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ACTINOMETRIC MEASUREMENTS
NEAR STOCKHOLM
1930—1936

KUNGL. BOKTRYCKERIET, P. A. NORSTEDT & SÖNER

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by *Anders Ångström.*

After 1930 current actinometric measurements have been carried out under the supervision of Statens Meteorologisk-Hydrografiska anstalt at Experimentalfältet near Stockholm. The place of observation is situated about 3 km north of the city of Stockholm at comparatively plane ground. The nearest surroundings consist of parks and suburbs of villa residences. The air is here comparatively free from the products of combustion emanating from the industries and residences of the city. Yet at low sun in winter the sun even in the middle of the day is not higher than about 10° above the horizon, and the radiation values will then probably to some extent be influenced by products of combustion adhering to the city.

The measurements were after May 6, 1931 taken with aid of the Michelson Actinometer No. 535 delivered early in 1931 by G. Schultze, Potsdam. Before that time the Michelson 129 was generally used. These instruments have been compared at intervals with two Ångström compensation pyrhelimeters, namely No. 152, kept as standard instrument, and No. 158. These latter instruments have both been standardized through comparison with the international normal instrument at Uppsala.

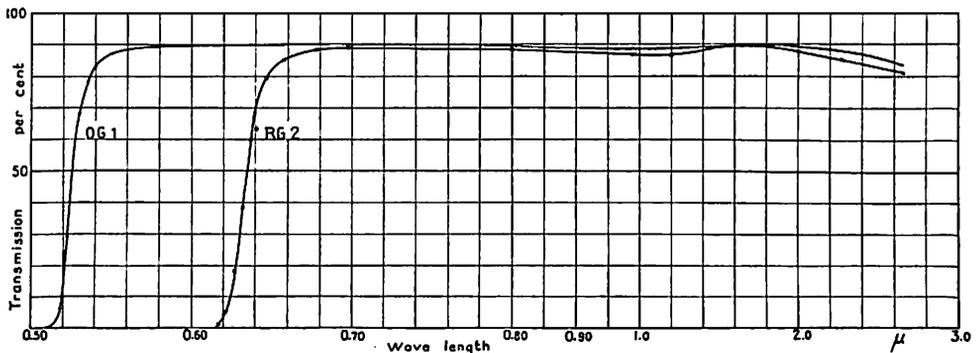
The constant of the Michelson instrument was at the delivery by the Institute in Potsdam referred to the Smithsonian Scale as standard; at the time of the delivery *Marten* makes the statement in a paper included in "Bericht über die Tätigkeit des Preussischen Meteorologischen Instituts im Jahre 1930", that the difference between the Smithsonian and Ångström scales as represented by secondary standards kept at Potsdam is in 1930 found to be 3.85 per cent, while the difference in 1913 was determined to 3.4 per cent. The value 3.85 per cent may consequently be regarded as the difference to be expected for the Michelson instrument at the delivery. On the 12th of April 1934 a careful determination of the difference between the Michelson instrument and the two Ångström pyrhelimeters was carried out at Experimentalfältet. The Ångström instruments differed with about 0.3 per cent from one another, and their readings averaged 3.3 per cent below the Michelson No. 535.

On May 3rd 1937 a careful comparison was made again. The difference between Michelson 535 and Ångström 158 was found to be 3.75 per cent and for the difference between Michelson and Ångström No. 152 exactly the same value of 3.75 was obtained.

Through the careful but still largely unpublished investigations of a special sub-committee appointed by the International Commission of Solar radiation, for the purpose of establishing the absolute scale of pyrheliometry, it is now clearly shown that the difference between the secondary instruments representing the two chief scales of pyrheliometry is not a strictly constant one, but that it may vary within limits which lie about 1.0 per cent or slightly more apart; according to the variable conditions of atmospheric turbidity. The explanation hereof is the fact that the effective aperture of the two types of instruments is not exactly the same and that consequently an increase of the turbidity of the atmosphere causes a larger amount of stray light from the sky surrounding the sun to enter into the instrument of the larger aperture viz. in the present case the Ångström instrument.

At sea level under not too extreme conditions, the variations of the ratio of the readings on this account are comparatively small. They generally do not exceed 0.5 per cent.

As a consequence of these considerations we may state that there is no reason to assume that any appreciable change has occurred neither in the Ångström pyrheliometers 152 and 158 nor in the Michelson instrument 535 used for daily work, during the time here considered.



Transmission of the glass filters according to *Feussner*. (Lit. 3).

In the tables the following elements are tabulated: 1) the day of the month, 2) true local time, 3) height of the sun above horizon in degrees. 4) Apparent air mass with vertical mass as unit (not reduced for pressure). 5) Radiation measured with Michelson actinometer: a) total radiation, b) radiation transmitted through yellow filter OG 1, b¹) same radiation multiplied with factor 1.14 to reduce for reflection c) radiation transmitted through red glass, c¹) same radiation multiplied with factor 1.19 for reflection, 6) barometric pressure at the regular observation hour, nearest coinciding with time of actinometric observation, 7) pressure of aqueous vapor at same hour as B. 8) conditions of clouds, 9) remarks.

As regards the red filter may be added that the filter F 4512 with a thickness of 3.5 mm was used with Michelson 129, but RG 2 thickness 3 mm with

Michelson 535. The ratio of the readings with the two red filters respectively was found to be 1.060 as an average (F4512 giving lower values).

All radiation values are given in gram calories per square centimeter per minute and are referred to the Smithsonian Scale. The reason for this is that the standardization at the delivery was referred to this scale and further that in the tables and diagrams worked out by Hoelper for determining the turbidity β (turbidity coefficient of A. Ångström) from actinometric measurements the values are given in the Smithsonian Scale. As the actinometric values will later be used for a study of the turbidity of different air masses in relation to the synoptic situation, the use of the Smithsonian scale is here of advantage on account of convenience. Recent investigations by the International Radiation Commission seem, however, to show that the true absolute scale probably coincides rather closely with the Ångström scale. As well the recent investigations by Abbot and those of the Radiation commission agree in showing that the true scale is lower than the Smithsonian Scale of 1913. Before definite results are obtained we may according to a recommendation by the International Radiation Commission use either the one or the other of the two scales. As here a special investigation of the differences between the secondary instruments used for the current observation on the one hand and the Ångström standard on the other has been carried through, a reduction to the Ångström scale or to the true absolute scale, when this latter will be fixed, is easily effected.

The observations here published form the second large series of actinometric observations from Sweden. The first one, published by Martin Sjöström in 1930 includes the observations taken at the Solar Observatory in Uppsala during the years 1909—1922. After regular observations have ceased in Uppsala in 1922, the observations started at Experimentalfältet by the Meteorological-Hydrological office form in several respects a continuation of the former works. Together they furnish to some degree the possibilities for studying secular variations of solar radiation and of atmospheric turbidity in Sweden.

Most of the observations here published have been carried out by Mr G. Köhler, M. Sc.

LITERATURE.

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Deutsches Meteorologisches Jahrbuch 1933. Aachen.
- (2) MARTEN, W: Aus der Praxis der Sonnenstrahlungsmessungen am Meteorologischen Observatorium in Potsdam.
Bericht über die Tätigkeit des Preuss. Meteor. Inst. 1930. Berlin 1931.
- (3) Meteorologisches Taschenbuch II herausgeg. von F. Linke. 1933.
- (4) SJÖSTRÖM, M: Pyrheliometric Measurements of the solar radiation in Upsala during the years 1909—1922.
Nova Acta Reg. Soc. Sc. Upsal. Ser. IV, Vol. 6. n:r 6.

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I_t	I_y (OG 1)		I_r (F 4512)					
					obs.	red.	obs.					red.
October												
8	9h 22	16.6	3.13	0.952	0.728	0.830	0.624	0.741	(8h) 752.3	3.5	—	
»	11h 07	23.0	2.42	1.258	0.868	0.990	0.656	0.780	(14h) 749.4	5.1	St ₁₀ Ast	
11	9h 06	14.0	3.73	1.082	0.844	0.961	0.648	0.770	(8h) 758.7	4.4	—	
»	11h 28	22.4	2.47	1.320	0.960	1.094	0.716	0.851	(14h) 760.9	4.3	—	
»	12h 32	24.9	2.24	1.318	0.936	1.066	0.700	0.832	»	»	—	
»	13h 52	22.5	2.53	1.262	0.928	1.052	0.688	0.818	»	»	—	
»	16h 03	7.4	5.37	0.852	0.700	0.798	0.560	0.666	(19h) 761.2	4.7	—	
16	11h 50	20.7	2.64	0.942	0.728	0.830	0.448	0.533	(14h) 764.1	7.9	Ci ₃	
20	10h 32	17.0	3.14	1.018	0.744	0.848	0.568	0.675	(8h) 766.5	7.4	Acu ₃	haze
»	12h 34	21.5	2.56	1.124	0.812	0.925	0.608	0.724	(14h) 765.4	7.7	—	
»	14h 15	16.8	3.18	1.034	0.776	0.885	0.580	0.689	»	»	—	
November												
7	14h 10	9.4	5.22	0.736	0.600	0.683	0.468	0.557	(14h) 756.5	5.3	—	
10	9h 30	6.7	6.83	0.716	0.564	0.643	0.472	0.561	(8h) 745.0	5.8	Acu ₃	
»	11h 09	11.8	4.33	1.008	0.804	0.916	0.620	0.737	»	»	»	
»	12h 33	14.8	3.55	1.078	0.816	0.930	0.620	0.737	(14h) 744.6	5.8	St ₅	
12	9h 38	6.9	6.69	0.852	0.668	0.762	0.548	0.652	(8h) 758.9	3.8	—	
»	11h 02	11.1	4.53	1.048	0.800	0.911	0.632	0.751	»	»	—	
»	12h 32	14.3	3.65	1.084	0.828	0.944	0.640	0.761	(14h) 761.0	3.2	Cist ₃	
»	14h 18	7.2	6.48	0.902	0.728	0.830	0.572	0.680	»	»	»	
13	14h 05	7.7	6.12	0.916	0.728	0.830	0.552	0.656	(14h) 740.5	3.4	—	
17	9h 41	5.7	7.70	0.794	0.640	0.730	0.548	0.651	(8h) 751.7	2.2	—	
»	11h 22	10.3	4.82	1.100	0.848	0.966	0.668	0.794	(14h) 752.7	2.9	Ci ₁	
»	12h 53	10.0	4.96	1.022	0.808	0.921	0.628	0.747	»	»	»	
»	14h 17	6.0	7.38	0.790	0.652	0.742	0.516	0.614	»	»	»	
19	9h 35	4.9	8.58	0.758	0.624	0.710	0.524	0.623	(8h) 760.9	2.2	—	
»	11h 20	9.8	5.05	1.031	0.792	0.902	0.620	0.737	»	»	—	
»	12h 50	9.5	5.18	1.000	0.796	0.907	0.616	0.732	(14h) 761.8	3.0	—	
December												
4	10h 44	5.9	7.46	0.600	0.520	0.593	0.400	0.476	(8h) 763.6	5.9	Acu ₃ Cist	
»	12h 25	7.0	6.58	0.710	0.572	0.652	0.456	0.542	(14h) 763.9	5.9	—	
»	14h 23	2.5	12.76	0.276	0.252	0.287	0.172	0.205	»	»	—	
23	9h 49	1.9	14.62	0.456	0.412	0.468	0.360	0.428	(8h) 763.1	3.2	—	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r (F 4512)					
					obs.	red.	obs.					red.
January												
16	11h 15'	8.0	5.94	0.840	0.664	0.756	0.524	0.623	(14h) 734.4	2.5	Acu ₂ Ci	
21	9h 19'	3.1	11.35	0.450	0.416	0.474	0.348	0.414	(8h) 771.5	1.5	—	
»	10h 42'	7.8	6.55	0.876	0.692	0.788	0.576	0.685	(8h) »	»	—	
»	12h 00'	9.5	5.18	0.902	0.716	0.816	0.584	0.694	(14h) 773.3	1.4	—	
»	14h 19'	4.8	8.63	0.645	0.536	0.611	0.460	0.547	»	»	—	
February												
11	10h 30'	12.9	3.99	1.023	0.770	0.878	0.615	0.731	(8h) 745.8	4.9	Fcu Fst ₁₀	
»	12h 02'	15.3	3.46	1.109	0.830	0.946	0.633	0.753	(14h) 750.0	4.2	Stcu ₃	
27	11h 12'	20.3	2.68	0.930	0.670	0.763	0.565	0.672	(14h) 749.7	2.6	St ₁₀	
March												
2	11h 12'	21.4	2.58	1.297	0.946	1.077	0.725	0.861	(8h) 750.0	1.3	Stcu ₁ Ci	
»	13h 08'	20.7	2.64	1.323	0.966	1.101	0.745	0.886	(14h) 752.0	1.6	—	
»	14h 54'	14.0	3.73	1.192	0.903	1.029	0.701	0.834	»	»	—	
3	9h 02'	13.6	3.83	1.060	0.804	0.915	0.657	0.781	(8h) 754.8	1.5	—	
»	11h 00'	21.4	2.57	1.242	0.924	1.052	0.701	0.834	(14h) 756.0	2.0	—	
»	13h 04'	21.4	2.57	1.236	0.911	1.039	0.705	0.838	»	»	—	
»	14h 49'	14.6	3.60	1.129	0.860	0.980	0.681	0.810	»	»	—	
5	9h 24'	16.0	3.31	1.098	0.832	0.948	0.657	0.781	(8h) 767.7	1.7	St ₇	
»	9h 07'	16.1	3.31	1.162	0.879	1.001	0.689	0.819	(8h) 763.0	1.3	—	
»	10h 46'	23.2	2.40	1.272	0.935	1.065	0.716	0.851	»	»	—	
»	12h 10'	24.7	2.27	1.324	0.958	1.091	0.733	0.872	(14h) 761.6	1.8	—	
»	14h 33'	18.1	3.00	1.172	0.883	1.005	0.681	0.810	»	»	—	
»	15h 47'	10.9	4.61	0.982	0.756	0.861	0.578	0.687	»	»	—	
12	9h 04'	16.9	3.17	0.614	0.503	0.574	0.435	0.517	(8h) 732.5	2.3	Ast ₃	fog
»	12h 57'	25.0	2.24	0.872	0.701	0.799	0.562	0.667	(14h) 732.6	2.6	Ast ₂	
13	10h 33'	24.1	2.32	0.982	0.736	0.839	0.598	0.711	(8h) 739.1	1.3	Ast ₂ Cist	
14	14h 30'	20.2	2.70	1.223	0.907	1.033	0.693	0.824	(14h) 746.3	1.5	—	
17	9h 01'	18.4	2.93	0.834	0.606	0.690	0.467	0.555	(8h) 771.6	1.5	Cist ₃	
»	11h 18'	27.3	2.08	1.051	0.717	0.816	0.582	0.691	(14h) 770.8	2.0	Cist ₃	
»	13h 35'	25.3	2.22	0.713	0.523	0.596	0.408	0.485	»	»	—	
19	12h 17'	28.5	2.00	1.323	0.955	1.087	0.705	0.838	(8h) 768.0	2.7	Stcu ₃ Acu ₁	
20	12h 49'	28.4	2.01	1.410	1.018	1.160	0.768	0.914	(14h) 766.6	2.6	—	
»	14h 38'	24.5	2.28	1.289	0.958	1.091	0.720	0.856	»	»	—	
»	16h 06'	12.8	4.02	1.067	0.827	0.942	0.641	0.762	»	»	—	
21	9h 38'	23.2	2.40	1.206	0.871	0.992	0.665	0.790	(8h) 765.4	3.5	Cist ₃	
»	11h 57'	24.4	2.29	1.367	0.970	1.105	0.733	0.871	(14h) 764.8	3.3	Ci ₃	
»	14h 25'	23.4	2.38	1.281	0.911	1.039	0.697	0.827	»	»	—	
»	16h 06'	13.3	3.91	1.151	0.891	1.016	0.693	0.824	»	»	—	
24	9h 46'	25.1	2.23	1.272	0.923	1.052	0.689	0.819	(8h) 764.9	2.9	—	
»	12h 25'	30.5	1.89	1.356	0.966	1.101	0.720	0.856	(14h) 762.8	2.7	—	
26	11h 00'	30.2	1.91	1.350	0.955	1.087	0.693	0.824	(8h) 768.0	3.1	Stcu ₁₀	
»	13h 55'	27.3	2.08	1.350	0.958	1.091	0.701	0.833	(14h) 767.0	3.8	Ci ₁	
28	9h 30'	24.9	2.25	1.380	0.990	1.128	0.765	0.910	(8h) 757.2	1.4	—	
»	12h 04'	32.2	1.80	1.462	1.021	1.163	0.772	0.917	(14h) 757.4	1.8	Cu ₅	
30	9h 00'	22.9	2.44	1.303	0.946	1.077	0.717	0.852	(8h) 772.7	1.8	—	
»	12h 12'	33.2	1.76	1.416	1.006	1.146	0.750	0.891	(14h) 773.2	2.9	St ₇	
31	9h 19'	25.2	2.23	1.355	0.978	1.114	0.740	0.880	(8h) 771.3	2.2	—	
»	11h 18'	32.9	1.77	1.406	0.994	1.132	0.753	0.896	(14h) 768.4	2.9	—	
»	13h 40'	30.3	1.90	1.378	0.983	1.120	0.729	0.866	»	»	—	
»	16h 09'	16.3	3.26	1.178	0.883	1.006	0.665	0.790	»	»	—	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r *					
					obs.	red.	obs.					red.
April												
24	10h 41	39.8	1.52	1.288	0.896	1.021	0.660	0.785	(8h) 764.3	4.7	—	
»	13h 04	40.8	1.49	1.074	0.732	0.834	0.565	0.671	(14h) 764.3	5.2	—	
»	16h 31	21.0	2.61	1.020	0.768	0.875	0.576	0.685	»	»	—	
28	12h 59	42.2	1.45	1.104	0.785	0.895	0.576	0.685	(14h) 754.8	6.8	St ₁₀	rain-fog
May												
6	9h 26	38.7	1.60	1.159	0.821	0.935	0.631	0.750	(8h) 767.5	7.6	—	
»	11h 50	46.1	1.36	1.209	0.855	0.974	0.657	0.781	(14h) 767.4	5.0	Acu ₁	
»	14h 28	39.5	1.58	1.240	0.854	0.973	0.694	0.825	»	»	—	
»	16h 57	22.4	2.64	1.043	0.784	0.893	0.630	0.749	(19h) 767.0	5.3	—	
7	15h 05	35.8	1.72	1.012	0.745	0.849	0.606	0.720	(14h) 765.1	6.5	St ₅	
8	9h 30	39.6	1.57	1.019	0.747	0.850	0.598	0.711	(8h) 760.0	5.9	Acu ₃	
9	10h 53	46.2	1.39	1.361	0.940	1.071	0.756	0.899	(8h) 763.2	4.8	Acu ₁	
»	12h 17	47.6	1.36	1.351	0.937	1.067	0.747	0.888	(14h) 762.7	3.9	Acu ₁ Ci ₂	
»	14h 24	40.5	1.54	1.286	0.908	1.034	0.714	0.849	»	»	»	
13	9h 18	39.5	1.58	1.276	0.890	1.014	0.707	0.840	(8h) 757.2	6.6	—	
»	11h 30	48.5	1.34	1.330	0.917	1.043	0.719	0.855	(14h) 757.6	5.7	Cist ₂	
»	13h 36	45.5	1.41	1.343	0.932	1.052	0.737	0.876	»	»	»	
18	10h 59	48.6	1.34	1.194	0.822	0.936	0.653	0.776	(8h) 749.4	7.8	St ₃ Cist ₁	
22	14h 19	44.2	1.44	1.237	0.861	0.981	0.678	0.806	(14h) 768.4	5.6	Cu ₃ Acu ₃	
26	9h 53	45.3	1.41	1.240	0.858	0.978	0.678	0.806	(8h) 769.2	8.8	Cu ₁ Acu ₂	
»	12h 01	51.8	1.28	1.293	0.887	1.010	0.694	0.825	(14h) 769.1	8.3	Acu ₅	
31	11h 15	51.7	1.28	1.321	0.915	1.042	0.719	0.855	(14h) 764.1	5.6	Ci ₆	
June												
5	14h 56	42.0	1.50	1.294	0.911	1.039	0.722	0.857	(14h) 756.6	3.9	Cunb ₉ Acu	
9	9h 20	43.9	1.45	1.274	0.863	0.983	0.712	0.846	(8h) 756.2	5.7	Cu ₁	
»	11h 30	53.2	1.25	1.356	0.944	1.074	0.743	0.884	(14h) 756.2	5.2	Cu ₁ Acu	
»	15h 05	42.3	1.49	1.287	0.901	1.026	0.710	0.844	»	»	»	
10	8h 39	39.3	1.58	1.227	0.863	0.984	0.683	0.812	(8h) 760.1	6.4	Ci ₁	
»	11h 50	53.7	1.25	1.307	0.900	1.025	0.708	0.841	(14h) 758.6	6.5	Cu ₃ Acu	
15	9h 06	42.7	1.48	1.243	0.871	0.992	0.650	0.773	(8h) 757.6	7.6	—	fog
»	12h 26	53.6	1.25	1.282	0.878	1.000	0.685	0.815	(14h) 755.8	8.1	Ast ₉	
17	16h 58	28.3	2.11	1.135	0.796	0.907	0.626	0.745	(19h) 755.7	9.1	Cu ₃ Acu ₂	
19	12h 50	53.0	1.26	1.311	0.905	1.031	0.702	0.834	(14h) 755.7	7.1	Cu ₃	
»	17h 01	27.9	2.14	1.039	0.758	0.864	0.606	0.720	(19h) 756.9	7.7	Cu ₃ Acu Ci	
22	16h 32	31.5	1.92	1.203	0.846	0.965	0.667	0.793	(19h) 747.0	6.6	Cunb ₅	14h rain
23	9h 18	44.2	1.44	1.343	0.881	1.003	0.725	0.861	(8h) 750.2	5.8	—	
»	12h 07	54.2	1.23	1.376	0.936	1.066	0.734	0.872	(14h) 751.6	5.8	Cu ₃ Acu	
»	16h 20	33.0	1.84	1.226	0.868	0.990	0.681	0.810	»	»	»	
24	9h 46	47.2	1.37	1.299	0.906	1.031	0.700	0.832	(8h) 759.0	8.0	Acu ₁	
»	12h 41	53.4	1.25	1.369	0.926	1.055	0.724	0.860	(14h) 759.8	9.4	Cu ₃ Acu	▲ 12h 10— 12h 20
25	9h 08	43.1	1.47	1.321	0.894	1.019	0.698	0.830	(8h) 766.4	6.6	—	
26	8h 44	40.1	1.56	1.286	0.880	1.002	0.694	0.825	(8h) 765.9	8.7	—	fog
»	11h 49	54.1	1.24	1.373	0.924	1.053	0.723	0.860	(14h) 766.2	6.4	Ci ₃	
»	13h 53	49.1	1.33	1.341	0.906	1.032	0.704	0.836	»	»	»	
»	16h 07	34.7	1.76	1.268	0.886	1.010	0.692	0.822	»	»	»	
29	12h 59	52.5	1.27	1.370	0.939	1.070	0.731	0.870	(14h) 754.0	5.4	Cu ₃	
July												
1	9h 38	46.1	1.40	1.268	0.890	1.015	0.700	0.832	(8h) 762.5	8.8	St ₉ Acu	
»	13h 05	52.0	1.27	1.353	0.920	1.049	0.715	0.850	(14h) 763.2	7.7	Cu ₃	
6	15h 18	40.1	1.55	1.141	0.800	0.912	0.640	0.761	(14h) 765.0	11.7	Cu ₃ Acu	

