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ENVIRONMENTAL DATA AND INFORMATION SERVICE

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Solar - Geophysical Data

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Part II (Comprehensive Reports)

DATA FOR
NOVEMBER 1980

**NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO**

For obtaining bulletins on a data exchange basis, send request to: World Data Center A for Solar-Terrestrial Physics, NOAA, Boulder, Colorado 80302.

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SOLAR-GEOPHYSICAL DATA

No. 441

Issued in two parts

Helen E. Coffey, Editor

Joe H. Allen, Acting Chief
Solar-Terrestrial Physics Division

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DETAILED COVERAGE FOR 1980-81 PUBLISHED IN "SOLAR-GEOPHYSICAL DATA"

	1980	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1981	Jan	Feb	Mar	Apr
A. SOLAR AND INTERPLANETARY PHENOMENA														
A.1 Sunspot Drawings	430A 52	431A 48	432A 50	433A 48	434A 46	435A 50	436A 50	437A 60	438A 44	439A 46	440A 52	441A 58	---	---
A.2a Zurich Provisional Relative Sunspot Numbers R _z	429A 9	430A 11	431A 11	432A 11	433A 11	434A 11	435A 11	436A 11	437A 11	---	---	---	---	---
A.2aa International Provisional Relative Sunspot Numbers R _i										438A 11	439A 9	440A 11	441A 13	---
A.2b Zurich Final Sunspot Numbers R _z	440A 10	440A 10	440A 10	440A 10	440A 10	440A 10	440A 10	440A 10	440A 10	440A 10	440A 10	440A 10	440A 10	440A 10
A.2c American Relative Sunspot Numbers R _a	429A 9	430A 11	431A 11	432A 11	433A 11	434A 11	435A 11	436A 11	437A 11	438A 11	439A 9	440A 11	441A 13	---
A.3a Mt. Wilson Magnetograms	430A 52	431A 48	432A 50	433A 48	434A 46	435A 50	436A 50	437A 60	438A 44	439A 46	440A 52	441A 58	---	---
A.3b Mt. Wilson Magnetic Characteristics of Sunspots	430A112	431A110	432A110	433A110	434A108	435A110	436A112	437A120	438A106	439A108	440A108	441A120	---	---
A.3c Kitt Peak Magnetograms	430A 52	431A 48	432A 50	433A 48	434A 46	435A 50	436A 50	437A 60	438A 44	439A 46	440A 52	441A 58	---	---
A.3d Mean Solar Magnetic Field (Stanford)	429A 35	430A 48	431A 41	432A 42	433A 40	434A 38	435A 42	436A 42	437A 48	438A 36	439A 38	440A 46	441A 50	---
A.3e Stanford Magnetograms	430A 52	431A 48	432A 50	433A 48	434A 46	435A 50	436A 50	437A 60	438A 44	439A 46	440A 52	441A 58	---	---
A.4 H-alpha Filtergrams	430A 52	431A 48	432A 50	433A 48	434A 46	435A 50	436A 50	437A 60	438A 44	439A 46	440A 52	441A 58	---	---
A.5 Calcium Plage Drawings - Mt. Wilson	430A 52	431A 48	432A 50	433A 48	434A 46	435A 50	436A 50	437A 60	438A 44	439A 46	440A 52	441A 58	---	---
A.5a Calcium Plage (Mt. Wilson) and Sunspot Regions	430A112	431A110	432A110	433A110	434A108	435A110	436A112	437A120	438A106	439A108	440A108	441A120	---	---
A.5b Mt. Wilson Daily Calcium Plage Indices	430A123	431A121	432A128	433A127	434A125	435A127	436A127	437A134	438A121	439A123	440A121	441A135	---	---
A.6 H-alpha Synoptic Charts	430A 48	431A 44	432A 46	433A 44	434A 46	435A 46	436A 46	437A 52	438A 40	439A 42	440A 48	441A 54	---	---
A.6b Synoptic Chart and Active Regions (Paris)	436B 97	437B 40	438B 33	439B120	439B121	440B 48	---	---	---	---	---	---	---	---
A.6c Stanford Solar Magnetic Field Synoptic Charts	430A 49	431A 45	432A 47	433A 45	434A 43	435A 47	436A 47	437A 54	438A 41	439A 43	440A 49	441A 55	---	---
A.6d Kitt Peak Solar Magnetic Field Synoptic Charts	430A 50	431A 45	432A 48	433A 46	434A 44	435A 48	436A 48	437A 56	438A 42	439A 44	440A 50	441A 56	---	---
A.6e Mass Ejections from the Sun	435B 85	436B 47	437B 46	438B 36	439B 29	439B 28	440B 38	441B 51	---	---	---	---	---	---
A.7f Helium D3 Chromosphere (Big Bear)	429A 36	430A 41	431A167	432A 37	433A 35	436A177	436A177	436A 39	437A 44	438A 33	439A 39	440A170	---	---
A.7g Helium Synoptic Maps (KPHO)	430A 51	431A 46	432A 49	433A 47	434A 45	435A 49	436A 49	437A 58	438A 43	439A 45	440A 51	441A 57	---	---
A.7h Coronal Line Emission (Sac Peak)	430A 52	431A 48	432A 50	433A 48	434A 46	435A 50	436A 50	437A 60	438A 44	439A 46	440A 52	441A 58	---	---
A.8aa 2800 MHz - Daily Values of Solar Flux (ARO-Ottawa)	429A 9	430A 11	431A 11	432A 11	433A 11	434A 11	435A 11	436A 11	437A 11	438A 11	439A 9	440A 11	441A 13	---
A.8ac 2800 MHz - Daily Values of Adj. Solar Flux (ARO-Ottawa)	429A 9	430A 11	431A 11	432A 11	433A 11	434A 11	435A 11	436A 11	437A 11	438A 11	439A 9	440A 11	441A 13	---
A.8g Daily Values of Adjusted Solar Flux (AFGL)	429A 9	430A 11	431A 11	432A 11	433A 11	434A 11	435A 11	436A 11	437A 11	438A 11	439A 9	440A 11	441A 13	---
A.8a 169 MHz - Interferometric Observations (Nancay)	429A 22	430A 26	432A166	432A 24	433A 22	434A 25	436A176	438A160	438A161	439A154	439A 24	440A 29	---	---
A.10c 21 cm East-West Solar Scans (Fleurs)	429A 25	430A 29	431A 28	432A 27	433A 25	434A 28	435A 30	436A 29	437A 34	438A 24	439A 27	440A 32	441A 33	---
A.10d 43 cm East-West Solar Scans (Fleurs)	429A 26	430A 30	431A 29	432A 28	433A 26	434A 29	435A 31	436A 30	437A 35	438A 25	439A 28	440A 33	441A 34	---
A.10e 10.7 cm East-West Solar Scans (Ottawa-ARO)	430A175	430A 28	431A 27	432A 26	433A 24	434A 27	435A 29	436A 28	437A 33	438A 23	439A 26	440A 31	441A 32	---
A.10f 3 cm East-West Solar Scans (Toyokawa)	429A 23	430A 27	431A 26	432A 25	433A 23	434A 26	435A 28	436A 27	437A 32	438A 22	439A 25	440A 30	441A 31	---
A.11g Solar X-ray (SMS/GOES) (graphs)	434B 6	435B 41	436B 41	437B 30	438B 23	439B 23	440B 32	441B 46	---	---	---	---	---	---
A.12bb Cosmic Ray Protons (Pioneers 8 & 9)	429A 32	431A160	431A 38	432A 38	---	---	---	---	---	---	---	---	---	---
A.12e Energetic Solar Particles (IMP II & J)	440B 42	---	---	---	---	---	---	---	---	---	---	---	---	---
A.13a Solar Wind (Pioneers 6 & 7)	429A 32	---	431A 38	432A 38	433A 36	---	---	---	---	---	---	---	---	---
A.13ab Solar Wind (Pioneers 8 & 9)	429A 32	431A160	431A 38	432A 38	433A 37	---	---	---	---	---	---	---	---	---
A.13d Solar Wind from IPS Measurements	430A164	430A 37	431A 36	432A 34	433A 31	434A 34	435A 37	436A 37	437A 41	---	---	---	---	---
A.13e Solar Plasma (IMP II & J)	434B 5	436B100	436B 40	437B 29	---	---	---	---	---	---	---	---	---	---
A.13f Solar Wind (Pioneer 12 (Venus))	429A 33	431A161	431A 39	432A 39	433A 37	435A160	435A 43	436A 43	437A 45	438A 37	---	---	---	---
A.17 Interplanetary Magnetic Field (Pioneer 9)	429A 32	431A160	431A 38	432A 38	433A 37	---	---	---	---	---	---	---	---	---
A.17 Interplanetary Magnetic Field (Pioneer 12)	430A127	431A125	432A132	433A131	---	---	436A132	438A162	438A125	439A127	440A153	---	---	---
A.17c Inferred IP Magnetic Field	429A 42	430A 42	432A 40	432A 40	433A 38	436A 40	436A 40	437A 46	438A 40	439A 36	440A 44	441A 48	---	---
A.18 Interplanetary Electric Field (Pioneer 9)	429A 32	431A160	431A 38	432A138	---	---	---	---	---	---	---	---	---	---
B. IONOSPHERIC (AND RADIO WAVE PROPAGATION) PHENOMENA														
B.52 Graphs of Transmission Frequency Range	430A160	431A156	432A162	433A154	434A154	435A156	436A172	437A170	438A156	439A150	440A154	441A167	---	---
B.53 Quality Figures Based on Frequency Ranges	430A159	431A155	432A164	433A156	434A153	435A158	436A174	437A169	438A155	439A152	440A156	---	---	---
C. FLARE-ASSOCIATED EVENTS														
C.1a Optical Observations of Flares	429A 14	430A 16	431A 16	432A 16	433A 16	434A 16	435A 16	436A 16	437A 16	438A 16	439A 14	440A 18	441A 18	---
C.1ba Optical Observations of Flares (Standardized Data)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C.1d Flare Patrol Observations	---	430A 46	431A 25	432A 23	433A 21	434A 24	435A 27	436A 26	437A 31	438A 21	439A 23	440A 28	441A 30	---
C.1d Flare Patrol Observations	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C.1e Flare Indices (by day)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C.1f Flare Indices (by Region)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
C.3 Solar Radio Waves - Outstanding Occurrences	435B 51	436B 5	437B 5	438B 5	439B 5	440B 5	441B 5	---	---	---	---	---	---	---
C.4 Solar Radio Waves - Fixed Frequencies - Selected	429A 27	430A 31	431A 30	432A 29	433A 27	434A 30	435A 32	436A 31	437A 36	438A 26	439A 29	440A 34	441A 35	---
C.4a Solar Radio Spectral Obs. (Fort Davis)	430A128	431A125	432A133	433A132	434A129	435A131	436A133	437A139	438A125	439A128	440A126	441A136	---	---
C.4d Solar Radio Spectral Obs. (Culgoora)	430A128	431A125	432A133	433A132	434A129	435A131	436A133	437A139	438A125	439A128	440A126	441A136	---	---
C.4e Solar Radio Spectral Obs. (Weissenau)	430A128	431A125	432A133	433A132	434A129	435A131	436A133	437A139	438A125	439A128	440A126	441A136	---	---
C.4f Solar Radio Spectral Obs. (Sagamore Hill)	430A128	431A125	432A133	433A132	434A129	435A131	436A133	437A139	438A125	439A128	440A126	441A136	---	---
C.4h Solar Radio Spectral Obs. (Uwingu)	430A128	431A125	432A133	433A132	434A129	435A131	436A133	437A139	438A125	439A128	440A126	441A136	---	---
C.4i Solar Radio Spectral Obs. (Bielefeld)	430A128	431A125	432A133	433A132	434A129	435A131	436A133	437A139	438A125	439A128	440A126	441A136	---	---
C.4j Solar Radio Spectral Obs. (Manila)	430A128	431A125	432A133	433A132	434A129	435A131	436A133	437A139	438A125	439A128	440A126	441A136	---	---
C.4k Solar Radio Spectral Obs. (Leamington)	430A128	431A125	432A133	433A132	434A129	435A131	436A133	437A139	438A125	439A128	440A126	441A136	---	---
C.4l Solar Radio Spectral Obs. (Pahua)	430A128	431A125	432A133	433A132	434A129	435A131	436A133	437A139	438A125	439A128	440A126	441A136	---	---
C.5e Solar X-ray (SMS/GOES) (graphs)	434B 6	435B 41	436B 41	437B 30	438B 23	439B 23	440B 32	441B 46	---	---	---	---	---	---
C.6 Sudden Ionospheric Disturbances	430A124	431A122	432A129	433A128	434A126	435A128	436A128	437A135	438A122	439A124	440A122	---	---	---
D. GEOMAGNETIC AND MAGNETOSPHERIC PHENOMENA														
D.1a Geomagnetic Indices K _p , K _n , K _s , K _m , A _p , A _a , C _p	430A155	431A151	432A158	433A150	434A147	435A152	436A166	437A163	438A149	439A145	440A149	441A162	---	---
D.1ba 27-day Chart of K _p Indices	430A157	431A153	432A160	433A152	434A149	435A154	436A168	437A165	438A151	439A147	440A151	441A164	---	---
D.1c 27-day Chart of C _p	441A165	441A165	441A165	441A165	441A165	441A165	441A165	441A165	441A165	441A165	441A165	441A165	441A165	441A165
D.1ca aa graph 1868 - present	---	---	---	---	---	---	---	---	---	---	---	---	---	---
D.1d Principal Magnetic Storms	430A158	431A154	432A161	433A153	434A152	435A155	436A171	437A168	438A154	439A148	440A152	441A166	---	---
D.1e Reduced Magnetograms	---	---	---	---	---	---	---	---	---	---	---	---	---	---
D.1f Sudden Commencement and Solar Flare Effects	431A169	433A168	433A168	434A188	435A164	436A179	437A176	437A169	439A163	439A149	441A170	---	---	---
D.1g Equatorial Indices D _{st}	431A167	433A167	434A186	434A187	---	---	---	---	438A153	440A160	441A172	---	---	---
D.1h Geomagnetic Substorm Log (Boulder)	429A 37	430A 45	431A 42	432A 43	433A 41	434A 40	435A 44	436A 44	437A 49	438A 38	439A 40	440A 43	441A 51	---
F. COSMIC RAYS														
F.1a Cosmic Ray Neutron Counts (Deep River)	430A154	432A170	433A165	434A183	434A146	435A151	436A165	438A163	439A162</					

NOVEMBER 1980 DATA

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NOTE ON DELAY OF GROUPED SOLAR FLARE DATA:

Beginning with the July 1980 issue of *Solar-Geophysical Data*, we planned to publish the final listing of solar flares 13 months, rather than 6 months, from the date of observation. Although this schedule has not been met since the July 1980 issue was published, we and our colleagues at the Meudon Observatory plan to return to the 13-month delay as soon as possible. This new schedule will cause the Daily Flare Index and the Regional Flare Index to appear 13 and 14 months from the date of observation. At the same time we are suspending indefinitely publication of the Abbreviated Calendar Record. We deeply regret this situation, but the volume of data recorded during sunspot maximum and computer conversion problems at the Meudon Observatory and at NGSDC have forced these greater delays on us.

For researchers who need the comprehensive solar flare data more promptly, NGSDC plans to generate in the next few weeks "preliminary" listings from November 1979 through the "current" month that lies 13 months from the month of observation. These complete tabulations will lack the final Meudon corrections, and will only be published after they have been made. Nevertheless, printouts for this period will be available on request, if they be recognized at "preliminary" when used in research projects. A fee may be charged for reproducing these data. Please contact the editor, Helen E. Coffey, at (303) 497-6223 or telex SOLTERWARN BLDR 45897.

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1980

DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
01	245 LEAR	43 NS	0540.5	0834.6	277.5D	28			
	127 TORN	43 NS	0600.0	0817.7	540.0	280	U	10	V1
	200 GORK	44 NS	0642.0		308.0E			5	
	260 ONDR	44 NS	0800.0E		382.0D	110		4	
	100 GORK	43 NS	0830.0		193.0			20	
	245 SGMR	43 NS	1122.0	1856.1	609.0D	330			
	9400 TYKW	45 C	0023.5	2424.7	2.5	5		1.5	
	3750 TYKW	20 GRF	0350.0	0353	30.0	2		1	
	2000 TYKW	5 S	0350.0	0353	10.0	1		.5	
	3750 TYKW	5 S	0440.0	0453	25.0	3		1.5	
	9400 TYKW	5 S	0440.0	0448	20.0	2		1	
	3750 TYKW	21 GRF	0510.0	0530	100.0	4		2	
	3750 TYKW	5 S	0514.6	0515.1	1.0	3		.8	
	1000 TYKW	45 C	0515.0	0515.1	.3	57		15	
	9400 TYKW	20 GRF	0515.0	0522	30.0	3		1.5	
	650 GORK	2 S/F	0517.3	0518.2	3.1	18			
	2000 TYKW	45 C	0519.0	0520.5	3.0	11		2	
	3750 TYKW	45 C	0519.0	0520.5	4.0	6		1	
	2000 TYKW	29 PBI	0522.0		25.0	2		1	
	9400 TYKW	5 S	0557.7	0558.3	1.5	7		2	
	9400 TYKW	45 C	0616.0	0616.5	15.0	5		1.5	
	9100 GORK	1 S	0823.8	0824.1	3.7	17			
	8800 LEAR	8 S	0824.6	0824.8	.2	19			
	9500 POTS	3 S	0824.6	0825.0	1.4	15			
	410 LEAR	8 S	0855.6	0855.8	.2	13			
	100 GORK		0926.5	0930.1		700	D		
	200 GORK		0926.5	0930.0		55	D		
	200 GORK	41 F	0926.5	0927.0	5.4	55	D		
	100 GORK	41 F	0926.5	0927.0	4.2	700	D		
	228 HARS	45 C	0927.5	0927.7	2.0	480		75	
	113 POTS	42 SER	0927.5	0928.2	3.9	350		3	III
	204 IZMI	41 F	0927.5	0928.0	5.0	1950			
	234 POTS	42 SER	0927.5	0931.1	3.9	675		6	III
	810 KRAK	8 S	0927.7	0928.0	.5	34			
	930 BORD	41 F	0928.0	0928.1	.3	16		2	
	228 HARS	45 C	0930.3	0930.8	1.5	445		60	
	245 LEAR	47 GB	0930.8	0931.1	1.8	630			
	430 KRAK	8 S	1135.0	1135.8	.2	140			
	930 BORD	41 F	1152.0	1153.3	1.8	128		2	
	245 SGMR	4 S/F	1152.8	1154.1	2.2	170			
	228 HARS	45 C	1153.0	1153.6	1.5	165		70	
	127 TORN	4 S/F	1153.0	1153.4	1.0	4500	2300		
	113 POTS	4 S/F	1153.0	1153.2	1.1	420		75	III
	204 IZMI	7 C	1153.0	1153.8	7.5	430		250	
	234 POTS	4 S/F	1153.1	1153.3	1.3	150		3	III
	810 KRAK	8 S	1153.3	1153.3	.1	7			
	800 ONDR	2 S/F	1153.3	1153.5	.6	35		2	
	410 SGMR	8 S	1153.6	1154.1	1.4D	22			
	810 KRAK	8 S	1239.5	1239.5	.2	30			
	930 BORD	41 F	1240.0	1240.1	.4	21			
	234 POTS	4 S/F	1241.3	1241.4	.2	250		50	III
	810 KRAK	8 S	1257.5	1257.5	.7	18			
	930 BORD	41 F	1258.0	1258.1	.6	21		2	
	430 KRAK	4 S/F	1300.8	1301.5	1.2	70		20	
	2800 OTTA	240 R	1315.0	1325	10.0	3.8		1.9	
	113 POTS	41 F	1319.1	1322.2	3.7	100		10	III
	430 KRAK	8 S	1321.3	1321.5	.5	80			
	810 KRAK	8 S	1321.7	1321.8	.3	7			
	245 SGMR	8 S	1321.8	1322.8	1.3	100			
	410 SGMR	8 S	1322.0	1322.6	1.1D	46			
	234 POTS	4 S/F	1322.1	1322.3	.6	100		5	III
	2800 OTTA	240 R	1335.0	1345	10.0	3.8		1.9	
	430 KRAK	8 S	1353.2	1353.5	.3	80			
	810 KRAK	8 S	1353.5	1353.5	.1	7			
	2800 OTTA	21 GRF	1415.0	1420	70.0	3.8		2.2	
	113 POTS	4 S/F	1418.4	1419.6	1.9	350		7	III
	2800 OTTA	1 S	1503.7	1503.9	1.2	4.8		2.4	
	2800 OTTA	20 GRF	1527.0	1530	20.0	3.8		1.6	
	2800 OTTA	1 S	1732.0	1737	10.0	2.2		1.0	
	2800 OTTA	1 S	1825.0	1826	3.0	3.0		1.5	
	2800 OTTA	1 S	1856.0	1856.5	2.0	3.0		1.0	
	2800 OTTA	4 S/F	1907.5	1909.4	4.0	42.0		17.0	
	2800 OTTA	21 GRF	1915.0	1922	20.0	6.6		3.6	
	4995 SGMR	4 S/F	1916.0	1919.1	7.0D	130			
	1415 SGMR	4 S/F	1916.3	1919.3	5.5D	75			
	245 SGMR	8 S	1917.0	1918.0	2.0	97			
	2695 SGMR	4 S/F	1917.0	1919.1	6.0D	43			
	8800 SGMR	4 S/F	1917.3	1919.1	5.7D	72			
	4995 PALE	4 S/F	1917.6	1919.3	2.2	80			
	2695 PALE	8 S	1917.8	1919.3	2.0	37			

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SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
						$10^{-22} W m^{-2} Hz^{-1}$			
			UT	UT	MINUTES	PEAK	MEAN		
01	15400 SGMR	4 S/F	1918.5	1919.1	3.5D	20			
	1415 PALE	8 S	1919.1	1919.3	.7	76			
	606 SGMR	8 S	1919.1	1919.3	.7D	21			
	3750 TYKW	20 GRF	2335.0	2409	60.0	6	2.5		
02	200 GORK	44 NS	0503.0E		402.0D		20		
	100 GORK	44 NS	0505.0E		400.0E		10		
	204 IZMI	44 NS	0600.0E		360.0D	72			
	127 TORN	44 NS	0610.0E	1440.2	530.0D	3000 D	66		V1
	260 ONDR	44 NS	0837.0E		353.0D	50	12		
	410 SGMR	43 NS	1123.0	1323.1	607.0D	119			
	245 SGMR	43 NS	1123.0	1655.1	607.0D	590			
	3750 TYKW	28 PRE	0126.5	0159.5	40.0	4	1		
	2000 TYKW	28 PRE	0127.0	0131.5	40.0	2	1		
	1000 TYKW	45 C	0206.5	0207.7	2.5	6	1.5		
	3750 TYKW	45 C	0206.5	0211.1	10.5	22	6		
	9400 TYKW	45 C	0206.5	0211.1	17.0	18	5		
	2000 TYKW	45 C	0207.0	0211.1	9.0	12	3		
	4995 LEAR	47 GB	0207.8	0211.1	6.5	28			
	8000 LEAR	47 GB	0207.8	0211.1	6.8	30			
	15400 LEAR	4 S/F	0210.1	0212.1	4.5	28			
	2695 LEAR	8 S	0210.5	0211.1	.8	21			
	4995 PALE	8 S	0210.5	0211.1	.6	19			
	1000 TYKW	45 C	0210.5	0211.1	1.5	8	2		
	1000 TYKW	45 C	0213.3	0214.0	2.0	13	4		
	1415 LEAR	8 S	0213.6	0214.0	.5	16			
	2000 TYKW	29 PBI	0216.0		10.0	1	.5		
	3750 TYKW	30 PBI	0217.0		60.0	4	2		
	3750 TYKW	5 S	0231.0	0236	25.0	3	1.5		
	2000 TYKW	5 S	0323.0	0327	10.0	1.5	.7		
	9400 TYKW	5 S	0325.0	0326.6	2.5	7	2		
	3750 TYKW	21 GRF	0335.0	0345	100.0	3	1.5		
	9400 TYKW	20 GRF	0335.0	0345	70.0	5	2		
	2000 TYKW	5 S	0335.0	0343	25.0	3	1.5		
	3750 TYKW	21 GRF	0430.0	0440	30.0	2	1		
	2000 TYKW	5 S	0446.3	0446.5	2.5	12	.5		
	3750 TYKW	8 S	0446.4	0446.5	.2	3	1		
	3750 TYKW	5 S	0523.0	0529	9.0	2	1		
	245 LEAR	8 S	0709.6	0710.3	1.0	139			
	100 GORK	8 S	0735.5	0736.0	1.2	500 D			
	200 GORK	4 S/F	0742.2	0744.8	4.1	200 D			
	204 IZMI	4 S/F	0743.2	0745.0	3.0	460	160		
	234 POTS	4 S/F	0743.3	0744.9	3.1	300	3		III
	100 GORK	46 C	0743.3	0745.4	3.0	6300			
	100 GORK		0743.3	0746.0		6300			
	650 GORK	4 S/F	0744.7	0745.0	1.5	28			
	650 GORK	20 GRF	1011.3	1035.6	37.6	5	2		
	113 POTS	4 S/F	1048.5	1049.4	1.8	350	35		
	930 BORD	41 F	1051.4	1051.6	1.3	14	2		
	650 GORK	20 GRF	1113.9	1124.0	21.0	2			
	200 GORK		1115.6	1122.1		150 D			
	200 GORK	46 C	1115.6	1119.4	9.3	150 D			
	100 GORK	4 S/F	1118.3	1119.5	2.5	1000 D			
	3000 POTS	29 PBI	1118.5	1119.1	12.0	9.5			
	3200 BERN	3 S	1118.6	1119.1	2.5	.0			
	5200 BERN	3 S	1118.6	1119.1	2.5	21.0			ONLY PAPER REC
	113 POTS	4 S/F	1118.8	1119.2	2.6	3100	500		ONLY PAPER REC
	6100 KISV	3 S	1119.0	1119.3	2.0	14			III
	234 POTS	4 S/F	1119.0	1119.3	.8	300	30		III
	15000 KISV	8 S	1119.0	1119.2	2.0	18			
	1470 POTS	29 PBI	1119.0	1120.5	26.0	5.5			
	204 IZMI	5 S	1119.0	1119.5	1.0	500	250		
	9500 POTS	29 PBI	1119.0	1119.2	16.0	21			
	9100 GORK	2 S/F	1119.0	1119.3	2.6	20	4		
	10715 DWIN	1 S	1119.0	1119.5	1.0	10	5		
	2950 GORK	1 S	1119.1	1119.2	4.2	5	2		
	930 BORD	8 S	1120.6	1120.6	.2	47	2		
	234 POTS	4 S/F	1133.1	1133.2	.6	200	40		III
	113 POTS	41 F	1310.6	1310.7	3.1	800	7		III
	234 POTS	41 F	1320.8	1322.6	5.9	625	3		III
	810 KRAK	8 S	1323.5	1323.6	.2	8			
	245 SGMR	4 S/F	1417.5	1419.3	3.5	350			
	2650 DWIN	1 S	1418.0	1418.5	1.0	20	10		
	10715 DWIN	1 S	1418.0	1418.5	1.0	15	10		
	1415 SGMR	8 S	1418.1	1419.0	1.4D	15			
	19600 BERN	3 S	1418.2	1419.0	1.2U	41.0			
	3200 BERN	3 S	1418.2	1419.0	1.0	.0			ONLY PAPER REC
	8400 BERN	3 S	1418.2	1419.0	1.2	37.0			
	11800 BERN	3 S	1418.2	1419.0	1.2	55.0			
	113 POTS	4 S/F	1418.2	1419.3	2.1	850	150		III/V
	5200 BERN	3 S	1418.3	1419.1	1.0	23.0			
	8000 SGMR	8 S	1418.3	1419.1	1.5D	49			
	15400 SGMR	8 S	1418.3	1418.8	.8D	46			
	4995 SGMR	8 S	1418.3	1418.8	1.5D	18			
	234 POTS	4 S/F	1418.7	1419.0	.5	100	15		III

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
02	3000 POTS	8 S	1418.5	1419.0	1.0	21			
	2695 SGMR	8 S	1418.6	1418.8	1.2D	15			
	1470 POTS	1 S	1418.7	1419.0	1.3	5.5			
	9500 POTS	8 S	1418.8	1419.1	.7	29			
	2800 OTTA	8 S	1418.8	1419	.6	16.8	8.4		
	2800 OTTA	20 GRF	1550.0	1635	110.0	4.6	2.6		
	4995 SGMR	4 S/F	1604.0	1604.8	3.0D	13			
	8800 SGMR	4 S/F	1604.0	1604.8	2.5	16			
	245 SGMR	8 S	1658.1	1658.3	1.7D	1500			
	410 SGMR	8 S	1658.1	1658.3	1.2D	720			
	606 SGMR	8 S	1658.3	1658.3	.3	170			
	606 SGMR	8 S	1855.3	1855.3	.3D	22			
	410 SGMR	8 S	1855.6	1856.3	1.0D	50			
	245 SGMR	47 GB	1855.8	1855.8	.3	520			
	2800 OTTA	21 GRF	1903.0	1908	25.0	2.8	1.6		
	2695 SGMR	4 S/F	1903.6	1905.5	3.9D	15			
	4995 SGMR	4 S/F	1904.0	1905.5	3.5	10			
	2800 OTTA	45 C	1905.0	1905.5	2.5	10.2	2.8		
	410 SGMR	8 S	1906.5	1907.1	1.0D	81			
	245 SGMR	8 S	1906.5	1907.1	1.0D	150			
	606 SGMR	8 S	1906.6	1907.1	.7D	26			
	2800 OTTA	1 S	1911.0	1911.6	1.2	3.2	1.6		
	1000 TYKW	5 S	2203.0	2203.2	.7	4	1		
	1000 TYKW	42 SER	2228.7	2229.7	2.5	20	4		
	1000 TYKW	45 C	2248.2	2248.9	2.5	5	1		
	2000 TYKW	28 PRE	2350.0	2354.9	10.0	4	1.5		
	9400 TYKW	28 PRE	2350.0	2400	10.0	3	1.5		
	1000 TYKW	45 C	2354.5	2403.7	12.0	12	2 D		
	1000 TYKW		2354.5	2356.2		9			
03	200 GORK	44 NS	0510.0E		410.0D		10		
	100 GORK	44 NS	0510.0E		410.0E		10		
	127 TORN	44 NS	0600.0E	0947.2	540.0D	55000	12		V2
	260 ONDR	44 NS	0800.0E		378.0D	47	3		
	17000 NOBE	20 GRF	0000.0	0002.1	27.0	16			0
	2000 TYKW	45 C	0000.0	0001.0	4.0	21	9		
	9400 TYKW	45 C	0000.0	0001.9	4.0	24	12		
	3750 TYKW	5 S	0003.0E	0003 U	1.0D	10 D	9 D		
	9400 TYKW	29 PBI	0004.0		25.0	12	5 D		
	2000 TYKW	29 PBI	0004.0		10.0	3	1		
	3750 TYKW	30 PBI	0004.0		35.0	8	2.5		
	1000 TYKW	45 C	0032.0	0032.3	2.0	16	2.5		
	3750 TYKW	5 S	0036.5	0037.1	1.5	2	.7		
	1000 TYKW	8 S	0036.9	0037.0	1.2	18	5		
	2000 TYKW	28 PRE	0100.0	0146.4	57.0	7	3		
	3750 TYKW	5 S	0100.0	0100.9	2.0	4	1		
	3750 TYKW	28 PRE	0100.0	0147.5	57.0	8	3.5		
	1000 TYKW	28 PRE	0100.0	0157	57.0	3.5	2		
	9400 TYKW	5 S	0100.5	0101.0	1.5	8	2		
	3750 TYKW	5 S	0116.0	0116.5	1.0	1.5	.5		
	9400 TYKW	5 S	0116.0	0116.4	1.0	16	4		
	5730 IRKU	2 S	0116.0	0116.5	1.0	55			R
	9400 TYKW	28 PRE	0150.0	0158	8.0	2	1		
	2000 TYKW	45 C	0157.0	0201.0	41.0	70	12		
	1000 TYKW		0157.0	0201.9		29			
	1000 TYKW	45 C	0157.0	0231.3	37.0	34	4		
	3750 TYKW	45 C	0157.0	0204.0	41.0	106	22		
	9400 TYKW	45 C	0158.0	0204.1	40.0	37	13		
	5730 IRKU	21 GRF	0158.0	0204.0	10.0	151	55		R
	17000 NOBE	20 GRF	0158.5	0204.5	41.0	30			0
	1000 TYKW	30 PBI	0234.0		180.0	3	1.5		
	3750 TYKW	30 PBI	0238.0		260.0	10	5		
	2000 TYKW	30 PBI	0238.0		260.0	4	2		
	9400 TYKW	28 PRE	0308.0	0337	28.0	10	4		
	3750 TYKW	28 PRE	0308.0	0333.0	28.0	9	5		
	2000 TYKW	28 PRE	0310.0	0337	27.0	3	1.5		
	1000 TYKW	28 PRE	0327.0	0337	10.0	2.5	1		
	1000 TYKW	5 S	0330.0	0330.3	1.0	2	.5		
	17000 NOBE	21 GRF	0331.2	0342.1	30.0	18			0
	1000 TYKW	45 C	0332.0	0333.0	2.0	79	10		
	2000 TYKW	45 C	0332.3	0332.9	1.5	27	8		
	9400 TYKW	45 C	0336.0	0339.0	7.0	166	55		
	3750 TYKW	45 C	0336.0	0339.7	9.0	72	25		
	1000 TYKW	45 C	0337.0	0338.4	10.0	37	7		
	2000 TYKW	45 C	0337.0	0339.1	13.0	18	6		
	17000 NOBE	45 C	0337.4	0338.9	4.8	77			
	9400 TYKW	29 PBI	0343.0		18.0	19	9		R
	3750 TYKW	29 PBI	0345.0		17.0	7	3.5		
	3750 TYKW	20 GRF	0410.0	0500	150.0	8	4		
	2000 TYKW	20 GRF	0410.0	0500	150.0	3	1.5		
	5730 IRKU	45 C	0436.3	0437.5	8.0	128			R
	5730 IRKU		0436.3	0438.3		185			R
	5730 IRKU		0436.3	0439.0		230			R
	9400 TYKW	5 S	0611.7	0611.9	.6	9	3		
	6100 KISV	27 RF	0748.0	0857	101.0	7			

