-0.04	-0.04	-0.04	-0.04	-0.03	-0.03	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	0.01
11	-0.06	-0.06	-0.03	-0.03	-0.05	-0.06	-0.07	-0.07	-0.05	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.05	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	0.01
12	-0.05	-0.06	-0.06	-0.06	-0.05	-0.04	-0.04	-0.05	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.05	-0.06	-0.06	-0.06	-0.05	-0.05	-0.05	-0.05	0.01
13	-0.04	-0.04	-0.04	-0.04	-0.05	-0.05	-0.05	-0.05	-0.03	-0.02	-0.02	-0.04	-0.03	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	0.01
14	-0.05	-0.05	-0.02	-0.02	-0.03	-0.04	-0.06	-0.06	-0.05	-0.05	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	0.01
15	-0.07	-0.07	-0.08	-0.08	-0.08	-0.08	-0.09	-0.08	-0.08	-0.08	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	0.01
16	-0.04	-0.05	-0.03	-0.03	-0.05	-0.06	-0.07	-0.07	-0.05	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.05	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	0.01
17	-0.02	-0.02	-0.02	-0.02	-0.03	-0.04	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	0.01
18	-0.02	-0.02	-0.02	-0.02	-0.05	-0.05	-0.08	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	0.01
19	-0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01
20	-0.01	-0.01	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	0.01
21	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01
22	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01
23	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.02	-0.02	-0.03	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	0.01
24	-0.08	-0.08	-0.06	-0.06	-0.07	-0.07	-0.07	-0.07	-0.07	-0.06	-0.06	-0.06	-0.05	-0.05	-0.05	-0.05	-0.07	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	0.01
25	-0.08	-0.08	-0.07	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	0.01
26	-0.04	-0.02	-0.04	-0.05	-0.05	-0.05	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01
27	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	-0.02	-0.01	-0.02	-0.01	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.07	-0.08	-0.06	-0.06	-0.07	-0.07	-0.07	0.01
28	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.05	-0.05	-0.05	-0.04	-0.04	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	0.01
29	-0.04	-0.04	-0.04	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.01
30	-0.05	-0.04	-0.02	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.01
31	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.01
MEAN	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
S.D.	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.02	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.03
N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

\* CAL/SQ-CM/DAY

Table 3.

Atmospheric Longwave Radiation ( $L_t$ )

1973      August - December

BROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

ATMOSPHERIC RADIATION (L↓)

INSTRUMENT:SRI (CSIRO-TYPE) NET RADIOMETER (WITH CAVITY)  
AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 AUGUST  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	HOUR (EASTERN STANDARD TIME)												DAILY AVG												
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	*
1																									10L
2																									09L
3																									09M
4																									00
5																									00
6																									00
7																									00
8																									00
9																									10M
10																									10L
11																									0
12																									09L
13																									00
14	*4.0	*4.1	*4.2	*4.2	*4.2	*4.2	*4.5	*4.5	*4.5	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.0	
15	*3.9	*4.0	*4.0	*4.0	*4.1	*4.4	*4.5	*4.8	*4.8	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.0	
16	*4.0	*4.0	*4.0	*4.0	*4.1	*4.4	*4.5	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.0	
17	*4.5	*4.6	*4.6	*4.7	*4.7	*4.7	*4.8	*4.8	*4.8	*4.7	*4.7	*4.7	*4.7	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.0	
18	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.0	
19	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.0	
20	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.8	*4.7	*4.7	*4.7	*4.7	*4.7	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.6	*4.0	
21	*4.3	*4.3	*4.5	*4.6	*4.7	*4.6	*5.1	*5.0	*5.1	*4.9	*5.0	*5.1	*5.0	*4.8	*4.6	*4.7	*4.6	*4.6	*4.7	*4.6	*4.7	*4.6	*4.7	*4.0	
22	*4.9	*5.0	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.8	*4.8	*4.7	*4.7	*4.8	*4.8	*4.8	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.0	
23	*4.6	*4.7	*4.7	*4.7	*4.7	*4.7	*4.8	*4.8	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.0	
24	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.6	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.0	
25	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.2	*4.2	*4.2	*4.2	*4.2	*4.2	*4.2	*4.3	*4.3	*4.3	*4.3	*4.3	*4.3	*4.3	*4.3	*4.3	*4.0	
26	*3.7	*3.7	*3.7	*3.7	*3.8	*4.1	*4.1	*4.3	*4.2	*4.1	*3.9	*3.8	*4.0	*4.0	*3.9	*3.9	*4.1	*4.1	*4.2	*3.9	*4.0	*4.1	*4.2	*3.0	
27	*4.7	*4.7	*4.7	*4.7	*4.7	*4.8	*4.6	*4.6	*4.6	*4.7	*4.6	*4.6	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.7	*4.0	
28	*4.5	*4.0	*3.8	*3.8	*4.5	*4.4	*4.4	*4.3	*4.3	*4.2	*4.2	*4.1	*4.1	*4.1	*4.1	*4.2	*4.2	*4.2	*4.2	*4.2	*4.2	*4.2	*4.2	*4.0	
29	*4.5	*4.1	*4.3	*4.2	*4.7	*4.8	*4.6	*4.5	*4.5	*4.4	*4.4	*4.3	*4.3	*4.3	*4.2	*4.2	*4.2	*4.2	*4.2	*4.2	*4.2	*4.2	*4.2	*4.0	
30	*3.9	*3.9	*3.8	*3.8	*4.0	*4.0	*4.3	*4.3	*4.7	*4.7	*4.7	*4.8	*4.5	*4.5	*4.5	*4.5	*4.5	*4.5	*4.5	*4.5	*4.5	*4.5	*4.5	*4.0	
31	*4.7	*4.5	*4.2	*4.4	*4.4	*4.5	*4.8	*4.8	*4.7	*4.7	*4.8	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.9	*4.0	
MEAN	.44	.44	.44	.45	.46	.46	.47	.47	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.44	
S.D.	.04	.04	.05	.04	.03	.03	.02	.03	.03	.04	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.04	
N	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	