* Red filter F 4512 used during April 1931, later RG 2.

Date	τ	h	m	R a d i a t i o n				B _e	e	Clouds	Remarks	
				I _t	I _γ (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
July (cont.)												
13	15h 09	40.3	1.55	1.195	0.820	0.935	0.650	0.772	(14h) 759.2	9.9	Acu ₃	
22	11h 01	49.6	1.31	1.258	0.870	0.991	0.680	0.809	(14h) 755.1	10.0	CuSteu ₃	
»	19h 20	8.1	7.25	0.665	0.530	0.604	0.440	0.523	(19h) 755.6	11.3	CuSteu ₃ Acu ₂	
23	9h 03	40.1	1.57	1.255	0.870	0.991	0.680	0.809	(8h) 759.8	10.4	Cu ₂ Acu	
»	10h 43	48.5	1.34	1.290	0.900	1.025	0.700	0.832	»	»	»	
»	15h 08	38.7	1.60	1.263	0.865	0.986	0.670	0.796	(14h) 760.9	9.5	Cu ₂ Acu	
24	13h 08	49.2	1.32	1.075	0.780	0.889	0.570	0.678	(14h) 764.1	12.3	CuSteu ₃ Acu ₂	
25	9h 10	39.8	1.57	1.105	0.770	0.878	0.610	0.725	(8h) 764.4	12.9	—	
»	12h 01	50.7	1.29	1.210	0.825	0.940	0.640	0.761	(14h) 764.3	11.4	—	
27	16h 12	30.6	1.96	1.105	0.730	0.832	0.590	0.701	(14h) 755.6	13.8	Cunb ₃	
30	14h 35	41.0	1.53	1.055	0.790	0.900	0.605	0.719	(14h) 755.7	12.0	Cunb ₃	
»	17h 21	21.6	2.72	0.830	0.630	0.718	0.520	0.618	(19h) 756.3	11.6	Acu ₃ Ci	
»	19h 00	9.3	6.23	0.465	0.390	0.444	0.330	0.392	»	»	»	
31	12h 16	49.1	1.32	1.200	0.835	0.952	0.600	0.714	(14h) 759.4	12.1	Cu ₂ Cl ₂	
»	19h 28	5.9	9.00	0.380	0.310	0.353	0.270	0.321	(19h) 759.9	12.4	Acu ₃ Ci	
August												
3	12h 12	48.3	1.34	1.320	0.895	1.020	0.705	0.839	(14h) 771.2	13.0	Cu ₁	
4	8h 40	34.7	1.76	1.160	0.800	0.911	0.620	0.737	(8h) 770.2	12.4	Ci ₁	
»	11h 35	48.0	1.35	1.290	0.870	0.992	0.671	0.798	(14h) 769.0	12.3	Acu ₁ Ci	
»	14h 15	41.6	1.50	1.255	0.860	0.980	0.665	0.790	»	»	»	
5	9h 20	38.8	1.60	1.265	0.870	0.992	0.670	0.797	(8h) 766.6	11.8	—	
»	12h 19	47.9	1.35	1.315	0.890	1.015	0.680	0.809	(14h) 764.9	9.7	Cu ₁	
»	15h 08	36.1	1.70	1.255	0.860	0.980	0.670	0.796	»	»	»	
6	11h 44	47.5	1.36	1.240	0.855	0.975	0.655	0.779	(14h) 760.1	10.7	Acu ₃	
26	9h 02	30.9	1.95	1.235	0.865	0.986	0.680	0.809	(8h) 762.2	8.4	Acu ₃	
»	12h 04	41.2	1.52	1.335	0.930	1.060	0.720	0.856	(14h) 763.4	7.1	Cu ₁	
»	14h 32	33.6	1.81	1.295	0.910	1.037	0.720	0.856	»	»	»	
28	8h 32	27.1	2.20	1.195	0.850	0.969	0.670	0.796	(8h) 767.9	9.3	—	
»	11h 59	40.9	1.53	1.315	0.910	1.037	0.705	0.838	(14h) 768.9	14.6	Cu ₁ Acu ₂	
»	14h 47	31.8	1.90	1.235	0.860	0.980	0.670	0.796	»	»	»	
»	17h 02	16.1	3.57	0.990	0.745	0.849	0.598	0.711	(19h) 769.0	8.1	Acu ₁	
29	8h 46	28.3	2.12	1.195	0.840	0.957	0.670	0.796	(8h) 767.7	8.8	—	
»	11h 43	40.4	1.55	1.330	0.920	1.049	0.720	0.856	(14h) 767.3	8.9	Cu ₁ Acu ₂ Ci	
»	14h 48	31.2	1.94	1.210	0.850	0.969	0.660	0.785	»	»	»	
31	8h 52	28.5	2.10	1.275	0.910	1.038	0.720	0.856	(8h) 763.0	7.8	Ci ₁	
»	12h 07	39.8	1.56	1.360	0.950	1.081	0.750	0.891	(14h) 761.4	7.3	Ast ₁	
»	14h 52	30.1	2.00	1.240	0.878	1.001	0.688	0.818	»	»	»	
September												
8	8h 45	25.4	2.33	1.236	0.885	1.008	0.712	0.846	(8h) 753.3	5.3	—	
»	12h 15	36.8	1.68	1.357	0.949	1.080	0.750	0.891	(14h) 753.8	5.1	Cu ₃	
»	13h 13	34.8	1.75	1.340	0.930	1.060	0.740	0.880	»	»	»	
10	8h 54	25.6	2.33	1.239	0.890	1.015	0.712	0.846	(8h) 752.3	6.2	Cu ₁ Acu ₃ Ci	
11	9h 07	26.3	2.26	1.235	0.880	1.003	0.710	0.844	(8h) 758.6	6.0	Cu ₁	
»	14h 01	30.9	1.95	1.290	0.910	1.038	0.720	0.856	(14h) 760.4	9.1	Cu ₁	
»	16h 26	15.9	3.66	1.028	0.788	0.898	0.628	0.746	»	»	»	
14	9h 27	27.2	2.20	1.293	0.914	1.042	0.720	0.856	(8h) 762.7	5.3	Cu ₁	
15	8h 49	23.0	2.57	1.188	0.811	0.925	0.703	0.836	(8h) 762.3	5.8	Acu ₃ Cieu	
16	16h 26	14.6	4.00	0.962	0.702	0.800	0.560	0.666	(14h) 762.5	9.4	Acu ₃ Ci	
23	9h 11	22.5	2.62	1.220	0.880	1.002	0.710	0.844	(8h) 768.3	4.6	CuSteu ₃ Acu ₁	
»	12h 24	30.7	1.96	1.310	0.920	1.049	0.720	0.856	(14h) 768.5	4.4	Acu ₁	
24	8h 55	20.3	2.91	1.045	0.760	0.866	0.602	0.716	(8h) 766.7	7.0	Acu ₂ Cieu	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I_t	I_y (OG 1)		I_r (RG 2)					
					obs.	red.	obs.					red.
October												
3	10h 17	33.8	1.80	1.180	0.832	0.947	0.659	0.784	(8h) 746.0	6.3	Sten ₂	
4	12h 00	26.8	2.23	1.292	0.917	1.045	0.733	0.872	(14h) 762.5	4.1	Acu ₂ Ci	
6	12h 18	25.9	2.29	1.161	0.835	0.951	0.660	0.785	(14h) 756.2	8.3	Acu ₁	
8	9h 26	18.4	3.17	0.958	0.694	0.790	0.580	0.690	(8h) 746.4	8.1	Fou Fst ₁₀	
9	9h 05	16.5	3.54	1.075	0.786	0.895	0.643	0.765	(8h) 754.3	6.9	—	
	12h 33	24.3	2.43	1.237	0.878	0.999	0.700	0.831	(14h) 756.9	5.7	Acu ₂ Ci	
10	15h 57	9.3	6.26	0.627	0.510	0.581	0.421	0.501	(14h) 755.0	8.2	Fou Fst ₁₀	
14	10h 24	20.1	2.91	1.193	0.871	0.992	0.692	0.823	(8h) 749.3	8.6	Acu ₂ Ci	
15	9h 06	15.3	4.05	0.966	0.720	0.820	0.593	0.705	(8h) 768.5	3.9	Ci ₁	
18	12h 23	31.4	1.92	1.268	0.920	1.047	0.739	0.829	(14h) 769.8	2.4	Cu ₁	
	15h 44	8.6	6.80	0.883	0.718	0.818	0.575	0.684	» » »	»	—	
22	8h 50	10.5	5.53	0.965	0.755	0.860	0.630	0.749	(8h) 755.1	3.7	—	
	12h 30	29.7	2.04	1.238	0.915	1.042	0.733	0.872	(14h) 756.3	3.5	Cist ₂	
26	9h 21	11.8	4.80	1.025	0.775	0.884	0.665	0.790	(8h) 763.7	2.0	—	
	11h 58	18.7	3.13	1.206	0.897	1.022	0.725	0.861	(14h) 766.0	4.1	Acu ₂	
27	8h 56	9.3	6.13	0.731	0.558	0.636	0.505	0.600	(8h) 772.5	2.7	Ci ₁	
28	9h 18	10.8	5.28	0.915	0.715	0.815	0.622	0.739	(8h) 765.5	3.7	Acu ₂ Cist	
	13h 12	16.7	3.48	1.103	0.835	0.951	0.685	0.815	(14h) 763.9	3.9	Acu ₂ Ci	
December												
9	10h 10	5.2	10.08	0.609	0.501	0.571	0.447	0.531	(8h) 748.6	4.6	Stcu ₁ Acu	
13	11h 26	7.3	7.50	0.821	0.659	0.750	0.567	0.674	(14h) 757.6	3.8	—	
	13h 42	5.3	9.36	0.634	0.527	0.600	0.454	0.540	(14h) »	»	—	
21	13h 01	6.7	8.05	0.630	0.509	0.580	0.435	0.517	(14h) 775.0	3.8	Ast ₂ Ci	
22	10h 19	5.0	10.43	0.531	0.435	0.496	0.392	0.466	(8h) 775.6	3.1	Acu ₂	
23	9h 58	3.9	12.63	0.482	0.413	0.469	0.398	0.474	(8h) 771.3	2.3	—	
	11h 49	7.3	7.50	0.606	0.486	0.554	0.415	0.494	(14h) 769.6	3.7	St ₂	haze
31	11h 12	7.2	7.61	0.723	0.593	0.676	0.532	0.632	(14h) 758.0	1.8	—	
	13h 31	5.7	9.35	0.532	0.435	0.496	0.374	0.445	(14h) 758.0	1.8	—	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
January												
3	11h 40	7.7	7.11	0.923	0.741	0.845	0.636	0.756	(14h) 751.2	2.5	—	
»	13h 58	4.9	10.13	0.700	0.593	0.676	0.525	0.624	(14h) »	»	—	
4	10h 05	4.7	11.58	0.604	0.517	0.589	0.464	0.552	(8h) 762.1	1.2	Acu ₁	
»	12h 15	8.0	6.87	0.884	0.712	0.811	0.622	0.739	(14h) 765.4	1.4	Acu ₁ Ci	
»	14h 01	4.8	10.35	0.653	0.548	0.625	0.488	0.580	»	»	»	
8	10h 00	4.9	10.61	0.487	0.367	0.418	0.339	0.403	(8h) 732.2	3.8	Acu ₃	
»	12h 05	8.5	6.53	0.758	0.597	0.680	0.509	0.605	(14h) 736.3	4.0	CuStcu ₂	
9	9h 57	4.9	10.51	0.633	0.519	0.591	0.476	0.565	(8h) 750.9	1.9	St ₁	
»	12h 01	8.7	6.36	0.910	0.720	0.820	0.630	0.749	(14h) 754.2	1.7	—	
»	14h 10	4.5	11.35	0.600	0.528	0.603	0.476	0.566	»	»	—	
23	11h 54	11.2	5.04	0.900	0.706	0.805	0.603	0.717	(14h) 776.2	4.3	Acu ₃	
26	9h 16	4.9	10.55	0.594	0.491	0.560	0.447	0.531	(8h) 773.3	3.6	—	
»	12h 07	11.9	4.75	0.997	0.780	0.889	0.642	0.763	(14h) 773.7	3.7	Acu ₃	
30	9h 47	8.2	6.69	0.851	0.677	0.771	0.581	0.691	(8h) 752.3	2.5	Acu ₃ Ci	
February												
5	12h 42	14.1	4.03	1.139	0.861	0.981	0.714	0.849	(14h) 777.4	1.4	Cu ₃	
9	9h 31	9.5	5.93	0.963	0.757	0.862	0.659	0.784	(8h) 774.4	1.0	CuStcu ₂	
»	11h 48	15.9	3.62	1.190	0.903	1.029	0.753	0.896	(14h) 778.4	1.0	Acu ₁	
»	13h 14	14.4	3.93	1.158	0.887	1.010	0.743	0.884	»	»	»	
»	14h 42	9.4	5.97	0.937	0.759	0.865	0.647	0.769	»	»	»	
12	10h 14	13.7	4.16	1.057	0.801	0.912	0.671	0.798	(8h) 767.9	2.1	St ₂ Acu ₆	
15	9h 11	10.1	5.55	0.924	0.698	0.795	0.605	0.720	(8h) 756.2	2.3	Acu ₃ Ci	
16	8h 36	7.4	7.58	0.775	0.616	0.702	0.546	0.650	(8h) 765.9	2.2	Ci ₁	
»	11h 57	18.2	3.19	1.192	0.881	1.030	0.714	0.849	(14h) 768.7	2.9	Acu ₁	
19	10h 55	18.1	3.20	1.133	0.846	0.964	0.684	0.813	(8h) 763.8	4.2	St ₁₀	
»	12h 53	18.5	3.14	1.125	0.842	0.959	0.675	0.803	(14h) 758.4	3.7	Acu ₃	
22	9h 06	11.5	4.91	0.967	0.761	0.866	0.636	0.756	(8h) 754.2	2.2	Stcu ₂ Acu ₂	
23	9h 36	14.9	3.85	1.021	0.805	0.917	0.671	0.793	(8h) 762.1	2.2	(8h) CuStcu ₃ Acu ₂	
»	12h 51	20.0	2.89	1.261	0.938	1.069	0.762	0.906	(14h) 763.6	1.4	Ci ₁	
March												
1	12h 34	23.0	2.55	1.198	0.874	0.995	0.718	0.854	(14h) 775.9	2.9	—	fog until 10 o'clock.
3	12h 25	24.0	2.46	1.112	0.835	0.951	0.690	0.820	(14h) 765.2	4.0	—	
»	14h 32	17.7	3.43	1.082	0.790	0.900	0.657	0.781	(14h) »	»	—	
17	8h 46	17.6	3.28	1.199	0.897	1.022	0.725	0.862	(8h) 758.6	1.7	—	
»	12h 00	29.4	2.03	1.384	0.987	1.123	0.800	0.951	(14h) 758.8	1.9	Acu ₁	
»	14h 08	24.6	2.40	1.304	0.952	1.083	0.764	0.909	(14h) »	»	»	
19	13h 13	28.3	2.11	1.342	0.959	1.092	0.774	0.920	(14h) 761.9	2.1	Acu ₁ Ci	
21	9h 06	21.3	2.74	1.177	0.866	0.986	0.720	0.856	(8h) 770.2	2.2	St ₂ Ast ₂	
22	14h 53	22.7	2.58	1.246	0.903	1.027	0.727	0.864	(14h) 772.4	2.8	CuStcu ₁	
23	13h 15	29.8	2.01	1.353	0.960	1.093	0.762	0.906	(14h) 770.6	2.6	St ₁₀	
»	15h 51	16.9	3.41	1.128	0.839	0.956	0.686	0.816	»	»	»	
24	9h 07	22.9	2.57	1.215	0.887	1.010	0.727	0.864	(8h) 770.3	2.9	Acu ₁	haze
26	9h 42	26.6	2.12	1.249	0.903	1.028	0.718	0.854	(8h) 762.9	3.9	Acu ₃ Cicu	
28	11h 52	33.9	1.79	1.259	0.899	1.023	0.716	0.851	(14h) 761.5	3.2	—	
»	13h 51	30.0	2.00	1.291	0.950	1.081	0.751	0.893	»	»	—	
»	15h 55	18.5	3.14	1.033	0.798	0.909	0.642	0.763	»	»	—	