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SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
03	3000 POTS	3 S	0750.0	0751.7	3.5	10			
	234 POTS	4 S/F	0750.8	0750.8	.1	220	50		
	1470 POTS	4 S/F	0750.5	0752.0	2.0	19			
	2950 GORK	1 S	0750.8	0751.6	1.2	3.4	1.7		
	6100 KISV	3 S	0751.0	0752	2.0	5			
	2950 GORK	1 S	0759.0	0759.4	2.2	7.0	3.5		
	9500 POTS	8 S	0902.9	0903.0	.6	15			
	950 GORK	45 C	0905.0	0907.2	5.5	14			
	950 GORK		0905.0	0907.9		18			
	234 POTS	4 S/F	0910.2	0910.2	.2	150	8		
	2950 GORK	3 S	1148.0	1148.0	.6	35	17		
	650 GORK	2 S/F	1148.0	1148.4	.6	13	6		
	430 KRAK	47 GB	1202.8	1203.3	3.0	1200	120		
	3100 CRIM	29 PBI	1203.0	1207.0	9.0	8			
	808 ONDR	4 S/F	1203.0	1203.5	2.5	65	15		
	3100 CRIM	3 S	1203.0	1204.0	4.0	54	13		
	950 GORK		1203.0	1203.9		44			
	950 GORK	46 C	1203.0	1203.5	9.0	27			
	2650 DWIN	2 S/F	1203.0	1204	5.0	40	25		
	3200 BERN	3 S	1203.1	1204.5	9.0	.0			ONLY PAPER REC
	5200 BERN	3 S	1203.2	1204.5	11.0	108.0			
	8400 BERN	3 S	1203.2	1204.5	11.0	167.0			
	536 ONDR	45 C	1203.3	1204.2	3.0	62	9		
	234 POTS	4 S/F	1203.3	1203.5	2.1	290	5		III
	810 KRAK	4 S/F	1203.3	1203.6	2.0	120	10		
	9500 POTS	3 S	1203.5	1204.4	12.0	123			
	3000 POTS	4 S/F	1203.5	1204.8	4.0	59			
	1470 POTS	4 S/F	1203.5	1204.0	3.5	32			
	2950 GORK	4 S/F	1203.5	1204.5	4.2	36	18		
	9100 GORK	3 S	1203.5	1204.3	4.1	130	30		
	930 BORD	46 C	1203.5	1204	2.4	79	7		
	11800 BERN	3 S	1203.7	1204.5	11.0	133.0			
	19600 BERN	3 S	1203.7	1204.8	5.0	99.0			
	10715 DWIN	1 S	1204.0	1204.5	4.0	50	30		
	33 UPIC	8 S	1204.3	1204.4	.5				
	29 UPIC	8 S	1204.3	1204.5	.5				
	536 ONDR	8 S	1244.2	1244.2	.2	31			
	810 KRAK	8 S	1309.3	1309.4	.2	18			
	430 KRAK	8 S	1334.0	1334.2	.5	160			
	2800 OTTA	21 GRF	1350.0		40.0	4.6			
	3200 BERN	22 GRF	1350.0	1357.7	39.0	.0			ONLY PAPER REC
	5200 BERN	22 GRF	1350.5	1357.7	35.0	93.0			
	8400 BERN	22 GRF	1351.1	1357.7	30.0	131.0			
	19600 BERN	22 GRF	1351.5	1356.9	18.0	119.0			
	11800 BERN	22 GRF	1353.0	1356.6	25.0	106.0			
	10715 DWIN	2 S/F	1355.0	1356	6.0	40	20		
	2800 OTTA	4 S/F	1355.0	1358	7.0	51.0	26.0		
	2650 DWIN	2 S/F	1355.0	1356	6.0	50	30		
	1470 POTS	4 S/F	1355.0	1357.2	6.0	30			
	3000 POTS	4 S/F	1355.0	1357.4	9.0	62			
	9500 POTS	4 S/F	1355.0	1356.6	20.0	88			
	810 KRAK		1355.3	1356.8		210			
	810 KRAK	45 C	1355.3	1355.8	2.7	81	10		
	930 BORD	46 C	1355.5	1356.2	2.6	134	15		
	808 ONDR	45 C	1355.7	1356.8	2.5	60	14		
	536 ONDR	45 C	1355.7	1356.7	4.0	27	2		
	430 KRAK	47 GB	1356.0	1356.5	4.0	900	9		
	260 ONDR	46 C	1400.0		4.5	219	142		
	127 TORN	42 SER	1400.3	1402.0U	8.0	5600			
	234 POTS	4 S/F	1400.5	1402.5	3.8	6700	1000		III
	113 POTS	42 SER	1402.0	1404.3	6.9	800	50		III
	2800 OTTA	21 GRF	1553.0	1554	30.0	4.2	2.1		
	2800 OTTA	3 S	1606.0	1606.5	1.0	12.0	6.0		
	930 BORD	41 F	1606.1	1606.2	.5	27	2		
	2800 OTTA	20 GRF	1625.0	1633	35.0	3.2	1.8		
	2800 OTTA	22 GRF	1925.0	1950	35.0	6.2	2.0		
	2800 OTTA	20 GRF	2030.0	2045	27.0	5.0	2.5		
	2695 PENT	20 GRF	2130.0	2150	60.0	4.2	2.1		
	3750 TYKW	28 PRE	2327.0	2400	33.0	5	2		
	2000 TYKW	5 S	2354.5	2355.3	2.0	7	2		
04	200 GORK	44 NS	0530.0E		390.0D		5		
	127 TORN	44 NS	0600.0E	0917.4	480.0D	0200	3		V2
	260 ONDR	44 NS	0755.0E		390.0D	54	4		
	245 SGM	43 NS	1956.1	2004.3	90.9D	32			
	245 LEAR	43 NS	2258.0	2319.8	602.0D	83			
	1000 TYKW	8 S	0009.6	0009.7	.2	28	7		
	3750 TYKW	20 GRF	0020.0	0030	40.0	4	2		
	9400 TYKW	20 GRF	0107.0	0115	30.0	10	4		
	1000 TYKW	45 C	0107.0	0108.9	5.0	8	2		
	3750 TYKW	5 S	0107.0	0109.3	5.0	17	9		
	2000 TYKW	5 S	0107.0	0109.3	5.0	10	5		
	17000 NOBE	21 GRF	0109.0	0111.7	91.0	9			0
	35000 NAGO	20 GRF	0111.0	0117	7.0	24			
	3750 TYKW	29 PBI	0112.0		30.0	8	4		

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING	TIME OF	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
				TIME	MAXIMUM		$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$			
				UT	UT	MINUTES	PEAK	MEAN		
04	2000	TYKW	29 PBI	0112.0		25.0	4	2		
	2000	TYKW	45 C	0149.0	0150.5	7.0	4.5	2		
	1000	TYKW	5 S	0149.0	0150.6	4.0	1	.4		
	3750	TYKW	45 C	0149.0	0150.4	11.0	22	4		
	9400	TYKW	45 C	0149.5	0152.4	10.5	91	30		
	17000	NOBE	7 C	0150.0	0152.7	7.2	40			
	35000	NAGO	22 GRF	0150.0	0205	42.0	29			
	17000	NOBE	29 PBI	0157.2	0157.2	36.0	9			
	9400	TYKW	29 PBI	0200.0		40.0	6	3		
	3750	TYKW	5 S	0203.0	0204	3.0	3	1		
	2000	TYKW	20 GRF	0213.0	0300	80.0	3	1		
	3750	TYKW	21 GRF	0214.0	0256	80.0	5	2		
	3750	TYKW	45 C	0245.0	0245.7	4.0	5	1		
	3750	TYKW	45 C	0258.5E	0258.5U	1.5D	10	5	D	
	1000	TYKW	5 S	0352.0	0352.4	1.0	13	3		
	6100	KISV	4 S/F	0618.0	0619.5	6.0	50			
	9100	GORK	21 GRF	0727.0	1116.0	280.0E	27			
	3200	BERN	3 S	0731.3	0734.1	50.0	.0			ONLY PAPER REC
	5200	BERN	3 S	0731.4	0734.2	50.0	56.0			
	2950	GORK	21 GRF	0731.5	0736.6	151.0	8	4		
	4995	ATHN	4 S/F	0731.5	0734.3	12.3D	61			
	2695	ATHN	4 S/F	0731.5	0734.3	10.1D	35			
	8800	ATHN	4 S/F	0731.8	0734.3	9.2	42			
	3100	CRIM	3 S	0732.0	0734.0	3.0	38	13		
	3100	CRIM	29 PBI	0732.0	0737.0	5.0	10			
	1415	ATHN	4 S/F	0732.1	0734.5	7.2D	07			
	9500	POTS	3 S	0732.5	0734.4	4.0	34			
	1470	POTS	3 S	0733.0	0734.4	2.5	7.2			
	3000	POTS	3 S	0733.0	0734.4	4.0	24			
	10715	DWIN	1 S	0733.0	0734	3.0	10	5		
	2650	DWIN	1 S	0733.0	0734	3.0	20	10		
	9100	GORK	3 S	0733.1	0734.2	3.4	46	7		
	950	GORK	1 S	0733.5	0734.4	1.7	4	2		
	2950	GORK	3 S	0733.5	0734.3	3.1	22	11		
	650	GORK	4 S/F	0734.4	0735.0	.7	20			
	204	IZMI	8 S	0755.5	0755.5	.3	80	50		
	113	POTS	8 S	0755.5	0755.5	.1	100	30		III
	6100	KISV	4 S/F	0832.0		5.0	22			
	15000	KISV	4 S/F	0832.0	0834.2	4.0	27			
	6100	KISV	29 PBI	0837.0	0839	18.0	7			
	430	KRAK	8 S	0859.0	0859.0	.2	100			
	3100	CRIM	3 S	0916.7	0918.0	2.5	19	6		
	3200	BERN	3 S	0917.6	0919.3	43.0	.0			ONLY PAPER REC
	8400	BERN	3 S	0917.6	0919.3	18.0	115.0			
	19600	BERN	3 S	0917.6	0919.6	9.0	63.0			
	11800	BERN	3 S	0917.6	0919.3	15.0	97.0			
	5200	BERN	3 S	0917.6	0919.3	43.0	60.0			
	2650	DWIN	1 S	0918.0	0919	3.0	15	10		
	10715	DWIN	1 S	0918.0	0919	6.0	30	20		
	650	GORK	1 S	0918.0	0919.4	2.6	2			
	15000	KISV	4 S/F	0918.0	0919.5	9.0	27			
	9500	POTS	3 S	0918.0	0919.5	6.0	88			
	950	GORK	1 S	0918.1	0919.3	2.0	4	2		
	9100	GORK	3 S	0918.2	0919.4	6.3	106	28		
	2950	GORK	1 S	0918.4	0919.2	2.5	13	6.0		
	1470	POTS	1 S	0918.5	0919.6	2.0	4.5			
	810	KRAK	1 S	0918.5	0919.0	1.0	3	2		
	3000	POTS	3 S	0919.0	0919.5	2.0	19			
	5200	BERN	1 S	1032.0	1115.6	115.0	24.0			
	3200	BERN	1 S	1032.0	1115.5	115.0	.0			ONLY PAPER REC
	113	POTS	8 S	1044.6	1045	.1	200	70		
	234	POTS	8 S	1055.4	1055.4	.1	150	50		
	4995	ATHN	4 S/F	1055.8	1115.8	26.5D	40			
	11800	BERN	1 S	1100.0	1115.6	90.0	17.0			
	8400	BERN	1 S	1100.0	1115.6	90.0	24.0			
	2950	GORK	20 GRF	1100.6	1112.6	45.0	16	8		
	6100	KISV	20 GRF	1103.0	1116	21.0	18			
	3000	POTS	23 GRF	1103.0	1116	90.0	31			
	3100	CRIM	21 GRF	1103.0	1115.5	34.0	21	7		
	8800	ATHN	4 S/F	1103.3	1105.6	19.8	11			
	19600	BERN	1 S	1104.0	1111.4	70.0	33.0			
	9500	POTS	20 GRF	1104.0	1116	56.0	13			
	950	GORK	2 S/F	1104.7	1105.0	1.3	10			
	930	BORD	41 F	1105.0	1105	.8	20	2		
	3100	CRIM	1 S	1105.0	1105.5	1.5	9	3		
	2695	ATHN	4 S/F	1105.1	1116.0	21.5D	13			
	650	GORK	4 S/F	1105.4	1105.7	.8	17			
	810	KRAK	8 S	1105.5	1105.5	.1	45			
	430	KRAK	2 S/F	1109.5	1109.5	.5	100	7		
	234	POTS	4 S/F	1125.0	1125.1	.3	150	40		
	234	POTS	4 S/F	1143.2	1143.3	.5	180	35		
	2800	OTTA	21 GRF	1240.0	1300	55.0	9.2	5.0		
	8400	BERN	3 S	1243.5	1246.5	60.0	128.0			
	35000	BERN	3 S	1243.5	1246.9	50.0	102.0			
	5200	BERN	3 S	1243.5	1246.3	60.0	127.0			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
04	3200 BERN	3 S	1243.5	1246.2	60.0	.0			ONLY PAPER REC
	11800 BERN	3 S	1243.5	1246.5	60.0	120.0			
	19600 BERN	3 S	1243.5	1246.9	60.0	105.0			
	2800 OTTA	3 S	1245.0	1246.7	5.0	84.0	24.0		
	2650 DWIN	1 S	1245.0	1246	5.0	110	50		
	930 BORD	45 C	1245.0	1247.60	11.0	2847 D	120		
	1470 POTS	29 PBI	1245.0	1247.8	25.0	96			
	3000 POTS	29 PBI	1245.0	1246.9	30.0	99			
	4995 ATHN	4 S/F	1245.3	1246.6	13.5D	87			
	2695 ATHN	4 S/F	1245.6	1246.6	12.5D	87			
	8800 ATHN	4 S/F	1245.6	1246.6	8.2	110			
	1415 ATHN	4 S/F	1245.6	1247.3	9.7D	88			
	536 ONDR	45 C	1245.8	1246	4.5	117	23		
	9500 POTS	29 PBI	1246.0	1246.4	32.0	95			
	808 ONDR	4 S/F	1246.0		5.0	636 D	289		
	10715 DWIN	1 S	1246.0	1247	5.0	40	20		
	430 KRAK	46 C	1246.3	1246.5	3.5	400	20		
	810 KRAK	47 GB	1246.5	1248.5	6.0	1000 D	160		
	810 KRAK	40 F	1256.5		4.0	7	3		
	808 ONDR	41 F	1302.5	1308.8	25.0	74	17		
	810 KRAK	48 C	1303.0	1305.0	29.0	150	40		
	536 ONDR	41 F	1307.0	1314.5	43.0	20	3		
	930 BORD	46 C	1307.0	1308	2.7	91	15		
	10715 DWIN	1 S	1337.0	1337.5	1.0	10	5		
	8800 ATHN	4 S/F	1337.1	1337.6	2.2	27			
	1470 POTS	1 S	1337.5	1337.8	1.0	2.7			
	9500 POTS	3 S	1337.5	1337.7	1.5	18			
	3000 POTS	3 S	1337.5	1337.7	2.5	35			
	808 ONDR	42 SER	1337.5	1345.2	8.0	323			
	4995 ATHN	8 S	1337.6	1337.8	1.4D	08			
	2695 ATHN	8 S	1337.6	1337.8	1.9D	02			
	930 BORD	42 SER	1337.6	1345.3	8.4	178	2		
	810 KRAK		1338.3	1342.5		400			
	810 KRAK	42 SER	1338.3	1338.5	8.2	600			
	2800 OTTA	21 GRF	1345.0	1530	250.0	14.0	7.2		
	810 KRAK		1346.3	1346.3		1000 D			
	15400 SGMR	4 S/F	1346.5	1352.8	12.3	16			
	8800 ATHN	4 S/F	1348.6	1355.1	18.7	35			
	2800 OTTA	3 S	1349.0	1355	11.0D	15.4			
	4995 SGMR	4 S/F	1349.3	1355.3	9.5D	17			
	3200 BERN	1 S	1349.8	1354.5	34.0	.0			
	8400 BERN	1 S	1349.9	1355.0	26.0	18.0			
	11800 BERN	1 S	1349.9	1355.0	26.0	13.0			
	5200 BERN	1 S	1349.9	1355.6	34.0	18.0			
	3000 POTS	21 GRF	1350.0	1354.5	20.0	19			
	2695 SGMR	4 S/F	1350.3	1353.1	7.8D	17			
	4995 ATHN	4 S/F	1351.3	1355.0	16.0D	18			
	2695 ATHN	4 S/F	1351.8	1354.8	11.8D	13			
	9500 POTS	25 R	1352.0	1355	18.0	17			
	8800 SGMR	4 S/F	1352.1	1355.1	6.7D	21			
	930 BORD	8 S	1449.4	1449.5	.2	20	2		
	8800 SGMR	8 S	1501.3	1501.8	1.8D	18			
	15400 SGMR	8 S	1501.3	1501.5	.3D	09			
	245 SGMR	8 S	1501.5	1501.5	.3	44			
	2800 OTTA	1 S	1505.0	1505.3	2.5	9.4	4.0		
	930 BORD	41 F	1556.8	1557.6	.8	44	2		
	930 BORD	41 F	1602.3	1602.4	.4	164	2		
	2800 OTTA	240 R	1805.0	1840	35.0	4.6	2.3		
	2800 OTTA	27AFRF	1950.0		150.0	4.6	3.9		
	2800 OTTA	24 R	1950.0	2005	15.0	4.6	2.3		
	2800 OTTA	2 S/F	1952.0	1954.5	5.0	9.2	4.8		
	2695 PALE	8 S	1953.6	1955.6	2.0	19			
	2800 OTTA	24P R	2005.0		105.0	4.6			
	2800 OTTA	26 FAL	2150.0	2220	30.0	-4.6	-2.3		
	1000 TYKW	45 C	2333.3	2333.5	.7	17	5		
	3750 TYKW	21 GRF	2340.0	2410	50.0	5	2		
	9400 TYKW	21 GRF	2345.0	2410	45.0	4	2		
05	100 GORK	44 NS	0509.0E		231.0D		5		V2
	200 GORK	44 NS	0510.0E		410.0D		5		
	127 TORN	44 NS	0600.0E	0921.5	540.0D	22000	4		
	260 ONDR	44 NS	0810.0E		370.0D	24			
	245 SGMR	43 NS	1127.0	1520.3	599.0D	130			
	245 LEAR	43 NS	2309.8	0703.3	671.2D	320			
	1000 TYKW	45 C	0003.0E	0003.4	.6D	19	4 D		
	2000 TYKW	5 S	0019.0	0019.4	1.0	1	.3		
	9400 TYKW	5 S	0019.0	0019.4	1.0	3	1		
	3750 TYKW	5 S	0019.0	0019.4	1.0	1.5	.5		
	3750 TYKW	20 GRF	0035.0	0050	35.0	3.5	1		
	3750 TYKW	40 F	0138.8	0139.0	1.6	15	4.5		
	1000 TYKW		0138.8	0139.0		-8			
	1000 TYKW	40 F	0138.8	0139.7	1.6	12	1		
	3750 TYKW		0138.8	0139.0		15			
	1000 TYKW		0138.8	0139.7		12			
	3750 TYKW		0138.8	0139.8		-2.5			

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
						$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$			
			UT	UT	MINUTES	PEAK	MEAN		
05	3750 TYKW		0138.8	0140.2		5			
	2000 TYKW	45 C	0138.9	0139.1	1.6	12	5		
	9400 TYKW	45 C	0139.5	0141.2	2.5	10	3		
	1000 TYKW	8 S	0209.1	0209.2	.3	4.5	1.5		
	9400 TYKW	5 S	0221.0	0221.3	1.0	4	1.5		
	3750 TYKW	5 S	0248.0	0250.5	6.0	2	1		
	2000 TYKW	5 S	0248.0	0250.5	6.0	2	1		
	9400 TYKW	5 S	0302.8	0302.9	1.0	8	2		
	3750 TYKW	5 S	0303.0	0305.5	5.0	36	11		
	4995 LEAR	8 S	0305.1	0305.3	.7	36			
	8800 LEAR	8 S	0305.1	0305.6	.9	17			
	2695 LEAR	8 S	0305.3	0305.3	.2	20			
	3750 TYKW	29 PBI	0308.0		10.0	5	2		
	2000 TYKW	29 PBI	0308.0		10.0	1	.5		
	245 LEAR	8 S	0311.3	0311.6	.5	330			
	9400 TYKW	5 S	0327.7	0328.3	1.5	7	3		
	3750 TYKW	5 S	0339.0	0341	5.0	2	1		
	1000 TYKW	45 C	0402.1	0402.3	.4	17	5		
	2000 TYKW	45 C	0411.0	0417.5	11.0	2	1		
	9400 TYKW	5 S	0414.0	0419.6	11.0	4	2		
	3750 TYKW	45 C	0416.0	0419.7	8.0	2.5	1		
	17000 NOBE	20 GRF	0416.0	0529.4	134.0	18			0
	1000 TYKW	45 C	0421.0	0421.2	.4	11	3		
	3750 TYKW	21 GRF	0430.0	0516	110.0	14	6		
	3750 TYKW	5 S	0431.0	0432.2	10.0	4	1.5		
	2000 TYKW	21 GRF	0435.0	0516	90.0	8	3		
	3750 TYKW	45 C	0447.0	0455.1	15.0	10	3		
	9400 TYKW	20 GRF	0450.0	0523	90.0	17	7		
	2000 TYKW	5 S	0451.0	0455	10.0	2.5	1		
	3750 TYKW	5 S	0505.0	0506.6	6.0	12	3		
	1000 TYKW	5 S	0506.0	0506.7	1.5	57	8		
	2000 TYKW	5 S	0506.0	0506.7	3.0	8	1.5		
	8800 LEAR	8 S	0506.0	0506.3	1.0	22			
	4995 LEAR	8 S	0506.1	0506.5	.5	22			
	2695 LEAR	8 S	0506.1	0506.5	.5	20			
	15400 LEAR	8 S	0506.1	0506.5	1.4	18			
	410 LEAR	8 S	0506.3	0506.8	.8	52			
	606 LEAR	8 S	0506.3	0506.6	.5	44			
	1415 LEAR	8 S	0506.3	0506.5	.3	30			
	9100 GORK	23 GRF	0635.5	0848.6	330.0E	54			
	4995 ATHN	4 S/F	0706.0	0807.5	62.6D	57			
	2950 GORK	20 GRF	0715.0	0724.0	24.0	5	2		
	11800 BERN	22 GRF	0740.0	0900.1	180.0	45.0			
	5200 BERN	22 GRF	0740.0	0807.7	180.0	40.0			
	8400 BERN	22 GRF	0740.0	0859.1	180.0	40.0			
	3200 BERN	22 GRF	0740.0	0839.3	180.0				
	2950 GORK	20 GRF	0742.8	0745.0	14.0	3	1		ONLY PAPER REC
	3000 POTS	22 GRF	0755.0	0928.5	205.0	35			
	9500 POTS	22 GRF	0757.0	0832.5	228.0	41			
	2950 GORK	20 GRF	0759.0	0836.0	240.0E	13			
	4995 ATHN	4 S/F	0806.0	0807.5	2.6D	57			
	6100 KISV	45 C	0806.0	0807.8	5.0	46			
	8800 ATHN	4 S/F	0806.5	0807.0	4.0	35			
	4995 LEAR	4 S/F	0806.8	0807.6	4.3	53			
	9100 GORK	1 S	0806.9	0807.4	1.4	23	12		
	8800 LEAR	8 S	0807.3	0807.6	.5	29			
	3100 CRIM	45 C	0807.5	0808.0	4.0	3			
	3100 CRIM		0807.5	0810.0		5	2		
	15400 LEAR	8 S	0814.6	0816.3	2.0	20			
	15400 LEAR	47 GB	0826.0	0846.5	24.5	52			
	3100 CRIM	20 GRF	0829.0	0840.0	21.0	8	3		
	9100 GORK	2 S/F	0829.4	0832.3	4.0	16			
	8800 LEAR	47 GB	0829.8	0842.1	16.8	35			
	4995 LEAR	47 GB	0830.5	0842.1	18.8	26			
	2695 LEAR	47 GB	0836.3	0838.3	5.2	15			
	11800 BERN	3 S	1046.3	1109.9	65.0	14.0			
	8400 BERN	3 S	1046.3	1109.8	65.0	17.0			
	5200 BERN	3 S	1046.3	1109.9	65.0	14.0			
	3200 BERN	2 S/F	1046.3	1109.8	65.0				ONLY PAPER REC
	15000 KISV	4 S/F	1101.0	1106	10.0	16			
	3100 CRIM	1 S	1108.0	1109.5	3.0	7	2		
	9100 GORK	1 S	1108.5	1109.7	3.0	15	7		
	430 KRAK	8 S	1157.0	1157.2	.5	430			
	536 ONDR	8 S	1157.2	1157.2	.3	35			
	810 KRAK	8 S	1157.2	1157.2	.1	13			
	5200 BERN	47 GB	1245.0	1346.5	150.0	508.0			
	35000 BERN	47 GB	1245.0	1346.5	150.0U	2125.0			
	19600 BERN	47 GB	1245.0	1346.5	150.0U	3484.0			
	3200 BERN	47 GB	1245.0	1346.5	150.0				
	8400 BERN	47 GB	1245.0	1346.5	150.0U	1320.0			ONLY PAPER REC
	11800 BERN	47 GB	1245.0	1346.5	150.0U	2061.0			
	430 KRAK	8 S	1337.7	1337.7	.5	70			
	536 ONDR	41 F	1338.0	1348.3	18.0	21	6.5		
	606 SGMR	8 S	1338.3	1338.5	.3	38			
	410 SGMR	8 S	1338.3	1338.5	.3D	33			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
05	4995 ATHN	47 GB	1340.6	1346.6	52.4D	650			
	10715 DWIN	47 GB	1341.0		27.0	320		D	
	8800 ATHN	47 GB	1342.5	1346.5	50.6	1300			
	1415 ATHN	4 S/F	1343.0	1346.6	26.1D	74			
	2695 ATHN	4 S/F	1343.3	1346.6	25.8D	250			
	430 KRAK	47 GB	1343.7	1346.7	9.5	2000	15		
	3000 POTS	45 C	1344.0	1346.6	26.0	250			
	2650 DWIN	45 C	1344.0	1346	20.0	250	100		
	2800 OTTA	46F C	1344.0	1346.5	18.0	312.0	84.0		
	810 KRAK	45 C	1344.5	1351.0	13.5	30	12		
	260 ONDR	46 C	1345.0	1349.4	7.5	202	37		
	9500 POTS	45 C	1345.0	1346.6	40.0	1330			
	1470 POTS	45 C	1345.0	1347.0	15.0	73			
	228 HARS	45 C	1345.1	1348.7	6.7	400	30	D	
	234 POTS	42 SER	1345.4	1348.9	6.1	1000	15		III
	113 POTS	42 SER	1345.5	1349.5	21.0	280	5		III
	127 TORN	42 SER	1346.0	1349.2	10.0	380			
	2800 OTTA	29 PBI	1402.0	1402	90.0	17.6			
	808 ONDR	41 F	1445.0	1451.2	10.0	22	14		
	2800 OTTA	4 S/F	1545.0	1545.8	2.0	10.0	5.0		
	2800 OTTA	20 GRF	1600.0	1610	30.0	4.4	2.2		
	2800 OTTA	21 GRF	1635.0	1653	65.0	7.0	3.8		
	2800 OTTA	8 S	1636.9	1637	.5	5.6	2.8		
	15400 SGMR	8 S	1638.6	1640.1	1.7	33			
	2800 OTTA	4 S/F	1639.0	1640	2.5	20.0	9.6		
	2800 OTTA	240 R	1851.0	1853	2.0	5.6	2.8		
	2695 PALE	4 S/F	1931.0	1937.0	29.1	11			
	4995 PALE	4 S/F	1932.6	1937.3	29.4	10			
	8800 PALE	4 S/F	1934.0	1937.0	28.0	20			
	2800 OTTA	2 S/F	1934.0	1936	10.0	5.6	2.8		
	15400 PALE	4 S/F	1941.3	1946.6	21.7	38			
	2695 PENT	20 GRF	2015.0	2103	80.0	8.2	4.1		
	2695 PENT	20 GRF	2140.0	2200	40.0	4.4	2.2		
	9400 TYKW	20 PRE	2225.0	2227.4	7.0	40	18		
	3750 TYKW	20 PRE	2225.0	2227.6	7.0	10	3		
	17000 NOBE	7 C	2225.6	2226.5	3.2	214			
	15400 LEAR	4 S/F	2226.0	2226.5	3.5	110			R
	8800 PALE	4 S/F	2226.1	2227.3	2.9	43			
	15400 PALE	4 S/F	2226.1	2226.5	2.7	139			
	17000 NOBE	29 PBI	2228.9	2228.9	3.4	22			
	8800 PALE	47 GB	2231.5	2233.0	11.1	3100			
	2695 PENT	3 S	2232.0	2233.2	4.0	104.0	35.0		
	35000 NAGO	5 S	2232.0U	2233 U	3.4	310		U	
	9400 TYKW	47 GB	2232.0	2233.0	10.0	2540	220		
	3750 TYKW	5 S	2232.0	2233.2	8.0	340	60		
	4995 PALE	47 GB	2232.3	2233.1	8.0	680			
	15400 PALE	47 GB	2232.3	2233.0	8.2	4000			
	8800 LEAR	47 GB	2232.3	2232.8	3.5	2100			
	4995 LEAR	47 GB	2232.3	2233.0	6.2	730			
	2695 LEAR	8 S	2232.3	2233.1	11.3	139			
	17000 NOBE	47 GB	2232.4	2233.0	4.8	3420			
	2000 TYKW	5 S	2232.5	2233.2	2.5	17	7		R
	15400 LEAR	47 GB	2232.5	2232.8	2.6	3800			
	2695 PALE	4 S/F	2232.6	2233.1	4.5	119			
	2000 TYKW	30 PBI	2235.0		40.0	4	2		
	2695 PENT	29 PBI	2236.0	2236	9.0	14.4	7.2		
	17000 NOBE	29 PBI	2237.2	2237.3	57.0	41			
	3750 TYKW	30 PBI	2240.0		35.0	17	7		
	9400 TYKW	30 PBI	2242.0		30.0	24	6		
	3750 TYKW	45 C	2259.0	2303.3	7.0	10	3		
	2000 TYKW	45 C	2301.0	2304.6	6.0	5	2		
	9400 TYKW	45 C	2302.6	2303.2	3.0	14	5		
	1000 TYKW	45 C	2303.0	2303.9	3.0	13	2.5		
	4995 LEAR	8 S	2315.1	2315.8	1.2	18			
	8800 LEAR	8 S	2315.3	2315.6	1.2	11			
	3750 TYKW	5 S	2315.4	2315.9	1.5	7	2.5		
	9400 TYKW	45 C	2315.5	2315.8	1.5	14	4		
	2000 TYKW	5 S	2315.5	2315.9	1.0	2	.7		
	1000 TYKW	8 S	2315.9	2316.0	.2	4.5	1.5		
	35000 NAGO	23 GRF	2320.0	2332	450.0D	20			
	1000 TYKW	5 S	2329.5	2329.7	.5	10	3		
	17000 NOBE	20 GRF	2335.5	2340.8	40.0	18			
	9400 TYKW	45 C	2340.0	2347.5	20.0	23	9		
	8800 LEAR	4 S/F	2340.0	2347.6	16.8	30			
	15400 LEAR	4 S/F	2340.0	2348.8	19.0	27			
	3750 TYKW	45 C	2341.0	2347.6	18.0	10	3		
	4995 LEAR	4 S/F	2341.5	2347.6	6.3	17			
	15400 LEAR	8 S	2341.8	2342.6	.3	22			
	8800 LEAR	8 S	2342.0	2342.8	.1	17			
06	200 GORK	44 NS	0545.0E		231.0D		10		
	100 GORK	44 NS	0546.0E		230.0D		5		
	204 IZMI	44 NS	0600.0E		360.0D	100			
	127 TORN	44 NS	0640.0E	0733.0	260.0D	1000	5		V2
	260 ONDR	44 NS	0820.0E		346.0D	51	4		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1980

DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
						PEAK	MEAN		
06	3750 TYKW	28 PRE	0020.0	0131.2	197.0	30	14		
	9400 TYKW	28 PRE	0025.0	0147.5	190.0	100	35		
	2000 TYKW	28 PRE	0050.0	0205	170.0	8	5		
	17000 NOBE	21 GRF	0057.9		315.0				
	17000 NOBE	1 S	0057.9	0101.2		27			Ø
	17000 NOBE	3 S	0057.9	0147.4		36			L
	8800 LEAR	4 S/F	0058.0	0147.8	158.0	110			
	15400 LEAR	4 S/F	0058.0	0147.3	158.0	100			
	4995 LEAR	4 S/F	0058.6	0147.8	158.4	32			
	2695 LEAR	4 S/F	0109.3	0109.6	80.7	13			
	35000 NAGO	21 GRF	0110.0	0300	147.0	126			
	1000 TYKW	21 GRF	0110.0	0153	120.0	4.5	1.5		
	1000 TYKW	28 PRE	0310.0	0330	34.0	3	1.5		
	9400 TYKW	47 GB	0335.0	0345.8	80.0	5000	350		
	5730 IRKU		0336.0	0355.7		650			R
	5730 IRKU		0336.0	0346.5		2900			R
	5730 IRKU	47 GB	0336.0	0341.5	30.0	160			R
	17000 NOBE	49 GB	0336.4	0345.5	62.0	6600			L
	3750 TYKW	47 GB	0337.0	0345.9	73.0	2370	230		
	2000 TYKW	47 GB	0340.0	0346.3	70.0	1130	120		
	35000 NAGO	5 S	0340.0	0341	3.0	208			
	35000 NAGO	47 GB	0343.0	0345	29.0	4350			
	1000 TYKW	47 GB	0344.0	0346.3	58.0	1300	80		
	35000 NAGO	29 PBI	0412.0	0416	150.0D	220			
	5730 IRKU	21 GRF	0420.0	0424.7	16.0	250			R
	17000 NOBE	30 PBI	0438.4	0439.1	68.0	92			Ø
	3750 TYKW	30 PBI	0450.0		60.0	33	17		
	9400 TYKW	29 PBI	0455.0		55.0	70	30		
	3750 TYKW	5 S	0500.0	0502.4	7.0	7	3		
	17000 NOBE	1 S	0503.0	0503.2	1.5	18			Ø
	9100 GORK	23 GRF	0520.0E	0659.5	120.0D	40			
	650 GORK	23 GRF	0548.0E	0653.5	199.0D	7			
	15000 KISV	1 S	0620.0	0706.5	2.0	12			
	9100 GORK		0620.7	0623.0		13			
	9100 GORK	45 C	0620.7	0621.4	3.7	17			
	2950 GORK	21 GRF	0624.0	0659.0	180.0E	17			
	3100 CRIM		0625.0	0628.0		22			
	3100 CRIM	45 C	0625.0	0626.2	5.0	31	10		
	6100 KISV		0626.0	0627.5		9			
	6100 KISV	8 S	0626.0	0620.5	5.0	13			
	2000 TYKW	45 C	0626.5	0627.5	7.0	24	6		
	1000 TYKW	45 C	0626.5	0627.5U	7.0U	22	7	U	
	3750 TYKW	45 C	0626.5	0627.5	6.0	30	8		
	950 GORK	45 C	0626.5	0627.5	5.4	21			
	950 GORK		0626.5	0629.5		17			
	650 GORK	45 C	0626.7	0627.5	4.3	23			
	650 GORK		0626.7	0629.5		13			
	650 GORK	45 C	0626.7	0627.9		24			
	2950 GORK		0626.7	0629.0		20			
	2950 GORK	45 C	0626.7	0627.4	4.7	23			
	9400 TYKW	45 C	0627.0	0627.4	4.0	16	4		
	6100 KISV	4 S/F	0646.0	0651	14.0	72			
	5200 BERN	3 S	0646.6	0650.9	60.0	234.0			
	35000 BERN	3 S	0646.9	0651.0	10.0D	390.0			
	8400 BERN	3 S	0646.9	0650.9	15.0D	992.0			
	11800 BERN	3 S	0646.9	0650.9	15.0D	1271.0			
	19600 BERN	3 S	0646.9	0650.9	15.0D	874.0			
	3200 BERN	3 S	0647.0	0651.0	60.0	.0			ONLY PAPER REC
	9100 GORK	3 S	0648.0	0651.0	6.2	1060			
	3750 TYKW	45 C	0648.0	0651.0	8.0	190	33		
	9400 TYKW	47 GB	0648.0	0651.0	8.0	1040	120		
	2950 GORK	4 S/F	0648.3	0651.0	5.5	130			
	5730 IRKU	2 S	0648.4	0651.1	9.0	180			R
	3100 CRIM	47 GB	0649.0	0651.0	23.0	224	70		
	2000 TYKW	5 S	0650.5	0651.0	2.0	11	3		
	3100 CRIM	26 FAL	0712.0	1100.0		24			
	17000 NOBE	45 C	0750.1	0751.0	3.4	647			R
	234 POTS	42 SER	0751.2	0751.4	2.2	100	1		
	17000 NOBE	29 PBI	0753.5	0753.6	14.0	28			R
	234 POTS	41 F	0810.5	0810.5	1.4	12500	300		III
	113 POTS	41 F	0810.5	0812.1	1.4	2800	150		III
	204 IZMI	8 S	0810.6	0810.6	.5	3000	2000		
	204 IZMI	8 S	0812.0	0812.0	.3	3000	2000		
	3200 BERN	1 S	0815.0	0853.1	127.0	.0			ONLY PAPER REC
	5200 BERN	1 S	0815.0	0853.2	127.0	10.0			
	3100 CRIM	20 GRF	0850.0	0853.0	17.0	7	2		
	15000 KISV	1 S	0915.0	0915.5	1.0	24			
	430 KRAK	8 S	0924.5	0924.6	.3	600			
	15000 KISV		0950.0	0952		26			
	15000 KISV	45 C	0950.0	0950.7	5.0	26			
	6100 KISV	8 S	1054.0	1054.5	1.0	30			
	6100 KISV	1 S	1059.0	1059.2	1.0	17			
	6100 KISV	45 C	1108.5	1109	1.5	9			
	113 POTS	4 S/F	1117.0	1117.4	.4	100	10		III
	3200 BERN	4 S/F	1222.0	1416.2	150.0	.0			ONLY PAPER REC

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SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
06	11800 BERN	4 S/F	1222.0	1416.3	150.0	180.0			
	5200 BERN	4 S/F	1222.0	1416.3	150.0	133.0			
	8400 BERN	4 S/F	1230.0	1416.3	140.0	229.0			
	19600 BERN	4 S/F	1411.0	1416.5	150.0	78.0			
	10715 DWIN	1 S	1412.0	1416	8.0	70	30		
	3000 POTS	3 S	1412.5	1416.0	13.0	51			
	9500 POTS	3 S	1413.0	1416.0	12.0	154			
	2650 DWIN	1 S	1415.0	1416	3.0	35	20		
	2800 OTTA		1415.0E	1416.3	30.0D	51.0			
	2800 OTTA	21 GRF	1415.0E	1642	435.0D	30.0			
	3200 BERN	46 C	1452.0	1508.2	40.0D	.0			
	5200 BERN	46 C	1453.5	1508.3	40.0D	301.0U			ONLY PAPER REC
	11800 BERN	46 C	1457.0	1503.2	40.0D	373.0U			
	35000 BERN	46 C	1457.0	1501.0U	7.0U	151.0U			
	19600 BERN	46 C	1457.0	1503.1	40.0U	261.0U			
	8400 BERN	46 C	1457.0	1503.2	40.0D	424.0U			
	2800 OTTA	46F C	1457.0	1508.4	25.0	284.0	75.0		
	2650 DWIN	45 C	1500.0	1508	15.0	200	100		
	10715 DWIN	45 C	1500.0	1504	20.0	120	50		
	2800 OTTA	30 PBI	1522.0	1522	60.0	33.0	16.0		
	2800 OTTA	4 S/F	1530.5	1532	10.0	30.0	14.0		
	2800 OTTA	1 S	1602.0	1605	6.0	9.8	5.0		
	2800 OTTA	8 S	1759.0	1759	.2	45.0			
	2800 OTTA	1 S	1817.5	1818	2.0	3.4	1.2		
	2800 OTTA	21 GRF	1915.0	2000	90.0	18.6	9.3		
	2800 OTTA	3 S	1916.0	1922	18.0	20.8	10.0		
	2800 OTTA	4 S/F	1936.0	1943.5	20.0	37.2	18.0		
	2800 OTTA	4 S/F	2025.5	2025.7	1.8	13.6	10.2		
	2800 OTTA	240 R	2150.0	2210	20.0	10.6	7.0		
	9400 TYKW	45 C	2212.0E	2231.0	23.0D	112	27 D		
	17000 NOBE	7 C	2218.6	2219.1	11.9	50			
	3750 TYKW	45 C	2219.0E	2231.0	16.0D	90	12 D		
	17000 NOBE	7 C	2230.5	2230.7	10.5	46			
	9400 TYKW	30 PBI	2235.0		87.0	23	12		
	3750 TYKW	30 PBI	2235.0		95.0	13	7		
	9400 TYKW	45 C	2319.0	2320.4	4.0	26	4		
	3750 TYKW	45 C	2319.5	2320.4	2.5	18	3.5		
	3750 TYKW	29 PBI	2322.0		18.0	3	1.5		
07	200 GORK	44 NS	0518.0E		352.0D		10		
	204 IZMI	43 NS	0600.0E		360.0D	25			
	127 TORN	44 NS	0650.0E	0812.6	290.0D	130 U	15		V1
	113 POTS	44 NS	0700.0	0905	220.0D	40			
	245 LEAR	43 NS	0754.0	0845.1	147.0D	74			
	260 ONDR	44 NS	0813.0E		362.0D	18	4		
	245 SGMR	43 NS	1130.0	1248.1	594.0D	170			
	3750 TYKW	28 PRE	0027.0	0150.7	95.0	38	12		
	9400 TYKW	5 S	0033.0	0035	7.0	8	3		
	2000 TYKW	28 PRE	0035.0	0150.7	88.0	12	3		
	1000 TYKW	5 S	0039.0	0045	26.0	3	1.5		
	9400 TYKW	28 PRE	0103.0	0123.4	57.0	40	12		
	8800 LEAR	4 S/F	0122.3	0123.3	2.5	43			
	4995 LEAR	8 S	0122.8	0123.3	.8	19			
	15400 LEAR	8 S	0123.1	0123.3	.5	13			
	1000 TYKW	5 S	0132.2	0132.4	.7	2.5	1		
	17000 NOBE	21 GRF	0134.9	0331.8	265.0	9			
	15400 LEAR	8 S	0136.1	0136.3	.2	26			
	2695 PALE	4 S/F	0137.1	0139.0	3.0	26			
	2695 LEAR	8 S	0138.1	0139.1	1.7	26			
	4995 LEAR	8 S	0138.3	0139.0	.8	22			
	4995 PALE	8 S	0138.3	0139.0	.8	25			
	8800 LEAR	8 S	0138.8	0139.0	.3	23			
	8800 PALE	8 S	0138.8	0139.0	.2	22			
	2695 PALE	47 GB	0142.3	0204.6	17.7	1199			
	4995 PALE	47 GB	0144.1	0204.6	15.9	5000			
	8800 PALE	47 GB	0144.3	0204.6	68.7	10000			
	8800 LEAR	47 GB	0145.1	0204.6	76.0	7100			
	15400 LEAR	47 GB	0145.5	0204.6	87.8	4800			
	4995 LEAR	47 GB	0145.5	0204.6	72.3	6300			
	35000 NAGO	20 GRF	0150.0	0313	112.0	18			
	17000 NOBE	47 GB	0158.9	0204.7	14.3	2490			
	2930 VORO	45 C	0200.0	0208	55.0	272			
	9400 TYKW	47 GB	0200.0	0204.8	70.0	7300	250		
	8800 MANI	47 GB	0201.6	0205.5	14.9	6900			
	15400 PALE	47 GB	0201.8	0204.6	51.2	3500			
	4995 MANI	47 GB	0202.0	0205.5	14.0D	4700			
	3750 TYKW	47 GB	0202.0	0204.8	65.0	2850	140		
	1000 TYKW	45 C	0203.0	0215.6	50.0	7	1.5		
	2000 TYKW	45 C	0203.0	0204.8	10.0	375	90		
	2695 LEAR	47 GB	0203.1	0204.6	33.5	1100			
	2695 MANI	47 GB	0203.5	0205.1	14.0D	1100			
	606 MANI	4 S/F	0203.5	0206.1	7.0D	25			
	1415 MANI	4 S/F	0204.0	0205.6	13.0D	19			
	1415 PALE	4 S/F	0204.0	0205.6	4.1	49			
	35000 NAGO	5 S	0204.0	0205	3.0	430			

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
07	1415 LEAR	4 S/F	0204.1	0205.5	2.7	43			
	35000 NAGO	29 PBI	0207.0	0209	53.0	103			
	2000 TYKW	30 PBI	0213.0		57.0	30	12		
	17000 NOBE	29 PBI	0213.2	0213.3	60.0	144			
	2000 TYKW	31 ABS	0310.0	0350	80.0	-7	-3		
	9400 TYKW	31 ABS	0310.0	0320	50.0	-10	-4		
	3750 TYKW	31 ABS	0310.0	0325	60.0	-8	-3		
	9400 TYKW	45 C	0329.0	0333.7	11.0	18	3		
	3750 TYKW	45 C	0333.0	0333.7	10.0	14	1.5		
	1000 TYKW	5 S	0334.5	0334.8	1.5	3.5	1.2		
	2000 TYKW	5 S	0334.5	0334.7	1.5	7	2		
	9400 TYKW	45 C	0352.0	0356	8.0	20	6		
	3750 TYKW	45 C	0354.0	0355.8	10.0	4	1		
	8800 LEAR	8 S	0355.6	0355.8	.2	21			
	9400 TYKW	45 C	0406.0	0458	115.0	30	12		
	1000 TYKW	45 C	0409.5	0409.8	1.0	12	2.5		
	3750 TYKW	21 GRF	0410.0	0458	120.0	14	7		
	3750 TYKW	5 S	0418.0	0424	15.0	6	2		
	35000 NAGO	20 GRF	0419.0	0455	91.0	30			
	2000 TYKW	20 GRF	0430.0	0457	90.0	4	1.5		
	17000 NOBE	20 GRF	0443.8	0457.5	23.0	18			
	9400 TYKW	45 C	0516.3	0516.8	5.0	23	5		
	6100 KISV	27 RF	0654.0	0700	10.0	12			
	2950 GORK	21 GRF	0659.00	0731.0	139.00	16			
	11800 BERN	22 GRF	0711.5	0726.5	180.00	64.00			
	5200 BERN	22 GRF	0711.5	0725.8	185.0	45.0			
	8400 BERN	22 GRF	0711.5	0726.5	180.00	56.00			
	3200 BERN	22 GRF	0711.5	0726.3	185.0	.0			ONLY PAPER REC
	1470 POTS	40 F	0719.0	0732.5	19.0	9.1			
	3000 POTS	40 F	0719.0	0726.7	9.0	18			
	4995 ATHN	4 S/F	0720.5	0726.5	15.5D	61			
	6100 KISV	46 C	0723.0	0726	5.0	45			
	9500 POTS	29 PBI	0724.0	0726.5	33.0	29			
	15000 KISV	45 C	0724.0	0726.5	5.0	23			
	5730 IRKU	21 GRF	0724.0	0726.0	9.0	145			L
	4995 LEAR	4 S/F	0724.0	0725.8	16.6	57			
	8800 LEAR	47 GB	0724.0	0726.3	17.1	58			
	2950 GORK	1 S	0725.5	0726.5	1.5	10	5		
	650 GORK		0725.5	0726.6		47			
	650 GORK	40 F	0725.5	0726.2	2.2	47			
	2695 LEAR	8 S	0725.6	0726.6	1.0	21			
	8800 ATHN	4 S/F	0726.0	0726.5	4.0	43			
	950 GORK	4 S/F	0726.0	0726.5	1.5	18			
	930 BORD	46 C	0726.0	0726.6	2.0	48	2		
	15400 LEAR	8 S	0726.3	0726.3	.2	20			
	2695 ATHN	8 S	0726.8	0727.5	1.3D	00			
	245 LEAR	8 S	0731.6	0732.3	1.0	46			
	6100 KISV	8 S	0747.8	0748	.5	19			
	245 LEAR	8 S	0752.8	0753.1	.7	33			
	9500 POTS	29 PBI	0808.0	0808.3	37.0	15			
	5730 IRKU	2 S	0836.8	0840.2	4.0	670			L
	5730 IRKU	29 PBI	0841.0		21.0	210			L
	15000 KISV	1 S	0859.5	0900	1.0	10			
	410 LEAR	4 S/F	0908.8	0910.0	2.8	21			
	9100 GORK	21 GRF	0935.3	1136.2	130.0	20			
	9500 POTS	29 PBI	0935.5	0936.7	25.0	119			
	9100 GORK	3 S	0935.8	0936.7	3.2	130	66		
	10715 DWIN	1 S	0936.0	0937	2.0	40	20		
	8800 ATHN	8 S	0936.0	0936.8	2.0	139			
	2695 ATHN	8 S	0936.1	0936.8	1.9D	13			
	15400 LEAR	8 S	0936.3	0936.8	.7	76			
	4995 ATHN	8 S	0936.3	0936.8	1.7D	28			
	8800 LEAR	8 S	0936.3	0936.8	.8	110			
	4995 LEAR	8 S	0936.6	0936.8	.4	20			
	200 GORK	4 S/F	0938.8	0943.5	7.8	35	D		
	9100 GORK	1 S	1007.5	1007.8	.7	20	10		
	8800 ATHN	4 S/F	1007.8	1008.0	4.7	35			
	10715 DWIN	1 S	1008.0	1008.5	1.0	10	5		
	9500 POTS	29 PBI	1008.0	1008.4	9.0	21			
	11800 BERN	20 GRF	1010.0	1134.7	140.00	26.0			
	5200 BERN	20 GRF	1018.0	1135.3	140.0	44.0			
	3200 BERN	20 GRF	1018.0	1140.0	140.0	.0			ONLY PAPER REC
	8400 BERN	20 GRF	1018.0	1134.7	140.00	40.0			
	9500 POTS	29 PBI	1132.5	1135.0	53.0	28			
	9100 GORK	2 S/F	1132.9	1134.7	2.8	20			
	5200 BERN	21 GRF	1242.5	1434.2	165.00	107.0			
	11800 BERN	21 GRF	1242.5	1434.1	165.00	259.0D			
	3200 BERN	21 GRF	1242.5	1434.1	165.00	.0			ONLY PAPER REC
	8400 BERN	21 GRF	1242.5	1434.1	165.00	253.0D			
	19600 BERN	21 GRF	1242.5	1434.1	165.00	153.0D			
	15400 SGMR	4 S/F	1256.1	1257.3	6.9D	67			
	2695 SGMR	4 S/F	1256.1	1259.1	8.0D	13			
	4995 SGMR	4 S/F	1256.8	1259.1	7.2D	40			
	8800 SGMR	4 S/F	1257.0	1258.1	6.5D	50			
	10715 DWIN	21 GRF	1257.0	1258	55.0	15	8		

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING	TIME OF	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
				TIME	MAXIMUM		$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$			
				UT	UT	MINUTES	PEAK	MEAN		
07	9500	POTS	29	PBI	1257.0	1258.0	58.0	30		
	3000	POTS	29	PBI	1257.0	1259.5	63.0	15		
	1415	SGMR	4	S/F	1259.0	1259.3	3.0	11		
	1470	POTS	3	S	1259.5	1300.0	1.0	10		
	536	ONDR	42	SER	1407.5	1409.2	7.0	24		
	410	SGMR	4	S/F	1409.0	1415.1	7.0D	32		
	930	BORD	42	SER	1409.0	1409.2	5.0	224	2	
	15400	SGMR	4	S/F	1411.8	1414.1	4.2	90		
	8800	SGMR	4	S/F	1412.0	1414.1	4.0D	49		
	8800	ATHN	8	S	1412.0	1434.5U	22.5D	450		
	10715	DWIN	21	GRF	1412.0		60.0		20	
	9500	POTS	21	GRF	1412.5	1414.1	33.0D	31		
	4995	SGMR	4	S/F	1412.8	1413.8	3.2D	47		
	4995	ATHN	8	S	1412.8	1434.3U	21.5D	119		
	606	SGMR	8	S	1413.6	1413.6	.2D	160		
	2800	OTTA	21	GRF	1415.0	1440	105.0	27.5	8.0	
	2695	ATHN	8	S	1425.3	1439.8U	14.3D	24		
	15400	SGMR	4	S/F	1430.3	1434.1	11.7D	130		
	8800	SGMR	4	S/F	1431.0	1434.1	10.0D	360		
	2695	SGMR	4	S/F	1432.6	1434.1	8.4	19		
	4995	SGMR	4	S/F	1433.0	1434.1	9.0D	110		
	2800	OTTA	3	S	1433.0	1434	3.0	14.0	7.0	
	10715	DWIN	3	S	1433.0	1434	7.0	90	40	
	9500	POTS	3	S	1433.0	1433.7	7.0	195		
	3000	POTS	29	GRF	1433.0	1433.8	7.0D	28		
	930	BORD	41	F	1438.6	1439.1	.5	14	2	
	2800	OTTA	1	S	1525.5	1526.5	3.5	6.2	3.1	
	2695	SGMR	4	S/F	1535.8	1537.0	4.2D	77		
	4995	SGMR	4	S/F	1535.8	1537.0	4.2D	70		
	606	SGMR	47	GB	1535.8	1536.0	2.8D	2000		
	1415	SGMR	4	S/F	1535.8	1537.3	6.2D	36		
	8800	SGMR	4	S/F	1535.8	1536.8	4.2D	39		
	15400	SGMR	4	S/F	1535.8	1536.6	3.2D	19		
	2800	OTTA	4	S/F	1536.0	1537	6.0	71.0	20.0	
	930	BORD	45	C	1536.0	1536.2	5.0	288	5	
	410	SGMR	8	S	1536.8	1537.0	.3D	70		
	245	SGMR	47	GB	1539.5	1542.1	4.6	520		
	2800	OTTA	20	GRF	1610.0	1630	50.0	5.6	3.4	
	4995	SGMR	8	S	1713.0	1713.1	2.0	18		
	4995	SGMR	47	GB	1723.0	1737.1	23.5D	130		
	15400	SGMR	47	GB	1723.1	1727.6	15.9D	200		
	8800	SGMR	47	GB	1723.3	1727.6				

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
08	4995 PALE	4 S/F	0118.6	0119.6	6.9	75			
	4995 LEAR	4 S/F	0118.6	0119.5	8.9	77			
	3750 TYKW	29 PBI	0129.0		70.0	7	2.5		
	9400 TYKW	29 PBI	0130.0		15.0	7	3		
	9400 TYKW	5 S	0157.5	0158.8	7.0	43	10		
	8800 LEAR	4 S/F	0158.1	0158.8	2.5	53			
	17000 NOBE	1 S	0158.2	0158.7	3.0	20			
	8800 PALE	8 S	0158.5	0158.8	.6	45			
	15400 PALE	8 S	0158.6	0158.6	.2	28			
	15400 LEAR	8 S	0158.6	0158.6	.4	28			
	3750 TYKW	21 GRF	0310.0	0323	155.0	5	2.5		
	2000 TYKW	20 GRF	0310.0	0355	130.0	2.5	1		
	9400 TYKW	5 S	0325.0	0325.8	2.0	7	2		
	3750 TYKW	45 C	0341.5	0345.2	28.0	15	4		
	9400 TYKW	5 S	0344.0	0350	20.0	6	3		
	4995 LEAR	4 S/F	0344.6	0345.1	9.7	27			
	8800 LEAR	4 S/F	0348.8	0350.1	2.3	21			
	3750 TYKW	20 GRF	0418.0	0425	32.0	5.5	2.5		
	9400 TYKW	45 C	0418.0	0420	15.0	13	6		
	17000 NOBE	1 S	0422.3	0422.9	3.0	9			
	3750 TYKW	45 C	0455.0	0500.5	45.0	12	4		
	9400 TYKW	45 C	0456.0	0504	45.0	15	5		
	9400 TYKW	45 C	0544.5	0545.6	6.0	36	8		
	9100 GORK	2 S/F	0544.5	0545.4	4.0	30			
	6100 KISV	45 C	0650.0	0718	40.0	140			
	6100 KISV	29 PBI	0650.0	0730	40.0	70			
	2950 GORK	21 GRF	0655.6	0745.0	275.0E	14			
	15000 KISV	45 C	0711.0	0718	12.0	107			
	100 GORK	8 S	0712.5	0712.6	.4	150	D		
	113 POTS	42 SER	0712.6	0713.0	3.7	550	5		III
	19600 BERN	20 GRF	0713.0	0717.1	9.0U	83.0			
	11800 BERN	20 GRF	0713.0	0718.1	72.0U	96.0			
	8400 BERN	20 GRF	0713.0	0718.1	72.0	81.0			
	9100 GORK		0714.2	0717.9		75			
	9100 GORK		0714.2	0719.0		56			
	5200 BERN	20 GRF	0714.2	0719.3	72.0	54.0			
	9100 GORK	46 C	0714.2	0716.7	6.3	60			
	3200 BERN	20 GRF	0715.0	0719.2	72.0	.0			ONLY PAPER REC
	4995 ATHN	4 S/F	0715.5	0718.1	7.5D	61			
	15400 LEAR	47 GB	0716.1	0717.3	4.0	100			
	4995 LEAR	47 GB	0716.5	0719.3	8.0	52			
	9500 POTS	4 S/F	0716.5	0718.5	3.5	42			
	8800 ATHN	4 S/F	0716.6	0718.3	12.4	64			
	8800 LEAR	4 S/F	0716.6	0718.1	5.9	79			
	9100 GORK	29 PBI	0720.0	0720.5		30			
	6100 KISV	3 S	0830.0	0831.5	4.0	7			
	8400 BERN	4 S/F	0845.6	0902.6	55.0	124.0			
	11800 BERN	4 S/F	0845.6	0902.1	55.0	83.0			
	6100 KISV	1 S	0847.5	0848	1.0	8			
	3200 BERN	4 S/F	0851.5	0902.6	103.0	.0			ONLY PAPER REC
	5200 BERN	4 S/F	0851.6	0902.6	103.0	93.0			
	6100 KISV	46 C	0856.0	0902.7	8.0	130			
	2950 GORK	3 S	0900.9	0905.5	5.0	85			
	10715 DWIN	2 S/F	0901.0	0902	3.0	20	10		
	2650 DWIN	4 S/F	0901.0	0903	5.0	100	50		
	15000 KISV		0901.0	0902.7		23			
	15000 KISV	45 C	0901.0	0902.2	3.0	24			
	9100 GORK	30 PBI	0901.3	0902.7	147.0E	29			
	9100 GORK	4 S/F	0901.3	0902.0	1.4	90			
	3000 POTS	4 S/F	0901.5	0903.0	3.5	108			
	9500 POTS	3 S	0901.5	0902.7	3.0	44			
	8800 LEAR	4 S/F	0901.6	0902.6	3.0	73			
	2695 ATHN	4 S/F	0901.8	0903.1	4.2D	96			
	4995 ATHN	4 S/F	0901.8	0902.8	2.7D	110			
	2695 LEAR	4 S/F	0901.8	0902.8	2.8	110			
	8800 ATHN	4 S/F	0901.8	0902.3	2.3	88			
	1415 ATHN	4 S/F	0901.8	0902.8	4.7D	27			
	4995 LEAR	8 S	0901.8	0902.3	1.5	88			
	950 GORK	1 S	0902.0	0903.0	6.3	2	1		
	1470 POTS	3 S	0902.0	0903.0	4.0	30			
	1415 LEAR	8 S	0902.3	0902.8	1.3	26			
	6100 KISV	29 PBI	0905.0	0905	15.0	20			
	6100 KISV	4 S/F	0922.0	0923	1.5	10			
	9100 GORK	1 S	0922.1	0922.7	1.6	12	6		
	810 KRAK	8 S	0928.3U	0928.3U	.5U	180			
	8400 BERN	47 GB	1030.0	1335.0U	300.0U	2509.0D			
	11800 BERN	47 GB	1030.0	1334.8	300.0U	11500.0			
	5200 BERN	47 GB	1030.0	1335.0U	300.0U	908.0D			
	3200 BERN	47 GB	1030.0	1335.0U	300.0U	.0			ONLY PAPER REC
	536 ONDR	8 S	1042.4	1042.4	.2	56			
	3000 POTS	20 GRF	1100.0	1150	142.0	24			
	9500 POTS	23 GRF	1101.0	1243	139.0	37			
	9100 GORK		1120.0	1124.9		58			
	9100 GORK	46 C	1120.0	1121.4	9.1	20			
	2650 DWIN	1 S	1121.0	1121.5	1.0	15	10		