\* CAL/SQ-CM/DAY

BROUGHTON ISL. N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

ATMOSPHERIC RADIATION (L+)

INSTRUMENT:SRI (CSIRO-TYPE) NET RADIOMETER (WITH CAVITY)

1973 SEPTEMBER  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

AVERAGE FLUX (CAL/SG-CM/MIN)

DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	DAILY AVG				
																								#	CLOUD COVER			
1	.48	.48	.47	.47	.48	.47	.43	.48	.48	.48	.47	.47	.47	.47	.47	.47	.47	.47	.47	.46	.46	.46	.46	.46	.46	.46	.46	.46
2	.46	.44	.45	.44	.45	.46	.46	.46	.47	.47	.48	.49	.49	.49	.49	.49	.49	.49	.49	.47	.47	.47	.47	.47	.47	.47	.47	.47
3	.47	.47	.47	.47	.46	.46	.46	.47	.47	.47	.48	.48	.48	.48	.48	.48	.48	.48	.48	.47	.47	.47	.47	.47	.47	.47	.47	.47
4	.46	.46	.46	.46	.47	.47	.47	.47	.47	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.47	.47	.47	.47	.47	.47	.47	.47	.47
5	.37	.37	.38	.40	.41	.44	.43	.43	.43	.42	.42	.43	.43	.43	.43	.43	.43	.43	.43	.42	.41	.40	.41	.42	.41	.42	.41	.42
6	.44	.41	.42	.43	.44	.45	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.45	.45	.45	.46	.46	.46	.46	.46	.46
7	.47	.47	.46	.46	.46	.46	.46	.47	.47	.47	.48	.48	.48	.48	.48	.48	.48	.48	.48	.47	.47	.47	.47	.47	.47	.47	.47	.47
8	.45	.46	.46	.45	.45	.45	.45	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.45	.45	.45	.46	.46	.46	.46	.46	.46
9	.46	.42	.34	.37	.41	.46	.44	.38	.36	.30	.29	.29	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30
10	.38	.37	.38	.37	.37	.39	.40	.41	.42	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.40	.40	.40	.40	.40	.40	.40
11	.47	.47	.43	.43	.42	.46	.45	.47	.48	.44	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
12	.46	.46	.47	.47	.47	.46	.47	.47	.47	.47	.47	.49	.49	.49	.49	.49	.49	.49	.49	.48	.48	.48	.48	.48	.48	.48	.48	.48
13	.47	.48	.48	.47	.48	.47	.48	.47	.48	.47	.48	.48	.48	.48	.48	.48	.48	.48	.48	.47	.47	.47	.47	.47	.47	.47	.47	.47
14	.46	.46	.46	.46	.46	.46	.46	.46	.46	.47	.47	.48	.47	.47	.47	.47	.47	.47	.47	.46	.45	.45	.45	.45	.45	.45	.45	.45
15	.46	.45	.44	.44	.46	.46	.46	.45	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.45	.45	.45	.45	.45	.45	.45	.45	.45
16	.35	.35	.35	.35	.36	.36	.35	.35	.36	.35	.35	.36	.35	.36	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35
17	.43	.43	.45	.46	.46	.46	.46	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
18	.42	.42	.44	.44	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46
19	.45	.45	.45	.45	.45	.45	.45	.45	.45	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.45	.45	.45	.45	.45	.45	.45	.45	.45
20	.45	.46	.45	.45	.45	.45	.42	.40	.39	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
21	.44	.44	.44	.44	.44	.44	.44	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
22	.44	.44	.45	.45	.45	.45	.44	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
23	.38	.35	.40	.42	.39	.38	.42	.38	.39	.35	.36	.41	.41	.41	.41	.41	.41	.41	.41	.40	.40	.40	.40	.40	.40	.40	.40	.40
24	.34	.36	.38	.39	.39	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38	.37	.37	.37	.37	.37	.37	.37	.37	.37
25	.35	.35	.35	.35	.35	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
26	.38	.38	.39	.41	.42	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
27	.48	.46	.46	.46	.46	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
28	.44	.45	.45	.45	.46	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
29	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47
30	.44	.44	.44	.44	.44	.44	.42	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
MEAN	.43	.43	.43	.43	.43	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.43	.43	.43	.43	.43	.43	.43	.43	.43
S.D.	.04	.04	.04	.04	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30

\* CAL/SQ-CM/DAY

PROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

ATMOSPHERIC RADIATION (L<sub>d</sub>)

INSTRUMENT:SRI (CSIRO-TYPE) NET RADIOMETER (WITH CAVITY)

AVERAGE FLUX (CAL/SQ-CM/MIN)