Date	τ	h	m	R a d i a t i o n				B	c	Clouds	Remarks	
				I_t	I_y (OG 1)		I_r (RG 2)					
					obs.	red.	obs.					red.
April												
9	8h 24	24.2	2.42	1.258	0.907	1.033	0.735	0.874	(8h) 747.8	2.6	Acu ₁	
15	12h 02	40.7	1.53	1.374	0.959	1.092	0.762	0.906	(14h) 768.0	4.1	Cu ₁ Acu ₂	
»	14h 39	32.1	1.88	1.301	0.922	1.050	0.735	0.874	» »	»	»	
»	16h 51	27.7	2.15	1.121	0.837	0.954	0.679	0.807	» »	»	»	
16	8h 14	25.5	2.32	1.234	0.903	1.029	0.735	0.874	(8h) 769.7	3.5	—	
19	8h 40	29.1	2.05	1.289	0.924	1.051	0.747	0.888	(8h) 757.5	3.1	—	
21	12h 26	42.2	1.49	1.169	0.842	0.960	0.669	0.795	(14h) 758.8	4.0	Ast ₂	
»	17h 14	16.4	3.53	0.617	0.499	0.569	0.439	0.523	» »	»	»	
22	8h 45	30.5	1.97	1.032	0.749	0.854	0.622	0.740	(8h) 759.3	5.5	Cu ₁	
26	9h 40	37.2	1.65	1.288	0.907	1.033	0.731	0.870	(8h) 754.5	5.2	St ₂ Acu	
»	12h 28	43.8	1.44	1.388	0.963	1.097	0.768	0.914	(14h) 754.9	3.6	Stcu ₃ Acu ₁	
30	11h 33	45.2	1.41	1.371	0.956	1.090	0.762	0.906	(14h) 769.8	5.3	Cu ₁ Acu ₂	
»	15h 35	31.1	1.93	1.207	0.856	0.975	0.686	0.816	» »	»	»	
May												
2	9h 14	36.6	1.68	1.211	0.862	0.982	0.690	0.820	(8h) 762.7	4.9	—	
»	12h 17	46.0	1.39	1.211	0.858	0.977	0.681	0.810	(14h) 763.7	5.5	Cu ₁	
»	15h 39	31.2	1.93	1.040	0.759	0.865	0.624	0.742	(14h) »	»	»	
3	8h 48	34.0	1.78	1.228	0.879	1.001	0.702	0.835	(8h) 762.7	3.9	Acu ₃	
»	12h 11	46.2	1.39	1.345	0.942	1.073	0.743	0.884	(14h) 761.5	3.3	—	
»	14h 52	36.6	1.68	1.289	0.903	1.008	0.723	0.860	» »	»	»	
»	17h 37	16.7	3.46	0.976	0.735	0.837	0.599	0.713	(19h) 759.4	4.3	—	
9	10h 31	45.1	1.41	1.320	0.920	1.049	0.722	0.857	(8h) 753.6	5.3	St ₂ Acu ₁	
»	16h 49	23.9	2.46	1.134	0.823	0.938	0.647	0.769	(14h) 752.7	4.2	Stcu ₅	
11	9h 28	40.4	1.54	1.316	0.922	1.050	0.716	0.851	(8h) 747.4	4.6	Stcu ₃ Acu ₄ Cicu	
»	15h 29	34.3	1.77	1.261	0.903	1.029	0.710	0.845	(14h) 747.9	4.1	Stcu ₃ Ci	
12	8h 39	35.2	1.74	1.194	0.858	0.977	0.686	0.816	(8h) 756.7	4.8	Acu ₁	
»	13h 10	47.1	1.37	1.300	0.911	1.038	0.729	0.866	(14h) 758.6	6.2	Cunb ₃	
13	9h 11	38.8	1.59	1.227	0.878	1.001	0.673	0.800	(8h) 763.9	5.8	—	haze
17	9h 07	40.0	1.57	1.312	0.909	1.035	0.716	0.851	(8h) 770.5	7.5	—	
»	12h 29	49.9	1.31	1.353	0.936	1.066	0.723	0.860	(14h) 770.2	7.8	—	
»	14h 33	41.8	1.50	1.281	0.897	1.023	0.700	0.832	» »	»	»	
»	16h 36	27.5	2.16	1.125	0.831	0.946	0.661	0.786	(19h) 770.1	7.0	—	
18	8h 42	36.6	1.68	1.231	0.874	0.996	0.692	0.822	(8h) 768.8	8.2	—	
»	10h 53	48.5	1.33	1.323	0.915	1.043	0.710	0.845	» »	»	»	
»	12h 58	49.1	1.32	1.261	0.881	1.004	0.684	0.813	(14h) 766.3	9.4	Acu ₃	
»	16h 40	27.0	2.19	0.943	0.681	0.776	0.554	0.658	» »	»	»	
21	10h 00	45.3	1.41	1.228	0.856	0.975	0.675	0.801	(8h) 756.1	10.4	St ₂ Ast ₁	
24	9h 26	42.8	1.47	1.236	0.872	0.993	0.686	0.816	(8h) 755.1	7.6	CuSt ₅	
27	11h 37	51.9	1.28	1.346	0.922	1.050	0.718	0.854	(14h) 764.8	6.2	Cu ₃ Acu	
»	14h 37	43.5	1.45	1.244	0.878	1.000	0.683	0.812	» »	»	»	
28	8h 47	39.1	1.58	1.282	0.901	1.027	0.714	0.849	(8h) 765.0	6.3	Ci ₃	
»	11h 34	52.0	1.27	1.310	0.897	1.022	0.698	0.830	(14h) 765.4	7.3	Stcu ₃ Acu ₁	
30	10h 14	47.9	1.35	1.198	0.815	0.929	0.659	0.784	(8h) 764.1	8.7	Ci ₁	haze
»	12h 31	52.2	1.27	1.301	0.889	1.011	0.696	0.828	(14h) 763.7	8.4	Cu ₁ Ci ₂	
»	15h 58	34.3	1.77	1.161	0.813	0.926	0.624	0.742	» »	»	»	
»	17h 37	21.9	2.66	1.059	0.774	0.881	0.614	0.730	(19h) 763.1	4.4	Acu ₃ Ci	
31	13h 31	49.6	1.32	1.319	0.903	1.028	0.712	0.846	(14h) 757.6	5.4	Acu ₃ Ci	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
June												
1	11h 21	52.1	1.27	1.375	0.946	1.088	0.739	0.879	(14h) 759.0	5.6	—	
»	13h 32	50.0	1.31	1.368	0.944	1.075	0.737	0.876	»	»	—	
»	17h 22	24.0	2.45	1.162	0.846	0.965	0.667	0.793	(19h) 759.7	4.1	—	
3	10h 15	48.6	1.33	1.404	0.969	1.102	0.780	0.928	(8h) 750.5	4.4	St ₃ Acu ₄	
»	12h 34	52.4	1.27	1.419	0.971	1.106	0.768	0.914	(14h) 750.8	4.2	Cu ₃	
7	10h 21	49.4	1.32	1.351	0.936	1.066	0.735	0.874	(8h) 758.2	6.9	Acu Ci ₁	
10	8h 39	40.1	1.57	1.330	0.928	1.057	0.737	0.876	(8h) 761.0	6.0	Acu ₃ Ci	
11	8h 47	40.5	1.54	1.267	0.887	1.010	0.702	0.834	(8h) 766.5	7.7	—	
»	10h 56	52.1	1.27	1.335	0.913	1.040	0.716	0.851	»	»	—	
»	14h 12	47.2	1.36	1.301	0.903	1.029	0.714	0.849	(14h) 766.0	6.9	Cu ₁	
»	16h 59	27.7	2.15	1.141	0.815	0.929	0.644	0.765	»	»	—	
12	13h 26	51.0	1.29	1.286	0.911	1.039	0.716	0.851	(14h) 767.5	7.0	—	
»	15h 10	41.4	1.51	1.257	0.883	1.005	0.720	0.856	»	»	—	
14	8h 46	40.7	1.53	1.274	0.897	1.021	0.706	0.840	(8h) 769.9	7.5	—	
»	12h 20	53.7	1.24	1.317	0.909	1.035	0.710	0.844	(14h) 769.2	6.2	Cu ₁ Ci	
15	9h 40	46.6	1.38	1.313	0.905	1.031	0.712	0.846	(8h) 769.2	6.3	Cu ₃	
»	12h 06	54.1	1.23	1.344	0.926	1.055	0.725	0.861	(14h) 769.6	5.6	Cu ₁	
»	14h 39	44.4	1.43	1.357	0.934	1.064	0.727	0.863	»	»	—	
22	8h 46	40.6	1.53	1.276	0.893	1.017	0.700	0.832	(8h) 763.2	8.4	Acu ₁ Ci	
23	8h 49	41.3	1.52	1.294	0.909	1.035	0.708	0.842	(8h) 765.8	7.8	Acu ₁	
»	11h 50	54.3	1.23	1.341	0.922	1.050	0.718	0.854	(14h) 765.7	7.8	Cu ₁ Acu ₂	
30	8h 16	37.1	1.65	1.271	0.881	1.004	0.698	0.830	(8h) 763.0	7.7	Ci ₁	
»	11h 54	54.2	1.23	1.363	0.926	1.055	0.708	0.841	(14h) 763.5	8.3	Acu ₂ Ci	
July												
1	13h 17	51.3	1.29	1.170	0.835	0.951	0.670	0.797	(14h) 762.8	8.4	Acu ₃ Ci	
2	8h 11	36.2	1.69	1.125	0.798	0.909	0.636	0.756	(8h) 759.3	10.8	Ci ₁	
»	11h 26	53.3	1.25	1.220	0.837	0.953	0.661	0.786	(14h) 758.6	9.4	—	
»	13h 58	48.2	1.34	1.196	0.842	0.958	0.655	0.779	»	»	—	
5	9h 17	43.2	1.46	1.241	0.885	1.007	0.688	0.818	(8h) 765.8	10.3	—	
»	16h 34	29.9	1.96	1.174	0.842	0.959	0.644	0.765	(14h) 764.6	10.2	Acu ₃	
6	9h 03	42.0	1.49	1.220	0.840	0.956	0.663	0.789	(8h) 763.1	13.2	Cu ₃	
»	12h 02	53.4	1.25	1.228	0.856	0.975	0.671	0.797	(14h) 761.9	11.7	Cu ₁	
»	14h 43	43.7	1.45	1.187	0.829	0.944	0.642	0.763	»	»	—	
»	16h 54	27.7	2.14	1.070	0.764	0.870	0.608	0.723	(19h) 760.9	10.7	—	
8	11h 20	52.5	1.27	1.268	0.868	0.988	0.681	0.810	(14h) 761.7	12.7	Cu ₁ Acu ₂	
»	16h 45	29.0	2.06	1.094	0.790	0.900	0.626	0.745	(19h) 761.5	10.0	Acu ₁	
11	8h 53	40.3	1.55	1.241	0.862	0.981	0.673	0.800	(8h) 764.2	10.5	—	
»	10h 56	51.1	1.29	1.221	0.842	0.958	0.659	0.784	(14h) 763.5	11.1	Cu ₃ Acu	
12	8h 42	38.8	1.59	1.171	0.815	0.928	0.638	0.759	(8h) 763.2	13.3	—	
»	12h 24	52.3	1.27	1.262	0.860	0.979	0.671	0.797	(14h) 761.1	12.2	Cu ₁ Acu ₂	
»	14h 26	44.8	1.42	1.245	0.858	0.976	0.673	0.800	»	»	—	
13	9h 30	44.0	1.44	1.239	0.856	0.975	0.671	0.798	(8h) 762.5	10.3	Cu ₁ Acu	
»	12h 05	52.8	1.26	1.313	0.897	1.020	0.688	0.819	(14h) 760.8	8.1	Acu ₁	
»	15h 10	40.0	1.55	1.231	0.848	0.965	0.665	0.791	»	»	—	
14	7h 53	32.8	1.84	1.259	0.870	0.990	0.690	0.820	(8h) 762.5	7.6	Cu ₁ Acu	
»	11h 12	51.4	1.29	1.359	0.928	1.057	0.725	0.861	(14h) 760.8	8.1	Acu ₁	
»	13h 12	50.0	1.31	1.327	0.917	1.045	0.712	0.846	»	»	—	
»	16h 28	30.0	1.97	1.198	0.852	0.970	0.665	0.790	(19h) 760.5	7.9	Stu ₃ Acu	
16	11h 15	51.1	1.29	1.188	0.835	0.952	0.642	0.763	(8h) 754.9	10.1	CuStu ₇	
»	13h 55	47.2	1.37	1.183	0.823	0.938	0.640	0.761	(14h) 753.3	9.1	Cu ₁ Acu ₂	
20	8h 25	35.8	1.76	1.320	0.922	1.050	0.727	0.865	(8h) 753.4	7.2	Cu ₁ Acu	
»	10h 54	49.5	1.32	1.397	0.957	1.090	0.747	0.888	»	»	—	
»	13h 34	48.1	1.34	1.369	0.938	1.069	0.733	0.873	(14h) 754.2	6.9	Cu ₁	
21	7h 31	29.2	2.04	1.211	0.854	0.972	0.671	0.798	(8h) 755.7	10.6	—	
26	9h 19	41.2	1.52	1.174	0.815	0.929	0.630	0.749	(8h) 760.0	13.5	Acu ₁	
»	11h 23	50.3	1.31	1.191	0.829	0.945	0.638	0.759	(14h) 759.3	11.1	Cu ₁ Acu	