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
						PEAK	MEAN		
08	8800 ATHN	4 S/F	1121.3	1125.3	7.3	38			
	15000 KISV	8 S	1121.5	1115.1	.5	18			
	650 GORK	1 S	1123.1	1123.7	.6	3			
	200 GORK	4 S/F	1123.8	1124.2	1.5	50	D		
	100 GORK		1123.9	1125.7	16.0	165			
	100 GORK		1123.9	1126.9		190			
	100 GORK	41 F	1123.9	1124.2	3.2	190	D		
	430 KRAK	8 S	1124.0	1124.2	.5	450			
	15000 KISV	8 S	1125.0	1125.2	1.0	60			
	2650 DWIN	8 S	1125.0			40			
	536 ONDR	4 S/F	1149.2	1149.2	1.0	56			
	430 KRAK	42 SER	1235.7	1246.2	11.5	1000	U		
	410 SGMR	4 S/F	1243.1	1244.1	2.4	150			
	606 SGMR	8 S	1244.1	1245.1	1.9D	37			
	234 POTS	4 S/F	1257.6	1258.0	.4	200		20	III
	33 UPIC	45 C	1333.5	1333.6U	1.4				
	29 UPIC	45 C	1333.5	1333.6	.6				
	2650 DWIN	47 GB	1334.0		50.0	420	D		
	10715 DWIN	47 GB	1334.0		50.0	320	D		
	15400 SGMR	47 GB	1334.1	1336.5	10.4D	8600			
	8800 ATHN	47 GB	1334.5	1335.6U	1.1D	7100			
	4995 ATHN	47 GB	1334.5	1335.6U	1.1D	1600			
	19600 BERN	47 GB	1334.5	1334.8	115.0U	14300.0			
	35000 BERN	47 GB	1334.5	1335.4	115.0U	10539.0			
	9500 POTS	45 C	1334.5	1335.4	51.0D	6000			
	3000 POTS	45 C	1334.5		51.0D	300	D		
	2695 ATHN	47 GB	1334.6	1336.8U	2.2D	1100			
	2800 OTTA	47 GB	1334.7	1337	15.3	1084.0		226.0	
	808 ONDR	46 C	1334.7	1336.6	14.0	172		72	
	2695 SGMR	47 GB	1334.8	1335.6	18.3D	2200			
	4995 SGMR	47 GB	1334.8	1335.3	17.0D	1800			
	8800 SGMR	47 GB	1334.8	1335.5	15.8D	9200			
	536 ONDR	45 C	1335.2	1335.2	1.5	208		26	
	1415 SGMR	4 S/F	1335.3	1336.6	13.5D	97			
	1470 POTS	45 C	1335.5	1336.9	50.0D	700			
	606 SGMR	47 GB	1335.6	1335.8	8.9D	1199			
	1415 ATHN	47 GB	1335.6	1336.8U	1.2D	820			
	930 BORD	45 C	1335.6	1337	25.0	559		150	
	810 KRAK	49 GB	1337.3	1338.2	22.5	700		80	
	245 SGMR	8 S	1338.5	1339.6	2.0	270			
	2800 OTTA	30 PBI	1350.0	1350	130.0	75.0		18.6	
	234 POTS	42 SER	1351.4	1400.1	12.0	300		1	E
	430 KRAK	42 SER	1404.0	1415.2	21.5	1100	U		
	245 SGMR	8 S	1416.5	1417.0	1.3	130			
	606 SGMR	8 S	1416.5	1416.6U	.1D	100.0	U		
	2650 DWIN	42 SER	1447.0	1453	10.0	420		100	
	930 BORD	46 C	1447.0	1449.8	13.0	241		14	
	606 SGMR	47 GB	1447.1	1447.6	.5D	2500			
	2695 SGMR	47 GB	1447.5	1452.3U	4.8D	1100			
	2800 OTTA	41 SER	1447.9	1452.3	8.1	700.0			
	2800 OTTA	3 S	1447.9	1448.1	1.0	26.2		9.0	
	4995 SGMR	4 S/F	1449.3	1452.1	9.5D	250			
	1415 SGMR	4 S/F	1449.3	1452.3	8.7D	110			
	8800 SGMR	4 S/F	1449.5	1452.3	5.1D	210			
	2800 OTTA	4 S/F	1449.6	1450	1.5	83.0		31.0	
	15400 SGMR	4 S/F	1451.8	1455.1	3.7	210			
	2800 OTTA	4 S/F	1452.0	1452.3	4.0	465.0		54.0	
	410 SGMR	8 S	1452.1	1452.6	1.7D	210			
	245 SGMR	8 S	1453.1	1453.1	.9D	150			
	10715 DWIN	2 S/F	1457.0	1458	2.0	70		30	
	2800 OTTA	22 GRF	1610.0	1740	190.0	10.8		5.4	
	4995 SGMR	4 S/F	1727.1	1728.8	6.4D	68			
	8800 SGMR	8 S	1728.3	1728.8	1.7	18			
	2800 OTTA	21 GRF	1955.0	2010	90.0	10.8		4.6	
	2695 SGMR	4 S/F	1956.5	2000.1	8.0D	33			
	2800 OTTA	3 S	1957.0	1959.7	5.0	34.0		15.0	
	4995 SGMR	4 S/F	1957.1	1959.1	6.7D	85			
	8800 SGMR	4 S/F	1957.6	1959.1	5.4D	98			
	15400 SGMR	4 S/F	1958.0	1959.1	3.0	13			
	4995 PALE	4 S/F	1958.3	1959.3	2.5	75			
	8800 PALE	8 S	1958.8	1959.1	.8	82			
	2695 PALE	4 S/F	1958.8	2000.1	2.2	36			
	8800 PALE	8 S	2006.3	2006.6	.5	24			
	15400 PALE	8 S	2008.1	2009.3	.2	23			
	2695 PENT	1 S	2014.5	2015.6	5.0	6.8		3.0	
	2000 TYKW	20 GRF	2240.0	2246	50.0	11		3.5	
	3750 TYKW	21 GRF	2240.0	2248	50.0	7		3.5	
	9400 TYKW	21 GRF	2240.0	2305	70.0	6		3	
	3750 TYKW	5 S	2302.0	2303.4	5.0	5		2	
	9400 TYKW	45 C	2331.0	2332.3	5.0	30		6	
	8800 PALE	8 S	2332.1	2332.3	.4	31			
	3750 TYKW	21 GRF	2340.0	2350	50.0	5		2	
09	200 GORK	44 NS	0530.0E		349.0D		5		
	260 ONDR	44 NS	0810.0E		360.0D	19			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
09	245 SGMR	43 NS	1132.0	1514.8	589.0D	170			
	3750 TYKW	45 C	0008.0	0010.3	13.0	5	2		
	9400 TYKW	5 S	0054.0	0100.6	14.0	22	7		
	3750 TYKW	45 C	0055.0	0058.7	8.0	26	10		
	2000 TYKW	45 C	0056.0	0057.1	7.0	23	10		
	1000 TYKW	45 C	0056.0	0100	15.0	4	1.5		
	2695 LEAR	47 GB	0056.5	0057.0	4.3	28			
	2695 PALE	8 S	0056.6	0057.1	.7	29			
	1415 LEAR	47 GB	0056.8	0058.8	.3	13			
	17000 NOBE	20 GRF	0056.8	0100.4	56.0	18			0
	15400 LEAR	4 S/F	0059.3	0100.3	2.8	23			
	8800 LEAR	4 S/F	0059.3	0100.3	3.3	25			
	8800 PALE	8 S	0059.8	0100.5	.8	25			
	2695 PALE	8 S	0059.8	0100.3	.8	24			
	4995 PALE	8 S	0100.0	0100.3	.5	22			
	4995 LEAR	8 S	0100.1	0100.3	.4	23			
	15400 PALE	8 S	0100.3	0100.8	.3	23			
	2000 TYKW	29 PBI	0103.0		40.0	5	2		
	3750 TYKW	30 PBI	0103.0		55.0	10	5		
	9400 TYKW	30 PBI	0108.0		50.0	6	2.5		
	3750 TYKW	45 C	0115.0	0116.1	10.0	6	2		
	9400 TYKW	5 S	0115.0	0116	5.0	5	2		
	9400 TYKW	5 S	0121.2	0121.4	1.0	6	2		
	9400 TYKW	5 S	0136.0	0136.7	5.0	6	2		
	9400 TYKW	5 S	0153.5	0154.2	3.0	3	1		
	17000 NOBE	25 R	0200.0	0414.2		26			0
	3750 TYKW	21 GRF	0202.0	0435	280.0	27	13		
	2000 TYKW	21 GRF	0203.0	0430	280.0	19	9		
	9400 TYKW	21 GRF	0205.0	0440	280.0	26	13		
	3750 TYKW	20 GRF	0205.0	0210	30.0	5	2.5		
	9400 TYKW	45 C	0235.0	0236.2	13.0	38	10		
	17000 NOBE	7 C	0235.7	0236.2	4.0	38			L
	8800 LEAR	8 S	0235.8	0236.1	.7	33			
	15400 LEAR	47 GB	0235.8	0236.1	5.0	56			
	3750 TYKW	20 GRF	0238.0	0245	35.0	6	3		
	2000 TYKW	20 GRF	0239.0	0258	40.0	4	2		
	1000 TYKW	21 GRF	0250.0	0430	170.0	4	2		
	2000 TYKW	20 GRF	0321.0	0333	30.0	7	3		
	3750 TYKW	21 GRF	0321.0	0332	32.0	6	1.5		
	3750 TYKW	5 S	0322.0	0323.7	5.0	4	1.5		
	9400 TYKW	5 S	0330.0	0332	10.0	4	2		
	2695 LEAR	4 S/F	0330.1	0336.0	9.2	23			
	8800 LEAR	47 GB	0330.3	0331.8	9.0	23			
	1415 LEAR	47 GB	0330.5	0331.8	8.0	13			
	4995 LEAR	47 GB	0333.3	0334.5	4.7	20			
	15400 LEAR	47 GB	0333.6	0336.1	2.7	32			
	9400 TYKW	5 S	0343.5	0344.0	1.5	4	1.5		
	9400 TYKW	5 S	0346.5	0347.0	1.5	5	1.5		
	9400 TYKW	5 S	0349.0	0349.8	3.0	5.5	2		
	9400 TYKW	5 S	0353.5	0354.8	6.0	6	2.5		
	3750 TYKW	45 C	0355.0	0416.0	38.0	31	9		
	2000 TYKW	20 GRF	0400.0	0412	30.0	11	5		
	9400 TYKW	45 C	0402.0	0416.3	22.0	16	8		
	4995 LEAR	47 GB	0402.3	0416.0	20.0	59			
	8800 LEAR	47 GB	0403.0	0427.8	36.0	100			
	2695 LEAR	47 GB	0406.1	0413.0	14.2	37			
	15400 LEAR	47 GB	0409.3E	0427.1	32.8D	59			
	1000 TYKW	45 C	0415.4	0415.7	1.5	34	5		
	9400 TYKW	45 C	0425.0	0427.8	13.0	65	10		
	9400 TYKW	45 C	0446.0	0447.4	10.0	10	2.5		
	35000 NAGO	20 GRF	0456.0	0501	52.0	10			
	9400 TYKW	5 S	0457.0	0459.3	10.0	15	4		
	9400 TYKW	45 C	0515.0	0517.9	12.0	11	2.5		
	3750 TYKW	5 S	0516.0	0517.9	8.0	32	5		
	1000 TYKW	45 C	0517.0	0517.6	2.0	142	45		
	2000 TYKW	45 C	0517.0	0517.7	2.0	53	15		
	1415 LEAR	47 GB	0517.3	0517.6	.8	3700			
	4995 LEAR	8 S	0517.3	0517.8	1.0	33			
	2695 LEAR	8 S	0517.3	0518.0	.8	22			
	2000 TYKW	29 PBI	0519.0		10.0	2	1		
	9100 GORK	23 GRF	0523.0E		360.0D				
	2950 GORK	20 GRF	0524.0E	0528.5	360.0E	19			
	9400 TYKW	45 C	0532.0	0535.5	7.0	11	4		
	3750 TYKW	5 S	0533.0	0536	6.0	3	1		
	9400 TYKW	5 S	0541.0	0544.3	8.0	46	8		
	650 GORK	22 GRF	0541.4U	0803.9	203.0U	16			
	9100 GORK	3 S	0543.0	0544.3	4.0	40	20		
	8800 ATHN	4 S/F	0543.6	0544.6	3.4	44			
	4995 ATHN	4 S/F	0543.6	0544.6	3.2D	25			
	8800 LEAR	8 S	0543.8	0544.1	1.5	53			
	3750 TYKW	5 S	0544.0	0544.5	5.0	6	2		
	4995 LEAR	8 S	0544.1	0544.1	.2	16			
	3750 TYKW	5 S	0606.0	0608	6.0	8	3		
	1000 TYKW	5 S	0606.0	0607	4.0	5	1.5		
	245 LEAR	8 S	0720.6	0720.8	.2	17			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
						PEAK	MEAN		
09	5200 BERN	20 GRF	0725.5	0818.5	235.0	19.0			ONLY PAPER REC
	3200 BERN	20 GRF	0725.5	0818.5	235.0	.0			
	8400 BERN	20 GRF	0725.5	0818.5	235.0	15.0			
	9100 GORK	1 S	0734.9	0735.7	1.7	11			
	234 POTS	4 S/F	0756.0	0756.8	.1	170	5	20	
	410 LEAR	8 S	0802.5	0802.6	.1	16			
	4995 LEAR	8 S	0818.3	0818.3	.2	15			
	650 GORK	22 GRF	1021.5	1117.4	68.0E	14			
	100 GORK		1021.8	1022.6		4900			
	100 GORK	46 C	1021.8	1022.1	1.3	1300 D			
	29 UPIC	45 C	1021.8	1021.9U	1.2				
	200 GORK	4 S/F	1021.9	1022.2	1.3	50 D			
	113 POTS	4 S/F	1022.1	1022.3	.6	850	70		
	33 UPIC	45 C	1022.5	1022.7	.6				
	15000 KISV	8 S	1152.0	1152.4	1.0	16			
	2800 OTTA	1 S	1455.5	1456	1.0	5.0	2.5		
	2800 OTTA	21 GRF	1605.0	1725	370.0	26.0	8.6		
	2800 OTTA	1 S	1615.8	1616.5	2.0	9.4	5.7		
	2695 PENT	8 S	1703.0	1703.1	.3	5.0			
	2800 OTTA	3 S	1713.5	1715	8.0	56.0	14.0		
	2695 PALE	4 S/F	1715.1	1725.1	11.2	59			
	1415 PALE	4 S/F	1715.1	1725.8	12.9	18			
	4995 PALE	4 S/F	1715.1	1725.8	11.9	47			
	15400 PALE	4 S/F	1715.5	1725.8	20.6	67			
	8800 PALE	4 S/F	1715.6	1727.6	13.0	76			
	15400 SGMR	4 S/F	1758.0	1759.8	2.6	52			
	8800 SGMR	4 S/F	1758.1	1758.8	3.9D	32			
	15400 PALE	8 S	1758.6	1759.8	1.5	73			
	8800 PALE	8 S	1759.8	1759.8	.3	37			
	8800 SGMR	4 S/F	1911.0	1911.8	2.6	11			
	2800 OTTA	1 S	1911.0	1912	3.0	3.8			
	4995 SGMR	4 S/F	1912.8	1911.8	2.2D	15			
	2800 OTTA	1 S	1918.5	1920	3.0	4.4	2.2		
	2695 PENT	21 GRF	2118.0	2135	35.0	4.6	2.4		
	2695 PENT	1 S	2144.0	2146	9.0	5.4	2.5		
	4995 PALE	8 S	2145.5	2146.1	1.0	26			
	1000 TYKW	5 S	2333.8	2334.1	.6	6	2		
10	245 LEAR	43 NS	0516.0	0802.3	307.0	43			ONLY PAPER REC
	200 GORK	44 NS	0532.0E		401.0D		5		
	260 ONDR	44 NS	0804.0E		357.0D	50	3		
	100 GORK	43 NS	0926.0		166.0E		15		
	245 SGMR	43 NS	1134.0	1256.6	586.0D	130			
	2000 TYKW	20 GRF	0003.0	0010.3	50.0	14	4		
	3750 TYKW	20 GRF	0007.0	0010.2	50.0	12	4		
	9400 TYKW	20 GRF	0007.0	0015	60.0	12	6 U		
	1000 TYKW	45 C	0008.0	0018.3	15.0	13	1.5		
	8800 LEAR	4 S/F	0008.1	0012.8	4.7	26			
	4995 LEAR	8 S	0008.8	0010.1	.3	16			
	2695 LEAR	8 S	0009.8	0010.1	.5	16			
	245 LEAR	8 S	0030.1	0030.3	.2	139			
	3750 TYKW	5 S	0117.0	0124	25.0	5	2		
	9400 TYKW	5 S	0120.0	0123	20.0	4	2		
	3750 TYKW	21 GRF	0143.0	0210.3	60.0	10	3.5		
	9400 TYKW	5 S	0148.0	0151.5	10.0	7	2		
	9400 TYKW	5 S	0203.0	0218	25.0	10	3.5		
	15400 PALE	4 S/F	0258.6	0259.1	4.0	40			
	17000 NOBE	7 C	0258.7	0259.2	3.2	61			
	35000 NAGO	5 S	0259.0	0259	3.0	4			
	9400 TYKW	5 S	0259.0	0259.3	4.0	33	17		
	3750 TYKW	45 C	0259.0	0306.8	30.0	15	6		
	15400 LEAR	8 S	0259.0	0259.1	1.8	57			
	17000 NOBE	29 PBI	0301.9	0301.9	10.0	13			
	9400 TYKW	29 PBI	0303.0		20.0	13	6		
	245 LEAR	8 S	0304.8	0305.0	2.0	180			
	3750 TYKW	21 GRF	0338.0	0340	95.0	5	3		
	2000 TYKW	5 S	0356.0	0356.6	3.0	2	.5		
	3750 TYKW	5 S	0356.0	0356.5	3.0	14	4		
	2000 TYKW	20 GRF	0400.0	0410	60.0	2	1		
	245 LEAR	8 S	0400.3	0400.5	.3	139			
	3750 TYKW	45 C	0406.0	0408.4	20.0	13	4		
	9400 TYKW	21 GRF	0413.0	0445	70.0	10	5		
	3750 TYKW	5 S	0438.0	0440.2	20.0	4	1.5		
	9400 TYKW	5 S	0439.0	0440.2	4.0	8	2		
	650 GORK	20 GRF	0537.2	0551.8	36.2	12	4		
	100 GORK	8 S	0705.7	0705.8	.8	100			
	6100 KISV	1 S	0711.0	0714.3	15.0	5			
	2950 GORK	21 GRF	0755.0	0939.0	260.0E	36			
	9100 GORK	21 GRF	0758.0	0915.0	260.0D	44			
	950 GORK	4 S/F	0758.1	0808.3	12.3	53			
	15000 KISV	27 RF	0802.0	0942		46			
	3200 BERN	20 GRF	0803.7	0808.0	130.0	.0			
	5200 BERN	1 S	0804.0	0808.0	125.0	64.0			
	8400 BERN	1 S	0804.0	0807.8	125.0	65.0			
	11800 BERN	1 S	0804.0	0820.3	125.0	64.0			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
10	3100 CRIM	3 S	0804.0	0807.5	8.0	93	31		
	3000 POTS	29 PBI	0804.5	0807.6	41.0	92			
	9500 POTS	29 PBI	0805.0	0810	25.0	37			
	2950 GORK	3 S	0805.0	0808.0	3.8	80			
	810 KRAK	8 S	0805.5	0805.7	.3	100			
	930 BORD	45 C	0805.6	0808.3	5.0	59			
	1470 POTS	4 S/F	0806.0	0808.5	4.0	60			
	9100 GORK	4 S/F	0806.1	0808.2	7.8	40			
	4995 LEAR	4 S/F	0806.5	0807.8	10.0	59			
	810 KRAK	2 S/F	0806.5	0808.0	2.0	40			
	650 GORK	4 S/F	0806.7	0808.0	3.6	28			
	2695 LEAR	4 S/F	0806.8	0807.3	2.5	88			
	200 GORK	4 S/F	0806.9	0808.6	3.0	50	D		
	8800 LEAR	4 S/F	0807.0	0808.1	18.3	55			
	260 ONDR	4 S/F	0807.0	0808.2	2.0	155		57	
	1415 LEAR	8 S	0807.1	0808.1	1.9	75			
	410 LEAR	8 S	0807.3	0807.5	.3	37			
	234 POTS	4 S/F	0807.4	0808	1.2	850		35	III
	204 IZMI	4 S/F	0807.5	0808.5	2.0	350		170	
	245 LEAR	8 S	0807.5	0808.3	1.1	450			
	100 GORK	8 S	0808.4	0808.5	.4	120	D		
	3100 CRIM	29 PBI	0811.0	0812.0	29				
	6100 KISV	3 S	0818.0	0819.6	3.0	13			
	9100 GORK	1 S	0819.0	0819.8	1.8	12		6	
	6100 KISV	27 RF	0843.0	0919	89.0	29			
	4995 LEAR	4 S/F	0852.8	0853.8	8.2	33			
	6100 KISV	3 S	0853.0	0853.7	4.0	33			
	9500 POTS	20 GRF	0905.0	0935	65.0	19			
	3000 POTS	20 GRF	0918.0	0934	32.0	41			
	6100 KISV	3 S	0928.0	0928.6	1.5	13			
	3100 CRIM		0928.5	0933.0		19			
	3100 CRIM	45 C	0928.5	0930.0	9.0	10		6	
	2950 GORK	1 S	0930.0	0934.0	6.4	11			
	2695 LEAR	8 S	0931.1	0934.5	.2	22			
	4995 LEAR	47 GB	0932.3	0934.6	7.5	38			
	536 ONDR	45 C	1136.0	1140	7.0	429		84	
	3200 BERN	46 C	1136.1	1141.3	80.0	.0			ONLY PAPER REC
	19600 BERN	46 C	1136.1	1141.2	80.0	1111.0			
	35000 BERN	46 C	1136.1	1141.2	80.0	914.0			
	5200 BERN	46 C	1136.5	1141.3	80.0	370.0			
	11800 BERN	46 C	1136.5	1141.2	80.0	1270.0			
	8400 BERN	46 C	1136.5	1141.2	80.0	1029.0			
	2650 DWIN	45 C	1137.0	1140	10.0	210		100	
	3100 CRIM		1137.0	1144.0		123			
	3100 CRIM	47 GB	1137.0	1141.0	11.0	223		70	
	3100 CRIM		1137.0	1142.0		160			
	2950 GORK	45 C	1137.1	1139.0	10.6	66			
	2950 GORK		1137.1	1140.5		180			
	650 GORK		1137.2	1156.7		70			
	650 GORK	46 C	1137.2	1140.3	36.0E	4100			
	9500 POTS	29 PBI	1137.5	1141.3	143.0	1250			
	3000 POTS	29 PBI	1137.5	1140.5	143.0	200			
	1470 POTS	29 PBI	1137.5	1138.6	103.0	240			
	9100 GORK	46 C	1137.7	1141.3	3.9	1550			
	9100 GORK		1137.7	1143.8		600			
	950 GORK		1138.0	1156.8		210			
	950 GORK	46 C	1138.0	1140.0	31.0	140			
	10715 DWIN	45 C	1138.0		10.0	320	D		
	810 KRAK	47 GB	1138.0	1139.8	10.2	1000	D	130	
	808 ONDR	45 C	1138.0	1140	12.0	273		80	
	430 KRAK	47 GB	1138.0	1139.0	5.7	3600		700	
	260 ONDR	46 C	1138.5	1140.2	10.0	148		27	
	4995 ATHN	47 GB	1138.5	1141.5	9.0D	900			
	2695 ATHN	47 GB	1138.5	1140.3	9.0D	520			
	8800 ATHN	47 GB	1138.8	1141.5	8.7	990			
	1415 ATHN	4 S/F	1138.8	1140.8	8.7D	160			
	228 HARS	45 C	1138.8	1138.8U	3.8	570		200	
	100 GORK	46 C	1139.0	1140.3	3.2	20000			
	930 BORD	45 C	1139.0	1158	23.0	234		60	
	100 GORK		1139.0	1140.9		20000			
	204 IZMI	45 C	1139.0	1139.0	6.0	1700		700	
	113 POTS	45 C	1139.1	1139.4	2.0	1300		15	III
	234 POTS	4 S/F	1139.1	1139.1	2.1	1000		120	III
	200 GORK	41 F	1139.1	1140.3	20.0	1800			
	200 GORK		1139.1	1153.5		100			
	200 GORK		1139.1	1158.3		40			
	33 UPIC	46 C	1139.2	1140.8	5.9				
	29 UPIC	46 C	1140.1	1141	2.2				
	930 BORD		1141.3	1141.3		195			
	15000 KISV	47 GB	1143.0	1147.3		872			
	15000 KISV		1143.0	1149.8		344			
	15000 KISV		1143.0	1147		848			
	15000 KISV		1143.0	1146.4		777			
	6100 KISV	47 GB	1143.5	1147.4	12.0	742			
	6100 KISV		1143.5	1149.9		312			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
10	204 IZMI	41 F	1145.8	1147.5	8.0	140			
	3100 CRIM	29 PBI	1148.0	1148.0		15			
	536 ONDR	41 F	1148.0	1156.7	32.0	20			
	810 KRAK	4 S/F	1148.2	1157.0	14.0	300	7		
	800 ONDR	46 C	1149.5	1156	13.0	172	71		
	100 GORK	46 C	1150.4	1151.2	4.6	2000			
	100 GORK		1150.4	1152.2		2000			
	100 GORK		1150.4	1153.2		2050			
	930 BORD	PBI	1202.0	1235	34.0	46	4		
	810 KRAK	40 F	1202.2	1205.5	7.5	50	11		
	2800 OTTA	21 GRF	1245.0E	1320	160.0D	27.0			
	810 KRAK	2 S/F	1249.8	1250.0	1.5	20	5		
	930 BORD	41 F	1305.4	1305.9	.6	55	2		
	810 KRAK	41 F	1305.5	1306.0	1.3	50			
	810 KRAK	2 S/F	1317.5	1318.0	1.3	21	3		
	810 KRAK	8 S	1320.7	1320.7	.2	15			
	2650 DWIN	1 S	1335.0	1336	3.0	30	15		
	3000 POTS	3 S	1335.7	1336.6	2.8	46			
	2800 OTTA	3 S	1336.0	1337.5	2.5	27.4	7.0		
	2800 OTTA	1 S	1444.0	1445	3.0	8.8	4.8		
	2800 OTTA	23 GRF	1548.0	1710	145.0	15.2	6.4		
	15400 SGMR	4 S/F	1610.6	1611.6	2.2	66			
	2800 OTTA	1 S	1611.8	1612	1.0	3.8	2.0		
	2800 OTTA	1 S	1923.5	1924	3.0	2.8	1.4		
	9400 TYKW	45 C	2150.5U	2151.0	2.0U	43 U	10 U		
	15400 PALE	8 S	2150.6	2150.8	1.0	119			
	8800 PALE	8 S	2150.6	2150.8	.5	46			
	3750 TYKW	20 GRF	2240.0	2315	90.0	8	4		
	9400 TYKW	21 GRF	2240.0	2250	90.0	7	3		
	9400 TYKW	5 S	2304.0	2305	8.0	8	4		
	8800 PALE	4 S/F	2323.8	2325.6	3.2	24			
	9400 TYKW	5 S	2324.0	2325	5.0	12	5		
	9400 TYKW	5 S	2334.0	2336	7.0	4	2		
	4995 PALE	8 S	2351.6	2352.3	1.5	15			
	8800 PALE	4 S/F	2352.0	2352.5	3.3	33			
	15400 PALE	8 S	2352.0	2352.3	1.6	15			
	9400 TYKW	5 S	2352.0	2352.6	3.0	14	5		
11	260 ONDR	44 NS	0835.0E		315.0D	23			
	245 SGMR	43 NS	1617.3	1631.8	301.7	139			
	3750 TYKW	21 GRF	0015.0	0035	70.0	4	2		
	9400 TYKW	5 S	0044.5	0045.5	15.0	14	4		
	3750 TYKW	5 S	0045.0	0045.6	2.0	3.5	1		
	3750 TYKW	5 S	0113.0	0116	13.0	3	1.5		
	3750 TYKW	21 GRF	0210.0	0250	150.0	12	6		
	9400 TYKW	21 GRF	0210.0	0250	150.0	13	6		
	3750 TYKW	5 S	0216.0	0216.3	2.0	3	1		
	3750 TYKW	45 C	0220.0	0225	15.0	6	3		
	2000 TYKW	21 GRF	0220.0	0250	150.0	5	2.5		
	3750 TYKW	45 C	0236.0	0237.1	12.0	12	3.5		
	2000 TYKW	5 S	0236.5	0238.0	6.0	6	2		
	9400 TYKW	5 S	0236.5	0237.1	3.5	12	3		
	3750 TYKW	45 C	0305.0	0315.3	35.0	17	4		
	9400 TYKW	5 S	0325.0	0332	15.0	4	2		
	2000 TYKW	5 S	0330.0	0332	5.0	2	1		
	9400 TYKW	5 S	0345.0	0345.3	1.5	12	3		
	17000 NOBE	1 S	0345.0	0345.2	1.0	20			L
	3750 TYKW	5 S	0348.0	0352	35.0	11	3		
	9400 TYKW	45 C	0510.0	0515.9	35.0	19 U	6 U		
	17000 NOBE	25 R	0511.1	0535.5	120.0D	11			
	17000 NOBE	1 S	0514.9	0515.2	1.0	42			
	3750 TYKW	20 GRF	0515.0	0524	35.0	8	3		
	17000 NOBE	1 S	0521.0	0521.4	2.0	18			
	9100 GORK	23 GRF	0551.0	1018.0	369.0D	47			
	9100 GORK	3 S	0552.5	0553.0	1.3	50			
	9400 TYKW	5 S	0552.5U	0552.9	1.0U	40 U	10 U		
	17000 NOBE	1 S	0552.7	0553.0	2.0	33			
	9400 TYKW	21 GRF	0600.0	0640	50.0D	29	15 D		
	2000 TYKW	21 GRF	0600.0	0610	50.0D	12	8 D		
	3750 TYKW	21 GRF	0604.0	0610	50.0D	15	10 D		
	3100 CRIM	21 GRF	0604.0	0612.0	136.0	14			
	2950 GORK	21 GRF	0605.3	1012.0	340.0	30	5		
	9100 GORK	4 S/F	0625.3	0627.1	5.0	130			
	5730 IRKU	21 GRF	0625.3	0627.3	6.0	162			
	6100 KISV	4 S/F	0625.5	0627	5.0	100			R
	2950 GORK	3 S	0625.9	0627.3	4.0	41	20		
	15000 KISV	8 S	0626.0	0627.2	4.0	74			
	9400 TYKW	45 C	0626.0	0627.2	6.0	142	30		
	1000 TYKW	45 C	0626.0	0626.5	4.0	31	7		
	3750 TYKW	5 S	0626.0	0627.3	5.0	85	20		
	2000 TYKW	45 C	0626.0	0627.4	5.0	35 U	9		
	17000 NOBE	1 S	0626.3	0627.1	2.0	37			
	15400 LEAR	4 S/F	0626.3	0627.1	2.5	74			L
	3100 CRIM	3 S	0626.5	0627.5	5.0	57	29		
	245 LEAR	8 S	0644.5	0645.0	.6	99			