1973 OCTOBER

UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	* DAILY CLOUD COVER	DAILY TOTAL CLOUD COVER	Avg COVER		
1	.40	.41	.38	.38	.37	.42	.40	.38	.35	.38	.38	.38	.39	.38	.37	.35	.38	.36	.35	.35	.34	.37	.39	.539.4	.00	.00			
2	.37	.37	.40	.44	.42	.39	.36	.38	.38	.39	.42	.43	.42	.43	.43	.44	.43	.44	.44	.44	.44	.44	.44	.43	.593.5	.064	.064		
3	.39	.39	.36	.36	.36	.35	.35	.37	.43	.42	.44	.46	.44	.49	.49	.48	.48	.47	.47	.47	.47	.47	.47	.47	.623.5	.064	.064		
4	.46	.46	.46	.46	.46	.46	.46	.46	.43	.41	.46	.52	.45	.41	.41	.40	.41	.39	.37	.37	.37	.37	.37	.37	.601.9	.00	.00		
5	.37	.37	.38	.37	.37	.38	.37	.41	.41	.45	.42	.47	.45	.46	.46	.46	.45	.45	.45	.45	.45	.45	.45	.45	.613.7	.054	.054		
6	.45	.45	.45	.45	.45	.45	.45	.44	.44	.46	.46	.45	.45	.45	.45	.45	.45	.44	.44	.44	.44	.44	.44	.44	.640.9	.10L	.10L		
7	.44	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.44	.44	.44	.45	.46	.45	.45	.44	.41	.41	.41	.530.8	.10L	.10L		
8	.43	.44	.44	.44	.44	.44	.45	.45	.45	.45	.45	.45	.45	.44	.44	.44	.45	.45	.44	.45	.45	.44	.40	.40	.40	.591.4	.064	.064	
9	.40	.38	.39	.42	.44	.44	.44	.43	.43	.43	.42	.41	.39	.37	.38	.38	.37	.38	.36	.35	.35	.34	.35	.35	.553.8	.054	.054		
10.	.34	.34	.35	.35	.33	.34	.34	.36	.36	.38	.38	.37	.37	.38	.39	.41	.42	.36	.35	.35	.35	.41	.40	.40	.535.1	.014	.014		
11.	.43	.42	.36	.38	.38	.38	.38	.41	.39	.39	.39	.40	.41	.40	.40	.38	.39	.36	.37	.37	.38	.40	.40	.40	.559.7	.084	.084		
12.	.34	.39	.42	.42	.42	.42	.42	.42	.42	.36	.39	.38	.39	.38	.38	.41	.40	.40	.37	.36	.36	.36	.36	.36	.552.8	.00	.00		
13.	.37	.37	.37	.37	.37	.37	.37	.37	.37	.40	.41	.38	.41	.45	.46	.46	.46	.43	.36	.37	.37	.37	.37	.37	.564.8	.024	.024		
14.	.37	.37	.37	.37	.37	.36	.37	.37	.37	.40	.42	.41	.40	.40	.40	.40	.40	.38	.37	.36	.37	.36	.37	.37	.545.8	.014	.014		
15.	.37	.38	.36	.36	.37	.37	.37	.42	.42	.46	.45	.46	.47	.46	.46	.46	.47	.47	.47	.46	.46	.46	.46	.46	.626.8	.064	.064		
16.	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.46	.46	.46	.46	.46	.46	.47	.47	.47	.47	.47	.47	.667.9	.10L	.10L		
17.	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47	.46	.47	.46	.47	.47	.47	.47	.47	.47	.47	.47	.673.0	.10L	.10L		
18.	.47	.47	.47	.47	.47	.47	.46	.45	.45	.40	.40	.41	.38	.41	.43	.45	.46	.46	.43	.36	.37	.37	.37	.37	.37	.564.8	.024	.024	
19.	.44	.44	.44	.44	.45	.45	.46	.46	.46	.44	.44	.44	.43	.43	.43	.40	.40	.39	.41	.42	.41	.42	.41	.41	.545.8	.014	.014		
20.	.45	.45	.44	.44	.43	.45	.45	.45	.45	.46	.46	.46	.46	.46	.46	.46	.46	.47	.47	.47	.47	.46	.46	.46	.553.9	.104	.104		
21.	.46	.46	.46	.46	.46	.46	.46	.46	.46	.47	.47	.47	.47	.47	.47	.46	.46	.45	.45	.45	.45	.43	.43	.43	.4556.4	.10L	.10L		
22.	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.46	.46	.46	.46	.45	.45	.45	.46	.45	.46	.46	.4556.6	.10L	.10L		
23.	.46	.46	.46	.46	.46	.46	.46	.46	.45	.46	.47	.47	.47	.47	.47	.46	.45	.45	.45	.45	.45	.45	.45	.45	.4556.8	.01L	.01L		
24.	.46	.46	.45	.45	.45	.45	.45	.45	.45	.43	.43	.42	.42	.42	.42	.41	.39	.38	.37	.37	.36	.35	.35	.35	.568.5	.05L	.05L		
25.	.33	.33	.34	.34	.36	.36	.33	.35	.31	.29	.35	.33	.35	.33	.34	.34	.33	.34	.33	.34	.34	.35	.35	.35	.502.9	.064	.064		
26.	.39	.39	.39	.40	.40	.38	.39	.43	.43	.44	.43	.44	.43	.44	.43	.42	.41	.41	.41	.41	.42	.39	.39	.44	.42	.42	.42	.42	
27.	.44	.44	.44	.44	.44	.42	.42	.42	.42	.44	.44	.44	.44	.44	.44	.43	.43	.43	.43	.43	.43	.43	.43	.43	.39	.38	.32	.32	.32
28.	.32	.35	.38	.40	.33	.31	.32	.33	.37	.34	.35	.35	.37	.33	.35	.34	.35	.34	.37	.37	.36	.33	.33	.33	.32	.32	.32	.32	
29.	.33	.32	.32	.32	.33	.32	.32	.33	.33	.33	.32	.31	.31	.31	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.484.9	.00	.00		
30.	.37	.31	.32	.32	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31	.510.8	.02L	.02L		
31.	.33	.36	.40	.39	.38	.38	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.35	.35	.35	.35	
MEAN	.40	.41	.41	.41	.41	.40	.40	.40	.40	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	
S.D.	.05	.05	.05	.04	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	
N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