Date	τ	h	m'	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r (RG 2)					
					obs.	red.	red.					obs.
August												
5	9h 16	38.1	1.62	1.094	0.788	0.898	0.630	0.749	(8h) 758.7	11.1	—	
11	9h 11	35.2	1.67	1.289	0.899	1.024	0.710	0.843	(8h) 761.0	8.5	—	
"	11h 22	45.9	1.40	1.322	0.911	1.039	0.718	0.854	(14h) 762.8	9.3	—	
"	13h 41	42.2	1.49	1.300	0.899	1.024	0.698	0.830	" "	"	—	
"	16h 04	28.0	2.13	1.147	0.815	0.929	0.636	0.756	" "	"	—	
12	9h 17	37.0	1.66	1.152	0.815	0.929	0.624	0.741	(8h) 764.8	12.2	—	
"	11h 15	45.9	1.39	1.207	0.839	0.956	0.644	0.765	(14h) 764.6	11.3	—	
"	13h 15	43.6	1.45	1.197	0.827	0.942	0.642	0.763	" "	"	—	
"	16h 20	25.6	2.31	0.945	0.690	0.786	0.534	0.635	" "	"	—	
13	9h 05	35.5	1.72	1.082	0.768	0.875	0.605	0.720	(8h) 765.0	12.8	—	
"	11h 05	44.7	1.42	1.220	0.837	0.954	0.655	0.779	(14h) 764.0	12.7	—	
19	8h 36	30.4	1.98	1.229	0.870	0.991	0.696	0.827	(8h) 763.5	8.7	—	
"	14h 25	36.6	1.67	1.254	0.876	0.998	0.698	0.830	(14h) 764.7	8.5	—	
"	16h 57	19.3	3.01	1.109	0.753	0.858	0.601	0.715	(19h) 764.8	8.7	—	Stcu ₂ Acu
23	8h 55	30.7	1.96	1.221	0.864	0.984	0.550	0.654	(8h) 765.4	7.6	—	Cu ₂ Acu
"	12h 08	42.3	1.49	1.312	0.918	1.046	0.718	0.854	(14h) 763.2	8.5	—	Cu ₂ Acu, Ci
25	9h 06	31.7	1.90	1.236	0.860	0.980	0.671	0.798	(8h) 766.9	9.7	—	Cu ₂ Acu
"	11h 12	40.7	1.53	1.288	0.881	1.003	0.690	0.820	(14h) 766.0	9.9	—	Cu ₁
"	13h 06	39.9	1.56	1.292	0.887	1.010	0.684	0.813	" "	"	—	"
"	15h 09	30.2	1.99	1.204	0.852	0.970	0.667	0.793	" "	"	—	"
26	9h 03	31.0	1.94	1.237	0.876	0.997	0.690	0.820	(8h) 769.5	8.5	—	Acu ₁ Ci
31	12h 13	39.6	1.57	1.246	0.887	1.010	0.692	0.823	(14h) 762.1	8.5	—	Cu ₂ Ci
September												
1	8h 41	27.0	2.20	1.142	0.827	0.942	0.663	0.789	(8h) 764.6	9.5	—	Acu ₁
"	11h 03	37.9	1.63	1.272	0.868	0.989	0.677	0.805	(14h) 763.8	8.8	—	Cu ₂
"	15h 10	27.9	2.13	1.126	0.811	0.924	0.644	0.765	" "	"	—	"
12	14h 15	29.2	2.04	1.230	0.874	0.995	0.694	0.825	(14h) 737.0	8.8	—	Cu ₂
14	8h 50	23.3	2.52	1.231	0.891	1.015	0.718	0.854	(8h) 762.3	5.1	—	—
"	11h 07	33.3	1.82	1.356	0.959	1.091	0.759	0.902	(14h) 765.5	4.2	—	Cu ₂
15	8h 35	21.8	2.67	1.050	0.786	0.895	0.640	0.761	(8h) 770.5	5.7	—	—
17	8h 48	22.1	2.60	1.185	0.860	0.980	0.690	0.820	(8h) 762.2	7.6	—	Acu ₁ Cicu
"	12h 20	33.0	1.83	1.295	0.915	1.042	0.725	0.862	(14h) 761.1	6.7	—	Cu ₁ Ci ₂
"	14h 38	25.6	2.30	1.111	0.819	0.932	0.640	0.761	" "	"	—	"
20	13h 20	30.3	1.98	1.283	0.903	1.028	0.716	0.851	(14h) 750.5	5.7	—	Cu ₁
21	8h 39	19.7	2.94	1.110	0.805	0.917	0.653	0.776	(8h) 752.9	6.7	—	Cu ₂ Acu
22	8h 45	19.9	2.92	1.199	0.870	0.991	0.706	0.840	(8h) 757.7	4.5	—	—
28	8h 53	17.8	3.24	1.110	0.825	0.940	0.659	0.784	(8h) 765.3	6.7	—	Acu ₂ Ci
"	8h 48	17.6	3.28	0.995	0.718	0.818	0.593	0.705	(8h) 763.6	8.6	—	St ₁ Acu ₂
29	11h 41	28.3	2.09	1.201	0.850	0.968	0.659	0.783	(14h) 763.1	10.1	—	Cist ₂
"	14h 28	21.7	2.68	1.139	0.817	0.931	0.634	0.754	" "	"	—	"
30	10h 30	25.6	2.31	0.994	0.722	0.823	0.581	0.691	(8h) 764.7	9.9	—	Acu ₂
"	12h 47	27.2	2.18	1.189	0.839	0.956	0.665	0.790	(14h) 762.5	10.8	—	Cicu ₂
October												
3	8h 45	16.0	3.59	1.105	0.819	0.932	0.669	0.795	(8h) 749.4	4.6	—	Acu ₂
6	8h 33	13.9	4.10	1.090	0.821	0.935	0.681	0.810	(8h) 764.9	3.6	—	—
8	13h 17	22.9	2.56	0.968	0.733	0.835	0.601	0.715	(14h) 769.2	8.0	—	Stcu ₁
23	11h 54	19.5	2.96	1.105	0.809	0.921	0.651	0.774	(14h) 750.4	6.5	—	Cu ₁
"	14h 18	14.0	4.08	0.994	0.753	0.857	0.603	0.717	" "	"	—	"
25	8h 41	8.5	6.53	0.850	0.671	0.765	0.579	0.689	(8h) 748.7	3.8	—	—
"	11h 44	18.7	3.10	1.190	0.872	0.993	0.708	0.843	(14h) 749.3	5.1	—	Cu ₁
"	12h 22	18.4	3.15	1.183	0.865	0.985	0.712	0.846	" "	"	—	"
"	14h 50	10.7	5.25	0.924	0.733	0.835	0.595	0.707	" "	"	—	"
26	8h 50	9.0	6.22	0.784	0.626	0.714	0.546	0.650	(8h) 749.1	4.3	—	—
"	13h 43	15.1	3.79	0.697	0.564	0.642	0.484	0.575	(14h) 747.8	3.8	—	—