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
11	9100 GORK	1 S	0721.0	0721.6	2.0	18	9		
	15400 LEAR	8 S	0721.3	0721.6	.5	21			
	8800 LEAR	8 S	0721.5	0721.6	.3	24			
	3100 CRIM	1 S	0724.0	0724.5	2.0	17	5		
	11800 BERN	3 S	0724.1	0725.0	33.0	303.0			
	19600 BERN	3 S	0724.1	0725.0	33.0	873.0			
	35000 BERN	3 S	0724.1	0726.7	27.0	858.0			
	8400 BERN	3 S	0724.2	0725.0	54.0	138.0			
	5200 BERN	3 S	0724.2	0725.0	54.0	36.0			
	3200 BERN	3 S	0724.3	0724.7	54.0	.0			
	9100 GORK	3 S	0724.4	0724.8	5.0	150			ONLY PAPER REC
	9500 POTS	4 S/F	0724.4	0724.8	2.9	111			
	15400 LEAR	47 GB	0724.5	0724.8	4.6	460			
	4995 ATHN	8 S	0724.6	0724.8	1.5D	41			
	8800 LEAR	47 GB	0724.6	0724.8	.9	160			
	8800 ATHN	8 S	0724.6	0724.8	1.7	139			
	2695 ATHN	8 S	0724.6	0724.8	1.0D	07			
	2950 GORK	1 S	0724.7	0724.8	1.0	11	5		
	4995 LEAR	8 S	0724.8	0724.8	.3	40			
	2695 LEAR	8 S	0724.8	0724.8	.3	19			
	10715 DWIN	8 S	0725.0			40			
	113 POTS	4 S/F	0815.6	0816.0	1.1	5300	900		III/V
	33 UPIC	4 S/F	0815.6	0815.7	.8				
	29 UPIC	45 C	0815.9	0816.1	.7				
	35000 BERN	4 S/F	0840.0	0914.3	77.0	749.0			
	8400 BERN	4 S/F	0840.0	0914.3	77.0	1075.0			
	19600 BERN	4 S/F	0840.0	0914.3	77.0	499.0			
	11800 BERN	4 S/F	0840.0	0914.3	77.0	587.0			
	9100 GORK	2 S/F	0855.2	0856.2	3.4	30			
	1470 POTS	23 GRF	0856.0	1009	219.0	8.1			
	9500 POTS	3	0856.0	0856.3	3.0	25			
	5200 BERN	4 S/F	0903.8	0914.3	52.0	517.0			ONLY PAPER REC
	3200 BERN	4 S/F	0903.8	0914.3	52.0	.0			ONLY PAPER REC
	3000 POTS	23 GRF	0905.0	1100	211.0	18			
	9500 POTS	23 GRF	0905.0	0923	215.0	40			
	3100 CRIM	1 S	0905.0	0905.5	1.0	10	3		
	4995 ATHN	47 GB	0905.3	0914.3	43.0D	630			
	9100 GORK		0906.4	0915.9		260			
	9100 GORK	46 C	0906.4	0914.5	19.0	480			
	4995 LEAR	47 GB	0907.3	0914.3	24.3	650			
	8800 ATHN	47 GB	0907.5	0914.3	28.1	2100			
	3100 CRIM	28 RPE	0908.0	0910.0	4.0	5	2		
	15400 LEAR	47 GB	0910.8	0914.3	10.0	610			
	3100 CRIM	45 C	0911.0	0912.0	5.0	141	45		
	3100 CRIM		0911.0	0912.5		141			
	3100 CRIM		0911.0	0913.5		109			
	2695 ATHN	4 S/F	0911.6	0914.8	13.5D	130			
	2650 DWIN	45 C	0912.0	0915	7.0	120	80		
	10715 DWIN	45 C	0913.0	0915	7.0	300	100		
	3000 POTS	4 S/F	0913.0	0914.9	5.5	154			
	9500 POTS	4 S/F	0914.0	0914.4	5.0	830			
	2950 GORK		0914.0	0915.7		80			
	2950 GORK	45 C	0914.0	0914.8	4.0	110			
	8800 LEAR	47 GB	0914.0	0914.3	3.6	1500			
	1415 ATHN	4 S/F	0914.1	0915.1	2.5D	22			
	2695 LEAR	4 S/F	0914.1	0914.8	2.9	130			
	1470 POTS	4 S/F	0914.2	0915.6	2.8	38			
	1415 LEAR	8 S	0914.3	0915.6	2.0	36			
	3100 CRIM	29 PBI	0915.0	0915.0	19.0	14			
	536 ONDR	8 S	0935.0	0935	.2	20			
	3100 CRIM	20 GRF	0946.0	1004.2	66.0	41	13		
	19600 BERN	1 S	0958.0	1114.1	122.0	44.0			
	11800 BERN	1 S	0958.0	1008.6	122.0	51.0			
	8400 BERN	1 S	0958.0	1004.5	122.0	54.0			
	3200 BERN	1 S	0958.0	1005.2	122.0	.0			
	5200 BERN	1 S	0958.0	1005.2	122.0	62.0			ONLY PAPER REC
	15000 KISV	4 S/F	1000.0	1005.5	10.0	24			ONLY PAPER REC
	6100 KISV		1002.0	1013.5		26			
	6100 KISV	45 C	1002.0	1004.7	18.0	48			
	3000 POTS	29 PBI	1003.0	1005.5	22.0	45			
	9100 GORK		1003.0	1013.5		16			
	9100 GORK	45 C	1003.0	1004.4	12.0	50			
	9500 POTS	29 PBI	1003.5	1004.5	24.0	58			
	2950 GORK	3 S	1003.6	1005.8	8.0	20			
	4995 LEAR	4 S/F	1004.1	1005.6	6.5	48			
	8800 LEAR	4 S/F	1004.1	1005.0	5.7	52			
	2695 LEAR	4 S/F	1004.3	1005.6	5.8	37			
	15400 LEAR	4 S/F	1004.8	1005.6	5.0	25			
	9100 GORK	1 S	1041.5	1042.0	2.2	15			
	9500 POTS	3 S	1041.5	1041.5	2.5	38			
	9500 POTS	3 S	1053.5	1053.9	1.5	33			
	6100 KISV	3 S	1058.0	1100.8	5.0	21			
	260 ONDR	45 C	1058.0	1105	6.0	54	18		
	204 IZMI	7 C	1058.5	1050.7	1.5	155	75		
	228 HARS	45 C	1058.5	1059.5	2.4	370	110		

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING	TIME OF	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
			TIME	MAXIMUM	MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$			
			UT	UT		PEAK	MEAN		
11	127 TORN	45 C	1058.7	1100.8	3.0	1700	U		
	234 POTS	4 S/F	1059.1	1100.2	2.0	325			
	113 POTS	4 S/F	1059.2	1100.5	2.1	11000	300		III
	930 BORD	41 F	1059.4	1100.6	1.2	34	2		III
	1470 POTS	4 S/F	1100.0	1100.6	2.0	14			
	33 UPIC	45 C	1100.2	1101.1	1.2				
	29 UPIC	45 C	1100.4	1100.9	.9				
	930 BORD	41 F	1107.4	1107.6	.7	21	3		
	6100 KISV	3 S	1117.0	1118.5	4.0	16			
	9100 GORK	2 S/F	1117.7	1118.3	3.1	37			
	15000 KISV	4 S/F	1118.0	1118.5	6.0	21			
	9500 POTS	3 S	1118.2	1118.5	3.8	50			
	9500 POTS	3 S	1156.2	1157.1	2.8	23			
	9100 GORK	1 S	1157.0	1157.3	1.5	25			
	11800 BERN	3 S	1223.5	1225.5	13.5	174.0			
	35000 BERN	3 S	1223.5	1225.5	12.0	91.0			
	19600 BERN	3 S	1223.5	1225.5	12.0	135.0			
	8400 BERN	3 S	1223.5	1225.5	16.5	94.0			
	5200 BERN	3 S	1223.5	1225.6	18.0	13.0			
	10715 DWIN	1 S	1225.0	1226	2.0	45	20		
	9500 POTS	3 S	1225.0	1225.3	4.0	86			
	4995 ATHN	4 S/F	1225.1	1226.0	3.7D	00			
	15400 SGMR	8 S	1225.1	1225.3	1.2	110			
	8000 ATHN	4 S/F	1225.3	1225.8	3.2	100			
	3000 POTS	20 GRF	1302.0	1325	58.0	11			
	9500 POTS	20 GRF	1310.0	1320	35.0	6.7			
	2800 OTTA	20 GRF	1310.0	1325	90.0	10.2	5.2		
	9500 POTS	3 S	1402.5	1403.7	1.5	15			
	2800 OTTA	23 GRF	1441.0	1555	160.0	15.0	10.4		
	2800 OTTA	3 S	1504.0	1505	2.5	11.0	3.7		
	930 BORD	41 F	1504.1	1504.2	.7	51	2		
	245 SGMR	4 S/F	1507.5	1509.1	2.3	45			
	15400 SGMR	4 S/F	1517.0	1517.6	2.6	16			
	2800 OTTA	1 S	1519.5	1520	1.0	2.8	1.4		
	15400 SGMR	4 S/F	1545.6	1549.1	4.0	18			
	2800 OTTA	1 S	1638.5	1638.7	2.0	5.4	1.8		
	606 SGMR	8 S	1641.5	1641.6	1.1	17			
	2800 OTTA	1 S	1641.6	1642.5	2.5	6.0	3.0		
	2800 OTTA	21 GRF	1722.0	1845	310.0	10.8	5.4		
	2800 OTTA	4 S/F	1723.0	1724.3	8.0	405.0	42.0		
	15400 SGMR	4 S/F	1723.0	1724.1	4.8	220			
	1415 SGMR	4 S/F	1723.1	1724.1	6.0D	90			
	606 SGMR	4 S/F	1723.1	1725.8	3.7D	46			
	410 SGMR	47 GB	1724.1	1724.3	2.0D	2000			
	2800 OTTA	46F C	1738.8	1745.5	21.0	202.0	72.0		
	15400 SGMR	47 GB	1739.8	1744.0	20.5	45			
	606 SGMR	47 GB	1739.8	1743.6	18.8D	990			
	1415 SGMR	47 GB	1740.3	1746.5	18.0D	6800			
	245 SGMR	47 GB	1741.0	1742.6	13.3D	1500			
	410 SGMR	47 GB	1742.0	1742.6	17.0D	300			
	4995 PALE	8 S	2040.6	2040.8	1.2	28			
	2800 OTTA	20 GRF	2049.0	2056	80.0	18.4	9.2		
	3750 TYKW	45 C	2339.0	2341.0	35.0	35	U		
	9400 TYKW	45 C	2339.0	2341.0	35.0	55	U		
	1000 TYKW	45 C	2339.0	2340.7	4.0	60			
	2000 TYKW	45 C	2339.0	2403.8	35.0	30	U		
	8800 LEAR	4 S/F	2339.3	2341.0	2.5	78			
	4995 LEAR	8 S	2339.8	2341.0	2.0	50			
	8800 PALE	47 GB	2339.8	2341.0	11.0	71			
	4995 PALE	8 S	2340.3	2341.0	1.0	33			
	2695 LEAR	8 S	2340.6	2341.1	.9	32			
	2695 PALE	47 GB	2341.0	2341.1	.1	17			
	1000 TYKW	45 C	2353.0	2353.4	1.0	150	15		
12	200 GORK	43 NS	0845.0		192.0E		5		
	8800 LEAR	4 S/F	0002.8	0003.6	4.3	51			
	2695 LEAR	8 S	0003.3	0003.8	.5	36			
	1415 LEAR	8 S	0003.3	0004.0	1.0	28			
	8800 PALE	8 S	0003.5	0003.6	.6	29			
	4995 LEAR	8 S	0003.6	0003.6	.2	43			
	1000 TYKW	45 C	0003.6	0003.7	1.0	57	12		
	9400 TYKW	21 GRF	0020.0U	0030	85.0U	11	6	U	
	2000 TYKW	20 GRF	0025.0	0050	110.0	7	3		
	3750 TYKW	21 GRF	0025.0	0100	65.0	10	6		
	606 LEAR	47 GB	0025.3	0056.1	79.8	100			
	410 LEAR	47 GB	0030.3	0056.1	48.8	34			
	35000 NAGO	20 GRF	0050.0	0252	180.0	33			
	245 LEAR	8 S	0056.8	0057.0	.3	110			
	2000 TYKW	5 S	0235.5	0236.0	2.0	2			
	3750 TYKW	28 PRE	0236.0	0240	13.0	3	1.5		
	9400 TYKW	28 PRE	0243.0	0249	6.0	8	3		
	17000 NOBE	7 C	0248.7	0249.6	5.0	55			L
	8800 PALE	4 S/F	0248.8	0251.1	9.8	139			
	15400 LEAR	4 S/F	0249.0	0251.1	8.5	87			
	15400 PALE	4 S/F	0249.0	0251.1	3.0	76			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$	MEAN		
12	8800 LEAR	4 S/F	0249.0	0251.1	11.3	150			
	3750 TYKW	45 C	0249.0	0251.3	39.0	41	8		
	9400 TYKW	45 C	0249.0	0251.3	36.0	120	18		
	4995 PALE	4 S/F	0249.3	0251.3	5.8	73			
	2695 LEAR	4 S/F	0250.0	0251.3	3.3	10			
	4995 LEAR	4 S/F	0250.0	0251.1	2.6	70			
	17000 NOBE	29 PBI	0253.5	0253.5	20.0	9			0
	4995 PALE	8 S	0302.8	0302.8	.2	24			
	8800 PALE	8 S	0302.8	0302.8	.3	38			
	8800 PALE	8 S	0305.6	0305.8	.4	36			
	4995 PALE	8 S	0305.6	0305.8	.2	23			
	1000 TYKW	32 ABS	0310.0	0410 U	130.0U	-3.1	-1.5U		
	2000 TYKW	32 ABS	0310.0	0425	102.0	-7	-4.5		
	2000 TYKW	32 ABS	0310.0	0425	102.0	-7	-4.5		
	1000 TYKW	32 ABS	0310.0	0410 U	130.0U	-3	-1.5U		
	9400 TYKW	31 ABS	0325.0	0345	81.0	-10	-7		
	3750 TYKW	31 ABS	0328.0	0425	78.0	-10	-6		
	3750 TYKW	5 S	0344.0	0346	5.0	3	1.5		
	3750 TYKW	5 S	0358.0	0359	5.0	3	1.5		
	9400 TYKW	5 S	0407.0	0408.3	6.0	55	12		
	2695 LEAR	8 S	0407.0E	0408.3	1.5D	50			
	4995 LEAR	8 S	0407.0E	0408.5	1.6D	25			
	8800 LEAR	8 S	0407.0E	0408.3	1.8D	30			
	3750 TYKW	5 S	0407.5	0408.3	10.0	80	15		
	17000 NOBE	1 S	0407.7	0408.2	1.0	35			L
	15400 LEAR	8 S	0408.0	0408.3	.5	51			
	9400 TYKW	5 S	0425.0	0428	15.0	8	4		
	3750 TYKW	5 S	0426.0	0428	15.0	5	2		
	3750 TYKW	45 C	0446.0	0448.9	20.0	250	60		
	9400 TYKW	47 GB	0446.0	0448.9	10.0	810	120		
	17000 NOBE	46 C	0446.0	0448.8	8.2	481			L
	4995 LEAR	47 GB	0446.0	0448.8	20.8	490			
	4995 MANI	47 GB	0447.6	0449.0	6.9D	340			
	8800 MANI	47 GB	0448.1	0449.0	6.4	640			
	15400 LEAR	47 GB	0448.1	0448.8	12.7	450			
	8800 LEAR	47 GB	0448.5	0448.8	17.1	900			
	2695 LEAR	47 GB	0448.6	0453.1	.9	100			
	2695 MANI	47 GB	0448.6	0453.3	6.4D	57			
	2000 TYKW	45 C	0452.0	0454.7	5.0	100	13		
	1415 MANI	47 GB	0453.0	0454.5	3.8D	290			
	1415 LEAR	47 GB	0453.1	0454.6	2.7	620			
	17000 NOBE	29 PBI	0454.2	0454.2	32.0	27			0
	9400 TYKW	29 PBI	0456.0		20.0	18	9		
	3750 TYKW	29 PBI	0506.0		20.0	8	4		
	9100 GORK	23 GRF	0544.4	0819.4	346.0	38			
	3100 CRIM	20 GRF	0702.0	0713.0	27.0	11	4		
	6100 KISV	45 C	0704.0	0707	20.0	19			
	6100 KISV		0704.0	0711		60			
	35000 BERN	1 S	0704.0	0706.5	4.0U	568.0U			
	19600 BERN	1 S	0704.0	0706.3	120.0U	1072.0			
	8400 BERN	1 S	0704.0	0706.5	120.0U	665.0			
	11800 BERN	1 S	0704.0	0706.3	120.0U	1345.0			
	5200 BERN	1 S	0704.0	0706.5	120.0U	58.0			
	3200 BERN	1 S	0704.0	0706.5	120.0U	.0			
	9100 GORK	4 S/F	0705.3	0706.7	7.5	435			ONLY PAPER REC
	8800 ATHN	47 GB	0705.6	0706.5	7.4	660			
	4995 ATHN	4 S/F	0705.8	0706.5	10.3D	66			
	17000 NOBE	46 C	0705.8	0706.3	3.0	330			0
	9400 TYKW	45 C	0706.0U	0706.5	5.0U	480	U	120	U
	9500 POTS	4 S/F	0706.0	0706.8	5.5	368	U		
	8800 MANI	4 S/F	0706.0	0706.8	5.1	590			
	4995 MANI	8 S	0706.3	0706.8	.7D	100			
	2950 GORK	20 GRF	0706.7	0815.0	145.0	10			
	9100 GORK	1 S	0919.2	0919.6	1.8	5		2	
	3100 CRIM	26 FAL	0944.0	1019.0		17			
	100 GORK	8 S	1031.2	1031.3	.7	155	D		
	15000 KISV	4 S/F	1100.0	1103	6.0	15			
	3100 CRIM	1 S	1102.0	1105.0	7.0	5		2	
	9500 POTS	29 PBI	1102.0	1103.2	22.0	22			
	9100 GORK	1 S	1102.6	1103.1	5.0	20		7	
	2950 GORK	1 S	1102.9	1103.4	6.5	5		2	
	536 ONDR	42 SER	1152.5	1201.4	19.0	120			
	3100 CRIM	1 S	1152.5	1153.8	2.0	16		5	
	808 ONDR	2 S/F	1152.5	1153.8	2.5	30		6	
	810 KRAK	2 S/F	1153.0	1154.0	1.5	57		7	
	1470 POTS	4 S/F	1153.0	1154.4	4.5	93			
	9500 POTS	1 S	1153.0	1154	2.0	6.6			
	3000 POTS	4 S/F	1153.0	1154	2.0	23			
	930 BORD	46 C	1153.0	1153.6	4.0	163		9	
	2950 GORK	1 S	1153.0	1154.2	2.6	18		9	
	2650 DWIN	1 S	1153.0	1154	2.0	30		20	
	950 GORK	4 S/F	1153.1	1153.8	1.3	68			
	650 GORK	2 S/F	1153.2	1154.0	1.6	8		3	
	430 KRAK	42 SER	1153.7	1154.3	1.5	1200			
	1415 SGMR	4 S/F	1154.0	1154.8	2.1D	250			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
12	410 SGM	47 GB	1154.1	1155.0	1.9	500			
	2695 ATHN	4 S/F	1208.8	1211.0	3.2D	57			
	10715 DWIN	1 S	1210.0	1212	4.0	10	5		
	2650 DWIN	1 S	1210.0	1212	5.0	70	40		
	3100 CRIM	3 S	1210.0	1211.5	4.0	66	22		
	4995 ATHN	4 S/F	1210.1	1210.8	3.4	52			
	8800 SGM	4 S/F	1210.1	1211.8	5.7D	20			
	8800 ATHN	8 S	1210.5	1210.8	1.8	59			
	1415 ATHN	4 S/F	1210.5	1211.0	5.3D	30			
	4995 SGM	8 S	1210.5	1211.8	1.5D	51			
	3000 POTS	29 PBI	1210.5	1211.7	7.5	79			
	9500 POTS	29 PBI	1211.0	1212.2	15.0	40			
	2695 SGM	4 S/F	1211.1	1211.8	4.2D	74			
	5200 BERN	3 S	1211.3	1211.8	5.0U	49.0U			
	3200 BERN	3 S	1211.3	1211.7	5.0U	.0			ONLY PAPER REC
	15400 SGM	8 S	1211.5	1211.8	1.0	30			
	1470 POTS	29 PBI	1211.5	1212.0	17.0	33			
	3100 CRIM	29 PBI	1214.0	1214.0	6.0	7			
	2800 OTTA	21 GRF	1235.0	1450	390.0	19.0	9.5		
	536 ONDR	42 SER	1322.0	1322.8	3.0	40			
	810 KRAK	8 S	1356.2	1356.2	.1	11			
	430 KRAK	8 S	1356.3	1356.3	.2	15			
	15400 SGM	4 S/F	1454.1	1455.1	2.5D	21			
	8800 SGM	4 S/F	1454.5	1455.1	2.3	26			
	8800 SGM	4 S/F	1536.5	1537.6	2.3	06			
	2800 OTTA	1 S	1547.0	1548	5.0	4.4	2.2		
	4995 SGM	4 S/F	1659.6	1702.1	8.4D	15			
	8800 SGM	4 S/F	1659.8	1702.6	7.2D	82			
	2800 OTTA	20 GRF	1700.0	1715	80.0	9.2	4.6		
	15400 SGM	4 S/F	1700.1	1702.8	5.9D	51			
	2695 SGM	4 S/F	1700.5	1701.1	8.5D	24			
	1415 SGM	4 S/F	1701.1	1701.6	2.2	25			
	410 SGM	8 S	1821.6	1822.0	1.7	77			
	606 SGM	8 S	1821.6	1821.6	.4D	88			
	2800 OTTA	1 S	1821.8	1822	4.5	2.6	1.6		
	4995 SGM	4 S/F	1836.1	1840.6	8.4D	11			
	8800 SGM	4 S/F	1836.1	1840.1	8.5D	30			
	15400 PALE	4 S/F	1837.3	1840.6	8.3	10			
	8800 PALE	4 S/F	1837.3	1840.6	10.8	27			
	4995 PALE	4 S/F	1837.3	1840.6	9.5	11			
	15400 SGM	4 S/F	1838.3	1839.8	6.8	13			
	410 SGM	8 S	1840.1	1840.8	.9D	88			
	2695 PENT	21 GRF	2020.0	2210	130.0D	13.6			
	8800 LEAR	4 S/F	2151.8	2153.6	5.8	48			
	2695 PENT	3 S	2152.0	2152.9	4.0	214.0	34.2		
	2695 LEAR	8 S	2152.1	2152.5	1.7	190			
	4995 LEAR	8 S	2152.1	2152.3	1.7	160			
	4995 PALE	4 S/F	2152.1	2152.3	3.4	150			
	2695 PALE	4 S/F	2152.1	2152.5	4.2	200			
	3750 TYKW	5 S	2152.2	2152.6U	1.0	220 D	70 D		
	2000 TYKW	5 S	2152.2	2152.6	1.0	100	40		
	1415 PALE	8 S	2152.3	2152.6	.5	19			
	8800 PALE	8 S	2152.3	2152.3	.2	21			
	2695 PENT	3 S	2156.0	2156	8.0	10.4	5.2		
	15400 LEAR	8 S	2231.1	2231.1	.2	20			
	8800 LEAR	8 S	2231.1	2231.1	.2	37			
	2000 TYKW	5 S	2240.0U	2245 U	20.0U	4 U	2 U		
	3750 TYKW	5 S	2241.0U	2243 U	30.0U	25 U	10 U		
	9400 TYKW	45 C	2241.0U	2245 U	40.0U	50 U	28 U		
	8800 PALE	47 GB	2241.8	2244.0	25.3	86			
	4995 PALE	47 GB	2242.1	2242.8	8.0	46			
	15400 PALE	47 GB	2242.5	2254.8	27.6	80			
	9400 TYKW	28 PRE	2328.0	2434.2	86.0	275	60		
	2000 TYKW	28 PRE	2329.0	2400	84.0	25	17		
	1000 TYKW	5 S	2329.0	2329.3	14.0	4	.5		
	3750 TYKW	28 PRE	2334.0	2434.2	78.0	70	30		
	8800 PALE	4 S/F	2334.6	0057.0	131.2D	1100			
	15400 LEAR	47 GB	2334.8	0057.6	130.7D	780			
	8800 LEAR	47 GB	2334.8	0057.0	130.3D	850			
	4995 LEAR	47 GB	2335.6	0057.0	126.7D	380			
	1415 PALE	47 GB	2338.3	0056.8	78.5D	150			
	2930 VORO	3 S	2340.0	2342	4.0	36			
	1000 TYKW	28 PRE	2346.0	2400	68.0	10	5		
	2695 PALE	4 S/F	2350.3	0057.5	100.3D	110			
	4995 PALE	4 S/F	2350.6	0057.0	101.5D	390			
	2695 LEAR	47 GB	2351.8	0057.5	100.8D	110			
	1415 LEAR	47 GB	2352.5	0057.3	96.5D	370			
	15400 PALE	8 S	2354.3	0058.3	64.0D	420			
13	200 GORK	44 NS	0529.0E		390.0D		15		
	204 IZMI	44 NS	0600.0E		360.0D	80			
	127 TORN	44 NS	0650.0E	1251.8	480.0D	470	5		V1
	260 ONDR	44 NS	0815.0E		349.0D	18	1		
	245 SGM	43 NS	1138.0	1410.1	579.0D	250			
	245 LEAR	43 NS	2151.0	0324.8	754.0D	360			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
13	35000 NAGO	20 GRF	0033.0	0039	107.0	24			
	17000 NOBE	3 S	0033.6	0034.1	1.0	116			L
	2930 VORO	45 C	0050.0	0055	10.0	54			
	3750 TYKW	45 C	0052.0	0057.1	11.0	195	80		
	2000 TYKW	45 C	0053.0	0057.5	10.0	152	30		
	1000 TYKW	45 C	0054.0	0056.2	8.0	140	20		
	9400 TYKW	47 GB	0054.0	0057.6	8.0	900	260		
	17000 NOBE	46 C	0054.8	0057.6	6.8	714			
	35000 NAGO	5 S	0057.0	0057	3.0	169			0
	35000 NAGO	20 GRF	0100.0	0111	27.0	40			
	17000 NOBE	29 PBI	0101.4	0101.5	104.0	28			0
	1000 TYKW	30 PBI	0102.0		140.0	5	3		
	9400 TYKW	30 PBI	0102.0		80.0	86	38		
	3750 TYKW	30 PBI	0103.0		90.0	45	17		
	2000 TYKW	30 PBI	0103.0		147.0	21	10		
	3750 TYKW	5 S	0125.0	0126.6	4.0	7	2.5		
	9400 TYKW	5 S	0126.0	0126.6	3.0	9	4		
	2000 TYKW	5 S	0203.0	0203.8	3.0	3	1		
	1000 TYKW	5 S	0203.0	0203.8	3.0	2.5	.8		
	9400 TYKW	45 C	0230.0	0237.6	70.0	16	7		
	3750 TYKW	5 S	0236.0	0237.2	14.0	2	1		
	3750 TYKW	45 C	0253.0	0257.7	23.0	6	1.5		
	1000 TYKW	5 S	0257.3	0257.6	.7	14	3		
	1000 TYKW	5 S	0303.0	0305.3	5.0	3	1.5		
	9400 TYKW	20 PRE	0359.0	0401	6.4	3	1.5		
	1000 TYKW	8 S	0403.7	0403.8	.3	12	4		
	1000 TYKW	45 C	0405.0	0405.9	5.0	4.5	2		
	3750 TYKW	45 C	0405.3	0405.7	6.7	440	80		
	2000 TYKW	45 C	0405.3	0405.7	6.7	240	60		
	9400 TYKW	45 C	0405.6	0405.7	3.6	58	24		
	9400 TYKW	30 PBI	0409.0		17.0	10	4		
	2000 TYKW	30 PBI	0412.0		70.0	15	3.5		
	3750 TYKW	30 PBI	0412.0		70.0	15	6		
	9400 TYKW	45 C	0418.0	0418.6	1.0	73	16		
	9400 TYKW	20 PRE	0427.0	0431.5	38.0	7	3		
	1000 TYKW	45 C	0502.0	0506.5	10.0	4.5	2		
	3750 TYKW	45 C	0502.0	0506.2	14.0	33	8		
	2000 TYKW	45 C	0502.0	0506.7	10.0	11	3.5		
	9400 TYKW	45 C	0505.0	0509.6	9.0	45	13		
	9400 TYKW	29 PBI	0514.0		20.0	6	3		
	35000 NAGO	20 GRF	0515.0	0519	21.0	5			
	9400 TYKW	5 S	0558.5	0558.8	2.0	6	2		
	9100 GORK	1 S	0558.6	0559.0	1.8	9	4		
	9400 TYKW	5 S	0613.0	0614.3	10.0	10	2		
	9100 GORK	22 GRF	0613.6	0638.6	39.0	13			
	1000 TYKW	5 S	0626.0	0626.3	.6	19	6		
	9400 TYKW	5 S	0638.0	0638.7	5.0	14	3		
	9100 GORK	22 GRF	0703.2	0845.5	132.0	14			
	6100 KISV	1 S	0734.0	0735	2.0	8			
	6100 KISV	4 S/P	0752.5	0753.6	2.0	14			
	6100 KISV	27 RF	0815.0	0830	30.0	19			
	5200 BERN	20 GRF	0819.5	0830.5	35.0	13.0			ONLY PAPER REC
	3200 BERN	20 GRF	0819.5	0830.5	35.0	.0			ONLY PAPER REC
	3100 CRIM	20 GRF	0824.0	0833.0	16.0	9	3		
	2950 GORK	20 GRF	0827.0	0830.8	15.0	5	2.5		
	6100 KISV	1 S	0839.0	0839.5	1.0	5			
	35000 BERN	45 C	0934.0	0946.5	180.0	343.0			ONLY PAPER REC
	11800 BERN	45 C	0938.0	0946.5	210.0	437.0			ONLY PAPER REC
	8400 BERN	45 C	0938.0	0948.5	210.0	427.0			ONLY PAPER REC
	5200 BERN	45 C	0938.0	0946.5	210.0	200.0			ONLY PAPER REC
	6100 KISV	4 S/F	0938.0		19.0	87			
	3100 CRIM		0938.0	0946.2		54			
	3100 CRIM	45 C	0938.0	0943.0	15.0	54	18		
	3200 BERN	45 C	0938.2	0946.5	210.0	.0			ONLY PAPER REC
	3000 POTS	29 PBI	0938.5	0946.8	262.0	58			
	1470 POTS	29 PBI	0939.0	0946.5	16.0	44			
	9500 POTS	29 PBI	0939.0	0944.5	191.0	425			
	9100 GORK		0939.0	0946.8		480			
	10715 DWIN	45 C	0939.0	0944	16.0	180	100		
	2950 GORK	45 C	0939.0	0943.9	16.7	49			
	2650 DWIN	45 C	0939.0	0944	16.0	60	30		
	2950 GORK		0939.0	0946.8		49			
	9100 GORK		0939.0	0944.5		490			
	9100 GORK	46 C	0939.0	0942.5	13.0	165			
	950 GORK	20 GRF	0939.8	0944.3	11.7	26			
	19600 BERN	45 C	0940.0	0946.5	200.0	418.0			ONLY PAPER REC
	650 GORK	20 GRF	0940.8	0945.7	20.6	12	4		
	810 KRAK	27 RF	0941.0	0946.0	9.0	30	11		
	430 KRAK	8 S	0943.3	0943.5	.4	100			
	9100 GORK	30 PBI	0952.0	0952.0	85.0	77			
	9500 POTS	20 GRF	1031.0	1034	19.0	31			
	9100 GORK	1 S	1031.4	1033.6	4.6	8	4		
	9500 POTS	20 GRF	1102.0	1102.5	10.0	31			
	9100 GORK	1 S	1103.0	1103.6	3.0	11	5		
	9500 POTS	3 S	1219.0	1220.5	4.0	40			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
13	2800 OTTA	23 GRF	1420.0	1446	40.0	4.4	2.4		
	8400 BERN	3 S	1436.1	1437.3	25.0	34.0			ONLY PAPER REC
	3200 BERN	3 S	1436.1	1437.3	25.0	.0			ONLY PAPER REC
	5200 BERN	3 S	1436.1	1437.3	25.0	33.0			ONLY PAPER REC
	11800 BERN	3 S	1436.1	1437.3	25.0	18.0			ONLY PAPER REC
	2800 OTTA	1 S	1437.0	1437.7	1.0	2.8	1.4		
	930 BORD	41 F	1500.4	1503.2	3.0	120	2		
	2800 OTTA	20 GRF	1505.0	1540	55.0	8.2	4.4		
	2800 OTTA	20 GRF	1620.0	1625	35.0	5.4	2.8		
	2800 OTTA	20 GRF	1700.0	1737	80.0	15.4	5.2		
	4995 SGMR	4 S/F	1909.6	1938.3	46.4D	67			
	2800 OTTA	20 GRF	1910.0	1942	200.0	32.8	17.0		
	8800 SGMR	4 S/F	1910.3	1938.5	45.5D	110			
	15400 SGMR	4 S/F	1913.6	1941.3	41.4	53			
	2695 SGMR	4 S/F	1914.1	1938.5	39.9D	32			
	15400 PALE	4 S/F	1915.3	1926.1	47.8	70			
	1415 SGMR	4 S/F	1927.0	1937.6	23.5D	06			
14	100 GORK	44 NS	0532.0E		388.0D		5		
	200 GORK	44 NS	0541.0E		379.0D		15		
	204 IZMI	44 NS	0600.0E		360.0D	46			
	8800 ATHN	43 NS	0639.1	0645.6	29.5	200			
	1415 ATHN	43 NS	0640.3	0643.1	6.3D	48			
	127 TORN	44 NS	0650.0E	0707.0	480.0D	210	4		V1
	260 ONDR	44 NS	0800.0E		360.0D	94	6		
	245 SGMR	43 NS	1139.0	1305.0	577.0D	63			
	245 LEAR	43 NS	2317.0	0852.3	669.0	170			
	17000 NOBE	29 PBI	0000.5	0000.5	90.0	71			L
	9400 TYKW	21 GRF	0045.0	0117	75.0	12	4		
	2000 TYKW	21 GRF	0100.0	0240	260.0	6	3		
	3750 TYKW	20 GRF	0100.0	0117	60.0	4	2		
	9400 TYKW	5 S	0130.5	0131.4	3.0	7	3		
	2000 TYKW	45 C	0131.0	0131.3	.5	16	5		
	3750 TYKW	21 GRF	0210.0	0238	90.0	9	5		
	9400 TYKW	21 GRF	0215.0	0228	83.0	10	6		
	3750 TYKW	5 S	0249.0	0249.4	1.0	6	2		
	2000 TYKW	5 S	0249.2	0249.5	.8	5	1.3		
	4995 LEAR	4 S/F	0256.3	0258.8	3.5	35			
	8800 LEAR	4 S/F	0256.3	0258.8	6.2	46			
	3750 TYKW	45 C	0257.0	0259.0	3.0D	20	7	D	
	9400 TYKW	45 C	0257.0	0258.7	3.0	24	12		
	2000 TYKW	45 C	0257.0	0259.3	4.0	10	3		
	1000 TYKW	45 C	0257.0	0259.4	3.0D	6	2.5D		
	15400 LEAR	8 S	0258.5	0258.6	.6	29			
	2695 LEAR	8 S	0258.6	0259.0	.7	19			
	9400 TYKW	29 PBI	0300.0		15.0	4	2		
	3750 TYKW	29 PBI	0303.0E		12.0D	2	D	1	D
	3750 TYKW	5 S	0319.0	0323	13.0	3	1.5		
	9400 TYKW	45 C	0322.0	0326.6	6.0	10	2		
	3750 TYKW	21 GRF	0343.0	0406	100.0	8	3.5		
	3750 TYKW	5 S	0348.5	0348.9	1.0	1.5	.5		
	2000 TYKW	5 S	0348.5	0349.0	1.5	2	.5		
	1000 TYKW	8 S	0348.8	0348.9	.2	23	6		
	9400 TYKW	5 S	0352.5	0353.8	2.5	75	10		
	3750 TYKW	5 S	0353.0	0353.8	2.0	15	4		
	4995 LEAR	8 S	0353.5	0353.8	.5	73			
	8800 LEAR	8 S	0353.6	0353.8	.2	100			
	9400 TYKW	29 PBI	0355.0		55.0	8	4		
	3750 TYKW	29 PBI	0355.0		7.0	2	1		
	3750 TYKW	45 C	0454.7	0455.9	26.0	59	7		
	9400 TYKW	45 C	0454.7	0455.9	21.0	135	13		
	17000 NOBE	1 S	0455.3	0455.9	2.0	16			0
	8800 LEAR	8 S	0455.3	0455.8	1.3	180			
	4995 LEAR	8 S	0455.3	0455.8	1.5	139			
	4995 MANI	8 S	0455.5	0456.0	1.1D	110			
	8800 MANI	4 S/F	0455.5	0456.0	2.3	200			
	2000 TYKW	45 C	0505.0	0506.9	6.0	4	1.5		
	1000 TYKW	45 C	0505.5	0507.7	3.5	5	1		
	100 GORK		0537.9	0538.6		110	D		
	100 GORK	46 C	0537.9	0538.0	11.0	110	D		
	9100 GORK	1 S	0553.0	0553.4	1.4	14	7		
	3750 TYKW	5 S	0553.0	0553.5	1.0	2	.5		
	9400 TYKW	5 S	0553.0	0553.5	1.5	15	4		
	9100 GORK	21 GRF	0605.8	0745.7	115.0	96			
	2950 GORK	21 GRF	0632.0	0800.0	330.0E	40			
	650 GORK	23 GRF	0632.7	0745.0	102.0	14			
	950 GORK	21 GRF	0633.0	0709.0	114.0	7			
	9400 TYKW	45 C	0633.0	0645.7	45.0	205	35		
	3750 TYKW	45 C	0637.0	0645.2	20.0	35	9		
	4995 LEAR	47 GB	0638.8	0645.6	15.3	80			
	8800 LEAR	47 GB	0638.8	0645.6	25.0	250			
	4995 ATHN	4 S/F	0639.0	0639.1	22.3D	170			
	15000 KISV	45 C	0639.0	0646	11.0	96			
	15000 KISV		0639.0	0643		46			
	3100 CRIM		0640.0	0644.3		28	9		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1980

DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
14	3100 CRIM	C	0640.0	0642.0	7.0	23			
	2000 TYKW	45 C	0640.0	0643.0	12.0	40			
	9100 GORK	46 C	0640.1	0644.1	11.0	110	6		
	9100 GORK		0640.1	0645.6		170			
	2695 LEAR	4 S/F	0640.6	0644.6	7.4	29			
	17000 NOBE	7 C	0640.8	0645.5	6.4	81			
	2695 ATHN	4 S/F	0641.0	0645.1	6.1D	28			
	15400 LEAR	47 GB	0641.1	0645.6	23.7	110			
	1000 TYKW	45 C	0641.3	0644.3	6.0	160	16		
	2950 GORK	1 S	0641.8	0645.2	4.8	14			
	950 GORK	46 C	0642.0	0642.6	4.0	74			
	950 GORK		0642.0	0643.8		108			
	1415 LEAR	47 GB	0642.0	0643.0	3.8	58			
	650 GORK	46 C	0642.2	0642.6	4.2	6.3			
	650 GORK		0642.2	0644.5		23			
	17000 NOBE	29 PBI	0647.2	0647.2	13.0	18			
	3100 CRIM	20 GRF	0658.0	0701.0	10.0	9	3		
	100 GORK	8 S	0704.8	0705.5	1.1	80	D		
	950 GORK	4 S/F	0716.6	0717.0	1.1	21			
	100 GORK	24 R	0721.0	0728.0	37.0	35			
	3100 CRIM	1 S	0725.0	0725.5	1.0	5	2		
	9100 GORK	1 S	0725.3	0726.8	2.2	17	8		
	950 GORK	4 S/F	0725.5	0726.0	.7	17			
	15000 KISV	1 S	0725.5	0726.1	1.5	11			
	3100 CRIM	47 GB	0728.0	0732.0		26			
	3100 CRIM		0728.0	0759.0		42			
	3100 CRIM		0728.0	0743.5	33.0	163	50		
	1415 MANI	4 S/F	0729.0	0745.3	25.0D	93			
	2695 MANI	4 S/F	0729.0	0744.6	24.5D	180			
	2695 LEAR	4 S/F	0729.3	0744.1	99.5	200			
	2950 GORK		0730.0	0744.1		130			
	2950 GORK		0730.0	0737.5		40			
	2950 GORK	45 C	0730.0	0732.4	16.6	18			
	3000 POTS	4 S/F	0730.0	0744	23.0	170			
	1470 POTS	3 S	0730.0	0745	23.0	97			
	2695 ATHN	4 S/F	0730.6	0744.5	43.9D	170			
	1415 LEAR	4 S/F	0731.3	0744.3	44.0	119			
	4995 ATHN	4 S/F	0731.6	0745.1	48.5D	119			
	5200 BERN	20 GRF	0734.3	0744.1	55.0	122.0			ONLY PAPER REC
	3200 BERN	20 GRF	0734.3	0744.1	55.0	.0			ONLY PAPER REC
	950 GORK		0734.7	0759.5		12			
	950 GORK	45 C	0734.7	0744.5	40.0	35			
	950 GORK		0734.7	0810.8		10			
	6100 KISV	27 RF	0736.0	0745	20.0	84			
	1415 ATHN	4 S/F	0736.5	0744.8	16.5D	85			
	8000 ATHN	4 S/F	0736.5	0745.5	48.0	100			
	4995 LEAR	4 S/F	0736.8	0744.1	82.5	150			
	4995 MANI	4 S/F	0737.0	0745.1	13.6D	180			
	8000 MANI	4 S/F	0737.0	0744.6	13.6	59			
	9500 POTS	3 S	0737.0	0746	16.0	72			
	8000 LEAR	4 S/F	0738.6	0745.6	56.7	110			
	15000 KISV	27 RF	0739.0	0745	15.0	24			
	15400 LEAR	4 S/F	0741.0	0745.6	78.0	56			
	2950 GORK	1 S	0758.0	0800.0	6.1	14	7		
	3100 CRIM	29 PBI	0800.0	0800.0	150.0D	36			
	100 GORK	8 S	0805.0	0805.3	.7	90	D		
	2950 GORK	1 S	0807.2	0809.0	5.7	10	5		
	200 GORK	4 S/F	0813.0	0814.1	1.4	180	D		
	204 IZMI	7 C	0813.8	0814.2	1.2	1900	800		
	3000 POTS	20 GRF	0915.0	0927	65.0	16			
	1470 POTS	23 GRF	0915.0	0928.3	40.0	16			
	950 GORK	20 GRF	0915.6	0927.0	35.0	6			
	9500 POTS	22 GRF	0925.0	0950.4	50.0	15			
	930 BORD	8 S	0929.3	0929.3	.1	18	1		
	6100 KISV		0934.0	0943.5		103			
	6100 KISV		0934.0	0945.5		121			
	6100 KISV	45 C	0934.0	0946	24.0	129			
	15000 KISV	1 S	0948.5	0950.2	3.5	15			
	9100 GORK	1 S	0949.8	0950.2	5.9	11	5		
	33 UPIC	8 S	1004.2	1004.3	.8				
	29 UPIC	8 S	1004.5	1004.7	.7				
	100 GORK	4 S/F	1009.4	1009.8	1.3	110	D		
	810 KRAK	8 S	1032.2	1032.3	.3	40			
	15000 KISV	1 S	1124.0	1125	3.0	8			
	9500 POTS	23 GRF	1124.0	1125	31.0	12			
	113 POTS	8 S	1156.1	1156.1	.2	160	50		III
	1470 POTS	40 F	1216.0	1224.2	24.0	12			
	33 UPIC	46 C	1222.6	1223.9	6.2				
	3200 BERN	3 S	1222.6	1225.6	21.0	.0			ONLY PAPER REC
	5200 BERN	3 S	1222.6	1225.6	21.0	65.0			ONLY PAPER REC
	29 UPIC	46 C	1222.7	1224	5.8				
	127 TORN	49 GB	1222.8	1225.9	13.0	2600	70		
	113 POTS	45 C	1223.1	1226.3	20.0	350	10		III
	3100 CRIM	1 S	1224.0	1225.8	3.0	17	5		
	4995 SGMR	4 S/F	1224.0	1225.6	6.0D	51			

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SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING	TIME OF	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
				TIME UT	MAXIMUM UT		$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$	PEAK		
14	245	SGMR	4 S/F	1224.0	1228.3	7.3D		300		
	8800	SGMR	4 S/F	1224.5	1225.8	4.1		21		
	3000	POTS	4 S/F	1224.5	1225.7	2.0		16		
	234	POTS	42 SER	1224.8	1228.1	3.8		400	4	
	536	ONDR	41 F	1224.5	1227.8	5.5		22	5	
	2695	SGMR	4 S/F	1224.6	1225.8	3.4D		09		
	9500	POTS	1 S	1224.7	1225.9	1.8		9.5		
	606	SGMR	4 S/F	1225.6	1226.5	4.4D		33		
	410	SGMR	4 S/F	1226.5	1228.1	3.5D		44		
	228	HARS	45 C	1227.2	1227.8	1.4		485	160	
	8800	SGMR	4 S/F	1252.8	1253.6	3.2		23		
	4995	SGMR	47 GB	1538.3	1543.6	13.7D		97		
	8800	SGMR	47 GB	1539.6	1543.6	13.2D		160		
	2800	OTTA	21 GRF	1540.0	1600	100.0		17.8	9.0	
	15400	SGMR	47 GB	1540.6	1550.3	12.4		51		
	2695	SGMR	4 S/F	1541.0	1543.6	4.0D		20		
	2800	OTTA	4 S/F	1541.0	1543.6	4.5		17.2	6.0	
	1415	SGMR	4 S/F	1541.1	1543.1	3.9D		10		
	606	SGMR	4 S/F	1542.6	1543.1	2.4D		38		
	4995	SGMR	4 S/F	1601.8	1602.1	5.2D		05		
	15400	SGMR	4 S/F	1601.8	1602.1	4.2		10		
	8800	SGMR	4 S/F	1602.0	1602.1	5.0D		26		
	8800	SGMR	4 S/F	1822.8	1830.6	14.3D		360		
	4995	SGMR	47 GB	1826.3	1830.6	10.7D		740		
	15400	SGMR	4 S/F	1826.8	1830.3	9.3		150		
	2695	SGMR	4 S/F	1827.6	1830.6	9.5D		160		
	8800	PALE	47 GB	1827.8	1830.6	24.0		350		
	4995	PALE	47 GB	1827.8	1830.6	26.5		300		
	1415	SGMR	4 S/F	1828.0	1830.8	8.3D		24		
	2800	OTTA	3 S	1828.0	1831	12.0		174.0	62.2	
	15400	PALE	4 S/F	1828.3	1830.3	22.3		150		
	2695	PALE	4 S/F	1828.6	1831.0	7.2		130		
	1415	PALE	8 S	1830.1	1831.0	1.7		19		
	2800	OTTA	30 PBI	1840.0	1840	75.0		18.2	6.1	
	2695	SGMR	4 S/F	1847.3	1849.6	3.8D		15		
	4995	SGMR	4 S/F	1847.6	1849.6	9.2D		139		
	15400	SGMR	4 S/F	1848.5	1849.5	3.0		11		
	2800	OTTA	3 S	1848.5	1849.5	6.0		14.8	3.8	
	8800	SGMR	4 S/F	1848.6	1849.6	4.4D		119		
	2800	OTTA	260 FAL	2020.0	2100	40.0		-3.8	-1.9	
	2695	PENT	260 FAL	2135.0	2200	25.0		-6.8	-3.4	
	9400	TYKW	45 C	2210.0	2214	20.0		16	5	
	3750	TYKW	45 C	2210.0	2216	30.0		10	3	
	3750	TYKW	28 PRE	2315.0	2351	36.0		15	8	
	9400	TYKW	28 PRE	2315.0	2351	36.0		16	8	
	3750	TYKW	45 C	2351.0	2356.5	13.0		240	75	
	2000	TYKW	45 C	2351.0	2356.4	13.0		54	18	
	9400	TYKW	45 C	2351.0	2356.3	16.0		355	125	
	8800	PALE	4 S/F	2351.3	2356.1	21.2D		450		
	4995	LEAR	4 S/F	2351.3	2356.3	14.8D		350		
	17000	NOBE	7 C	2351.4	2356.2	9.1		168		
	8800	LEAR	4 S/F	2351.6	2356.3	26.7D		380		
	8800	MANI	4 S/F	2351.8	2356.5	14.5D		280		
	4995	PALE	4 S/F	2352.0	2356.3	16.5D		340		
	15400	LEAR	4 S/F	2352.1	2356.3	22.7D		180		
	4995	MANI	47 GB	2352.5	2356.5	10.5D		440		
	15400	PALE	4 S/F	2353.0	2356.3	12.0D		210		
	1000	TYKW	45 C	2353.0	2356.4	15.0		17	3.5	
	2695	LEAR	4 S/F	2353.1	2356.5	9.2D		100		
	2695	PALE	4 S/F	2353.6	2356.5	8.4D		110		
	2695	MANI	4 S/F	2355.0	2357.0	7.0D		100		
	35000	NAGO	20 GRF	2355.0	2415	120.0		160		
	1415	MANI	8 S	2355.1	2356.6U	D		32		
	606	MANI	8 S	2355.5	2356.3	2.0D		21		
	1415	LEAR	4 S/F	2355.6	2356.3	4.7D		32		
	1415	PALE	4 S/F	2355.8	2356.3	3.5		29		
15	200	GORK	44 NS	0532.0E		360.0D			10	
	204	IZMI	43 NS	0700.0		210.0		30		
	260	ONDR	44 NS	0812.0E		351.0D		30		
	245	SGMR	43 NS	1140.0	1938.1	575.0D		230		
	2000	TYKW	30 PBI	0004.0		145.0		10	5	
	3750	TYKW	30 PBI	0004.0		160.0		48	18	
	9400	TYKW	29 PBI	0007.0		115.0		87	30	
	3750	TYKW	5 S	0141.5	0141.8	1.0		1	.3	
	3750	TYKW	5 S	0207.0	0207.5	1.0		3	1	
	2000	TYKW	5 S	0207.0	0207.5	1.0		2.5	1	
	1000	TYKW	5 S	0207.0	0207.6	1.2		2	.7	
	9400	TYKW	5 S	0207.0	0207.4	1.0		3	1	
	9400	TYKW	5 S	0225.0	0226.4	5.0		7	2	
	3750	TYKW	45 C	0225.5	0226.6	4.0		3	1.5	
	9400	TYKW	5 S	0235.0	0236.3	10.0		7	2.5	
	3750	TYKW	21 GRF	0350.0	0358	45.0		2	1	
	3750	TYKW	5 S	0423.0	0423.7	2.0		3	1	
	1000	TYKW	5 S	0423.4	0423.7	.6		4	1	

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1980

DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
15	2000 TYKW	5 S	0423.4	0423.7	1.0	1.5	.5		
	9400 TYKW	28 PRE	0511.0	0526	28.0	11	4		
	2000 TYKW	45 C	0513.3	0514.6	4.0	8	2.5		
	3750 TYKW	45 C	0513.3	0514.7	2.0	6	2		
	1000 TYKW	45 C	0513.8	0514.5	1.5	13	3		
	3750 TYKW	28 PRE	0519.0	0526	20.0	3	1.5		
	3750 TYKW	45 C	0539.0	0541.3	10.0	33	17		
	9400 TYKW	45 C	0539.0	0540.3	4.0	21	13		
	9100 GORK	23 GRF	0539.3	0723.0	348.0	40			
	3100 CRIM	1 S	0539.5	0541.0	3.0	17	5		
	3100 CRIM	29 PBI	0542.5	0542.5	20.0	9			
	9400 TYKW	29 PBI	0543.0		55.0	11	5		
	3750 TYKW	29 PBI	0549.0		50.0	12	5		
	3200 BERN	4 S/F	0659.0U	0701.1	8.0	.0			ONLY PAPER REC
	5200 BERN	4 S/F	0659.0U	0701.1	8.0U	193.0			ONLY PAPER REC
	4995 ATHN	4 S/F	0659.1	0700.5	6.9D	180			
	8800 ATHN	4 S/F	0659.5	0700.3	6.5	110			
	3750 TYKW	45 C	0700.0	0701.5	21.0D	125	17	D	
	2000 TYKW	45 C	0700.0	0701.6	19.0D	48	10	D	
	2000 TYKW		0700.0	0717.8		44			
	1000 TYKW		0700.0	0717.3		47			
	1000 TYKW	45 C	0700.0	0701.5	21.0D	103	12	D	
	3750 TYKW		0700.0	0717.8		100			
	9400 TYKW	45 C	0700.0	0717.8	21.0D	185	20	D	
	9400 TYKW		0700.0	0701.4		108			
	15000 KISV	4 S/F	0700.0	0701	6.0	50			
	6100 KISV	3 S	0700.0	0701.3	6.0	155			
	1415 ATHN	4 S/F	0700.1	0701.0	4.4D	36			
	2695 ATHN	4 S/F	0700.3	0701.0	5.5D	51			
	8800 MANI	4 S/F	0700.6	0701.5	3.2	110			
	606 MANI	47 GB	0700.6	0701.6	2.9D	100			
	17000 NOBE	1 S	0700.6	0701.6	1.4	27			
	127 TORN	47 GB	0700.7	0701.8	3.8	4900	160		R
	2695 LEAR	4 S/F	0700.8	0701.6	3.5	80			
	4995 LEAR	4 S/F	0700.8	0701.5	3.5	160			
	245 LEAR	47 GB	0700.8	0701.0	4.5	750			
	1415 LEAR	4 S/F	0700.8	0701.6	3.2	53			
	606 LEAR	4 S/F	0700.8	0701.6	3.5	73			
	8800 LEAR	4 S/F	0700.8	0701.5	3.8	119			
	9100 GORK	3 S	0700.8	0701.6	5.0	106			
	2950 GORK	3 S	0701.0E	0701.5	4.7D	70			
	950 GORK	4 S/F	0701.0E	0701.9	7.0D	60			
	15400 LEAR	4 S/F	0701.0	0701.5	3.1	33			
	204 IZMI	7 C	0701.0	0701.5	2.0	2700	1500		
	200 GORK	4 S/F	0701.4E	0701.6	1.6D	170			
	100 GORK	8 S	0701.4E	0702.0	1.4D	4000			
	650 GORK	4 S/F	0701.5	0701.9	1.4	82			
	410 LEAR	4 S/F	0701.6	0701.8	3.7	160			
	650 GORK	29 PBI	0702.9	0703.0	5.3	7	3		
	3200 BERN	3 S	0707.0	0717.5	30.0	.0			ONLY PAPER REC
	5200 BERN	3 S	0707.0	0717.5	30.0	188.0			ONLY PAPER REC
	6100 KISV	46 C	0712.0	0717.5	9.0	174			
	15000 KISV	46 C	0712.0	0717.5	8.0	113			
	8800 ATHN	4 S/F	0712.1	0716.3	16.4	280			
	4995 ATHN	4 S/F	0712.3	0716.3	18.2D	190			
	3100 CRIM	3 S	0712.5	0717.5	9.0	86	25		
	1415 MANI	4 S/F	0712.6	0718.0	6.9D	30			
	650 GORK	21 GRF	0712.6		8.4	3			
	8800 MANI	4 S/F	0712.8	0717.8	8.2	210			
	2695 MANI	4 S/F	0713.3	0717.6	6.5D	78			
	2950 GORK	3 S	0714.0	0717.9	6.9	62			
	950 GORK	4 S/F	0714.2	0717.3	6.0	51			
	1415 ATHN	4 S/F	0715.3	0716.5	3.0D	26			
	200 GORK	4 S/F	0715.4	0716.7	1.8	190			
	204 IZMI	5 S	0715.5	0716.5	1.5	450	300		
	2695 ATHN	4 S/F	0715.6	0716.5	2.7D	71			
	4995 LEAR	4 S/F	0715.8	0717.8	4.0	170			
	100 GORK	8 S	0715.8	0716.0	.3	350			D
	9100 GORK	4 S/F	0715.9	0717.8	5.0	177			
	9500 POTS	3 S	0716.0	0717.7	4.0	118			
	3000 POTS	3 S	0716.0	0717.7	4.0	68			
	2695 LEAR	4 S/F	0716.1	0717.6	3.0	82			
	606 MANI	47 GB	0716.1	0717.3	2.4D	48			
	245 LEAR	8 S	0716.3	0716.5	.3	119			
	1415 LEAR	4 S/F	0716.3	0717.8	2.5	44			
	15400 LEAR	4 S/F	0716.3	0717.8	2.8	100			
	606 LEAR	8 S	0716.3	0717.3	2.0	100			
	8800 LEAR	4 S/F	0716.3	0717.8	3.3	220			
	650 GORK	4 S/F	0716.4	0717.3	2.0	60			
	4995 MANI	4 S/F	0716.5	0717.8	3.0D	170			
	1470 POTS	3 S	0716.5	0718.4	4.5	40			
	950 GORK	29 PBI	0720.2	0720.5	7.6	4			
	650 GORK	4 S/F	0755.4	0756.2	1.6	18			
	2950 GORK	1 S	0755.4	0756.0	1.5	5.0	2		
	204 IZMI	8 S	0757.5	0757.5	.3	1850	1000		