ATMOSPHERIC RADIATION (L<sub>W</sub>)

INSTRUMENT:SRI (CSIRO-TYPE) NET RADIOMETER (WITH CAVITY)

1973 NOVEMBER  
UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

## AVERAGE FLUX (CAL/SQ-CM/MIN)

DATE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	DAILY AVG:		
																								* COVER		
1	.34	.39	.41	.43	.44	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.44	.44	.44	.44	.44	.44	.44	.44	.44
2	.44	.44	.45	.45	.45	.45	.45	.45	.45	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46	.45	.45	.45	.45	.45
3	.44	.45	.45	.46	.46	.46	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
4	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
5	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
6	.42	.42	.43	.42	.42	.42	.42	.42	.42	.43	.43	.43	.43	.43	.43	.43	.43	.44	.44	.44	.44	.44	.44	.44	.44	.44
7	.43	.43	.44	.44	.44	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
8	.43	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44
9	.41	.37	.37	.44	.41	.34	.35	.40	.42	.38	.39	.36	.38	.39	.36	.38	.39	.37	.37	.37	.37	.37	.37	.37	.37	.37
10	.36	.39	.34	.33	.32	.32	.33	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32	.32
11	.34	.34	.34	.33	.33	.33	.36	.44	.44	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
12	.38	.41	.41	.37	.37	.34	.35	.35	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37
13	.41	.35	.41	.34	.33	.33	.34	.36	.37	.35	.35	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
14	.37	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34
15	.32	.34	.33	.33	.33	.33	.33	.34	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35
16	.45	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44
17	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
18	.42	.42	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
19	.43	.42	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
20	.41	.41	.41	.41	.41	.41	.41	.41	.41	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
21	.36	.37	.38	.41	.42	.42	.43	.43	.43	.42	.40	.40	.40	.40	.40	.40	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39
22	.39	.38	.40	.41	.39	.38	.40	.42	.42	.40	.42	.40	.42	.40	.42	.40	.42	.40	.42	.41	.41	.41	.41	.41	.41	.41
23	.41	.42	.42	.42	.42	.42	.42	.42	.42	.41	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
24	.42	.42	.42	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
25	.44	.44	.44	.44	.44	.45	.45	.45	.45	.45	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44	.44
26	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
27	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
28	.45	.45	.45	.44	.44	.44	.44	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
29	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
30	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
MEAN	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41
S.D.	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30

\* CAL/SQ-CM/DAY

BROUGHTON ISLAND, N.W.T.  
67°57' N 64°05' W  
ELEV 10 M.A.S.L.

ATMOSPHERIC RADIATION (L<sub>+</sub>)

INSTRUMENT:SRI (CSIRO-TYPE) NET RADIOMETER (WITH CAVITY)

UNIVERSITY OF COLORADO  
INSTITUTE OF ARCTIC AND  
ALPINE RESEARCH

AVERAGE FLUX (CAL/SQ-CM/MIN)