haze

Experimentalfältet 1932

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Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _γ (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
November												
7	12h 41	14.2	4.04	0.875	0.688	0.785	0.558	0.664	(14h) 769.7	5.8	Cist ₁	
11	10h 09	10.0	5.61	0.794	0.624	0.710	0.540	0.642	(8h) 772.7	5.0	CuStcu ₂ Acu ₂	
15	12h 10	12.4	4.57	0.921	0.718	0.818	0.593	0.705	(14h) 762.8	4.5	—	
»	14h 34	6.3	8.59	0.629	0.515	0.586	0.435	0.517	»	»	—	
16	9h 30	6.2	8.64	0.737	0.585	0.666	0.517	0.615	(8h) 763.7	3.7	Acu ₁	
»	13h 29	10.0	5.62	0.927	0.725	0.825	0.603	0.717	(14h) 764.1	3.8	Cu ₁ Acu ₂	
18	9h 46	6.7	8.06	0.722	0.585	0.666	0.515	0.612	(8h) 772.7	3.1	St ₇ Acu	
26	9h 44	5.1	9.65	0.478	0.394	0.449	0.378	0.449	(8h) 753.6	3.1	—	
»	14h 04	8.6	6.47	0.688	0.554	0.631	0.480	0.571	(14h) 755.1	3.7	Acu ₃	
December												
10	10h 14	5.1	10.23	0.561	0.484	0.551	0.437	0.569	(8h) 767.0	4.1	St ₂ Acu	
»	12h 25	7.9	6.95	0.809	0.655	0.746	0.558	0.664	(14h) 765.0	3.7	Ci ₃	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I_t	I_Y (OG 1)		I_r (RG 2)					
					obs.	red.	obs.					red.
February												
3	10h 07	10.7	5.25	0.791	0.614	0.699	0.536	0.637	(8h) 736.0	4.5	St ₁₀	
10	8h 56	7.4	7.45	0.792	0.640	0.730	0.569	0.675	(8h) 749.8	2.6	Stcu ₃ Acu ₂ Ci	
»	12h 31	16.1	3.57	1.153	0.870	0.991	0.720	0.856	(14h) 750.7	2.2	—	
11	8h 46	6.7	8.08	0.672	0.575	0.655	0.521	0.620	(8h) 760.0	2.1	—	
»	12h 21	16.2	3.54	1.098	0.831	0.946	0.684	0.814	(14h) 760.5	2.1	Cu ₃	
13	8h 47	7.5	7.32	0.714	0.587	0.668	0.521	0.620	(8h) 751.8	4.1	Stcu ₃ Acu ₂	
»	11h 33	16.9	3.42	1.119	0.837	0.954	0.690	0.820	(14h) 749.2	4.0	Acu ₇ Ci	
14	9h 20	10.6	5.31	0.873	0.684	0.779	0.589	0.700	(8h) 748.3	2.0	Acu ₃ Ci	
»	12h 33	17.2	3.35	1.063	0.798	0.909	0.647	0.769	(14h) 748.0	2.4	St ₁₀	
18	9h 31	13.1	4.36	0.794	0.624	0.710	0.542	0.644	(8h) 760.8	1.9	St ₂ Acu ₄	
March												
1	9h 12	15.2	3.77	0.872	0.657	0.748	0.575	0.684	(8h) 770.4	2.4	Acu ₁ Ci ₄	haze
»	12h 26	23.1	2.55	1.146	0.844	0.961	0.690	0.821	(14h) 770.1	3.1	Acu ₃	
»	15h 23	12.1	4.70	0.850	0.663	0.755	0.554	0.647	»	»	»	
15	14h 14	23.2	2.53	1.040	0.776	0.884	0.626	0.745	(14h) 750.6	4.6	St ₁₀	
16	10h 24	26.2	2.26	1.229	0.893	1.018	0.718	0.854	(8h) 749.1	4.5	Acu ₂ Cicu	
»	12h 08	29.0	2.06	1.289	0.917	1.045	0.720	0.856	(14h) 749.6	4.4	Stcu ₇ Acu ₂	
21	9h 22	23.2	2.53	1.296	0.938	1.070	0.772	0.918	(8h) 759.2	2.3	Ci ₁	
»	11h 59	31.1	1.94	1.367	0.987	1.125	0.801	0.952	(14h) 763.0	2.9	Cu ₁	
»	15h 01	21.5	2.72	1.212	0.907	1.032	0.733	0.872	»	»	»	
22	8h 44	19.9	2.94	1.148	0.844	0.961	0.702	0.835	(8h) 771.3	2.5	—	
»	11h 47	31.2	1.93	1.339	0.956	1.090	0.772	0.917	(14h) 773.9	3.8	Stcu ₇	
24	13h 05	30.7	1.96	1.233	0.881	1.003	0.716	0.851	(14h) 775.9	4.6	Ci ₁	
»	13h 58	27.6	2.15	1.241	0.897	1.021	0.729	0.865	»	»	»	
25	12h 05	32.4	1.86	1.359	0.965	1.099	0.768	0.914	(14h) 771.4	3.4	Ci ₁	
»	14h 11	27.2	2.18	1.271	0.917	1.044	0.733	0.871	»	»	»	
26	14h 00	32.7	1.85	1.230	0.878	1.000	0.702	0.834	(14h) 771.4	4.6	Cu ₁ Ci	
»	13h 50	28.9	2.07	1.271	0.895	1.020	0.722	0.858	»	»	»	
»	15h 49	18.1	3.19	1.097	0.800	0.911	0.657	0.781	»	»	»	
27	12h 54	32.3	1.87	1.159	0.844	0.961	0.661	0.786	(14h) 768.1	4.7	Acu ₃ Ci	
30	8h 30	21.2	2.74	1.044	0.774	0.881	0.638	0.759	(8h) 755.5	5.8	—	haze
»	12h 33	34.2	1.78	1.103	0.786	0.895	0.645	0.767	(14h) 754.5	4.8	—	
April												
1	8h 27	21.7	2.70	1.142	0.833	0.949	0.667	0.794	(8h) 750.0	4.4	Stcu ₁	
»	12h 06	35.1	1.73	1.335	0.934	1.064	0.751	0.893	(14h) 750.1	3.9	Cu ₃	
3	10h 01	31.1	1.93	1.221	0.885	1.007	0.714	0.849	(8h) 756.5	2.8	St ₃	
»	12h 21	35.9	1.71	0.992	0.739	0.841	0.628	0.747	(14h) 752.7	3.6	St ₇ Acu	
5	10h 19	33.1	1.83	1.321	0.928	1.057	0.749	0.890	(8h) 760.5	4.0	St ₁₀	
»	12h 01	36.8	1.67	1.345	0.948	1.080	0.757	0.900	(14h) 760.9	3.5	Cu ₃	
6	11h 02	36.0	1.70	1.345	0.950	1.081	0.759	0.902	(14h) 756.0	2.8	Cu ₃	
8	8h 20	23.5	2.51	1.193	0.864	0.984	0.718	0.854	(8h) 764.0	3.3	—	
»	10h 20	34.5	1.76	1.311	0.942	1.072	0.749	0.890	»	»	»	
»	15h 35	24.1	2.44	1.104	0.817	0.930	0.669	0.795	(14h) 763.3	2.8	Cu ₁ Acu ₄ Ci	
9	11h 16	37.5	1.64	0.841	0.562	0.640	0.486	0.577	(14h) 763.7	4.6	Cu ₅ Cicu	
»	14h 13	32.4	1.87	1.217	0.874	0.995	0.696	0.827	»	»	»	
10	8h 59	28.1	2.12	1.073	0.790	0.900	0.640	0.761	(8h) 762.9	4.8	St ₃ Acu ₂	
13	10h 48	37.9	1.63	1.314	0.913	1.040	0.722	0.857	»	»	»	
22	9h 37	35.8	1.71	1.256	0.924	1.052	0.743	0.884	(8h) 761.4	3.4	Ci ₁	
»	12h 14	43.0	1.46	1.373	0.959	1.091	0.762	0.906	(14h) 758.0	2.8	Cu ₃	
»	15h 08	31.4	1.93	1.258	0.901	1.026	0.720	0.857	»	»	»	
24	8h 45	31.2	1.93	1.311	0.924	1.052	0.753	0.896	(8h) 760.0	3.4	—	
»	11h 26	43.0	1.46	1.391	0.969	1.103	0.768	0.914	(14h) 760.6	2.9	Stcu ₃	
»	15h 13	31.6	1.91	1.305	0.918	1.047	0.735	0.874	»	»	»	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _γ (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
April (cont.)												
25	8h 16	28.2	2.13	1.229	0.876	0.997	0.714	0.849	(8h) 769.1	3.9	—	
»	10h 19	40.0	1.55	1.317	0.928	1.058	0.741	0.881	»	»	»	
»	12h 07	43.9	1.44	1.352	0.942	1.072	0.751	0.892	(14h) 768.4	3.8	—	
»	15h 06	32.7	1.85	1.274	0.905	1.030	0.722	0.859	»	»	»	
»	16h 12	25.2	2.34	1.163	0.840	0.957	0.679	0.808	(14h) 768.4	3.8	—	haze
26	8h 14	28.3	2.10	1.137	0.821	0.935	0.659	0.784	(8h) 768.5	4.9	—	
»	10h 14	40.1	1.55	1.302	0.911	1.038	0.723	0.860	»	»	»	
»	12h 14	44.2	1.43	1.319	0.922	1.050	0.739	0.879	(14h) 767.1	4.5	—	
»	14h 14	37.8	1.62	1.230	0.866	0.986	0.686	0.816	»	»	»	
»	16h 14	25.1	2.35	1.112	0.815	0.929	0.651	0.774	»	»	»	
27	8h 45	31.9	1.89	1.296	0.926	1.055	0.753	0.895	(8h) 768.6	3.6	—	
»	11h 55	44.5	1.43	1.363	0.944	1.075	0.762	0.906	(14h) 767.9	4.2	—	
»	15h 32	30.2	2.00	1.267	0.893	1.017	0.725	0.862	»	»	»	
28	8h 46	32.1	1.88	1.231	0.879	1.000	0.714	0.849	(8h) 767.2	4.7	—	haze
30	11h 56	45.4	1.40	1.276	0.893	1.017	0.712	0.846	(14h) 754.4	4.6	Cu ₂	
May												
3	9h 50	40.0	1.55	1.189	0.850	0.968	0.686	0.816	(8h) 759.8	5.4	St, Acu ₂	
4	11h 20	46.1	1.39	1.367	0.952	1.084	0.753	0.896	(14h) 764.5	3.1	Cu ₁ Acu ₂	
5	12h 18	47.1	1.37	1.366	0.938	1.069	0.753	0.896	(14h) 767.5	4.4	Cu ₁ Acu	
»	15h 17	34.5	1.76	1.275	0.891	1.015	0.708	0.842	»	»	»	
»	17h 17	19.7	2.95	1.034	0.759	0.865	0.626	0.745	(19h) 766.3	4.0	Ci ₁	
19	8h 48	37.8	1.63	1.254	0.868	0.990	0.683	0.812	(8h) 769.8	6.9	Ci ₂	
»	12h 11	50.4	1.30	1.316	0.907	1.033	0.696	0.827	(14h) 769.0	6.3	Acu ₁ Ci ₂	
22	8h 54	38.7	1.60	1.307	0.934	1.064	0.737	0.876	(8h) 770.4	4.8	—	
»	13h 57	45.7	1.40	1.382	0.952	1.083	0.755	0.897	(14h) 769.1	4.2	—	
»	16h 53	26.2	2.26	1.212	0.891	1.015	0.722	0.859	»	»	»	
23	11h 51	51.2	1.29	1.374	0.946	1.078	0.745	0.886	(14h) 765.3	5.7	Cu ₁ Acu ₂	
27	8h 42	38.2	1.62	1.269	0.891	1.015	0.708	0.841	(8h) 756.0	7.3	—	
»	13h 11	49.9	1.31	1.351	0.928	1.058	0.737	0.876	(14h) 757.3	5.8	Acu ₂ Ci	
29	8h 46	39.2	1.58	1.343	0.942	1.073	0.747	0.888	(8h) 762.3	5.5	—	
»	10h 56	50.8	1.30	1.401	0.959	1.091	0.764	0.908	»	»	»	
»	12h 52	51.1	1.29	1.384	0.954	1.085	0.749	0.890	(14h) 761.2	5.2	Acu ₁	
30	11h 53	52.3	1.26	1.290	0.891	1.015	0.706	0.840	(14h) 762.3	9.2	St ₁₀	thunder
»	17h 11	25.2	2.34	1.051	0.772	0.878	0.608	0.724	(19h) 761.9	8.6	Cu ₁ Acu Ci	
»	19h 24	9.2	6.10	0.600	0.501	0.571	0.419	0.498	»	»	»	
31	8h 59	39.8	1.56	1.152	0.823	0.937	0.661	0.786	(8h) 762.5	8.0	Acu ₁ Ci ₂	
June												
1	8h 46	39.2	1.58	1.160	0.823	0.936	0.665	0.757	(8h) 761.5	9.1	Stcu ₃ Acu Ci	
»	17h 55	19.9	2.91	0.902	0.772	0.880	0.585	0.666	(19h) 763.5	5.0	Stcu ₃ Acu	
3	8h 35	38.4	1.61	1.351	0.946	1.078	0.762	0.867	(8h) 771.3	4.3	—	
»	12h 50	51.9	1.28	1.329	0.928	1.057	0.733	0.835	(14h) 769.0	5.0	Acu ₃	
6	10h 06	48.1	1.34	1.243	0.872	0.993	0.690	0.786	(8h) 767.3	8.6	St ₁₀	haze
»	12h 08	53.3	1.25	1.262	0.862	0.981	0.690	0.786	(14h) 767.6	9.2	Stcu ₅	
»	15h 56	35.7	1.71	1.172	0.782	0.891	0.575	0.655	»	»	»	
7	10h 07	48.2	1.34	1.281	0.883	1.005	0.692	0.788	(8h) 767.8	9.5	Acu ₁ Ci	
»	12h 34	53.1	1.27	1.299	0.893	1.017	0.702	0.800	(14h) 767.6	8.4	CuStcu ₃ Acu Ci	
»	8h 45	39.8	1.57	1.236	0.866	0.986	0.690	0.786	(8h) 769.1	8.8	Acu ₁ Ci ₄	
8	11h 06	52.2	1.27	1.289	0.895	1.020	0.698	0.795	(14h) 768.1	8.3	Cu ₃	
»	13h 49	48.5	1.33	1.215	0.850	0.968	0.683	0.778	»	»	»	
»	16h 18	32.6	1.85	1.122	0.805	0.916	0.647	0.737	(19h) 767.9	8.5	Acu ₁	
9	9h 30	44.8	1.42	1.232	0.848	0.967	0.675	0.769	(8h) 767.1	9.5	—	
12	9h 05	42.4	1.48	1.210	0.840	0.957	0.663	0.755	(8h) 761.7	10.0	Acu ₁	
»	12h 21	53.8	1.24	1.272	0.878	1.000	0.686	0.781	(14h) 762.2	10.4	Cu ₃	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
June (cont.)												
12	14h 52	43.2	1.46	1.259	0.868	0.989	0.684	0.813	(14h) 762.2	10.4	—	
»	17h 03	27.7	2.15	1.190	0.846	0.964	0.667	0.793	(19h) 763.3	7.2	—	
»	19h 13	11.9	4.78	0.876	0.677	0.771	0.544	0.646	»	»	»	
13	8h 51	40.9	1.53	1.152	0.835	0.951	0.655	0.779	(8h) 764.9	10.0	Acu ₁ Ast	
»	11h 44	53.9	1.24	1.338	0.917	1.046	0.710	0.844	(14h) 765.5	7.7	Cu ₁	
»	14h 18	46.6	1.38	1.301	0.901	1.026	0.708	0.841	»	»	»	
»	16h 36	31.1	1.93	1.212	0.860	0.980	0.684	0.813	(19h) 764.8	8.3	Ci ₁	
»	18h 55	13.8	4.14	0.849	0.647	0.737	0.513	0.610	»	»	»	
14	7h 22	30.0	2.00	1.179	0.837	0.954	0.663	0.789	(8h) 765.2	8.7	—	
»	9h 50	47.3	1.36	1.303	0.901	1.025	0.708	0.841	»	»	»	
»	12h 25	53.8	1.24	1.310	0.899	1.024	0.704	0.836	(14h) 764.7	8.4	—	
»	15h 05	41.6	1.51	1.231	0.862	0.982	0.681	0.810	»	»	»	
»	17h 57	20.3	2.86	0.963	0.725	0.826	0.579	0.688	(19h) 763.8	7.6	—	
15	8h 39	39.8	1.56	1.309	0.918	1.045	0.735	0.874	(8h) 764.0	6.0	Ci ₁	
»	11h 50	53.8	1.24	1.305	0.911	1.039	0.716	0.851	(14h) 763.2	7.2	Acu ₁	
»	14h 25	46.1	1.39	1.275	0.895	1.020	0.698	0.830	»	»	»	
»	17h 32	24.0	2.45	1.082	0.796	0.906	0.636	0.756	(19h) 762.3	6.3	Ci ₁	
16	9h 21	44.2	1.44	1.184	0.827	0.942	0.661	0.786	(8h) 761.6	7.3	—	
»	12h 31	53.8	1.24	1.272	0.883	1.005	0.686	0.815	(14h) 760.1	7.6	Cu ₂ Acu Ci	
22	8h 37	39.6	1.57	1.243	0.881	1.003	0.702	0.835	(8h) 762.9	7.9	—	
»	11h 53	54.1	1.23	1.319	0.920	1.049	0.727	0.865	(14h) 762.7	7.4	—	
»	14h 23	46.4	1.39	1.269	0.887	1.010	0.708	0.841	»	»	»	
»	17h 05	27.0	2.19	1.153	0.835	0.951	0.659	0.784	(19h) 762.5	8.2	—	
23	8h 47	40.8	1.53	1.220	0.850	0.968	0.675	0.803	(8h) 759.8	8.3	—	
»	11h 54	54.2	1.23	1.328	0.913	1.040	0.714	0.849	(14h) 758.1	10.7	—	
»	14h 23	46.2	1.39	1.282	0.881	1.003	0.700	0.832	»	»	»	
»	17h 16	25.7	2.30	1.066	0.764	0.870	0.612	0.727	(19h) 757.4	9.1	Acu ₁	
July												
6	8h 50	40.4	1.54	1.300	0.889	1.012	0.690	0.786	(8h) 770.0	10.2	Ci ₁	
»	11h 32	53.0	1.25	1.337	0.901	1.026	0.700	0.797	(14h) 769.9	11.1	Cu ₁ Cicu ₂	
»	14h 27	45.3	1.41	1.288	0.883	1.005	0.681	0.775	»	»	»	
»	17h 02	26.9	2.15	1.120	0.800	0.911	0.622	0.706	(19h) 769.7	»	Cu ₂	
7	8h 44	39.5	1.52	1.231	0.852	0.971	0.661	0.753	(8h) 770.1	12.4	—	
»	12h 14	53.1	1.25	1.244	0.866	0.986	0.671	0.765	(14h) 769.1	11.4	—	
»	14h 58	42.1	1.49	1.198	0.833	0.949	0.655	0.746	»	»	»	
»	17h 05	26.5	2.25	1.043	0.753	0.858	0.601	0.685	(19h) 768.0	11.2	—	
8	9h 08	42.2	1.49	1.208	0.844	0.961	0.667	0.760	(8h) 769.0	9.3	—	haze
»	11h 46	53.1	1.25	1.266	0.868	0.989	0.679	0.773	(14h) 768.3	8.7	—	
»	14h 15	46.3	1.39	1.237	0.850	0.968	0.669	0.762	»	»	»	
»	17h 02	26.9	2.20	0.988	0.723	0.824	0.581	0.662	(19h) 768.3	8.7	Ci ₁	haze
10	9h 07	42.0	1.49	1.252	0.862	0.982	0.677	0.770	(8h) 763.2	12.1	—	haze
»	11h 58	52.7	1.26	1.290	0.881	1.003	0.688	0.784	(14h) 762.1	11.2	Cu ₁	
»	14h 36	44.0	1.44	1.244	0.846	0.964	0.659	0.750	»	»	»	
»	16h 52	27.8	2.14	1.003	0.729	0.830	0.571	0.650	(19h) 759.6	12.6	—	
21	15h 46	34.8	1.75	1.173	0.823	0.938	0.634	0.722	(14h) 765.2	12.2	Cu ₂	
22	9h 20	42.0	1.49	1.117	0.778	0.886	0.616	0.701	(8h) 764.5	12.4	Ci ₁	
»	12h 04	51.0	1.29	1.252	0.854	0.972	0.671	0.764	(14h) 763.4	10.0	Cu ₂ Acu ₂ Ci	
25	9h 30	42.4	1.48	1.257	0.852	0.971	0.679	0.773	(8h) 756.8	13.2	Cu ₁	
27	9h 23	41.0	1.52	1.322	0.905	1.030	0.716	0.816	(8h) 759.7	8.9	Ci ₂	
»	13h 25	47.2	1.36	1.334	0.915	1.042	0.706	0.805	(14h) 760.3	9.3	Cu ₁	
»	15h 32	35.2	1.74	1.252	0.866	0.986	0.671	0.765	»	»	»	
29	9h 59	44.3	1.43	1.270	0.872	0.994	0.673	0.767	(8h) 747.8	9.7	Cu ₂	
31	9h 27	40.7	1.53	1.266	0.879	1.001	0.684	0.779	(8h) 755.3	11.7	Acu ₁	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _γ (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
August												
4	15h 20'	34.7	1.75	1.269	0.881	1.003	0.686	0.781	(14h) 755.8	13.6	Fcu Fst ₃ Acu ₂	
9	8h 40	33.2	1.82	1.238	0.858	0.977	0.665	0.757	(8h) 750.1	11.3	Cu ₁ Acu ₂	
	11h 29	45.9	1.40	1.330	0.901	1.026	0.700	0.797	(14h) 751.3	9.0	Cunb ₅ Acu	
11	9h 02	34.9	1.75	1.291	0.895	1.020	0.696	0.793	(8h) 755.9	8.3	Cu ₃	
12	7h 31	24.5	2.41	1.181	0.844	0.961	0.669	0.761	(8h) 765.0	8.6	—	
	11h 47	45.6	1.40	1.354	0.934	1.063	0.727	0.828	(14h) 764.6	8.1	Cu ₅	
	15h 09	33.9	1.79	1.274	0.889	1.011	0.698	0.795	»	»	Cu ₅	
13	10h 58	44.0	1.44	1.345	0.924	1.052	0.723	0.824	(14h) 767.4	7.8	Cu ₅	
14	9h 55	41.1	1.47	1.265	0.854	0.973	0.659	0.750	(8h) 766.0	10.4	Acu Cicu	haze
27	13h 03	39.4	1.58	1.289	0.887	1.010	0.694	0.790	(14h) 767.8	8.8	Cu ₁ Ci ₂	
	15h 13	29.5	2.03	1.178	0.835	0.950	0.645	0.735	»	»	»	
28	9h 06	30.4	1.97	1.190	0.833	0.949	0.657	0.748	(8h) 768.6	11.0	Acu ₂ Ci	
	12h 12	40.3	1.54	1.236	0.852	0.971	0.677	0.771	(14h) 767.5	10.6	Cu ₁ Ast ₂	
29	12h 47	39.3	1.58	1.137	0.807	0.919	0.634	0.723	(14h) 763.9	12.5	Cist ₃	haze
	15h 50	24.4	2.42	0.918	0.690	0.786	0.550	0.627	»	»	»	»
30	9h 08	30.2	1.98	1.104	0.794	0.904	0.630	0.718	(8h) 765.4	11.9	Ci ₁	haze
	12h 03	39.7	1.56	1.212	0.848	0.966	0.671	0.765	(14h) 764.6	12.1	—	»
31	9h 05	29.6	2.03	1.065	0.768	0.875	0.612	0.697	(8h) 762.3	10.1	Acu ₅	»
	12h 57	38.4	1.61	1.174	0.811	0.924	0.655	0.746	(14h) 761.5	9.6	Cu ₁	
	15h 43	24.5	2.41	1.120	0.813	0.925	0.642	0.731	»	»	»	
September												
4	9h 14	29.1	2.06	1.270	0.897	1.021	0.704	0.802	(8h) 768.0	9.1	—	
	12h 10	37.7	1.63	1.349	0.928	1.056	0.735	0.837	(14h) 767.4	7.8	Cu ₁ Ci ₂	
5	10h 29	35.1	1.74	1.202	0.842	0.959	0.663	0.755	(8h) 768.6	9.9	Cu ₅	
7	14h 42	28.7	2.08	1.285	0.911	1.037	0.723	0.824	(14h) 771.6	6.6	Cu ₁	
	16h 51	14.3	4.01	1.018	0.772	0.829	0.630	0.718	(19h) 770.8	6.7	—	
8	11h 46	36.5	1.68	1.364	0.932	1.060	0.735	0.837	(8h) 770.5	8.2	Stcu ₃ Acu	
	15h 29	23.6	2.50	1.172	0.842	0.959	0.677	0.771	(14h) 769.9	7.1	Cu ₁	
9	12h 53	35.2	1.73	1.194	0.842	0.959	0.665	0.757	(14h) 770.5	9.9	Cu ₁ Ci ₂	
12	11h 42	35.0	1.74	1.136	0.796	0.907	0.638	0.727	(14h) 763.3	8.5	Acu ₅ Ci	
15	9h 21	26.0	2.28	1.252	0.876	0.998	0.706	0.805	(8h) 759.7	6.6	Cu ₁	
	12h 03	34.0	1.78	1.346	0.932	1.061	0.743	0.846	(14h) 760.3	9.1	Cu ₇	
16	9h 37	26.9	2.21	1.243	0.883	1.006	0.708	0.806	(8h) 763.4	6.6	Stcu ₃ Ci	
	12h 16	33.4	1.81	1.342	0.932	1.061	0.735	0.837	(14h) 763.5	5.7	Cu ₁	
	14h 45	25.2	2.34	1.268	0.897	1.021	0.727	0.828	»	»	»	
	16h 55	10.8	5.25	0.957	0.737	0.839	0.608	0.693	(19h) 764.6	5.4	Ci ₁	
17	11h 12	32.3	1.87	1.360	0.936	1.066	0.755	0.860	(14h) 762.8	6.7	Cu ₃ Acu	
	13h 40	29.6	2.02	1.297	0.895	1.020	0.714	0.813	»	»	»	
18	14h 20	26.3	2.25	1.265	0.889	1.011	0.718	0.818	(14h) 769.0	7.4	—	
	16h 43	11.6	4.87	0.885	0.679	0.773	0.571	0.650	(19h) 770.1	7.4	Acu ₁	
October												
3	8h 37	15.5	3.73	1.074	0.788	0.897	0.651	0.741	(8h) 763.4	4.9	Cu ₅	
6	14h 09	20.6	2.83	1.178	0.837	0.953	0.675	0.769	(14h) 765.9	6.1	Cu ₅	
8	12h 05	25.0	2.36	1.279	0.907	1.062	0.729	0.830	(14h) 761.5	4.9	Cu ₁ Cicu ₂	
13	9h 05	14.6	3.60	1.055	0.782	0.991	0.655	0.746	(8h) 758.5	6.0	St ₅ Ast ₄	
	12h 29	23.0	2.56	1.287	0.917	1.044	0.739	0.853	(14h) 757.8	6.5	—	
	14h 35	16.5	3.50	1.130	0.825	0.940	0.692	0.789	»	»	»	
	16h 14	6.7	8.16	0.778	0.606	0.690	0.491	0.560	»	»	»	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I_t	I_Y (OG 1)		I_r (RG 2)					
					obs.	red.	obs.					red.
December												
2	10 ^h 24	8.7	6.38	0.868	0.683	0.778	0.583	0.665	(8 ^h) 781.6	2.7	St ₉ Acu ₁	haze
3	13 ^h 02	7.9	6.97	0.741	0.601	0.685	0.517	0.588	(14 ^h) 783.4	3.2	Ci ₁	
12	10 ^h 11	5.1	10.83	0.549	0.458	0.522	0.427	0.486	(8 ^h) 765.1	2.0	Cu ₂ Acu	
»	14 ^h 02	4.3	11.83	0.483	0.425	0.485	0.380	0.433	(14 ^h) 766.8	2.1	St ₃ Acu	
13	10 ^h 01	4.3	11.91	0.448	0.394	0.448	0.365	0.416	(8 ^h) 770.2	1.7	Cist ₃	
15	9 ^h 59	4.1	12.24	0.649	0.542	0.617	0.509	0.580	(8 ^h) 761.2	2.1	Cu ₁	
»	11 ^h 56	7.8	7.09	0.927	0.737	0.840	0.641	0.730	(14 ^h) 763.7	1.9	Acu ₁	
»	14 ^h 05	4.0	12.46	0.606	0.522	0.595	0.466	0.581	»	»	»	
19	11 ^h 06	6.9	7.87	0.681	0.546	0.622	0.497	0.566	(14 ^h) 761.5	3.4	Acu ₁ Ci ₄	
20	10 ^h 21	5.1	10.29	0.515	0.425	0.484	0.396	0.451	(8 ^h) 763.5	3.1	—	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I_t	I_y (OG 1)		I_r (RG 2)					
					obs.	red.	obs.					red.
January												
20	13 ^h 45	7.8	7.05	0.780	0.624	0.711	0.532	0.606	(14 ^h) 760.2	3.3	Stcu ₃	
23	10 ^h 01	7.5	7.23	0.755	0.610	0.695	0.546	0.621	(8 ^h) 774.6	3.3	Cist ₃	
»	12 ^h 06	11.2	5.03	0.936	0.720	0.820	0.593	0.675	(14 ^h) 774.2	4.0	Cist ₅	
28	12 ^h 05	12.6	4.50	1.008	0.755	0.860	0.640	0.730	(14 ^h) 766.1	3.5	—	
»	14 ^h 26	7.4	7.45	0.747	0.603	0.688	0.507	0.577	»	»	—	
29	10 ^h 00	8.8	6.32	0.711	0.575	0.655	0.493	0.562	(8 ^h) 771.0	3.8	Acu ₁	
»	12 ^h 07	12.9	4.40	0.900	0.692	0.788	0.587	0.668	(14 ^h) 771.0	4.1	—	
»	14 ^h 20	8.1	6.87	0.712	0.562	0.640	0.476	0.542	»	»	—	
31	9 ^h 43	8.2	6.79	0.832	0.657	0.748	0.581	0.662	(8 ^h) 762.1	2.5	—	
»	11 ^h 58	13.4	4.27	1.020	0.772	0.879	0.661	0.753	(14 ^h) 759.4	2.9	—	
»	14 ^h 06	9.6	5.85	0.857	0.683	0.778	0.585	0.666	»	»	—	
February												
1	9 ^h 21	6.8	8.01	0.743	0.597	0.680	0.538	0.640	(8 ^h) 773.1	2.6	Stcu ₃	
»	12 ^h 07	13.7	4.16	1.146	0.856	0.976	0.718	0.854	(14 ^h) 775.8	2.2	Acu ₃ Ci	
»	14 ^h 25	8.6	6.45	0.934	0.727	0.827	0.634	0.715	»	»	»	
3	9 ^h 28	7.9	6.98	0.698	0.546	0.622	0.486	0.550	(8 ^h) 769.5	3.0	—	
9	9 ^h 30	9.7	5.80	0.838	0.651	0.742	0.579	0.654	(8 ^h) 754.9	1.6	—	
»	11 ^h 59	16.0	3.59	1.127	0.831	0.947	0.684	0.773	(14 ^h) 755.2	2.4	Ast ₁₀	
10	11 ^h 02	15.3	3.76	1.148	0.856	0.975	0.702	0.792	(8 ^h) 738.9	4.8	Cunb ₇ Acu ₂	
»	14 ^h 36	10.4	5.43	0.948	0.731	0.832	0.612	0.691	(14 ^h) 742.6	3.4	Acu ₃	
11	12 ^h 05	16.8	3.44	1.168	0.852	0.971	0.706	0.797	(14 ^h) 751.3	3.1	Stcu ₃	
»	14 ^h 33	10.9	5.20	1.004	0.772	0.879	0.644	0.728	»	»	»	
12	9 ^h 31	10.7	5.29	1.026	0.784	0.893	0.681	0.770	(8 ^h) 766.1	2.4	Stcu ₃	
»	12 ^h 21	17.0	3.39	1.208	0.895	1.008	0.735	0.837	(14 ^h) 773.6	2.0	—	
15	13 ^h 38	15.7	3.66	1.073	0.794	0.905	0.655	0.746	(14 ^h) 774.9	3.5	Ci ₃	
17	12 ^h 21	18.8	3.09	1.134	0.833	0.950	0.683	0.778	(14 ^h) 768.2	4.5	Ci ₁	
19	12 ^h 04	19.5	2.98	1.206	0.879	1.001	0.714	0.813	(14 ^h) 742.4	4.1	Stcu ₃ Acu ₂	
21	10 ^h 07	16.3	3.53	1.121	0.833	0.950	0.692	0.788	(8 ^h) 754.7	2.1	St ₉	
»	13 ^h 39	17.5	3.29	1.127	0.833	0.950	0.690	0.786	(14 ^h) 755.9	2.5	—	
March												
17	12 ^h 25	29.1	2.06	1.027	0.739	0.843	0.608	0.724	(14 ^h) 745.2	4.7	—	
»	14 ^h 50	20.7	2.81	0.912	0.698	0.796	0.585	0.695	»	»	—	
20	9 ^h 26	23.3	2.52	0.948	0.720	0.820	0.597	0.710	(8 ^h) 759.0	5.0	Acu ₁ Ci ₁	
»	11 ^h 57	30.4	1.98	1.200	0.854	0.972	0.694	0.825	(14 ^h) 760.4	3.8	Cu ₁ Cicu ₂	
»	15 ^h 36	17.4	3.33	0.958	0.729	0.831	0.593	0.705	»	»	»	
21	11 ^h 38	30.7	1.96	1.223	0.860	0.980	0.712	0.846	(8 ^h) 766.3	4.8	Ast ₉	
April												
7	9 ^h 04	27.8	2.14	1.123	0.815	0.929	0.678	0.808	(8 ^h) 761.0	3.2	Acu ₃	
»	11 ^h 40	37.3	1.65	1.190	0.856	0.976	0.694	0.825	(14 ^h) 760.0	3.3	Acu ₅	
10	9 ^h 26	30.9	1.95	1.355	0.957	1.090	0.782	0.930	(8 ^h) 763.8	2.5	Cu ₃ Acu	
»	11 ^h 55	38.4	1.61	0.425	0.989	1.127	0.801	0.952	(14 ^h) 765.3	3.3	Cu ₁	
»	14 ^h 20	32.0	1.89	1.373	0.959	1.092	0.780	0.928	»	»	»	
»	16 ^h 38	17.3	3.35	1.162	0.862	0.982	0.720	0.856	(19 ^h) 766.1	3.0	—	