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
15	245 LEAR	8 S	0757.8	0757.8	.3	450			
	3100 CRIM	26 FAL	0800.0	0900.0		10			
	6100 KISV	4 S/F	0847.0	0850	9.0	11			
	9500 POTS	3 S	0848.0	0849.2	4.5	8			
	9100 GORK	1 S	0848.2	0849.9	2.9	13	5		
	3000 POTS	3 S	0848.5	0849.2	4.0	7.8			
	2950 GORK	1 S	0849.2	0849.3	1.6	3.0	1		
	234 POTS	8 S	0921.6	0921.6	.1	100	30		
	3200 BERN	22 GRF	0941.0	1005.7	40.0	.0			ONLY PAPER REC
	5200 BERN	22 GRF	0941.0	1005.7	40.0	27.0			
	3000 POTS	22 GRF	0950.0	0953.8	19.0	14			
	9500 POTS	22 GRF	0951.0	1000.5	18.0	21			
	6100 KISV	45 C	0951.0	1005.1	29.0	25			
	3100 CRIM	1 S	0951.0	0954.5	6.0	10	3		
	6100 KISV		0951.0	0953.7		20			
	9100 GORK	1 S	0953.0	0953.9	3.1	15	7		
	2950 GORK	1 S	0953.1	0954.0	1.7	6	3		
	3100 CRIM	20 GRF	1000.5	1004.8	7.0	9	3		
	9100 GORK	1 S	1004.8	1006.0	2.5	16	8		
	950 GORK	2 S/F	1005.0	1005.9	1.9	7			
	1470 POTS	40 F	1005.0	1005.7	2.5	5.8			
	2950 GORK	1 S	1005.2	1006.0	2.4	4	2		
	930 BORD	41 F	1005.4	1005.8	1.6	16	2		
	536 ONDR	42 SER	1024.8	1107.3	43.0	49			
	3200 BERN	20 GRF	1305.0	1340.6	105.0	.0			ONLY PAPER REC
	5200 BERN	20 GRF	1305.0	1340.7	105.0	30.0			
	2650 DWIN	2 S/F	1306.0	1311	9.0	15	10		
	1470 POTS	23 GRF	1306.0	1310.7	15.0	13			
	3000 POTS	23 GRF	1306.0	1311.5	49.0	20			
	9500 POTS	22 GRF	1307.0	1340	60.0	22			
	930 BORD	3 S	1307.0	1311.3	7.0	23	4		
	2800 OTTA	45 C	1307.0	1311.5	6.0	13.8	5.6		
	810 KRAK	1 S	1310.0U	1311.0	1.5U	10	4		
	810 KRAK	8 S	1318.5	1318.5	.1	10			
	8800 SGMN	4 S/F	1333.3	1339.3	12.7D	30			
	4995 SGMN	4 S/F	1334.5	1339.8	11.5	11			
	2800 OTTA	1 S	1457.8	1458	3.0	3.0	1.5		
	2800 OTTA	21 GRF	1505.0	1625	340.0D	43.0			
	3200 BERN	3 S	1516.0	1520.0	8.0D	.0			ONLY PAPER REC
	5200 BERN	3 S	1516.0	1520.1	8.0D	74.0U			
	4995 SGMN	4 S/F	1517.1	1520.0	11.9D	75			
	2695 SGMN	4 S/F	1517.3	1520.0	6.2D	55			
	2800 OTTA	8 S	1517.4	1517.6	.8	6.0	3.0		
	245 SGMN	47 GB	1517.6	1520.1	4.4	1700			
	410 SGMN	47 GB	1518.0	1518.3	4.0D	800			
	8800 SGMN	4 S/F	1519.0	1520.1	6.0D	110			
	930 BORD	46 C	1519.0	1520.1	3.0	37	5		
	15400 SGMN	4 S/F	1519.1	1520.6	3.2D	36			
	2800 OTTA	4 S/F	1519.3	1520.1	2.7	52.0	19.0		
	1415 SGMN	4 S/F	1519.5	1520.5	3.3D	26			
	606 SGMN	8 S	1519.5	1519.6	1.6D	400			
	8800 SGMN	47 GB	1538.6	1543.0	17.4D	1399			
	15400 SGMN	47 GB	1539.0	1543.6	12.0D	840			
	4995 SGMN	47 GB	1540.0	1543.5	18.3D	840			
	2695 SGMN	4 S/F	1540.0	1543.3	21.5D	370			
	930 BORD	46 C	1540.0	1541.4	6.0	214	10		
	2800 OTTA	3 S	1540.0	1543.5	22.0	372.0	75.0		
	1415 SGMN	4 S/F	1540.3	1543.5	6.2D	92			
	606 SGMN	4 S/F	1542.1	1545.1	6.0	139			
	4995 SGMN	4 S/F	1610.0	1614.3	12.0D	260			
	8800 SGMN	4 S/F	1610.8	1614.6	11.2D	400			
	2695 SGMN	4 S/F	1611.5	1614.5	9.5D	190			
	15400 SGMN	4 S/F	1611.6	1614.5	9.4D	150			
	1415 SGMN	4 S/F	1611.6	1616.1	6.4	150			
	2800 OTTA	4 S/F	1612.5	1614.5	10.0	173.0	30.0		
	2695 SGMN	8 S	1801.1	1802.1	1.7	08			
	4995 SGMN	4 S/F	1801.1	1802.1	2.4D	87			
	8800 SGMN	8 S	1801.3	1802.1	1.8D	130			
	15400 SGMN	8 S	1801.6	1802.0	1.2D	97			
	8800 PALE	4 S/F	1802.0	1802.1	2.1	119			
	15400 PALE	4 S/F	1802.0	1802.1	4.1	86			
	4995 PALE	8 S	1802.0	1802.1	.5	87			
	2800 OTTA	1 S	1802.0	1802.2	1.0	7.4	3.7		
	4995 SGMN	4 S/F	1957.0	1959.6	7.0D	65			
	8800 SGMN	4 S/F	1957.0	1959.8	5.0D	139			
	15400 SGMN	4 S/F	1957.1	1959.3	4.9D	400			
	8800 PALE	47 GB	1957.8	1959.8	23.2	130			
	2800 OTTA	46F C	1958.0	2000	3.0	30.0			
	15400 PALE	47 GB	1958.1	1959.6	22.9	84			
	4995 PALE	47 GB	1958.1	1959.6	22.7	72			
	1415 SGMN	4 S/F	1958.3	1958.8	3.8D	11			
	2695 SGMN	4 S/F	1958.3	1959.6	3.7D	25			
	2695 PALE	47 GB	1958.8	1959.8	9.3	35			
	606 SGMN	4 S/F	1959.5	2000.5	2.1D	57			
	410 SGMN	8 S	2000.3	2000.5	1.0D	170			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
15	245 SGMR	4 S/F	2000.3	2000.6	4.0	86			
	4995 SGMR	4 S/F	2010.8	2013.0	4.0D	19			
	8800 SGMR	4 S/F	2011.0	2013.1	4.0D	21			
	2695 SGMR	8 S	2012.8	2014.0	2.0D	07			
	245 SGMR	8 S	2013.5	2013.6	.3	280			
	8800 PALE	4 S/F	2112.5	2113.1	2.3	42			
	4995 PALE	8 S	2113.0	2113.1	.6	24			
	15400 PALE	8 S	2146.1	2146.3	.7	93			
	8800 PALE	8 S	2146.1	2146.3	2.0	57			
	4995 PALE	8 S	2146.3	2146.5	.3	22			
	3750 TYKW	21 GRF	2315.0	2353	85.0	5.5	3		
	9400 TYKW	21 GRF	2320.0	2353	80.0	7	3		
	3750 TYKW	5 S	2321.0	2323.4	7.0	13	5		
	9400 TYKW	5 S	2322.0	2323	5.0	4	2		
16	260 ONDR	44 NS	0010.0E		347.0D	32			
	200 GORK	43 NS	0037.0		173.0E		5		
	127 TORN	43 NS	0930.0U	0959.7	310.0D	86	5		V1
	245 SGMR	43 NS	1510.5	1750.1	364.5D	300			
	9400 TYKW	5 S	0022.0	0022.8	5.0	21	6		
	17000 NOBE	1 S	0022.4	0022.9	1.0	18			R
	8800 LEAR	8 S	0022.6	0022.8	.5	25			
	15400 LEAR	8 S	0022.6	0022.8	.4	23			
	9400 TYKW	28 PRE	0046.0	0047	6.0	6	4		
	17000 NOBE	7 C	0051.8	0054.7	8.0	99			R
	4995 PALE	4 S/F	0051.8	0054.8	9.0	119			
	15400 PALE	4 S/F	0051.8	0054.6	6.8	119			
	8800 PALE	4 S/F	0051.8	0054.8	13.5	250			
	1415 MANI	4 S/F	0052.0	0055.6	15.0D	15			
	8800 LEAR	47 GB	0052.0	0054.8	13.8	250			
	2000 TYKW	45 C	0052.0	0055.6	18.0	76	20		
	3750 TYKW	45 C	0052.0	0055.3	14.0	102	30		
	1000 TYKW	45 C	0052.0	0054.9	25.0	104	10		
	9400 TYKW	45 C	0052.0	0054.9	12.0	230	60		
	2695 PALE	4 S/F	0052.1	0055.3	7.5	89			
	15400 LEAR	47 GB	0052.1	0054.6	14.7	119			
	4995 LEAR	47 GB	0052.1	0054.8	10.7	139			
	2695 LEAR	47 GB	0052.3	0055.6	9.0	89			
	1415 LEAR	47 GB	0052.3	0055.0	9.2	98			
	1415 PALE	4 S/F	0052.3	0055.0	6.8	85			
	4995 MANI	4 S/F	0052.5	0055.6	5.1D	170			
	8800 MANI	4 S/F	0052.5	0055.6	12.5	250			
	606 MANI	47 GB	0054.3	0058.1	7.3D	119			
	2695 MANI	4 S/F	0055.0	0056.0	10.0D	84			
	606 LEAR	8 S	0057.3	0057.5	.3	400			
	17000 NOBE	29 PBI	0059.8	0059.8	23.0	18			0
	9400 TYKW	29 PBI	0104.0		90.0	22	7		
	3750 TYKW	29 PBI	0106.0		85.0	12	6		
	2000 TYKW	29 PBI	0110.0		40.0	7	3		
	3750 TYKW	5 S	0259.0	0303 U	9.0	7	3	D	
	3750 TYKW	21 GRF	0259.0	0353	90.0	6	2		
	9400 TYKW	21 GRF	0301.0	0353	90.0	14	7		
	4995 PALE	4 S/F	0301.1	0302.0	5.4D	53			
	8800 PALE	4 S/F	0301.5	0302.0	2.5D	79			
	4995 LEAR	8 S	0301.5	0302.0	1.3	63			
	9400 TYKW	45 C	0301.5	0302.0	2.5D	71	20	D	
	2000 TYKW	5 S	0301.5	0302.6	2.5	6	2		
	8800 LEAR	8 S	0301.6	0301.8	1.0	80			
	2695 PALE	8 S	0301.8	0302.1	1.3	19			
	2695 LEAR	8 S	0302.0	0302.1	.1	19			
	4995 MANI	8 S	0302.0	0302.6	1.5D	51			
	8800 MANI	8 S	0302.0	0302.6	2.0	100			
	2695 MANI	8 S	0302.5	0302.6	1.0D	20			
	9400 TYKW	5 S	0311.0	0311.8	9.0	27	7		
	8800 LEAR	4 S/F	0311.3	0311.8	2.7	33			
	8800 PALE	8 S	0311.6	0311.6	.4	34			
	15400 LEAR	8 S	0311.6	0311.8	.4	17			
	3750 TYKW	5 S	0339.0	0341	8.0	3	1.5		
	3750 TYKW	45 C	0450.0	0505.4	25.0	3.5	1		
	9400 TYKW	45 C	0450.0	0507	20.0	14	6		
	35000 NAGO	20 GRF	0512.0	0537	48.0	30			
	9400 TYKW	45 C	0520.0	0532.0	30.0	70	35		
	3750 TYKW	5 S	0520.0	0535	30.0	21	11		
	2000 TYKW	20 GRF	0525.0	0540	55.0	3	1.5		
	17000 NOBE	20 GRF	0526.9	0537.6	60.0	28			R
	8800 LEAR	4 S/F	0528.6	0534.5	28.4	82			
	15400 LEAR	4 S/F	0528.6	0537.6	40.0	38			
	4995 LEAR	4 S/F	0529.1	0532.5	25.0	39			
	9100 GORK	21 GRF	0529.6	0612.8	124.0	25			
	9400 TYKW	29 PBI	0550.0		60.0	32	14		
	3750 TYKW	29 PBI	0550.0		60.0	14	7		
	100 GORK		0625.1	0632.9		1900			
	100 GORK		0625.1	0630.8		150	D		
	100 GORK	41 F	0625.1	0625.3	9.5	150	D		
	9100 GORK	1 S	0720.7	0721.8	2.5	13	6		

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
16	9100 GORK	21 GRF	0825.6	0912.5	184.0	34			
	9500 POTS	21 GRF	0835.0	1010	195.0	25			
	6100 KISV	4 S/F	0835.5	0836.7	4.0	13			
	9100 GORK	1 S	0836.0	0836.5	1.8	13		6	
	8800 LEAR	8 S	0836.5	0836.6	.1	23			
	3200 BERN	4 S/F	0858.5	0904.6	244.0	.0			ONLY PAPER REC
	2950 GORK	45 C	0859.5	0903.7	9.5	100			
	2950 GORK		0859.5	0904.7		194			
	950 GORK	4 S/F	0900.0	0904.7	8.5	450			
	2650 DWIN	4 S/F	0900.0	0905	10.0	170		80	
	3100 CRIM	47 GB	0900.0	0904.0	9.0	239		70	
	5200 BERN	4 S/F	0900.5	0904.5	244.0	324.0			
	8400 BERN	4 S/F	0900.6	0904.4	210.0	310.0			
	11800 BERN	4 S/F	0900.8	0904.4	210.0	224.0			
	35000 BERN	4 S/F	0900.8	0904.5	55.0	145.0			
	19600 BERN	4 S/F	0900.8	0904.5	210.0	179.0			
	650 GORK	21 GRF	0901.0	0914.0	26.7	6.5			
	6100 KISV	45 C	0901.0	0904.5		249			
	6100 KISV		0901.0	0903.8		148			
	6100 KISV		0901.0	0905.4		148			
	1415 ATHN	4 S/F	0901.1	0904.8	10.7D	95			
	9100 GORK		0901.2	0904.5		180			
	9100 GORK	45 C	0901.2	0904.2	8.5	240			
	2695 ATHN	4 S/F	0901.8	0904.6	10.0D	180			
	2695 LEAR	4 S/F	0902.0	0905.0	7.3	200			
	10715 DWIN	4 S/F	0902.0	0904	18.0	70		30	
	15000 KISV	45 C	0902.0	0904.4	5.0	130			
	15000 KISV		0902.0	0905.5		103			
	9500 POTS	4 S/F	0902.0	0904.5	38.0	206			
	3000 POTS	4 S/F	0902.0	0905	8.0	200			
	1470 POTS	4 S/F	0902.0	0905.5	16.0	98			
	4995 LEAR	4 S/F	0902.3	0904.5	19.8	310			
	1415 LEAR	4 S/F	0902.5	0905.0	5.6	110			
	8800 LEAR	4 S/F	0902.6	0904.5	16.5	310			
	8800 ATHN	4 S/F	0902.8	0904.1	6.5	320			
	4995 ATHN	4 S/F	0902.8	0904.5	12.3D	270			
	650 GORK		0902.8	0904.8		25			
	650 GORK	46 C	0902.8	0903.5	6.2	46			
	15400 LEAR	4 S/F	0903.1	0904.5	15.2	139			
	606 LEAR	47 GB	0903.3	0906.1	4.2	82			
	410 LEAR	4 S/F	0904.1	0904.3	2.5	150			
	200 GORK	4 S/F	0904.2	0906.2U	4.8	60	D		
	245 LEAR	8 S	0904.3	0904.5	1.0	340			
	234 POTS	4 S/F	0904.3	0904.4	1.0	100		30	
	204 IZMI	41 F	0904.5	0904.6	4.0	190			
	9100 GORK	1 S	0905.5	0906.6	2.6	9		4	
	100 GORK	46 C	0906.0	0908.0	4.5	320	D		
	100 GORK		0906.0	0909.0		3800	D		
	100 GORK		0906.0	0909.7		38000	D		
	127 TORN	47 GB	0906.0U	0908	7.0U	9000	D	6400	SATURATED
	113 POTS	45 C	0907.1	0908.5	8.7	8000		150	IV
	15000 KISV	29 PBI	0907.5	0907.5	13.0	54			
	950 GORK	29 PBI	0908.5	0909.0	15.0	9			
	2950 GORK	29 PBI	0909.0	0909.0	133.0	15			
	3100 CRIM	29 PBI	0909.0	0909.0	15.0	7			
	204 IZMI	4 S/F	0926.5	0928.8	5.0	50		25	
	245 LEAR	8 S	0928.3	0928.8	.8	20			
	1470 POTS	40 F	0943.0	0949	7.0	11			
	9500 POTS	3 S	1011.0	1011.2	2.0	32			
	9500 POTS	3 S	1028.0	1029	2.0	20			
	9100 GORK	1 S	1028.2	1028.9	2.0	23		12	
	9100 GORK	1 S	1047.9	1048.7	2.5	11		5	
	228 HARS	45 C	1330.5	1330.5	.8	90		30	
	245 SGMR	8 S	1330.8	1331.0	1.2	86			
	4995 SGMR	4 S/F	1338.8	1342.0	5.3D	04			
	8800 SGMR	4 S/F	1340.1	1341.3	4.0	25			
	2800 OTTA	20 GRF	1345.0	1440	100.0	4.2		2.1	
	11800 BERN	21 GRF	1426.4	1429.1	29.0	125.0			
	19600 BERN	21 GRF	1426.4	1429.1	29.0	92.0			
	4995 SGMR	4 S/F	1426.5	1427.6	5.3D	29			
	245 SGMR	4 S/F	1426.6	1428.8	8.0D	70			
	10715 DWIN	2 S/F	1427.0	1429	5.0	40		20	
	5200 BERN	21 GRF	1427.1	1427.2	29.0	40.0			
	4995 ATHN	4 S/F	1427.3	1430.0	5.0D	19			
	8400 BERN	21 GRF	1427.3	1429.1	29.0	120.0			
	8800 ATHN	4 S/F	1427.5	1429.1	4.1	110			
	15400 SGMR	4 S/F	1427.6	1429.1	3.7	110			
	8800 SGMR	4 S/F	1427.6	1429.3	5.2D	130			
	4995 SGMR	4 S/F	1740.1	1742.0	3.7D	69			
	2695 SGMR	4 S/F	1740.3	1742.8	3.7D	45			
	606 SGMR	4 S/F	1740.5	1741.6	2.1D	200			
	2800 OTTA	4 S/F	1740.5	1742	5.0	42.0		10.5	
	8800 SGMR	4 S/F	1740.6	1742.1	2.2D	93			
	410 SGMR	8 S	1740.8	1740.8	1.2D	91			
	8800 PALE	8 S	1741.5	1742.1	1.0	89			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
16	4995 PALE	8 S	1741.6	1742.1	.9	70			
	15400 PALE	8 S	1741.6	1741.6	.5	48			
	2695 PALE	8 S	1741.6	1742.0	.9	65			
	1415 PALE	8 S	1742.0	1742.1	.1	18			
	1415 SGMR	4 S/F	1742.5	1743.0	2.1D	170			
	15400 SGMR	4 S/F	1742.8	1743.1	3.3	44			
	2800 OTTA	1 S	1933.5	1934.5	2.0	4.4	2.2		
	2800 OTTA	21 GRF	1950.0	2040	130.0D	16.0			
	8800 SGMR	4 S/F	1959.0	2001.1	9.8D	21			
	15400 SGMR	4 S/F	2001.0	2005.3	7.8	20			
	245 SGMR	47 GB	2001.1	2007.6	16.7D	2800			
	4995 SGMR	8 S	2006.8	2008.1	2.0D	15			
	2800 OTTA	4 S/F	2019.0	2022.5	9.0	54.6	21.0		
	4995 SGMR	4 S/F	2019.1	2022.1	6.7D	110			
	8800 SGMR	4 S/F	2019.1	2022.1	7.0	170			
	2695 SGMR	4 S/F	2019.3	2022.3	6.2D	44			
	4995 PALE	47 GB	2019.3	2022.1	11.8	119			
	1415 SGMR	4 S/F	2019.3	2022.1	8.7D	30			
	8800 PALE	47 GB	2019.3	2022.1	17.5	190			
	410 SGMR	4 S/F	2019.6	2022.1	6.4D	110			
	15400 PALE	47 GB	2019.6	2022.1	3.9	87			
	2695 PALE	47 GB	2019.6	2022.6	5.7	64			
	245 SGMR	4 S/F	2021.0	2021.1	4.6	100			
	1415 PALE	4 S/F	2021.3	2022.3	2.3	34			
	606 SGMR	4 S/F	2021.6	2023.8	3.4D	77			
	2000 TYKW	45 C	2357.0	0014.9	33.0	28	1.5		
	3750 TYKW	45 C	2358.0	0014.8	32.0	34	9		
17	260 ONDR	44 NS	0810.0E		345.0D	50	4		
	200 GORK	43 NS	0900.0		73.0		5		
	8800 LEAR	4 S/F	0000.0	0024.1	46.0	35			
	15400 LEAR	4 S/F	0000.0	0024.0	46.0	38			
	4995 LEAR	4 S/F	0000.0	0014.6	46.0	28			
	2695 LEAR	4 S/F	0000.0	0014.6	31.3	34			
	9400 TYKW	45 C	0000.0	0014.8	70.0	26	12		
	17000 NOBE	20 GRF	0001.9	0023.7	48.0	25			
	1415 MANI	47 GB	0003.0	0012.3	25.5D	1600			
	2695 PALE	8 S	0006.0	0007.1	1.1	22			
	1415 LEAR	47 GB	0007.8	0011.1	8.5	1900			
	1415 PALE	47 GB	0008.0	0011.3	5.0	1600			
	1000 TYKW	47 GB	0008.0	0013.7	35.0	775	60		
	2695 MANI	8 S	0013.5	0015.0	2.0D	28			
	606 LEAR	47 GB	0013.5	0025.5	51.6	5200			
	606 MANI	47 GB	0013.5	0026.3	52.8D	3200			
	4995 MANI	8 S	0014.0	0014.5	1.5	60			
	4995 PALE	8 S	0014.1	0014.8	.9	20			
	410 LEAR	4 S/F	0022.6	0029.3	14.4	1700			
	2000 TYKW	29 PBI	0030.0		60.0	3	1.5		
	3750 TYKW	29 PBI	0030.0		60.0	8	4		
	1000 TYKW	29 PBI	0043.0		130.0	3	1.5		
	1000 TYKW	8 S	0305.9	0306.1	.4	16	4		
	2000 TYKW	45 C	0347.0	0349.4	6.0	4	2		
	3750 TYKW	45 C	0348.0	0351.0	30.0	11	3		
	9400 TYKW	45 C	0348.0	0351.0	30.0	18	2.5		
	1000 TYKW	5 S	0348.6	0348.8	.6	3	1		
	1000 TYKW	5 S	0351.0	0351.4	.8	3	1		
	3750 TYKW	5 S	0457.0	0500	10.0	3	1		
	9400 TYKW	5 S	0457.0	0500	13.0	5	2		
	2000 TYKW	45 C	0541.0	0544.8	10.0	16	5		
	9400 TYKW	45 C	0542.0	0548.7	20.0	18	4		
	3750 TYKW	45 C	0542.0	0544.9	15.0	17	5		
	2950 GORK	1 S	0542.8	0544.7	2.3	7	3		
	950 GORK	4 S/F	0542.8	0546.6	6.1	30			
	606 MANI	47 GB	0543.6	0546.3	4.9D	20			
	1415 MANI	47 GB	0543.6	0546.3	4.5	18			
	1000 TYKW	45 C	0544.0	0546.6	6.0	28	6		
	245 LEAR	4 S/F	0544.3	0544.6	4.0	40			
	2695 LEAR	4 S/F	0544.3	0544.8	2.3	21			
	650 GORK	4 S/F	0544.4	0546.5	4.2	17	4		
	200 GORK	4 S/F	0544.4	0546.5	5.2	40			
	410 LEAR	47 GB	0544.6	0547.0	3.4	100			
	8800 LEAR	4 S/F	0545.1	0548.1	3.4	18			
	4995 LEAR	8 S	0545.6	0545.8	.4	16			
	1415 LEAR	8 S	0545.8	0546.6	.8	20			
	606 LEAR	8 S	0546.3	0546.3	.5	22			
	100 GORK	4 S/F	0615.0	0615.5	1.4	150 D			
	3750 TYKW	5 S	0615.0	0615.7	1.5U	4	1.5U		
	2000 TYKW	5 S	0615.0	0615.7	1.5U	4	1.5U		
	200 GORK	41 F	0615.2	0616.7	27.5	10			
	200 GORK		0615.2	0627.0		20			
	650 GORK	1 S	0615.3	0615.6	1.0	6	3		
	950 GORK	1 S	0615.4	0615.6	.6	7			
	2950 GORK	1 S	0615.5	0615.7	6.1	3	1		
	410 LEAR	8 S	0615.5	0615.6	.1	27			
	1000 TYKW	5 S	0615.5U	0615.7	.7U	4.5	1.5U		

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING	TIME OF	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
				TIME	MAXIMUM		$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$			
				UT	UT	MINUTES	PEAK	MEAN		
17	3100	CRIM	3 S	0643.0	0645.0	6.0	20	7		
	9100	GORK	21 GRF	0730.3	0819.5	207.0	20			
	2950	GORK	21 GRF	0750.2	0758.0	51.7	7	3		
	5200	BERN	22 GRF	0751.0	0807.0	75.0	24.0			
	11800	BERN	22 GRF	0751.0	0836.9	60.0	20.0			
	8400	BERN	22 GRF	0751.0	0825.5	60.0	14.0			ONLY PAPER REC
	3200	BERN	22 GRF	0751.0	0807.0	75.0	.0			ONLY PAPER REC
	1470	POTS	3 S	0757.5	0800.9	5.0	8.3			
	3000	POTS	3 S	0757.5	0800.7	5.1	21			
	4995	LEAR	47 GB	0757.6	0807.0	16.2	28			
	8800	LEAR	47 GB	0757.6	0801.3	17.0	27			
	2695	LEAR	47 GB	0757.8	0807.0	10.8	41			
	3100	CRIM		0758.0	0807.0		18			
	3100	CRIM	45 C	0758.0	0800.5	14.0	25	8		
	2950	GORK	1 S	0758.5	0800.7	4.4	14	7		
	15400	LEAR	8 S	0801.1	0801.8	.9	19			
	2950	GORK	1 S	0805.5	0807.2	4.0	15	7		
	3000	POTS	3 S	0806.5	0807.5	3.5	19			
	1470	POTS	3 S	0807.0	0807.5	3.0	7.6			
	650	GORK	21 GRF	0812.0		70.5	2			
	9500	POTS	20 GRF	0815.0	0822	35.0	6.8			
	3000	POTS	21 GRF	0815.0	0819	35.0	12			
	3100	CRIM	1 S	0816.0	0819.0	4.0	9	3		
	2950	GORK	1 S	0817.7	0819.3	2.1	5	2		
	8800	LEAR	4 S/F	0818.5	0818.6	41.5D	31			
	4995	LEAR	4 S/F	0818.5	0818.6	41.5D	23			
	2695	LEAR	4 S/F	0818.5	0819.3	41.5D	25			
	15400	LEAR	4 S/F	0818.6	0819.3	41.4D	24			
	200	GORK		0822.3	0903.6		50			
	200	GORK		0822.3	0854.0		60	D		
	200	GORK	41 F	0822.3	0822.6	42.5	60	D		
	650	GORK	1 S	0827.0	0827.2	.7	5	2		
	930	BORD	8 S	0830.0	0830.1	.3	17	2		
	3100	CRIM	26 FAL	0832.0	1000.0		14			
	113	POTS	42 SER	0853.5	0918.0	28.0	5600	15		III
	100	GORK	41 F	0853.8	0853.9	24.4	300	D		
	100	GORK		0853.8	0911.0		300	D		
	100	GORK		0853.8	0902.9		300	D		
	100	GORK		0853.8	0908.2		300	D		
	650	GORK	4 S/F	0902.6	0903.3	1.2	18	9		
	8400	BERN	22 GRF	0904.0	0919.0	60.0	24.0			
	11800	BERN	22 GRF	0904.0	0921.6	70.0	26.0			
	3100	CRIM	1 S	0909.5	0911.0	5.0	12	4		
	3200	BERN	22 GRF	0915.0	0919.0	60.0	.0			ONLY PAPER REC
	5200	BERN	22 GRF	0915.0	0919.0	60.0	20.0			
	3100	CRIM	45 C	0917.0	0918.0	6.0	12	4		
	3100	CRIM		0917.0	0920.0		9			
	1470	POTS	42 SER	0917.5	0917.8	5.5	12			
	4995	ATHN	4 S/F	0917.5	0919.3	11.5D	20			
	33	UPIC	8 S	0917.8	0917.8	.3				
	29	UPIC	8 S	0917.9	0918	.3				
	3000	POTS	42 SER	0918.0	0919.4	6.0	15			
	430	KRAK	46 C	0918.0	0921.8	4.5	170	30		
	234	POTS	4 S/F	0918.0	0918.1	.2	120	25		III
	536	ONDR	46 C	0918.0	0919.2	5.5	50	10		
	2950	GORK	45 C	0918.0	0919.3	6.6	9			
	2950	GORK		0918.0	0921.6		9			
	650	GORK	46 C	0918.5	0919.2	4.0	9			
	650	GORK		0918.5	0921.7		14.5			
	9100	GORK	1 S	0918.6	0919.5	4.5	12	6		
	8800	ATHN	8 S	0918.6	0919.5	1.7	08			
	410	LEAR	47 GB	0918.6	0921.8	3.7	139			
	4995	LEAR	8 S	0918.8	0919.1	.7	18			
	245	LEAR	8 S	0918.8	0918.8	.3	22			
	8800	LEAR	8 S	0918.8	0919.3	.8	22			
	9500	POTS	29 PBI	0919.0	0919.8	36.0	12			
	606	LEAR	8 S	0919.1	0919.3	.5	19			
	950	GORK	1 S	0921.3	0921.7	13.0	10	5		
	810	KRAK	1 S	0921.5	0921.7	.8	16	5		
	200	GORK	4 S/F	1009.8	1011.4	3.1	50			
	204	IZMI	7 C	1010.2	1012.0	2.8	65	33		
	650	GORK	1 S	1010.6	1012.5	3.4	2			
	950	GORK	2 S/F	1010.7	1012.1	3.1	5			
	100	GORK	41 F	1010.7	1010.9	5.6	150			
	100	GORK		1010.7	1013.5		155			
	228	HARS	45 C	1010.7	1012.2	2.5	60	30		
	100	GORK		1010.7	1015.8		95			
	245	LEAR	8 S	1010.8	1012.3	2.0	70			
	3000	POTS	29 PBI	1011.0	1012.9		23			
	2950	GORK	20 GRF	1011.1	1012.0	21.8	8	4		
	1470	POTS	3 S	1011.5	1013.0	3.5	12			
	29	UPIC	46 C	1132.0	1135	3.6				
	33	UPIC	46 C	1132.0	1134.9	3.6				
	100	GORK		1132.0	1132.8		270			
	100	GORK		1132.0	1134.6		155			