DATE	HOUR (EASTERN STANDARD TIME)												DAILY AVG:																
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	*	CLOUD COVER			
1	.43	.44	.44	.44	.44	.44	.43	.43	.41	.44	.44	.43	.43	.42	.42	.43	.42	.41	.40	.42	.43	.41	.40	.41	.40	.09	L		
2	.42	.44	.43	.43	.43	.43	.43	.43	.42	.43	.43	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.41	.39	.41	.609	.7		
3	.42	.42	.41	.41	.41	.41	.39	.39	.41	.41	.42	.42	.40	.40	.41	.41	.39	.38	.39	.38	.37	.34	.33	.33	.34	.556	.6		
4	.36	.38	.40	.40	.41	.41	.39	.39	.35	.36	.38	.39	.40	.41	.41	.41	.39	.38	.41	.40	.40	.40	.41	.41	.41	.564	.9		
5	.42	.41	.40	.41	.41	.41	.41	.41	.41	.41	.43	.43	.42	.42	.43	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.602	.5		
6	.42	.41	.42	.40	.42	.40	.40	.40	.38	.40	.33	.33	.33	.32	.33	.36	.35	.33	.36	.38	.41	.33	.32	.32	.37	.532	.3		
7	.40	.40	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.40	.40	.38	.33	.31	.32	.32	.33	.560	.7		
8	.33	.35	.34	.34	.35	.37	.37	.37	.35	.36	.36	.39	.40	.41	.40	.39	.40	.39	.39	.40	.41	.41	.41	.41	.41	.549	.0		
9	.41	.41	.40	.40	.38	.38	.36	.32	.31	.26	.29	.31	.35	.36	.32	.33	.34	.32	.33	.34	.31	.31	.30	.29	.30	.482	.0		
10	.30	.30	.31	.31	.31	.32	.31	.32	.31	.31	.32	.31	.31	.32	.31	.31	.32	.31	.33	.33	.31	.30	.29	.29	.30	.31	.445	.9	
11	.31	.31	.32	.37	.38	.34	.33	.30	.34	.32	.38	.31	.29	.30	.31	.33	.30	.29	.29	.29	.29	.30	.29	.29	.30	.454	.5		
12	.32	.31	.30	.30	.32	.32	.32	.31	.33	.31	.33	.31	.29	.30	.31	.33	.30	.30	.30	.31	.31	.31	.32	.32	.32	.446	.3		
13	.33	.33	.33	.34	.33	.33	.34	.33	.34	.38	.38	.38	.35	.32	.31	.36	.39	.39	.40	.40	.40	.41	.40	.40	.40	.31	.526	.6	
14	.33	.42	.42	.39	.35	.31	.30	.29	.30	.30	.28	.27	.29	.29	.29	.29	.29	.29	.29	.30	.30	.30	.30	.30	.30	.31	.452	.0	
15	.30	.30	.30	.30	.30	.31	.31	.31	.31	.31	.32	.30	.29	.29	.31	.32	.31	.31	.32	.31	.31	.32	.31	.31	.32	.36	.457	.6	
16	.36	.35	.35	.38	.38	.39	.41	.40	.40	.40	.41	.39	.35	.35	.38	.37	.35	.37	.35	.36	.36	.32	.31	.32	.31	.36	.527	.8	
17	.38	.33	.33	.32	.35	.35	.38	.35	.38	.36	.40	.40	.40	.36	.36	.38	.39	.39	.39	.38	.36	.36	.36	.36	.36	.40	.538	.3	
18	.40	.39	.35	.35	.39	.41	.41	.41	.41	.41	.41	.41	.41	.39	.39	.41	.40	.41	.41	.40	.40	.40	.41	.41	.41	.40	.580	.2	
19	.40	.40	.40	.40	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.41	.585	.0	
20	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.41	.578	.9	
21	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.41	.595	.6	
22	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.40	.40	.40	.41	.41	.583	.5	
23	.41	.41	.41	.41	.40	.40	.40	.39	.39	.37	.36	.36	.37	.36	.37	.36	.37	.36	.37	.36	.37	.36	.37	.36	.37	.32	.531	.7	
24	.30	.30	.32	.31	.29	.29	.29	.29	.29	.28	.26	.26	.28	.28	.28	.28	.28	.28	.28	.28	.28	.27	.27	.27	.28	.28	.416	.3	
25	.28	.28	.28	.28	.29	.29	.30	.30	.31	.27	.28	.28	.30	.31	.31	.32	.31	.32	.31	.32	.31	.32	.31	.32	.31	.34	.442	.0	
26	.40	.38	.35	.33	.33	.37	.38	.39	.41	.40	.36	.35	.38	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42	.41	.565	.8	
27	.42	.41	.41	.41	.41	.41	.40	.40	.40	.40	.41	.41	.40	.34	.31	.35	.38	.36	.36	.31	.30	.31	.30	.29	.28	.28	.29	.503	.0
28	.30	.29	.29	.29	.29	.29	.29	.30	.29	.28	.27	.30	.32	.32	.32	.32	.32	.32	.32	.32	.32	.31	.31	.31	.31	.31	.31	.31	.31
29	.31	.31	.31	.31	.32	.33	.33	.35	.35	.34	.33	.33	.35	.37	.37	.37	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39
30	.31	.33	.34	.34	.37	.38	.38	.39	.39	.39	.39	.39	.39	.36	.36	.36	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33
31	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39
MEAN	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37	.35	.35	.36	.36	.37	.37	.37	.36	.36	.36	.36	.36	.36	.36	.36	.36
S.D.	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
N	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

\* CAL/SQ-CM/DAY

Table 4. Direct Solar Radiation (I). Measurements with the Eppley normal incidence pyrheliometer.

Column 1. Year

2. Month

3. Date

4. Local Apparent Time ( $64^{\circ}03'W$ ).

5. Instantaneous value of global flux,  $K\downarrow$  ( $\text{cal-cm}^{-2}\text{-min}^{-1}$ ).

6. Solar zenith angle,  $\theta$ , in degrees.

7. Atmospheric mass,  $m$ , according to the formula of Kondratyev (1969, p. 163)

8. Measured value of direct solar flux,  $I$ , ( $\text{cal-cm}^{-2}\text{-min}^{-1}$ ).

9. Diffuse component of global solar flux,  $D$ , calculated as difference between  $K\downarrow$  and horizontal component of  $I$ , i.e.  $I \cos \theta$ .