11	9 ^h 03	29.1	2.05	0.989	0.729	0.831	0.606	0.720	(8 ^h) 766.0	3.0	—	
»	12 ^h 12	39.0	1.59	0.644	0.497	0.566	0.347	0.413	(14 ^h) 763.7	5.1	Ast ₁₀	
12	8 ^h 46	27.6	2.15	1.251	0.895	1.020	0.727	0.865	(8 ^h) 761.3	3.5	Acu ₃	
»	10 ^h 22	35.9	1.71	1.360	0.952	1.084	0.741	0.881	»	»	»	
»	15 ^h 15	27.6	2.16	1.337	0.926	1.055	0.751	0.892	(14 ^h) 763.0	2.5	Cu ₇	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
April (cont.)												
13	8h 52	28.5	2.10	1.307	0.930	1.060	0.751	0.893	(8h) 770.5	3.0	—	
»	11h 34	39.5	1.58	1.407	0.977	1.113	0.784	0.933	(14h) 770.6	2.7	—	
»	14h 16	33.5	1.81	1.316	0.934	1.064	0.751	0.894	»	»	—	
»	16h 01	22.8	2.57	1.205	0.878	1.001	0.718	0.855	»	»	—	
17	9h 07	31.5	1.91	1.244	0.874	0.996	0.710	0.845	(8h) 758.0	5.6	—	
»	11h 56	41.1	1.52	1.353	0.930	1.060	0.739	0.879	(14h) 758.2	5.8	Cu ₁	
»	14h 43	33.4	1.81	1.309	0.900	1.036	0.725	0.862	»	»	—	
»	16h 49	18.2	3.18	0.993	0.727	0.823	0.606	0.721	(19h) 758.5	6.1	Cu ₁	
21	12h 19	42.4	1.48	1.341	0.922	1.050	0.747	0.888	(14h) 755.8	5.4	Cu ₂	
»	15h 18	30.1	1.99	1.236	0.881	1.004	0.712	0.846	»	»	—	
»	16h 53	18.7	3.09	1.014	0.753	0.859	0.612	0.727	(19h) 757.1	4.9	Acu ₁ Ci ₂	
26	10h 01	39.2	1.58	1.164	0.831	0.947	0.679	0.809	(8h) 754.3	7.1	Stcu ₃	
28	11h 59	44.7	1.42	1.222	0.856	0.976	0.673	0.800	(14h) 766.2	7.8	Cu ₂	
29	11h 07	44.1	1.44	1.247	0.874	0.996	0.700	0.832	(8h) 770.7	7.1	—	
»	13h 48	40.8	1.53	1.152	0.811	0.925	0.663	0.789	(14h) 770.1	7.4	Cu ₂	
May												
1	9h 42	39.0	1.59	1.070	0.741	0.844	0.601	0.715	(8h) 760.9	7.6	Ci ₁	
»	11h 55	45.7	1.39	1.143	0.798	0.910	0.640	0.761	(14h) 759.1	8.4	—	
»	16h 24	25.2	2.35	0.973	0.704	0.803	0.560	0.666	»	»	—	
2	9h 31	38.2	1.62	1.173	0.819	0.934	0.653	0.776	(8h) 760.0	7.0	—	
»	11h 45	46.0	1.38	1.340	0.922	1.052	0.743	0.884	(14h) 760.0	5.9	Ast ₁ Ci ₁	
4	10h 28	43.5	1.45	1.142	0.792	0.903	0.616	0.732	(8h) 768.5	7.4	Ci ₂	
5	11h 33	46.6	1.37	1.081	0.741	0.845	0.583	0.694	(14h) 765.4	8.6	—	
»	13h 48	42.6	1.48	1.092	0.749	0.854	0.603	0.716	»	»	—	
6	10h 58	45.6	1.40	1.068	0.739	0.842	0.587	0.697	(8h) 768.8	10.8	Ci ₁	
»	16h 17	27.5	2.16	0.886	0.640	0.730	0.515	0.612	(14h) 769.5	11.0	—	
7	10h 05	42.6	1.48	1.084	0.761	0.867	0.610	0.725	(8h) 770.8	10.2	—	
»	13h 43	43.4	1.46	1.065	0.745	0.849	0.595	0.708	(14h) 770.6	8.6	Acu ₁	
»	16h 48	23.9	2.47	0.841	0.608	0.693	0.493	0.586	(19h) 770.3	8.9	—	
9	9h 45	41.5	1.51	1.032	0.722	0.822	0.581	0.691	(8h) 770.0	8.5	—	
»	12h 04	48.0	1.34	1.124	0.780	0.890	0.622	0.740	(14h) 769.4	9.7	—	
»	16h 36	25.5	2.31	0.824	0.614	0.700	0.493	0.586	(19h) 769.4	9.6	—	
11	10h 36	45.8	1.39	1.301	0.885	1.008	0.704	0.836	(8h) 768.4	6.1	Cu ₁ Ci	
12	9h 18	44.9	1.41	1.326	0.905	1.031	0.710	0.845	(8h) 765.3	6.4	Acu ₁	
»	12h 42	47.9	1.35	1.319	0.897	1.023	0.690	0.828	(14h) 760.3	8.7	Acu ₃	
16	12h 05	49.8	1.30	1.332	0.924	1.052	0.725	0.862	(14h) 754.9	7.6	Cunb ₀ Acu ₁	
17	9h 39	42.6	1.48	1.232	0.870	0.991	0.696	0.827	(8h) 754.0	7.5	Cist ₃	
18	9h 00	38.5	1.61	1.241	0.883	1.006	0.710	0.845	(8h) 760.6	5.5	Cu ₁ Acu ₂	
25	9h 33	43.6	1.45	1.331	0.930	1.060	0.743	0.884	(8h) 755.5	4.4	—	
28	18h 06	20.4	2.86	0.974	0.725	0.826	0.566	0.673	(19h) 753.2	5.5	Stcu ₃	
June												
2	12h 36	52.3	1.27	1.162	0.807	0.920	0.645	0.766	(14h) 764.3	9.3	Cu ₁ Acu ₂ Ci	
8	13h 58	47.8	1.34	1.246	0.860	0.980	0.677	0.805	(14h) 764.4	10.3	Cu ₂	
»	16h 49	28.7	2.08	1.068	0.759	0.865	0.601	0.715	(19h) 763.8	9.3	Cu ₁	
9	9h 11	43.3	1.45	1.241	0.866	0.987	0.688	0.818	(8h) 765.6	8.0	Cu St ₁	
»	11h 57	53.5	1.24	1.295	0.885	1.009	0.706	0.839	(14h) 764.3	7.5	CuSt ₃ Acu	
»	17h 05	26.6	2.23	0.989	0.727	0.828	0.581	0.691	(19h) 762.3	6.5	Cu ₂	
11	13h 16	51.2	1.29	1.373	0.944	1.075	0.743	0.884	(14h) 757.0	4.6	Cu ₂ Acu	
12	9h 42	46.6	1.38	1.308	0.887	1.011	0.706	0.839	(8h) 757.8	7.5	Ci ₂	
»	11h 56	53.7	1.24	1.354	0.922	1.051	0.722	0.857	(14h) 755.9	5.6	Cu ₁ Acu ₄ Ci	
»	16h 33	31.0	1.95	1.185	0.840	0.957	0.663	0.788	(19h) 754.2	6.7	Acu ₁	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
June (cont.)												
13	9h 15	43.9	1.44	1.307	0.893	1.018	0.710	0.845	(8h) 757.8	6.2	Acu ₁	
15	8h 59	42.3	1.49	1.334	0.924	1.053	0.737	0.827	(8h) 766.2	5.2	Cu ₁ Acu ₂	
16	9h 15	44.0	1.44	1.226	0.870	0.991	0.686	0.816	(8h) 767.7	7.4	Cist ₂	
18	9h 19	44.4	1.43	1.257	0.858	0.978	0.679	0.808	(8h) 755.8	9.5	Acu ₃	
	12h 28	54.0	1.24	1.343	0.926	1.055	0.727	0.865	(14h) 755.8	10.3	St ₂ Acu	
24	9h 00	42.4	1.48	1.353	0.934	1.065	0.737	0.876	(8h) 765.2	5.3	Acu ₁	
»	11h 56	54.0	1.24	1.434	0.979	1.115	0.772	0.917	(14h) 765.8	4.3	—	
»	14h 37	44.9	1.42	1.379	0.956	1.090	0.759	0.903	»	»	—	
»	16h 05	34.7	1.76	1.314	0.917	1.045	0.727	0.865	(19h) 765.7	7.5	Cu ₁	
»	19h 06	12.0	4.74	0.898	0.694	0.790	0.569	0.676	»	»	—	
25	9h 23	44.9	1.42	1.311	0.897	1.022	0.712	0.846	(8h) 767.2	8.6	—	
»	16h 29	31.7	1.91	1.218	0.856	0.976	0.677	0.805	(14h) 765.8	7.8	Cu ₃ Acu ₂	
26	9h 10	43.6	1.45	1.318	0.903	1.029	0.714	0.849	(8h) 766.2	6.1	—	
»	11h 48	54.1	1.24	1.364	0.926	1.056	0.729	0.866	(14h) 765.1	6.5	Cu ₁	
»	14h 43	44.3	1.43	1.325	0.909	1.036	0.716	0.852	»	»	—	
July												
2	8h 55	41.3	1.51	1.289	0.881	1.005	0.669	0.795	(8h) 760.4	8.6	Cu ₁	
9	8h 35	38.4	1.62	1.308	0.899	1.026	0.712	0.846	(8h) 762.5	8.9	Acu ₁ Cicu ₂	
»	11h 25	52.5	1.26	1.375	0.936	1.079	0.731	0.869	(14h) 760.7	7.3	Acu ₁ Ci ₂	
»	13h 42	49.1	1.31	1.341	0.909	1.036	0.710	0.843	»	»	»	
»	16h 03	34.1	1.78	1.247	0.858	0.979	0.673	0.800	»	»	»	
10	7h 52	33.0	1.83	1.286	0.891	1.016	0.710	0.844	(8h) 761.2	7.2	Cu ₁	
»	10h 13	48.5	1.33	1.396	0.952	1.085	0.747	0.888	(14h) 760.3	6.3	Cu ₃	
12	8h 37	38.7	1.60	1.304	0.889	1.013	0.696	0.827	(8h) 758.2	8.4	Cu ₃	
»	11h 26	52.5	1.26	1.359	0.924	1.053	0.722	0.857	»	»	»	
»	14h 46	42.7	1.47	1.277	0.887	1.011	0.696	0.827	(14h) 758.9	8.1	Cu ₃ Ci	
»	17h 58	19.5	2.99	1.005	0.751	0.856	0.597	0.710	(19h) 759.0	8.3	Ci ₃	
14	13h 31	49.2	1.32	1.272	0.870	0.991	0.681	0.810	(14h) 758.5	10.6	Cu ₁ Acu ₂	
»	16h 14	32.7	1.85	1.176	0.817	0.931	0.640	0.761	(14h) 758.5	10.6	Cu ₁ Acu ₂	
16	8h 11	34.8	1.75	1.216	0.840	0.958	0.665	0.790	(8h) 762.2	11.5	Acu ₁	
»	10h 27	48.7	1.33	1.233	0.850	0.969	0.671	0.798	»	»	»	
»	12h 44	51.2	1.29	1.236	0.844	0.962	0.661	0.786	(14h) 761.7	10.9	Cu ₃	
»	15h 29	37.4	1.65	1.141	0.800	0.912	0.632	0.751	»	»	»	
»	18h 10	17.5	3.29	0.897	0.659	0.751	0.546	0.650	(19h) 761.6	11.9	Acu ₁	
17	8h 17	35.0	1.74	1.170	0.817	0.931	0.645	0.766	(8h) 762.5	12.6	—	
»	11h 13	51.0	1.29	1.309	0.885	1.009	0.696	0.827	(14h) 761.8	10.5	Cu ₃	
»	13h 41	47.8	1.35	1.218	0.835	0.952	0.647	0.769	»	»	»	
»	15h 59	34.2	1.78	1.099	0.780	0.890	0.618	0.735	»	»	»	
18	8h 33	37.1	1.66	1.141	0.798	0.910	0.638	0.759	(8h) 762.4	11.5	—	
»	11h 14	50.9	1.29	1.237	0.844	0.962	0.663	0.789	(14h) 761.1	13.1	Cu ₃	
»	13h 50	47.1	1.37	1.158	0.821	0.936	0.626	0.745	»	»	»	
»	16h 14	31.8	1.90	1.098	0.772	0.880	0.614	0.730	»	»	»	
23	17h 34	20.7	2.81	0.896	0.670	0.764	0.536	0.637	(19h) 756.8	11.5	Stcu ₃	
»	19h 29	7.2	7.66	0.430	0.359	0.409	0.312	0.371	»	»	»	
26	15h 15	37.3	1.64	1.147	0.774	0.882	0.622	0.739	(14h) 751.3	11.9	Cu ₃	
»	18h 04	15.3	3.75	0.841	0.620	0.707	0.523	0.621	(19h) 749.9	11.2	Stcu ₁ Acu	
28	8h 55	37.9	1.63	1.251	0.856	0.976	0.681	0.810	(8h) 743.5	11.0	Cu ₇	
31	8h 28	34.4	1.77	1.153	0.803	0.916	0.634	0.754	(8h) 756.0	13.3	Cu ₁	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
August												
3	10h 55	47.0	1.37	1.261	0.864	0.985	0.671	0.805	(14h) 759.8	11.8	Cu ₃	
»	15h 47	31.8	1.89	1.178	0.821	0.936	0.644	0.765	»	»	»	
7	9h 53	41.5	1.51	1.127	0.780	0.890	0.640	0.760	(8h) 765.7	12.1	—	
8	9h 29	39.0	1.59	1.120	0.798	0.910	0.642	0.763	(8h) 763.7	11.6	—	
»	11h 52	47.2	1.37	1.241	0.868	0.990	0.692	0.823	(14h) 762.7	9.0	—	
»	14h 38	33.3	1.61	1.101	0.786	0.896	0.638	0.758	»	»	»	
»	16h 57	21.9	2.67	0.849	0.642	0.732	0.528	0.628	(19h) 761.5	9.6	—	
10	9h 06	36.2	1.70	1.165	0.825	0.940	0.653	0.776	(8h) 753.9	10.9	—	
»	12h 00	46.6	1.37	1.078	0.770	0.878	0.608	0.722	(14h) 752.5	11.7	Cu ₁ Aeu	
18	10h 04	39.4	1.58	1.277	0.876	0.990	0.694	0.825	(8h) 754.6	8.6	Ci ₃	
25	10h 25	38.8	1.61	1.249	0.860	0.981	0.686	0.816	(8h) 760.9	10.2	Steu ₇	
»	12h 04	41.7	1.50	1.270	0.862	0.982	0.690	0.820	(14h) 762.1	8.8	Cu ₁	
26	11h 10	40.5	1.54	1.245	0.852	0.972	0.688	0.818	(8h) 765.0	9.4	Cu ₁ Aeu Ci	
27	9h 17	32.4	1.87	1.188	0.831	0.948	0.659	0.784	(8h) 770.1	10.5	Aeu ₃	
»	12h 14	41.0	1.52	1.285	0.881	1.005	0.688	0.818	(14h) 770.3	7.8	Cu ₃	
»	14h 31	33.1	1.82	1.216	0.854	0.974	0.661	0.785	»	»	»	
»	16h 49	17.7	3.27	1.015	0.749	0.854	0.603	0.716	(19h) 770.9	9.2	—	
28	9h 26	32.9	1.84	1.214	0.840	0.958	0.671	0.797	(8h) 770.3	11.6	—	
»	12h 21	40.4	1.54	1.296	0.885	1.008	0.706	0.839	(14h) 769.6	9.3	Cu ₅	
»	16h 50	17.3	3.34	0.989	0.735	0.838	0.605	0.718	(19h) 768.3	9.8	—	
September												
5	12h 43	37.0	1.67	1.101	0.766	0.874	0.606	0.720	(14h) 768.3	12.1	Aeu ₁ Ci ₂	
8	8h 40	24.5	2.41	1.046	0.761	0.867	0.616	0.732	(8h) 766.6	9.4	Aeu ₁	
»	11h 55	36.7	1.68	1.172	0.815	0.930	0.647	0.768	(14h) 766.1	9.1	Cu ₁	
»	13h 42	33.0	1.84	1.124	0.788	0.899	0.634	0.753	»	»	»	
»	16h 18	18.0	3.24	0.785	0.597	0.681	0.488	0.580	»	»	»	
9	10h 29	33.5	1.81	1.154	0.800	0.912	0.653	0.776	(8h) 766.3	11.6	Ci ₁	
»	12h 08	36.2	1.69	1.164	0.823	0.938	0.653	0.776	(14h) 765.3	10.1	—	
»	13h 57	31.7	1.90	1.108	0.788	0.898	0.642	0.762	»	»	»	
»	16h 32	16.1	3.59	0.811	0.620	0.707	0.507	0.603	(19h) 765.5	11.8	Steu ₃	
10	8h 40	23.7	2.48	0.886	0.655	0.746	0.542	0.644	(8h) 766.0	12.6	—	
»	13h 42	32.1	1.88	1.052	0.757	0.863	0.605	0.719	(14h) 766.8	11.6	Aeu ₁ Cieu ₂	
»	16h 31	15.8	3.65	0.759	0.581	0.662	0.489	0.581	(19h) 766.6	12.6	Aeu ₃	
11	14h 25	28.5	2.09	1.067	0.761	0.868	0.616	0.732	(14h) 769.5	11.7	Cu ₁ Aeu ₁ Ci ₁	
13	8h 17	26.6	2.24	1.097	0.782	0.892	0.630	0.749	(8h) 775.5	9.0	—	
»	11h 31	34.5	1.76	1.145	0.801	0.914	0.636	0.756	(14h) 775.5	11.1	Ci ₃	
14	9h 44	28.3	2.10	1.166	0.813	0.926	0.645	0.766	(8h) 774.9	10.0	Ci ₂	
15	10h 45	32.2	1.87	1.018	0.727	0.829	0.593	0.705	(8h) 772.0	10.9	Aeu ₃	haze
»	13h 14	32.0	1.88	1.006	0.733	0.835	0.587	0.697	(14h) 770.8	10.7	Cu ₃ Aeu ₁ Cieu ₁	
17	9h 04	23.9	2.47	1.041	0.762	0.869	0.601	0.716	(8h) 768.3	11.8	St ₃ Aeu Cieu	
18	9h 44	26.8	2.22	0.886	0.649	0.740	0.552	0.656	(8h) 765.9	11.9	St ₉	haze
20	9h 32	25.2	2.34	0.931	0.690	0.787	0.550	0.654	(8h) 757.0	12.3	Aeu ₁	haze
»	15h 10	21.6	2.70	0.881	0.659	0.751	0.540	0.642	(14h) 756.2	11.2	—	
22	12h 20	31.0	1.94	1.238	0.878	1.001	0.692	0.822	(14h) 758.0	7.7	Cu ₃	
26	14h 15	23.9	2.47	1.133	0.809	0.923	0.651	0.774	(14h) 760.2	9.3	Cu ₁ Ci ₂	
27	12h 29	28.9	2.07	1.242	0.878	1.001	0.694	0.825	(14h) 756.9	8.1	Cu ₁ Ci ₁	
28	11h 05	28.1	2.12	1.258	0.881	1.005	0.698	0.830	(14h) 768.0	9.0	Cu ₁ Ci ₁	
»	12h 16	29.0	2.07	1.271	0.881	1.005	0.712	0.846	»	»	»	
29	11h 36	28.3	2.11	1.233	0.864	0.985	0.677	0.805	(14h) 771.0	7.5	Aeu ₁ Cieu ₁	
»	14h 18	22.6	2.60	1.153	0.817	0.931	0.642	0.764	»	»	»	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I_t	I_y (OG 1)		I_r (RG 2)					
					obs.	red.	obs.					red.
October												
11	11h 55	24.0	2.45	1.217	0.864	0.985	0.692	0.822	(14h) 751.2	6.2	Cu ₂ Acu Ci	
»	15h 16	13.7	4.21	1.017	0.761	0.867	0.620	0.737	» »	»	»	
12	10h 02	19.4	2.99	1.185	0.858	0.978	0.686	0.815	(8h) 751.8	5.4	St ₅ Acu ₂	
»	12h 10	23.5	2.51	1.247	0.889	1.013	0.702	0.834	(14h) 751.3	5.8	Cu ₁	
»	15h 13	13.0	4.38	1.019	0.774	0.883	0.618	0.735	» »	»	»	
19	13h 45	17.5	3.30	1.139	0.805	0.918	0.651	0.774	(14h) 746.6	6.7	Cu ₃	
November												
19	11h 58	11.4	4.98	1.004	0.772	0.880	0.645	0.767	(14h) 766.8	3.9	Acu ₁	
»	14h 19	6.6	8.28	0.724	0.597	0.681	0.513	0.611	» »	»	»	
23	11h 33	10.4	5.43	0.935	0.725	0.826	0.606	0.720	(14h) 758.9	3.2	Acu ₃	
24	10h 34	8.5	6.53	0.854	0.675	0.770	0.562	0.668	(8h) 768.3	3.5	—	
29	9h 48	5.1	10.24	0.647	0.515	0.587	0.478	0.569	(8h) 761.2	3.9	—	
»	12h 11	9.1	6.12	0.950	0.745	0.850	0.630	0.750	(14h) 761.2	3.7	—	
»	14h 23	4.5	11.42	0.623	0.517	0.589	0.445	0.529	» »	»	—	
30	11h 13	8.9	6.25	0.942	0.741	0.845	0.630	0.749	(8h) 764.8	3.5	Acu ₁	
»	13h 36	7.1	7.68	0.822	0.659	0.751	0.575	0.684	(14h) 766.1	3.5	Ast ₁	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I_t	I_y (OG 1)		I_r (RG 2)					
					obs.	red.	obs.					red.
January												
16	9h 54	5.6	9.49	0.692	0.563	0.642	0.514	0.612	(8h) 767.2	2.7	St ₅ Ast	
»	11h 27	9.6	5.82	0.914	0.710	0.809	0.604	0.718	(14h) 768.9	3.0	St ₅ Acu	
24	9h 49	7.1	7.68	0.763	0.585	0.666	0.540	0.642	(8h) 742.5	3.4	Acu ₅	
»	11h 43	11.4	4.96	1.025	0.783	0.993	0.653	0.776	(14h) 747.4	3.2	Stcu ₇	
28	9h 38	7.0	7.78	0.869	0.695	0.792	0.620	0.738	(8h) 768.5	1.9	—	
»	11h 32	12.2	4.65	1.109	0.850	0.969	0.720	0.856	(14h) 768.8	2.0	—	
»	13h 48	9.6	5.83	1.010	0.800	0.913	0.675	0.803	»	»	—	
29	9h 34	7.0	7.78	0.776	0.613	0.698	0.556	0.662	(8h) 763.5	1.7	—	
»	11h 39	12.8	4.46	0.995	0.760	0.867	0.650	0.773	(14h) 760.0	2.4	St ₁₀	
February												
5	10h 18	11.9	4.78	0.986	0.745	0.848	0.644	0.765	(8h) 748.9	2.2	Stu ₅ Acu	
»	12h 04	14.8	3.89	1.098	0.821	0.935	0.690	0.820	(14h) 750.0	2.1	Cu ₁	
»	14h 34	8.6	6.46	0.860	0.688	0.784	0.585	0.696	»	»	—	
11	14h 19	11.6	4.88	0.855	0.677	0.771	0.562	0.667	(14h) 757.9	2.9	St ₁₀	
13	10h 10	13.8	4.15	1.123	0.846	0.965	0.704	0.838	(8h) 746.2	4.1	Acu ₅ Ci	
»	11h 56	17.2	3.36	1.118	0.874	0.995	0.722	0.859	(14h) 748.3	4.3	Acu ₅ Ci	
15	10h 06	14.4	3.99	1.105	0.833	0.949	0.688	0.819	(8h) 742.4	4.3	St ₅ Acu ₄	
»	11h 59	18.0	3.22	1.222	0.899	1.024	0.735	0.874	(14h) 746.0	3.6	—	
»	14h 40	11.3	5.03	1.013	0.786	0.896	0.645	0.767	»	»	—	
March												
2	9h 07	14.9	3.86	1.180	0.888	1.013	0.742	0.882	(8h) 768.7	2.5	—	
»	11h 59	23.4	2.52	1.373	1.000	1.140	0.819	0.974	(14h) 766.8	1.5	Cu ₁	
»	14h 41	16.2	3.55	1.198	0.900	1.026	0.737	0.876	»	»	—	
4	9h 22	16.9	3.42	1.107	0.830	0.947	0.693	0.824	(8h) 776.1	2.6	—	
»	14h 44	16.6	3.48	0.849	0.665	0.758	0.535	0.636	(14h) 776.6	2.2	Stcu ₁	
5	14h 41	17.1	3.38	1.060	0.797	0.909	0.655	0.778	(14h) 775.7	2.0	Stcu ₅	
8	11h 51	25.7	2.30	1.217	0.889	1.013	0.724	0.861	(14h) 784.0	3.5	—	
9	10h 56	24.8	2.38	1.161	0.836	0.954	0.681	0.810	(8h) 783.3	3.9	—	
10	10h 04	22.3	2.64	1.185	0.867	0.989	0.693	0.824	(8h) 781.2	3.6	Cicu ₁	
»	12h 28	26.3	2.25	1.260	0.908	1.067	0.724	0.860	(14h) 780.4	5.1	Cicu ₃	
11	9h 16	18.6	3.13	0.927	0.710	0.810	0.583	0.693	(8h) 779.7	3.8	—	
»	12h 21	26.7	2.23	1.077	0.796	0.909	0.643	0.765	(14h) 779.6	2.8	Ci ₁	
12	8h 42	15.9	3.62	0.996	0.753	0.859	0.630	0.749	(8h) 782.0	3.7	—	haze
»	11h 25	26.7	2.23	1.261	0.910	1.068	0.734	0.873	(14h) 781.1	4.6	Acu ₁	
»	14h 41	20.0	2.91	1.095	0.830	0.947	0.664	0.789	»	»	—	haze
14	9h 28	21.1	2.76	1.095	0.809	0.924	0.673	0.800	(8h) 774.1	3.7	—	
»	12h 05	28.0	2.12	1.277	0.934	1.064	0.766	0.910	(14h) 771.5	3.3	Ci ₁	
18	9h 11	21.1	2.76	1.036	0.776	0.886	0.650	0.773	(8h) 757.2	3.3	Cunb ₅ Acu	
26	9h 16	24.2	2.43	1.214	0.868	0.989	0.693	0.824	(8h) 746.4	4.9	Acu ₁	
»	12h 15	32.6	1.86	1.290	0.896	1.021	0.710	0.844	(14h) 746.4	4.8	Cu ₅ Acu ₂ Ci	
27	9h 43	27.2	2.21	1.350	0.965	1.100	0.782	0.930	(8h) 757.2	2.8	Cu ₁	
»	12h 02	33.0	1.83	1.403	0.993	1.131	0.797	0.948	(14h) 760.7	3.6	—	
»	16h 01	16.3	3.53	1.123	0.840	0.957	0.690	0.820	»	»	—	
30	9h 08	24.8	2.38	1.221	0.870	0.991	0.721	0.856	(8h) 761.4	2.9	Ci ₁	
April												
5	9h 07	27.2	2.20	1.065	0.790	0.901	0.642	0.763	(8h) 752.4	4.5	—	
8	12h 00	37.7	1.63	1.117	0.819	0.934	0.677	0.805	(14h) 751.5	3.6	Cu ₅ Acu	
9	9h 04	28.1	2.12	1.173	0.856	0.977	0.710	0.845	(8h) 755.2	3.3	—	
»	12h 00	38.1	1.62	1.321	0.948	1.080	0.770	0.916	(14h) 755.7	3.2	Cu ₁	
»	15h 41	23.3	2.52	1.100	0.813	0.928	0.672	0.799	»	»	—	
10	8h 59	28.3	2.11	1.226	0.880	1.003	0.723	0.860	(8h) 755.7	4.2	Cicu ₃	
»	12h 12	38.4	1.61	1.252	0.899	1.026	0.723	0.860	(14h) 754.9	4.4	Acu ₅	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks		
				I _t	I _y (OG 1)		I _r (RG 2)						
					obs.	red.	obs.					red.	
April (cont.)													
16	10h 36	38.2	1.62	1.283	0.920	1.049	0.752	0.895	(8h) 762.6	4.0	—	haze	
»	12h 18	40.5	1.54	1.336	0.937	1.069	0.752	0.895	(14h) 761.9	3.8	—		
23	9h 45	36.7	1.68	1.070	0.768	0.876	0.620	0.737	(8h) 767.8	6.2	Acu ₂		
»	12h 21	43.0	1.46	1.129	0.803	0.916	0.643	0.765	(14h) 768.6	7.0	Cu ₁		
»	16h 21	23.7	2.48	1.019	0.750	0.856	0.601	0.715	»	»	»		
25	13h 33	40.6	1.53	1.180	0.830	0.947	0.680	0.809	(14h) 762.8	6.8	Cu ₂ Acu		
26	12h 02	44.0	1.44	1.281	0.884	1.008	0.708	0.841	(14h) 762.0	5.8	Stcu ₂ Acu		
May													
1	9h 07	35.5	1.72	1.324	0.938	1.070	0.762	0.706	(8h) 767.9	3.7	Cu ₁	rain-shower	
2	9h 10	35.9	1.70	1.270	0.905	1.032	0.720	0.720	(8h) 763.7	3.9	—		
»	12h 01	46.0	1.38	1.372	0.955	1.089	0.757	0.900	(14h) 762.4	2.9	Cu ₂		
8	11h 12	46.8	1.37	1.411	0.976	1.113	0.773	0.920	(14h) 762.4	2.9	Cu ₂		
»	14h 12	41.2	1.51	1.336	0.934	1.065	0.744	0.884	»	»	»		
»	16h 53	23.5	2.51	1.063	0.778	0.888	0.617	0.734	(19h) 761.9	3.4	St ₂ Acu ₂		
9	9h 25	39.3	1.68	1.320	0.915	1.044	0.723	0.860	(8h) 768.0	4.5	Cicu ₁		
»	12h 00	48.0	1.34	1.380	0.943	1.075	0.733	0.870	(14h) 765.0	4.0	Cu Stcu ₂ Acu		
15	8h 39	35.7	1.71	1.308	0.925	1.055	0.743	0.883	(8h) 766.0	4.5	Cicu ₁		
23	9h 08	40.7	1.53	1.286	0.899	1.026	0.712	0.846	(8h) 768.1	5.9	Acu ₁		
»	11h 57	51.3	1.29	1.343	0.927	1.057	0.739	0.879	(14h) 767.3	5.8	Cu ₂		
»	15h 48	34.5	1.76	1.214	0.856	0.976	0.664	0.790	»	»	»		
24	8h 49	38.7	1.60	1.317	0.925	1.055	0.730	0.868	(8h) 769.1	5.3	Cicu ₁		
»	11h 54	51.3	1.29	1.400	0.950	1.083	0.743	0.883	(14h) 767.5	5.5	Cu ₁ Ci		
»	14h 27	43.3	1.45	1.337	0.925	1.055	0.726	0.864	»	»	»		
»	17h 26	22.3	2.63	1.125	0.808	0.923	0.649	0.772	(19h) 766.5	5.8	—		
25	9h 05	40.5	1.54	1.257	0.876	1.000	0.698	0.830	(8h) 763.5	6.2	Cu ₁		
27	12h 52	50.6	1.30	1.390	0.483	0.550	0.747	0.887	(14h) 766.3	5.7	Cu ₁ Ci		
»	17h 24	23.0	2.50	1.063	0.773	0.883	0.627	0.746	(19h) 764.6	5.5	Cu ₁		
28	9h 07	41.3	1.52	1.300	0.896	1.022	0.715	0.850	(8h) 764.1	5.5	Acu ₂		
June													
5	11h 29	52.9	1.25	1.228	0.877	1.000	0.684	0.814	(14h) 756.0	7.6	St ₂ Ast		rain-shower
8	12h 28	53.3	1.25	1.281	0.880	1.004	0.693	0.824	(14h) 755.2	8.8	Cu ₂ Acu ₂ Ci ₁		
10	10h 55	51.9	1.28	1.412	0.965	1.100	0.762	0.906	(8h) 765.1	5.2	—		
»	13h 16	51.4	1.28	1.402	0.963	1.098	0.757	0.900	(14h) 765.1	5.5	Ci ₁		
»	15h 55	35.6	1.72	1.311	0.914	1.041	0.727	0.864	»	»	»		
13	10h 08	48.8	1.33	1.336	0.914	1.042	0.722	0.859	(8h) 755.6	8.1	Stcu ₂		
»	11h 55	53.9	1.24	1.342	0.920	1.050	0.719	0.855	(14h) 757.2	7.7	Cu ₂		
14	14h 04	47.6	1.36	1.332	0.917	1.046	0.715	0.850	(14h) 760.8	7.5	Cu ₂ Ci		
20	15h 07	41.6	1.51	1.245	0.866	0.987	0.690	0.820	(14h) 763.3	7.1	Cu ₁ Acu ₂		
»	16h 59	27.8	2.14	1.095	0.792	0.904	0.627	0.745	(19h) 762.8	7.6	Cicu		
21	9h 06	43.1	1.47	1.203	0.840	0.958	0.665	0.791	(8h) 763.9	8.3	Acu		
23	9h 26	45.2	1.41	1.230	0.848	0.968	0.663	0.787	(8h) 772.9	11.9	—		
»	12h 01	54.3	1.24	1.297	0.880	1.004	0.685	0.815	(14h) 771.7	13.0	—		
»	15h 03	42.2	1.48	1.164	0.817	0.932	0.640	0.761	»	»	»		
»	17h 44	22.2	2.64	0.968	0.709	0.809	0.563	0.670	(19h) 770.8	11.7	—		
24	9h 04	42.7	1.47	1.259	0.877	1.000	0.683	0.812	(8h) 770.7	12.5	—		
»	11h 47	54.2	1.24	1.304	0.889	1.014	0.693	0.825	(14h) 769.0	11.7	—		
»	14h 24	46.2	1.38	1.252	0.867	0.989	0.678	0.806	»	»	»		
»	17h 15	26.1	2.28	1.031	0.750	0.856	0.594	0.706	(19h) 767.8	11.8	—		
25	10h 38	51.3	1.29	1.232	0.846	0.965	0.660	0.785	(8h) 766.1	12.8	Cicu ₁		
»	12h 24	53.8	1.24	1.265	0.870	0.992	0.690	0.821	(14h) 764.3	10.9	Cu ₁		
»	16h 45	29.1	2.03	1.070	0.778	0.888	0.603	0.717	»	»	»		
26	9h 10	43.4	1.45	1.017	0.724	0.826	0.584	0.695	(8h) 762.5	15.0	Cicu ₁	haze	
»	14h 34	45.3	1.40	1.176	0.820	0.935	0.642	0.762	(14h) 762.1	14.9	Acu Ci ₂		