10. Ratio of indirect flux  $D$  to global flux  $K\downarrow$ .

11. Transmission coefficient,  $q$ .

12 - 13. Measured fluxes ( $\text{cal-cm}^{-2}\text{-min}^{-1}$ ) for OG-1, RG-2 and RG-8 filters, respectively, uncorrected for a filter factor of 1.1.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
YR	MO	DAY	LAT	GF	THETA	M	DQ	IFL	IFL/GF	TF	DG1	DR2	DR8
73	6	6	8 15 48	.83	56.48	1.808	1.270	.13	.16	.795	.93	.77	.66
73	6	6	9 5 36	.95	52.37	1.636	1.311	.15	.15	.791	.95	.78	.68
73	6	6	10 21 48	1.08	47.47	1.479	1.349	.17	.15	.787	.98	.80	.69
73	6	6	11 11 36	1.12	45.58	1.428	1.354	.18	.16	.782	.98	.80	.69
73	6	6	12 11 0	1.13	44.98	1.414	1.352	.18	.16	.780	.98	.80	.69
73	6	6	13 26 0	1.08	46.90	1.463	1.323	.18	.17	.775	.96	.78	.68
73	6	6	14 18 48	1.01	49.83	1.549	1.318	.16	.16	.784	.95	.79	.68
73	6	6	15 17 36	.90	54.21	1.708	1.291	.14	.16	.792	.95	.78	.67
73	6	6	16 18 48	.76	59.60	1.972	1.228	.14	.18	.797	.91	.75	.65
73	6	6	17 18 48	.60	65.26	2.382	1.176	.11	.19	.814	.88	.74	.64
73	6	6	18 25 60	.41	71.60	3.149	1.059	.08	.19	.828	.82	.69	.60
73	6	9	9 20 48	.99	50.97	1.587	1.281	.18	.18	.774	.93	.76	.65
73	6	9	10 59 48	1.22	45.64	1.430	1.329	.29	.24	.773	.96	.78	.68
73	6	9	11 58 36	1.13	44.67	1.406	1.337	.18	.16	.773	.96	.79	.68
73	6	9	13 5 48	1.10	45.83	1.435	1.325	.18	.16	.772	.95	.78	.67
73	6	9	13 59 48	1.03	48.37	1.505	1.320	.15	.15	.779	.96	.78	.68
73	6	9	15 5 48	.92	53.00	1.660	1.285	.15	.16	.785	.94	.77	.66
73	6	9	16 22 36	.74	59.69	1.978	1.235	.11	.15	.800	.91	.75	.65
73	6	9	17 15 60	.61	64.74	2.336	1.183	.11	.17	.813	.89	.73	.64
73	6	9	18 38 48	.39	72.52	3.307	1.053	.08	.19	.834	.81	.68	.60
73	6	9	19 23 48	.27	76.47	4.227	.954	.05	.19	.847	.76	.64	.56
73	6	9	20 17 48	.17	80.75	6.076	.813	.04	.23	.868	.67	.58	.52
73	6	9	21 15 60	.08	84.58	9.946	.603	.02	.29	.890	.52	.47	.42
73	6	22	13 41 48	1.14	46.85	1.462	1.365	.20	.18	.793	.97	.80	.69
73	6	22	15 13 36	.91	53.11	1.664	1.314	.13	.14	.797	.94	.77	.67
73	6	22	16 15 60	.78	58.58	1.915	1.271	.12	.15	.807	.92	.76	.65
73	6	24	9 11 48	1.20	51.14	1.593	1.315	.37	.31	.789	.95	.78	.67
73	6	24	10 10 0	1.31	47.31	1.474	1.353	.39	.30	.790	.97	.79	.68
73	6	29	9 40 48	.96	49.25	1.531	.767	.46	.48	.550	.60	.53	.44
73	6	29	10 40 48	1.03	45.99	1.439	.938	.38	.37	.609	.72	.60	.53
73	6	29	11 39 36	1.07	44.43	1.400	.955	.39	.36	.608	.72	.60	.54
73	7	1	8 48 48	.88	53.21	1.668	1.162	.19	.21	.741	.86	.70	.61
73	7	2	8 56 36	.89	52.65	1.647	1.241	.14	.16	.768	.90	.73	.63
73	7	2	9 57 48	.99	48.35	1.504	1.295	.13	.13	.771	.94	.76	.66
73	7	2	10 51 48	1.05	45.74	1.433	1.307	.14	.13	.766	.94	.76	.65
73	7	2	11 50 0	1.08	44.52	1.403	1.269	.17	.16	.746	.92	.75	.64
73	7	2	12 53 0	1.06	45.26	1.420	1.261	.17	.16	.745	.91	.75	.64
73	7	2	13 59 36	.99	48.20	1.500	1.229	.17	.17	.744	.90	.74	.63
73	7	2	14 55 60	.88	52.07	1.625	1.204	.13	.15	.752	.88	.72	.63
73	7	2	15 58 60	.75	57.38	1.852	1.179	.12	.16	.770	.88	.72	.63
73	7	2	16 55 60	.60	62.68	2.173	1.106	.10	.16	.777	.83	.69	.59
73	7	10	8 58 36	.86	53.23	1.669	1.251	.12	.13	.775	.90	.73	.63
73	7	10	9 50 48	.95	49.54	1.540	1.295	.11	.11	.776	.93	.76	.65
73	7	10	10 49 0	1.02	46.63	1.456	1.311	.12	.12	.771	.94	.76	.66

YR	MO	DAY	LAT	GF	THETA	M	DQ	IFL	IFL/GF	TF	NG1	DR2	DR8
73	7	10	11 46 36	1.05	45.34	1.422	1.320	.12	.12	.770	.94	.77	.66
73	7	10	12 49 0	1.03	45.93	1.438	1.307	.13	.12	.767	.93	.76	.65
73	7	10	13 49 36	.98	48.40	1.506	1.305	.12	.12	.775	.94	.76	.65
73	7	10	14 48 24	.89	52.23	1.632	1.279	.11	.12	.781	.93	.75	.65
73	7	10	15 54 60	.74	57.75	1.871	1.225	.09	.12	.788	.89	.73	.62
73	7	10	16 48 60	.63	62.74	2.178	1.167	.09	.15	.797	.86	.70	.60
73	7	23	9 8 60	.73	54.45	1.718	.862	.23	.31	.628	.68	.58	.52
73	7	23	9 36 36	.81	52.50	1.641	.964	.22	.27	.657	.75	.63	.55
73	7	27	10 27 36	.94	50.45	1.569	1.308	.11	.11	.783	.94	.76	.65
73	7	27	11 7 48	.98	48.98	1.523	1.333	.11	.11	.787	.95	.78	.67
73	7	27	11 57 36	1.02	48.27	1.502	1.335	.13	.13	.785	.95	.78	.67
73	7	27	13 44 60	.93	51.06	1.590	1.314	.11	.11	.788	.94	.77	.66
73	7	27	15 1 48	.80	56.07	1.789	1.268	.09	.11	.793	.92	.75	.64
73	7	27	16 18 0	.63	62.58	2.166	1.201	.08	.13	.805	.88	.72	.62
73	8	6	8 39 36	.63	59.90	1.990	.880	.19	.30	.675	.69	.59	.52
73	8	6	9 40 48	.75	55.45	1.761	1.001	.18	.24	.690	.76	.64	.56
73	8	6	10 34 48	.83	52.59	1.645	1.042	.20	.24	.689	.79	.66	.58
73	8	11	7 37 36	.50	66.60	2.509	1.041	.09	.17	.782	.79	.65	.56
73	8	11	8 47 48	.66	60.59	2.032	1.153	.09	.14	.776	.85	.70	.60
73	8	11	9 47 48	.76	56.39	1.804	1.199	.09	.12	.768	.88	.71	.61
73	8	11	10 47 48	.83	53.49	1.679	1.235	.10	.12	.767	.90	.73	.63
73	8	11	11 47 48	.86	52.22	1.631	1.241	.10	.12	.763	.89	.73	.62
73	8	11	12 47 48	.85	52.76	1.651	1.227	.11	.12	.761	.89	.73	.62
73	8	11	13 47 48	.80	55.03	1.743	1.207	.10	.13	.765	.88	.71	.61
73	8	11	15 19 0	.65	61.13	2.067	1.163	.09	.14	.783	.85	.70	.60
73	8	13	9 27 60	.73	58.23	1.896	1.211	.09	.12	.782	.89	.72	.62
73	8	13	10 25 36	.80	54.98	1.740	1.235	.09	.11	.774	.90	.74	.64
73	8	13	11 50 48	.84	52.81	1.653	1.207	.11	.13	.753	.89	.73	.63
73	8	13	12 50 48	.84	53.43	1.677	1.233	.10	.12	.765	.90	.74	.64
73	8	13	14 7 0	.75	56.66	1.817	1.174	.11	.15	.761	.87	.71	.61
73	8	13	15 10 36	.66	61.03	2.060	1.138	.11	.16	.774	.85	.70	.60
73	8	13	16 10 36	.53	66.09	2.459	1.076	.10	.19	.789	.81	.67	.58
73	8	25	8 34 48	.57	65.87	2.438	1.195	.08	.14	.820	.89	.74	.64
73	8	25	9 57 36	.71	60.20	2.008	1.252	.09	.12	.804	.92	.75	.64
73	8	25	10 52 48	.77	57.78	1.873	1.291	.08	.11	.805	.94	.77	.66
73	8	25	11 57 36	.79	56.69	1.818	1.315	.07	.09	.808	.96	.79	.68
73	8	25	12 52 48	.76	57.36	1.851	1.291	.07	.09	.803	.94	.77	.66
73	8	28	11 40 48	.75	57.81	1.874	1.221	.10	.13	.781	.89	.72	.62
73	8	28	11 46 48	.75	57.76	1.872	1.227	.10	.13	.783	.89	.72	.62
73	8	28	11 52 48	.75	57.73	1.870	1.225	.10	.13	.782	.89	.72	.62
73	8	28	11 58 48	.75	57.72	1.869	1.223	.10	.13	.781	.89	.72	.62
73	8	28	12 4 48	.75	57.72	1.870	1.223	.10	.13	.781	.89	.72	.62
73	9	9	14 16 48	.57	66.30	2.479	1.233	.07	.12	.831	.93	.77	.67

YR	MO	DAY	LAT	GF	THETA	M	DO	IFL	IFL/GF	TF	DG1	DR2	DRA
73	9	9	14 52 48	.47	68.61	2.730	1.207	.03	.07	.839	.92	.77	.67
73	9	15	13 14 36	.57	65.66	2.419	1.209	.07	.13	.819	.90	.74	.64
73	9	15	14 15 48	.50	68.46	2.712	1.167	.07	.14	.826	.88	.73	.63
73	9	16	11 36 48	.59	64.91	2.351	1.216	.07	.12	.816	.91	.75	.65
73	9	16	11 48 48	.59	64.82	2.343	1.223	.07	.12	.818	.91	.75	.65
73	9	16	11 57 48	.59	64.79	2.341	1.227	.07	.12	.819	.91	.75	.65
73	9	16	12 4 60	.59	64.79	2.341	1.228	.07	.12	.819	.92	.76	.65
73	9	16	12 3 12	.59	64.79	2.341	1.229	.07	.12	.819	.92	.76	.66
73	9	25	11 46 24	.50	68.31	2.694	1.187	.06	.13	.829	.89	.74	.64
73	9	25	11 57 48	.51	68.27	2.689	1.191	.06	.13	.829	.90	.75	.64
73	10	1	11 40 36	.44	70.70	3.009	1.152	.05	.13	.836	.88	.73	.64
73	10	1	11 55 36	.43	70.62	2.998	1.165	.05	.11	.839	.89	.75	.65
73	10	1	12 8 48	.43	70.63	3.000	1.162	.05	.11	.838	.89	.75	.65
73	10	12	11 25 36	.32	75.09	3.851	1.076	.04	.14	.853	.84	.71	.62
73	10	12	11 48 60	.33	74.86	3.796	1.078	.05	.14	.851	.84	.71	.62
73	10	12	11 58 36	.33	74.84	3.790	1.079	.05	.14	.851	.84	.71	.62
73	10	29	11 47 48	.18	80.93	6.191	.860	.05	.25	.872	.71	.62	.56
73	10	29	12 0 60	.18	80.90	6.172	.880	.04	.24	.875	.73	.64	.57