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
June (cont.)												
27	9h 23	44.6	1.43	1.093	0.768	0.876	0.605	0.720	(8h) 759.6	15.6	—	haze
»	12h 13	53.9	1.24	1.128	0.782	0.992	0.620	0.737	(14h) 758.2	14.8	Cu ₁ Ci	
29	9h 48	47.3	1.36	1.302	0.888	1.013	0.692	0.822	(8h) 761.2	10.9	Cu ₂ Acu	
30	10h 49	52.0	1.28	1.361	0.918	1.047	0.712	0.846	(8h) 765.6	8.5	Steu ₂ Acu	
»	14h 07	47.4	1.36	1.338	0.900	1.027	0.713	0.847	(14h) 764.8	7.6	Cu ₂ Acu	
July												
1	9h 20	44.2	1.44	1.113	0.770	0.878	0.598	0.711	(8h) 766.7	9.1	Acu ₁ Ci	haze
11	11h 24	52.5	1.26	1.401	0.951	1.085	0.740	0.880	(14h) 764.6	6.8	Ci ₁	
»	15h 19	40.0	1.58	1.320	0.896	1.022	0.710	0.844	»	»	»	
13	8h 11	35.2	1.73	1.059	0.759	0.866	0.606	0.721	(8h) 768.5	10.0	Ci ₂	
19	9h 02	40.3	1.55	1.293	0.860	0.981	0.702	0.835	(8h) 752.0	8.8	Cu ₁ Acu ₂	
23	8h 52	38.8	1.60	1.265	0.872	0.994	0.685	0.815	(8h) 761.2	9.3	—	
»	12h 26	50.9	1.29	1.313	0.895	1.010	0.700	0.832	(14h) 761.2	8.6	Cu ₂ Acu ₁	
24	8h 58	39.2	1.58	1.189	0.817	0.932	0.643	0.764	(8h) 760.5	12.9	Ci ₁	
25	9h 08	40.2	1.54	1.305	0.904	1.031	0.708	0.843	(8h) 761.9	7.4	Cu ₁	
»	12h 44	49.9	1.31	1.385	0.944	1.075	0.734	0.873	(14h) 760.8	6.1	Cu ₂	
26	9h 08	39.8	1.56	1.292	0.890	1.016	0.680	0.809	(8h) 756.3	9.8	—	
27	12h 17	50.2	1.30	1.382	0.935	1.066	0.730	0.869	(14h) 752.1	5.0	Acu ₁	
August												
2	8h 40	35.6	1.72	1.276	0.885	1.010	0.691	0.822	(8h) 760.9	9.4	—	
3	10h 24	45.0	1.41	1.321	0.905	1.032	0.701	0.834	(8h) 760.8	10.8	Acu ₁	
6	10h 20	43.9	1.45	1.343	0.915	1.044	0.719	0.855	(8h) 765.6	8.1	Ci ₂	
8	8h 53	35.3	1.73	1.106	0.770	0.879	0.612	0.727	(8h) 760.2	14.3	—	
»	11h 53	47.1	1.37	1.288	0.870	0.992	0.670	0.797	(14h) 759.3	12.6	Cu ₁ Ci ₂	
15	9h 07	35.0	1.74	1.288	0.895	1.022	0.700	0.832	(8h) 757.7	9.6	Steu ₁ Acu ₂ Cieu	
17	8h 25	29.8	2.01	1.228	0.866	0.986	0.683	0.813	(8h) 763.4	8.1	Cu ₁ Ci	
27	9h 11	31.8	1.91	1.271	0.889	1.014	0.699	0.831	(8h) 761.2	9.4	St ₂	
September												
10	8h 31	22.9	2.56	1.187	0.856	0.976	0.680	0.809	(8h) 763.9	6.7	Steu ₁	haze
14	14h 31	37.5	1.64	1.148	0.818	0.933	0.643	0.765	(14h) 755.4	8.5	Cu ₂	
21	8h 43	20.6	2.83	1.162	0.840	0.958	0.670	0.797	(8h) 753.5	6.9	Acu ₂	
28	8h 41	17.8	3.27	1.151	0.851	0.971	0.693	0.825	(8h) 762.1	4.5	—	
October												
21	10h 45	18.8	3.09	1.139	0.829	0.945	0.635	0.755	(8h) 745.8	5.1	St ₂	haze
22	8h 56	10.6	5.31	0.864	0.651	0.742	0.544	0.648	(8h) 757.1	4.5	—	
»	11h 48	20.1	2.89	1.204	0.860	0.981	0.703	0.836	(14h) 758.1	5.1	Cu ₁	
»	15h 46	7.3	7.50	0.758	0.614	0.700	0.528	0.628	»	»	»	
23	8h 55	10.5	5.41	0.936	0.729	0.831	0.617	0.734	(8h) 761.7	3.8	—	
»	12h 16	19.7	2.95	1.217	0.883	1.007	0.704	0.887	(14h) 763.5	4.3	Acu ₁	
»	14h 48	11.8	4.80	0.961	0.774	0.883	0.636	0.757	»	»	»	
24	8h 51	9.8	5.75	0.853	0.660	0.752	0.554	0.659	(8h) 767.5	3.8	Acu ₂	
December												
24	13h 16	6.0	9.18	0.682	0.571	0.651	0.494	0.588	(14h) 752.2	2.9	—	haze
»	14h 11	3.5	13.28	0.478	0.393	0.448	0.347	0.413	»	»	»	