Table 5. Atmospheric transmission characteristics derived from measurements of direct solar flux, I.

Date	q	$\beta$	T
June 6 9 22 24 29	.794	.030	2.54
	.809	.027	2.48
	.799	.016	2.43
	.790	.024	2.52
	.589	.179	5.62
July 1 2 10 23 27	.741	.057	3.25
	.760	.043	2.95
	.778	.027	2.71
	.642	.168	4.82
	.790	.019	2.55
Aug. 6 11 13 25 28	.685	.098	4.18
	.771	.036	2.88
	.771	.040	2.87
	.808	.020	2.38
	.782	.025	2.73
Sept. 9 15 16 25	.835	.017	2.11
	.822	.016	2.28
	.818	.023	2.31
	.829	.019	2.22
Oct. 1 12 29	.838	.019	2.15
	.852	.015	2.07
	.874	<.010	2.03
Mean	.781	.042	2.82
Stand. dev.	.066	.046	.91

**Table 6. Percentage of days in each class of cloud cover (tenths) and mean<sub>2</sub> daily<sub>1</sub> totals of global and net radiation (cal-cm<sup>-2</sup>-day<sup>-1</sup>).**

	0 - 2	3 - 7	8 - 10	K†	Q*
<b>1971</b>					
June	18	9	73	561	303
July	23	13	64	443	235
August		----- No Observations -----			
<b>1972</b>					
June	17	13	70	552	275
July	29	13	58	486	247
August	13	13	74	337	137
<b>1973</b>					
June	10	20	70	584	162
July	22	13	65	394	201
August	35	10	55	299	130

Table 7. Mean daily flux of global ( $K\downarrow$ ) and net ( $Q^*$ )<sup>a</sup> radiation at Broughton Island compared with other Arctic stations, June - December, 1973.  
 Units are cal-cm<sup>-2</sup>-day<sup>-1</sup>.

Station	Latitude	$K\downarrow$				$Q^*$											
		J	J	A	S	O	N	D	J	J	A	S	O	N	D		
Fort Chimo	58° 06'N	480	346	344	172	102	45	26	-----	-----	Not measured	-----	-----	-----	-----		
Frobisher Bay	63° 45'N	451	305	345	161	80	22	9	282	188	159	68	-15	-44	-61		
Broughton Island	67° 34'N	584	394	299	159	68	8	4	162	201	130	39	-35	-22	-42		
Hall Beach	68° 47'N	682	499	353	139	56	10	0	-----	-----	Not measured	-----	-----	-----	-----		
Resolute	74° 43'N	535	390	248	118	24	0	0	273	208	116	2	-29	-34	-50		
Eureka	80° 00'N	525	382	195	93	9	0	0	310	224	112	-21	-24	-44	-41		
Alert	82° 30'N	538	411	176	84	4	0	0	99	249	98	-28	-30	-35	-28		

<sup>a</sup>Data for all stations except Broughton Island are from the Atmospheric Environment Service,

Monthly Radiation Summary.

Occasional Papers

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- Occasional Paper No. 1: The Taxir Primer, R.C. Brill, 1971.
- Occasional Paper No. 2: Present and Paleo-Climatic Influences on the Glacierization and Deglacierization of Cumberland Peninsula, Baffin Island, J. T. Andrews and R. G. Barry, and others, 1972.
- Occasional Paper No. 3: Climatic Environment of the East Slope of the Colorado Front Range, R. G. Barry, 1972.
- Occasional Paper No. 4: Short-Term Air-Sea Interactions and Surface Effects in the Baffin Bay - Davis Strait Region from Satellite Observations, J.D. Jacobs, R.G. Barry, B. Stankov and J. Williams, 1972.
- Occasional Paper No. 5: Simulation of the Climate at the Last Glacial Maximum Using the NCAR Global Circulation Model, Jill Williams, R.G. Barry, and W.M. Washington, 1973.
- Occasional Paper No. 6: Guide to the Mosses of Colorado, William A. Weber, 1973.
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- Occasional Paper No. 9: Studies of Climate and Ice Conditions in Eastern Baffin Island, 1971-73, J. D. Jacobs, R. G. Barry, R. S. Bradley and R. L. Weaver, 1974.
- Occasional Paper No. 10: Simulation of the Atmospheric Circulation using the NCAR Global Circulation Model with Present-Day and Glacial-Period Boundary Conditions. Jill Williams, 1974.
- Occasional Paper No. 11: Solar and Atmospheric Radiation Data for Broughton Island, Eastern Baffin Island, Canada, 1971-1973, John D. Jacobs, 1974.