Experimentalfältet 1936

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I _t	I _y (OG 1)		I _r (RG 2)					
					obs.	red.	obs.					red.
January												
15	12h 02'	9.8	5.71	0.898	0.703	0.802	0.605	0.720	(14h) 754.6	2.3	Acu ₃	
16	11h 30'	9.7	5.80	0.888	0.694	0.791	0.590	0.701	(14h) 758.5	2.2	—	
»	13h 48'	6.8	8.54	0.653	0.549	0.626	0.487	0.579	»	»	—	
February												
6	11h 33'	14.6	3.92	1.122	0.847	0.966	0.704	0.836	(14h) 772.5	2.4	—	
»	14h 36'	8.6	6.54	0.860	0.661	0.754	0.585	0.696	»	»	—	
12	8h 43'	6.2	8.75	0.724	0.568	0.648	0.525	0.625	(8h) 752.6	2.5	—	
13	8h 50'	7.8	6.61	0.927	0.740	0.844	0.655	0.779	(8h) 754.1	1.3	—	
»	11h 47'	16.8	3.43	1.238	0.915	1.044	0.753	0.895	(14h) 754.3	1.7	Acu ₁ Ci	
14	11h 45'	17.2	3.36	1.157	0.870	0.993	0.724	0.861	(14h) 761.1	1.5	St ₇ Acu	
15	8h 57'	8.9	6.79	0.831	0.665	0.758	0.590	0.702	(8h) 762.3	1.5	Acu ₁	
»	11h 55'	17.6	3.29	1.120	0.850	0.970	0.704	0.886	(14h) 763.0	1.7	Cu ₁ Acu	
27	12h 03'	21.9	2.67	1.093	0.816	0.931	0.671	0.798	(14h) 760.3	2.9	Stcu ₃	
March												
17	9h 30'	22.5	2.61	1.240	0.900	1.026	0.731	0.869	(8h) 759.0	3.0	—	
»	11h 55'	29.4	2.03	1.321	0.946	1.079	0.757	0.900	(14h) 762.3	3.3	Ci ₁	
»	14h 38'	22.2	2.64	1.174	0.857	0.977	0.688	0.819	»	»	—	
20	10h 58'	29.4	2.04	1.302	0.917	1.045	0.742	0.883	(8h) 771.9	3.0	Cicu ₃	
23	9h 26'	24.6	2.40	1.095	0.820	0.935	0.640	0.761	(8h) 761.4	3.0	—	haze
»	12h 40'	31.3	1.93	1.218	0.816	0.931	0.612	0.727	(14h) 764.1	3.1	St ₉ Ast ₁	
27	9h 57'	28.6	2.08	1.124	0.798	0.910	0.642	0.764	(8h) 764.3	4.1	St ₅ Acu	haze
30	9h 06'	25.1	2.35	1.020	0.748	0.854	0.566	0.674	(8h) 766.3	3.9	—	haze
31	8h 54'	24.3	2.43	1.058	0.802	0.915	0.650	0.773	(8h) 759.3	4.5	—	
»	12h 18'	35.0	1.74	1.112	0.810	0.924	0.651	0.775	(14h) 757.1	4.5	Cicu	
April												
3	8h 40'	24.0	2.45	1.269	0.926	1.056	0.750	0.991	(8h) 764.6	2.4	—	
8	8h 36'	24.2	2.44	1.248	0.892	1.018	0.730	0.867	(8h) 757.5	3.0	—	
9	8h 35'	25.5	2.32	1.271	0.905	1.032	0.728	0.865	(8h) 756.2	3.0	Acu ₁	
May												
5	13h 47'	42.9	1.47	1.326	0.919	1.048	0.738	0.879	(14h) 774.6	5.1	Cu ₁	
6	8h 18'	31.4	1.92	1.220	0.866	0.987	0.685	0.815	(8h) 775.8	5.7	—	
»	11h 52'	47.4	1.36	1.328	0.922	1.051	0.730	0.869	(14h) 776.0	4.3	—	
»	15h 23'	34.2	1.78	1.275	0.904	1.030	0.720	0.856	»	»	—	
7	8h 17'	31.0	1.92	1.181	0.830	0.946	0.663	0.789	(8h) 775.4	5.3	—	
»	12h 14'	47.4	1.36	1.340	0.928	1.058	0.728	0.865	(14h) 772.8	4.5	Cunb ₃	
8	8h 15'	31.2	1.92	1.205	0.845	0.964	0.680	0.808	(8h) 775.4	5.3	—	
»	11h 34'	47.5	1.36	1.318	0.913	1.041	0.718	0.854	(14h) 772.8	4.5	Cunb ₃	
»	14h 33'	39.8	1.56	1.260	0.880	1.003	0.691	0.821	»	»	—	
»	17h 45'	17.3	3.36	0.871	0.664	0.756	0.534	0.635	(19h) 772.5	5.5	Stcu ₃	
9	8h 08'	30.6	1.97	1.198	0.850	0.970	0.683	0.812	(8h) 768.1	5.6	—	
»	11h 39'	47.6	1.36	1.308	0.904	1.030	0.724	0.860	(14h) 768.2	6.5	Cu ₁	
»	14h 54'	38.0	1.62	1.258	0.887	1.011	0.700	0.832	»	»	—	
11	7h 57'	29.7	2.02	1.155	0.826	0.942	0.665	0.790	(8h) 764.6	6.9	Acu ₁	
»	12h 18'	48.6	1.33	1.289	0.895	1.020	0.704	0.837	(14h) 764.3	6.0	Cu ₁ Acu	
»	14h 56'	38.2	1.62	1.188	0.840	0.958	0.665	0.790	»	»	—	
12	8h 10'	31.7	1.90	1.094	0.788	0.898	0.635	0.755	(8h) 763.5	6.8	Acu ₁	
»	11h 44'	48.7	1.33	1.251	0.860	0.980	0.670	0.796	(14h) 762.2	5.8	Cunb ₃ Acu ₁	
16	8h 22'	34.2	1.78	1.311	0.918	1.047	0.739	0.890	(8h) 775.9	5.1	—	
»	11h 50'	49.8	1.30	1.429	0.981	1.119	0.788	0.936	(14h) 776.1	4.8	—	

Date	τ	h	m	R a d i a t i o n				B	e	Clouds	Remarks	
				I_t	I_y (OG 1)		I_r (RG 2)					
					obs.	red.	obs.					red.
May (cont.)												
18	12 ^h 36	50.1	1.30	1.300	0.905	1.032	0.720	0.856	(14 ^h) 772.8	6.6	Cu ₁	
»	15 ^h 24	36.8	1.67	1.232	0.865	0.986	0.694	0.825	»	»	»	
»	18 ^h 07	16.6	3.47	0.888	0.674	0.768	0.557	0.662	(19 ^h) 772.3	6.9	—	
19	8 ^h 23	34.8	1.75	1.058	0.750	0.855	0.612	0.727	(8 ^h) 771.1	7.4	—	haze
»	13 ^h 02	48.9	1.32	1.231	0.830	0.946	0.680	0.808	(14 ^h) 768.4	6.0	—	
19	17 ^h 47	19.5	2.99	1.021	0.752	0.857	0.610	0.713	(19 ^h) 765.5	6.0	—	
20	8 ^h 16	34.2	1.78	1.169	0.807	0.920	0.660	0.785	(8 ^h) 759.8	6.3	Ci ₁	
»	12 ^h 17	50.7	1.29	1.299	0.898	1.024	0.710	0.844	(14 ^h) 757.1	4.7	—	
»	15 ^h 16	37.8	1.63	1.203	0.845	0.964	0.672	0.798	»	»	»	
»	18 ^h 16	16.7	3.45	0.835	0.635	0.724	0.526	0.625	(19 ^h) 755.7	6.4	Acu ₁	
24	12 ^h 31	51.0	1.29	1.381	0.938	1.070	0.743	0.883	(14 ^h) 766.5	6.4	Au ₃ Acu	
25	8 ^h 16	34.5	1.76	1.303	0.903	1.029	0.729	0.866	(8 ^h) 768.0	6.7	Ci ₁	
»	11 ^h 32	51.2	1.29	1.371	0.931	1.062	0.739	0.878	(14 ^h) 767.7	7.0	—	
»	14 ^h 39	43.0	1.46	1.266	0.865	0.986	0.687	0.816	»	»	»	
»	17 ^h 42	21.0	2.78	0.985	0.720	0.821	0.575	0.684	(19 ^h) 767.6	6.4	—	
26	8 ^h 13	34.9	1.75	1.237	0.864	0.985	0.687	0.687	(8 ^h) 767.5	7.0	—	
»	11 ^h 58	52.0	1.27	1.228	0.850	0.970	0.663	0.797	(14 ^h) 764.8	8.0	Acu ₁	
»	18 ^h 24	15.7	3.68	0.850	0.645	0.735	0.539	0.641	(19 ^h) 762.5	5.8	Acu ₁ Cicu	
29	8 ^h 23	36.6	1.68	1.308	0.905	1.032	0.729	0.866	(8 ^h) 755.1	4.9	Cu ₅	
»	15 ^h 50	35.4	1.73	1.251	0.894	1.019	0.708	0.842	(14 ^h) 755.2	4.2	Fcu Fst ₉	
June												
1	9 ^h 10	42.2	1.49	1.309	0.900	1.026	0.728	0.865	(8 ^h) 755.0	6.2	Cu ₅	
»	14 ^h 08	46.4	1.38	1.360	0.933	1.063	0.739	0.879	(14 ^h) 758.6	5.3	Cu ₅	
3	8 ^h 19	36.2	1.70	1.285	0.904	1.030	0.713	0.848	(8 ^h) 760.5	7.0	Cu ₃	
4	12 ^h 38	52.6	1.26	1.329	0.897	1.023	0.714	0.849	(14 ^h) 763.2	10.3	Cu ₁	
5	10 ^h 14	48.5	1.33	1.313	0.904	1.030	0.710	0.845	(8 ^h) 763.0	6.4	Acu ₁ Ci ₃	
»	13 ^h 00	52.0	1.27	1.327	0.895	1.020	0.692	0.823	(14 ^h) 762.3	6.9	Cu ₁ Ci ₁	
»	17 ^h 52	20.8	2.80	1.051	0.770	0.878	0.627	0.745	(19 ^h) 762.0	6.4	Cicu ₁	
6	7 ^h 37	31.1	1.93	1.248	0.876	0.999	0.700	0.832	(8 ^h) 759.5	7.5	—	
»	12 ^h 00	53.2	1.25	1.382	0.933	1.064	0.742	0.882	(14 ^h) 757.6	7.6	Cu ₁	
11	9 ^h 16	43.9	1.44	1.227	0.848	0.967	0.664	0.790	(8 ^h) 759.4	13.1	Ci ₃	
»	11 ^h 57	53.9	1.24	1.291	0.870	0.992	0.680	0.809	(14 ^h) 760.0	10.7	Cu ₃	
»	16 ^h 36	30.7	1.96	1.037	0.725	0.826	0.577	0.686	(19 ^h) 760.0	12.7	—	
12	9 ^h 25	44.8	1.42	1.115	0.777	0.886	0.617	0.734	(8 ^h) 761.2	12.2	Cu ₃ Ci	
»	12 ^h 01	53.7	1.24	1.155	0.791	0.902	0.622	0.740	(14 ^h) 761.2	14.5	Cu ₃ Cicu	
13	9 ^h 36	45.7	1.40	1.215	0.830	0.947	0.653	0.777	(8 ^h) 762.9	10.8	Acu ₃	
»	12 ^h 19	53.6	1.24	1.268	0.866	0.988	0.670	0.796	(14 ^h) 762.9	10.8	Cu ₃	
»	16 ^h 45	29.5	2.03	1.019	0.728	0.830	0.577	0.686	(19 ^h) 763.0	9.9	—	
14	8 ^h 34	38.9	1.59	1.062	0.759	0.865	0.611	0.726	(8 ^h) 763.7	9.3	—	
»	12 ^h 08	53.9	1.24	1.164	0.813	0.927	0.645	0.767	(14 ^h) 762.9	10.7	Cu ₃	
15	9 ^h 00	41.9	1.50	0.949	0.689	0.785	0.563	0.670	(8 ^h) 761.6	11.4	Ci ₁	
18	9 ^h 18	44.1	1.44	1.119	0.787	0.898	0.623	0.741	(8 ^h) 765.4	13.1	—	
19	8 ^h 08	35.9	1.71	1.189	0.827	0.943	0.650	0.773	(8 ^h) 766.3	13.5	Ci ₁	
22	9 ^h 08	42.9	1.47	1.167	0.813	0.926	0.635	0.755	(8 ^h) 768.1	11.5	Acu ₁	
»	11 ^h 47	54.1	1.24	1.156	0.791	0.902	0.624	0.742	(14 ^h) 767.3	13.8	Cu ₅	
24	9 ^h 23	44.6	1.43	1.178	0.817	0.932	0.636	0.768	(8 ^h) 756.9	14.2	Stcu ₃ Acu	
»	12 ^h 23	53.8	1.24	1.242	0.850	0.970	0.672	0.798	(14 ^h) 754.6	12.2	Stcu ₁ Ci	
26	8 ^h 41	39.7	1.57	1.288	0.885	1.009	0.690	0.820	(8 ^h) 760.3	10.3	—	
»	12 ^h 58	52.5	1.26	1.326	0.897	1.022	0.691	0.822	(14 ^h) 758.5	9.7	Cu ₃	
»	17 ^h 03	27.6	2.16	1.125	0.798	0.910	0.623	0.741	(19 ^h) 756.9	11.6	—	
30	11 ^h 39	53.7	1.24	1.213	0.827	0.943	0.650	0.773	(14 ^h) 761.9	9.4	Cu ₃ Acu ₁ Ci	