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
17	100	GORK	41 F	1132.0	1132.1	3.3	270			
	228	HARS	45 C	1134.0	1135.0	2.0	155	45		
	536	ONDR	45 C	1134.0	1135.4	8.5	88	3		
	1470	POTS	20 GRF	1134.0	1151.5	36.0	7.6			
	204	IZMI	41 F	1134.0	1135.3	1.7	137			
	127	TORN	45 C	1134.1	1134.6	2.0	480	30		
	113	POTS	4 S/F	1134.2	1134.2	.4	980	25		III
	950	GORK	2 S/F	1134.2	1135.0	1.5	5			
	200	GORK	4 S/F	1134.2	1135.2	1.7	50			
	650	GORK	4 S/F	1134.2	1135.2	1.5	72			
	2950	GORK	3 S	1151.8	1155.0	6.7	17	8		
	113	POTS	4 S/F	1256.0	1256.2	1.5	200	5		III
	127	TORN	7 C	1256.1	1256.3	2.2	40	10		
	9500	POTS	20 GRF	1304.0	1305	6.0	8.6			
	11800	BERN	20 GRF	1333.6	1337.7	90.0	41.0			
	3200	BERN	20 GRF	1333.6	1338.2	75.0U	.0			ONLY PAPER REC
	8400	BERN	20 GRF	1333.6	1337.7	90.0	82.0			
	5200	BERN	20 GRF	1333.6	1338.3	57.0U	55.0			
	4995	ATHN	4 S/F	1333.8	1338.1	20.0D	54			
	4995	SGMR	4 S/F	1334.1	1337.6	10.7D	49			
	8800	ATHN	4 S/F	1334.6	1337.5	22.7	77			
	8800	SGMR	4 S/F	1335.1	1337.6	9.0D	85			
	9400	HUAN	S	1335.4	1337.6	4.3	71.0	39.2		R
	9500	POTS	29 PBI	1335.5	1337.6	25.0	55			
	3000	POTS	29 PBI	1336.0	1339.2	24.0	28			
	2800	OTTA	3 S	1336.0	1339	7.0	19.0	12.6		
	15400	SGMR	4 S/F	1336.1	1341.3	7.0	21			
	2695	SGMR	4 S/F	1336.3	1338.3	8.0D	15			
	2695	ATHN	4 S/F	1336.5	1338.6	18.1D	13			
	1415	ATHN	4 S/F	1337.6	1339.3	5.4D	05			
	9400	HUAN	PBI	1339.7	1339.7	83.0	31.6	12.7		0
	2800	OTTA	29 PBI	1343.0	1343	140.0	8.8	6.9		
	2800	OTTA	21 GRF	1630.0	1801	260.0	7.2	3.6		
	1415	PALE	4 S/F	2026.1	2027.0	3.2	13			
	2800	OTTA	1 S	2026.5	2027	3.0	4.0	2.0		
	15400	LEAR	8 S	2212.1	2212.5	.7	19			
	8800	LEAR	8 S	2212.3	2212.5	.5	22			
18	1000	TYKW	5 S	0130.0	0130.6	1.5	4.5	1.5		
	35000	NAGO	20 GRF	0212.0	0219	44.0	12			
	2000	TYKW	21 GRF	0400.0	0532	180.0D	10	4 D		
	3750	TYKW	21 GRF	0400.0	0532	190.0D	14	7 D		
	9400	TYKW	21 GRF	0410.0	0545	190.0D	17	10 D		
	2000	TYKW	45 C	0448.0	0449.9	5.0	42	6		
	3750	TYKW	45 C	0448.0	0449.8	4.0	69	15		
	9400	TYKW	45 C	0448.0	0449.8	4.0	30	8		
	1000	TYKW	5 S	0449.0	0449.4	1.0	13	3		
	17000	NOBE	1 S	0449.0	0449.7	1.5	18			0
	1415	MANI	8 S	0450.0	0451.1	2.0D	07			
	4995	MANI	8 S	0450.5	0451.1	1.5D	46			
	8800	MANI	8 S	0450.5	0451.1	1.5	21			
	2695	MANI	4 S/F	0490.5	0451.1	38.5D	13			
	2000	TYKW	5 S	0614.0	0614.8	2.0	4	1.5		
	3750	TYKW	5 S	0614.0	0614.8	2.0	3	1		
	5200	BERN	4 S/F	0716.5	0718.3	93.0	41.0			
	19600	BERN	4 S/F	0717.3	0718.7	15.0U	204.0			
	8400	BERN	4 S/F	0717.3	0718.3	93.0	101.0			
	11800	BERN	4 S/F	0717.3	0718.3	90.0U	71.0			
	35000	BERN	4 S/F	0717.3	0718.9	15.0U	653.0			
	9100	GORK	4 S/F	0718.0	0718.6	1.1	94			
	9500	POTS	4 S/F	0718.0	0718.4	1.0	44			
	9400	TYKW	45 C	0718.0	0718.3	2.0	72	18		
	15400	LEAR	8 S	0718.1	0718.3	.5	31			
	4995	LEAR	8 S	0718.1	0718.3	.4	38			
	8800	LEAR	8 S	0718.1	0718.3	.5	119			
	9100	GORK	29 PBI	0719.1	0719.1	14.2	16			
	260	ONDR	42 SER	0902.5	0904.8	142.0	50			
	228	HARS	45 C	0904.2	0904.3	.5	85	30		
	430	KRAK	42 SER	0929.0	0959.5	46.5	110			
	3100	CRIM		0945.0	1005.5		51			
	3100	CRIM	45 C	0945.0	1001.5	25.0	51	17		
	3200	BERN	22 GRF	0950.0	0957.0	60.0	.0			ONLY PAPER REC
	5200	BERN	22 GRF	0950.0	0957.0	60.0	56.0			
	11800	BERN	22 GRF	0951.0	0957.1	40.0U	48.0			
	19600	BERN	22 GRF	0951.0	0957.1	18.0U	71.0			
	2950	GORK	21 GRF	0952.7	1009.0	127.0E	20	10		
	8400	BERN	22 GRF	0953.0	0957.0	60.0	76.0			
	536	ONDR	42 SER	0953.0	0959.7	102.0	36			
	9500	POTS	29 PBI	0955.0	0957	200.0	47			
	3000	POTS	29 PBI	0955.0	1001.5	200.0	55			
	1470	POTS	29 PBI	0955.0	1001.5	200.0	19			
	2695	ATHN	4 S/F	0955.1	1001.6	26.4D	38			
	4995	ATHN	4 S/F	0955.1	0957.1	26.5D	54			
	1415	ATHN	4 S/F	0955.1	0959.8	17.5D	13			
	8800	ATHN	4 S/F	0955.3	0957.1	29.7	68			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
						PEAK	MEAN		
18	9100 GORK	23 GRF	0955.6	1001.6	120.0E	35			
	9100 GORK	46 C	0956.9	0957.4	2.3	48			
	9100 GORK		0956.9	0958.5		25			
	650 GORK	21 GRF	0957.0		99.0	3			
	2950 GORK		0957.0	1006.0		25			
	2950 GORK	40 F	0957.0	1001.6	11.6	30			
	950 GORK	23 GRF	0957.0	1001.9	21.0	8			
	930 BORD	40 F	0958.0	1000.6	42.0	33		3	
	650 GORK	4 S/F	0958.7	1001.9	5.2	24		4	
	950 GORK	1 S	1008.0	1008.5	1.7	6.5			
	810 KRAK	1 S	1008.0	1009.2	2.0	12		5	
	650 GORK	46 C	1008.3	1009.7	6.2	15			
	650 GORK		1008.3	1014.0		24			
	810 KRAK	1 S	1013.3	1013.5	.5	11		4	
	808 ONDR	3 S	1026.3	1026.3	.2	42			
	650 GORK	4 S/F	1038.2	1039.4	1.7	86		40	
	808 ONDR	2 S/F	1038.3	1039.2	2.0	19		6	
	430 KRAK	4 S/F	1038.3	1039.0	1.5	130		4	
	9500 POTS	3 S	1038.5	1039.2	1.5	11			
	810 KRAK	4 S/F	1038.5	1039.7	1.5	54		11	
	3000 POTS	3 S	1038.5	1039.0	1.5	11			
	3100 CRIM	1 S	1038.5	1039.0	2.0	9		3	
	9100 GORK	1 S	1038.7	1039.2	2.1	10		5	
	2950 GORK	1 S	1039.0	1039.3	1.2	8		4	
	950 GORK	1 S	1039.0	1039.5	1.0	8			
	1470 POTS	3 S	1039.0	1039.4	2.0	15			
	1470 POTS	3 S	1053.5	1054.2	1.0	11			
	930 BORD	8 S	1053.8	1053.9	.2	14		2	
	430 KRAK	42 SER	1057.5	1122.3	46.0	70			
	204 IZMI	5 S	1123.0	1123.0	1.0	280		185	
	113 POTS	4 S/F	1123.2	1123.4	.8	100		20	
	228 HARS	45 C	1125.6	1125.7	1.0	55		20	III
	5200 BERN	22 GRF	1138.8	1142.9	14.0	19.0			
	8400 BERN	22 GRF	1138.8	1143.0	14.0	10.0			
	3200 BERN	22 GRF	1138.8	1142.8	14.0	.0			ONLY PAPER REC
	2950 GORK	3 S	1140.2	1143.0	3.9	20			
	4995 ATHN	4 S/F	1140.8	1142.0	5.3	22			
	1470 POTS	3 S	1142.5	1143.4	1.5	9.7			
	3000 POTS	3 S	1142.5	1143.1	1.5	29			
	2695 ATHN	8 S	1142.6	1143.1	1.9D	16			
	3100 CRIM	1 S	1146.3	1146.5	2.0	18		6	
	29 UPIC	45 C	1147.3	1148.7	1.6				
	33 UPIC	45 C	1147.8	1148.6	1.1				
	810 KRAK	8 S	1240.0	1240.2	.3	13			
	2800 OTTA	20 GRF	1300.0	1340	95.0	5.6			
	245 SGMR	47 GB	1305.0	1306.1	5.1D	3700			
	228 HARS	45 C	1305.0	1305.5	2.0	700		230	
	260 ONDR	46 C	1305.0	1306.7	6.0	222		15	
	430 KRAK	8 S	1305.5	1305.6	.5	200			
	606 SGMR	8 S	1305.8	1306.0	.8	160			
	410 SGMR	8 S	1306.0	1306.1	.6D	28			
	930 BORD	41 F	1306.0	1306.6	1.0	26		2	
	1470 POTS	40 F	1306.0	1306.8	6.0	9.1			
	234 POTS	4 S/F	1306.0	1306.1	.9	5500		1000	III
	113 POTS	41 F	1306.0	1306.1	4.5	5600		200	
	3000 POTS	3 S	1306.0	1306.4	2.5	9.1			
	9500 POTS	40 F	1306.0	1306.4	3.0	14			
	536 ONDR	8 S	1306.1	1306.1	.2	117			
	29 UPIC	45 C	1306.3	1306.4	2.1U				
	33 UPIC	45 C	1306.3	1306.4	2.2				
	228 HARS	45 C	1307.5	1309.0	3.0	80		5	
	113 POTS	41 F	1327.1	1328.2	1.7	175		10	III
	606 SGMR	8 S	1405.3	1405.5	.3	69			
	245 SGMR	8 S	1405.6	1405.8U	.2D	67.0			
	410 SGMR	8 S	1405.6	1405.8U	.2D	85.0			
	4995 SGMR	4 S/F	1446.6	1452.1	8.0D	45			
	8800 SGMR	4 S/F	1447.3	1452.0	7.3D	139			
	5200 BERN	4 S/F	1447.5	1452.0	15.0	54.0			
	8400 BERN	4 S/F	1447.5	1451.8	15.0	141.0			
	3200 BERN	4 S/F	1447.5	1451.8	15.0	.0			ONLY PAPER REC
	11800 BERN	4 S/F	1448.5	1452.0	12.0	143.0			
	2800 OTTA	1 S	1448.7	1449	2.0	7.8		2.6	
	15400 SGMR	4 S/F	1449.8	1451.8	3.2	80			
	19600 BERN	4 S/F	1451.0	1452.0	3.0	51.0			
	2800 OTTA	1 S	1451.7	1452	1.2	6.2		3.1	
	10715 DWIN	2 S/F	1452.0	1452.5	1.0	40		20	
	245 SGMR	47 GB	1651.5	1653.1	2.0	1600			
	410 SGMR	8 S	1653.0	1653.1	.3D	110			
	2800 OTTA	260 FAL	1653.0	1720	27.0	-3.6		-1.8	
	2800 OTTA	20 GRF	1827.0	1835	40.0	2.8		1.8	
	2695 PENT	1 S	2132.0	2133	2.0	2.8		1.4	
	1000 TYKW	5 S	2221.2	2221.3	.6	6		1.5	
	1000 TYKW	5 S	2332.2	2332.3	.6	6		1.5	
19	127 TORN	44 NS	0640.0E	0738.1	470.0D	440		4	VI

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
19	113 POTS	43 NS	0650.0E	0717	173.0	70			
	3750 TYKW	21 GRF	0029.5	0035	40.0	3	1		
	3750 TYKW	45 C	0029.5	0030.2	1.5	21	4		
	9400 TYKW	21 GRF	0029.5	0035	40.0	3	1.5		
	9400 TYKW	5 S	0029.5	0030.3	1.5	14	5		
	2000 TYKW	45 C	0030.0	0030.4	1.0	4	.5		
	1000 TYKW	8 S	0043.7	0043.8	.3	4	1.5		
	3750 TYKW	28 PRE	0120.0	0145	25.0	2	1		
	9400 TYKW	28 PRE	0120.0	0128	26.0	3	2		
	3750 TYKW	5 S	0145.0	0147.2	4.0	42	15		
	2000 TYKW	5 S	0145.0	0147.2	4.0	18	9		
	9400 TYKW	5 S	0146.0	0147.2	9.0	14	8		
	1000 TYKW	45 C	0146.0	0146.9	6.0	8	2		
	4995 PALE	8 S	0147.0	0147.1	.3	26			
	2695 PALE	8 S	0147.0	0147.1	.6	36			
	1415 LEAR	8 S	0147.0	0147.3	.3	11			
	3750 TYKW	30 PBI	0149.0		65.0	7	3		
	2000 TYKW	30 PBI	0149.0		70.0	3	1.5		
	2000 TYKW	5 S	0149.5	0149.9	1.0	1	.3		
	3750 TYKW	5 S	0153.0	0153.6	1.5	3	1		
	2000 TYKW	5 S	0153.0	0153.6	2.0	1.5	.4		
	9400 TYKW	29 PBI	0155.0		55.0	6	3		
	1000 TYKW	8 S	0211.0	0211.2	.3	10	2		
	3750 TYKW	5 S	0233.0	0233.6	2.0	3	.8		
	1415 LEAR	8 S	0317.0E	0317.5	.8	25			
	2695 LEAR	8 S	0317.0E	0317.5	1.1	33			
	4995 LEAR	4 S/F	0317.0E	0317.5	6.6	52			
	8800 LEAR	4 S/F	0317.0E	0317.5	6.6	65			
	9400 TYKW	20 GRF	0325.0	0340	45.0	10	5		
	3750 TYKW	20 GRF	0325.0	0337	45.0	6	3		
	2000 TYKW	20 GRF	0328.0	0335	40.0	3	1.5		
	17000 NOBE	20 GRF	0333.0	0337.8	22.0	7			
	2000 TYKW	21 GRF	0415.0	0510	165.0	6	2.5		
	3750 TYKW	21 GRF	0415.0	0510	165.0	17	8		
	1000 TYKW	45 C	0428.0	0429.6	3.0	18	5		
	3750 TYKW	5 S	0437.0	0442.0	15.0	15	5		
	1000 TYKW	45 C	0439.0	0439.2	2.0	2.5	1		
	2000 TYKW	5 S	0439.0	0442.0	13.0	11	6		
	4995 LEAR	4 S/F	0439.0	0441.5	2.7	19			
	9400 TYKW	20 GRF	0440.0	0505	140.0	28	14		
	2695 LEAR	8 S	0441.1	0442.0	1.0	17			
	17000 NOBE	20 GRF	0443.7	0504.8	100.0	30			
	8800 LEAR	4 S/F	0449.1	0505.0	50.7	39			
	35000 NAGO	20 GRF	0450.0	0502	80.0	50			
	15400 LEAR	4 S/F	0450.1	0504.3	49.5	40			
	6100 KISV	32 ABS	0734.0	0737	7.0	-3			
	6100 KISV	32 ABS	0741.0	0744	5.0	-2			
	6100 KISV	45 C	0746.0	0749	38.0	7			
	204 IZMI	5 S	0813.0	0813.5	1.0	350	260		
	260 ONDR	41 F	0840.0	0931	68.0	13	3		
	6100 KISV	8 S	0852.0	0852.1	.7	5			
	2950 GORK	1 S	0950.6	0951.9	8.0	15	5		
	3100 CRIM	1 S	0951.0	0952.0	3.0	12	3		
	260 ONDR	42 SER	1104.5	1310.5	125.0	24			
	810 KRAK	42 SER	1134.0	1134.5	3.3	30			
	430 KRAK		1134.0	1137.3		600			
	810 KRAK		1134.0	1137.3		23			
	430 KRAK	42 SER	1134.0	1134.5	3.3	300			
	3200 BERN	3 S	1235.0	1237.5	90.0	.0			ONLY PAPER REC
	5200 BERN	3 S	1235.0	1237.5	90.0	72.0			ONLY PAPER REC
	8400 BERN	3 S	1235.1	1237.5	90.0	51.0			
	11800 BERN	3 S	1235.1	1237.5	90.0	33.0			
	19600 BERN	3 S	1235.6	1237.5	25.0	17.0			
	2650 DWIN	1 S	1236.0	1237	4.0	40	20		
	3100 CRIM	3 S	1236.0	1237.0	5.0	48	16		
	2695 SGMR	4 S/F	1236.1	1237.6	3.70	03			
	4995 SGMR	4 S/F	1236.1	1237.6	3.90	05			
	8800 SGMR	4 S/F	1236.3	1237.3	4.70	03			
	15400 SGMR	4 S/F	1236.5	1237.3	7.6	01			
	4995 ATHN	4 S/F	1236.6	1237.6	4.00	56			
	8800 ATHN	4 S/F	1236.6	1237.6	3.0	44			
	9400 HUAN	S	1236.6	1237.6	3.0	40.9	14.6		L
	2695 ATHN	4 S/F	1236.8	1237.6	3.00	30			
	10715 DWIN	1 S	1237.0	1237.5	2.0	10	5		
	3000 POTS	3 S	1237.0	1237.5	1.5	28			
	9500 POTS	3 S	1237.0	1237.5	1.0	20			
	2800 OTTA	20 GRF	1255.0	1320	65.0	7.8	4.2		
	1415 SGMR	4 S/F	1555.5E	1558.3	3.30	56			
	930 BORD	46 C	1605.0	1605.2	1.0	54	5		
	2800 OTTA	1 S	1940.0	1941	2.0	3.8	1.8		
	2695 PENT	1 S	2001.5	2002.3	2.0	3.4	1.6		
	2695 PENT	240AR	2115.0	2155	40.0	8.8			
	2695 PENT	8 S	2122.9	2123	.7	4.4	2.2		
	2695 PENT	22 GRF	2133.0	2146.5	18.0	13.4	10.0		
	8800 PALE	4 S/F	2144.8	2147.8	5.0	70			

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
19	15400	LEAR	4 S/F	2339.1	2345.1	9.9	27			
20	3750	TYKW	5 S	0128.0	0130	7.0	7	4		
	9400	TYKW	45 C	0129.0	0129.5	12.0	8	2		
	3750	TYKW	29 PBI	0135.0		55.0	3	1.5		
	3750	TYKW	5 S	0437.0	0438.5	5.0	180	30		
	2000	TYKW	5 S	0437.0	0438.7	6.0	29	5		
	9400	TYKW	5 S	0437.5	0438.5	2.5	340	35		
	4995	LEAR	4 S/F	0437.6	0438.5	3.5	350			
	8800	LEAR	4 S/F	0438.0	0438.3	5.6	440			
	2695	LEAR	8 S	0438.0	0438.6	1.3	77			
	5730	IRKU	2 S	0438.0	0438.5	7.0	300			L
	15400	LEAR	8 S	0438.1	0438.3	1.2	96			
	17000	NOBE	2 S	0438.2	0438.4	3.0	67			R
	9400	TYKW	29 PBI	0440.0		20.0	18	5		
	3750	TYKW	29 PBI	0442.0		15.0	8	2.5		
	9400	TYKW	5 S	0528.7	0529.0	2.0	6	2		
	2000	TYKW	5 S	0528.7	0529.2	3.0	4	1.5		
	3750	TYKW	5 S	0528.7	0529.1	5.0	26	5		
	5730	IRKU	2 S	0528.8	0529.1	3.0	60			R
	2695	LEAR	8 S	0528.8	0529.1	.5	19			
	8800	LEAR	8 S	0528.8	0529.0	.3	13			
	4995	LEAR	8 S	0528.8	0529.0	.5	22			
	2000	TYKW	5 S	0535.0	0537	10.0	3	1.5		
	3750	TYKW	5 S	0535.0	0537.3	10.0	5	2		
	6100	KISV	3 S	0635.0	0635.8	2.0	3			
	15000	KISV	3 S	0635.5	0635.7	.5	11			
	6100	KISV	29 PBI	0803.0	0812	48.0	31			
	6100	KISV	21 GRF	0803.0		9.0				
	35000	BERN	47 GB	0803.0	0806.7	18.0U	134.0U			
	8400	BERN	47 GB	0803.0	0806.2	170.0	531.0			
	1415	MANI	47 GB	0803.0	0806.5	13.5D	50			
	19600	BERN	47 GB	0803.0	0807.0	170.0	226.0			
	11800	BERN	47 GB	0803.0	0806.1	170.0	410.0			
	5200	BERN	47 GB	0803.6	0806.4	170.0	586.0			
	3200	BERN	47 GB	0803.6	0806.1	170.0	.0			ONLY PAPER REC
	8800	MANI	47 GB	0804.0	0806.3	12.0	520			
	9100	GORK	4 S/F	0804.0	0806.2	3.9	320			
	5730	IRKU	2 S	0804.0	0806.2	12.0	200			L
	3100	CRIM	47 GB	0804.0	0806.5	10.0	238	70		
	15000	KISV	46 C	0804.0	0806.5	5.0	146			
	15000	KISV	29 PBI	0804.0	0809	20.0	42			
	1470	POTS	29 PBI	0805.0	0806.9	230.0	69			
	9500	POTS	29 PBI	0805.0	0806.0	295.0U	248			
	3000	POTS	29 PBI	0805.0	0806.9	355.0	610			
	10715	DWIN	4 S/F	0805.0	0807	10.0	120	50		
	2650	DWIN	3 S	0805.0	0807	10.0	320	150		
	4995	MANI	47 GB	0805.0	0806.3	9.0D	510			
	2695	MANI	47 GB	0805.0	0806.3	9.0D	280			
	810	KRAK	8 S	0805.5	0805.5	.5	35			
	950	GORK	20 GRF	0805.8	0807.3	9.8	6			
	9100	GORK	29 PBI	0807.9	0808.0	204.0	80			
	3100	CRIM	29 PBI	0814.0	0814.0	122.0	25			
	260	ONDR	42 SER	1153.7	1153.7	120.0	17			
	2800	OTTA	20 GRF	1925.0	2000	120.0	4.2	2.1		
	2800	OTTA	22 GRF	2028.0	2047	37.0	3.4	1.7		
21	260	ONDR	43 NS	1113.0		86.0D	12			
	9400	TYKW	45 C	0300.0	0302.0	10.0	8	3	D	
	9400	TYKW	5 S	0321.0	0322.1	6.0	16	4		
	8800	LEAR	8 S	0321.6	0322.0	1.0	30			
	4995	ATHN	4 S/F	0632.0	0633.3	3.0	59			
	1415	LEAR	8 S	0632.5	0632.6	1.0	20			
	8800	LEAR	8 S	0632.5	0633.1	1.1	26			
	245	LEAR	8 S	0632.5	0633.1	1.0	23			
	3750	TYKW	45 C	0632.5	0633.2	1.5	230	20		
	2000	TYKW	45 C	0632.5	0633.2	1.5	19	3		
	2695	LEAR	8 S	0632.6	0633.1	.7	93			
	4995	LEAR	8 S	0632.6	0633.1	.7	65			
	2695	ATHN	8 S	0632.6	0633.3	1.0D	35			
	6100	KISV	28 PRE	0730.0	0742.7	13.0	4			
	3200	BERN	22 GRF	0741.5	0743.3	90.0	.0			ONLY PAPER REC
	5200	BERN	22 GRF	0741.5	0743.3	90.0	87.0			ONLY PAPER REC
	9500	POTS	3 S	0742.6	0743.0	2.1	83			
	6100	KISV		0742.7	0747.5		30			
	6100	KISV		0742.7	0753		20			
	6100	KISV	46 C	0742.7	0743.4	18.0	80			
	6100	KISV		0742.7	0743.3		70			
	3100	CRIM	45 C	0743.0	0748.0		48			
	15000	KISV	45 C	0743.0	0743.2	2.0	97			
	3100	CRIM		0743.0	0750.0	8.0	78	26		
	15000	KISV		0743.0	0743.3		96			
	8800	ATHN	4 S/F	0743.1	0743.6	2.5	119			
	8800	LEAR	8 S	0743.1	0743.3	1.2	119			
	4995	ATHN	4 S/F	0743.1	0743.6	2.7D	61			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
21	4995 LEAR	8 S	0743.3	0743.6	1.0	57			
	2695 LEAR	8 S	0743.3	0744.0	.8	17			
	15400 LEAR	8 S	0743.3	0743.6	.5	100			
	8800 LEAR	8 S	0746.3	0747.6	1.3D	31			
	4995 LEAR	8 S	0746.3	0747.6	1.3D	36			
	2695 LEAR	8 S	0746.8	0749.8	3.0D	51			
	2650 DWIN	1 S	0749.5	0750	1.0	30		15	
	1470 POTS	3 S	0749.5	0750.0	1.5	11			
	3000 POTS	8 S	0749.7	0750.0	.7	30			
	15000 KISV	20 GRF	0750.0	0757	20.0	7			
	3100 CRIM	29 PBI	0751.0	0751.0	23.0	12			
	6100 KISV	29 PBI	0800.0E	0800	60.0D	10			
	4995 LEAR	4 S/F	0804.6	0806.0	32.5	420			
	8800 LEAR	4 S/F	0804.8	0806.1	16.0	460			
	2695 LEAR	4 S/F	0805.1	0806.6	32.0	340			
	1415 LEAR	4 S/F	0805.3	0806.3	8.8	70			
	15400 LEAR	4 S/F	0805.3	0806.5	11.8	200			
	5200 BERN	4 S/F	0959.0	1001.3	90.0	122.0			ONLY PAPER REC
	3200 BERN	4 S/F	0959.0	1001.3	90.0	.0			ONLY PAPER REC
	6100 KISV	4 S/F	0959.4	1001.5	4.0	74			
	6100 KISV		0959.4	1000.2		55			
	8800 ATHN	4 S/F	0959.6	1002.6	5.5	67			
	4995 ATHN	4 S/F	0959.6	1002.6	5.0D	94			
	2695 ATHN	4 S/F	0959.6	1002.6	5.0D	39			
	2650 DWIN	2 S/F	1000.0	1002	3.0	50		30	
	9500 POTS	29 PBI	1000.0	1001.6	100.0	42			
	3000 POTS	29 PBI	1000.0	1001.5	60.0U	53			
	1470 POTS	29 PBI	1000.0	1001.6	100.0	6.7			
	2950 GORK	3 S	1000.7	1002.5	2.6	130			
	9100 GORK	3 S	1000.9	1002.5	2.3	57			
	9100 GORK	29 PBI	1003.2	1003.3	43.0	24		12	
	2950 GORK	29 PBI	1003.3	1003.3	12.5	25			
	2800 OTTA	1 S	1416.4	1416.7	1.0	5.8		2.0	
	2800 OTTA	21 GRF	1650.0	1720	80.0	4.0			
	2800 OTTA	1 S	1749.0	1751	9.0	1.4		.7	
	2800 OTTA	20 GRF	1840.0	1847	20.0	3.2		1.6	
	2695 PENT	24OAR	2055.0	2105	10.0	6.0			
	2695 PENT	1 S	2100.0	2101.5	2.2	4.2		2.1	
22	100 GORK	44 NS	0553.6E		267.0D	10			
	200 GORK	44 NS	0616.6E		348.0D	5			
	127 TORN	44 NS	0640.0E	0726.4	310.0D	240		1	V1
	260 ONDR	43 NS	1106.5		163.0D	35			
	245 SGMR	43 NS	1149.0	1337.1	561.0D	230			
	3750 TYKW	28 PRE	0330.0	0412.2	115.0	11		4	
	2000 TYKW	28 PRE	0330.0	0525	115.0	8		3	
	1000 TYKW	45 C	0520.0	0544.2	70.0U	44		12	
	3750 TYKW	45 C	0525.0	0543.8	30.0	127		40	
	2000 TYKW	45 C	0525.0	0544.0	35.0	115		35	
	9400 TYKW	5 S	0525.0	0545.3	30.0	51		20	
	1415 LEAR	4 S/F	0526.3	0544.1	49.7	81			
	2695 LEAR	4 S/F	0526.3	0543.8	48.0	150			
	4995 LEAR	4 S/F	0528.1	0543.8	45.7	90			
	8800 LEAR	4 S/F	0529.1	0545.8	43.9	55			
	1415 MANI	4 S/F	0529.1	0544.5	30.9D	55			
	606 LEAR	4 S/F	0534.0	0544.1	41.8	35			
	15400 LEAR	4 S/F	0534.0	0547.5	38.1	27			
	410 LEAR	4 S/F	0536.0	0544.0	40.1	29			
	245 LEAR	4 S/F	0536.0	0543.3	39.0	85			
	606 MANI	4 S/F	0538.5	0544.1	15.5D	16			
	2695 ATHN	4 S/F	0538.8	0544.0	18.3D	100			
	1415 ATHN	4 S/F	0541.0	0544.5	16.3D	79			
	4995 ATHN	4 S/F	0541.6	0544.0	12.2D	65			
	4995 MANI	4 S/F	0542.0	0544.5	8.0D	83			
	2695 MANI	4 S/F	0542.0	0544.5	8.0D	110			
	8800 ATHN	4 S/F	0543.1	0544.0	4.4	21			
	8800 MANI	4 S/F	0543.5	0545.5	6.5	35			
	200 GORK	24 R	0554.0E	0603.0	2.3D	50			E
	100 GORK	4 S/F	0554.3	0559.3	8.0	45			
	3750 TYKW	29 PBI	0555.0		65.0D	33		20 D	
	9400 TYKW	29 PBI	0555.0		65.0D	24		20 D	
	2000 TYKW	29 PBI	0600.0		60.0D	22		17 D	
	3100 CRIM	26 FAL	0600.0E	0738.0		26			
	650 GORK	22 GRF	0600.0E	0606.0	219.0D	20			
	950 GORK	22 GRF	0859.0	0859.7	9.2	11			
	10715 DWIN	2 S/F	1000.0	1002	3.0	20		10	
	2800 OTTA	260 FAL	1620.0	1650	30.0	-3.6		-1.8	
	9400 TYKW	5 S	2259.5	2259.7	.5	12		4	
23	1000 TYKW	8 S	0209.7	0209.8	.3	30		8	
	2000 TYKW	5 S	0209.8	0209.9	1.0	7		1.5	
	9400 TYKW	8 S	0209.8	0209.9	.3	10		3	
	3750 TYKW	5 S	0209.8	0209.9	.8	2.5		1	
	260 ONDR	41 F	1025.0	1025.8	16.0	16		2.6	
	260 ONDR	42 SER	1239.3	1242.4	5.0	14			

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
23	2800 OTTA	8 S	1459.4	1459.5	.3	7.8			
	2800 OTTA	1A S	1750.0	1755	10.0	4.8	2.0		
	2800 OTTA	1 S	1750.2	1750.6	1.0	7.8	3.9		
	2800 OTTA	4 S/F	1833.0	1857	47.0	68.8	41.4		
	4995 SGMR	4 S/F	1833.6	1857.3	45.2D	39			
	1415 SGMR	47 GB	1833.8	1854.5	48.3D	97			
	2695 SGMR	47 GB	1834.1	1856.6	44.4D	64			
	410 SGMR	47 GB	1841.8	1912.8	35.5D	260			
	245 SGMR	47 GB	1842.0	1846.5	35.1D	250			
	8800 SGMR	4 S/F	1842.3	1856.1	35.8D	32			
	606 SGMR	47 GB	1844.0	1911.0	33.5D	150			
	15400 SGMR	47 GB	1845.6	1911.5	29.5	38			
	9400 HUAN	S	1903.7	1911.2U	35.6	17.0	10.7		0
	2800 OTTA	30 PBI	1920.0	1920	130.0D	30.6			
	245 SGMR	47 GB	1926.8	1949.1	44.3D	119			
	410 SGMR	47 GB	1926.8	1950.5	39.2D	43			
	606 SGMR	47 GB	1927.8	1950.1	42.5D	160			
	1415 SGMR	47 GB	1928.1	1949.5	45.2	110			
	1415 PALE	4 S/F	1942.0	1949.3	22.6	130			
	2800 OTTA	20 GRF	1950.0	1954	17.0	6.8	3.4		
	245 SGMR	4 S/F	2040.6	2040.8	5.2	119			
	2695 PENT	3 S	2117.0	2117.9	2.0	11.8	3.9		
	2695 PALE	8 S	2117.1	2117.8	2.0	13			
	4995 PALE	8 S	2117.1	2117.8	1.4	15			
24	2800 TYKW	5 S	0214.0	0215.5	10.0	2.5	1		
	3750 TYKW	5 S	0214.0	0215.1	3.0	6	2		
	9400 TYKW	21 GRF	0215.0	0216	30.0	3	1.5		
	3750 TYKW	30 PBI	0217.0		50.0	1.5	1		
	9400 TYKW	5 S	0228.5	0229.2	3.5	4	1		
	3750 TYKW	5 S	0228.7	0229.1	1.0	1	.3		
	3750 TYKW	5 S	0317.0	0317.5	1.5	1.5	.5		
	2800 TYKW	20 GRF	0400.0	0430	80.0	5.5	3		
	3750 TYKW	20 GRF	0400.0	0414	90.0	8	4		
	9400 TYKW	20 GRF	0400.0	0430	80.0	8	4		
	3750 TYKW	45 C	0607.6	0608.0	1.5	16	5		
	2800 TYKW	45 C	0607.8E	0608.0	1.2D	19	4		D
	3100 CRIM	1 S	0608.0	0608.5	1.0	14	5		
	3100 CRIM	1 S	0700.5	0701.5	1.0	14	5		
	3200 BERN	20 GRF	0838.5	0843.5	18.0	.0			ONLY PAPER REC
	5200 BERN	20 GRF	0838.5	0843.5	18.0	18.0			
	260 ONDR	45 C	0926.0	0926.8	2.5	14	1		
	810 KRAK	42 SER	0940.5	0941.5	1.0	18			
	430 KRAK	42 SER	0940.5	0941.5	1.0	11			
	2800 OTTA	21 GRF	1330.0	1355	130.0	13.4	6.7		
	3200 BERN	41 F	1331.1	1348.3	55.0	.0			ONLY PAPER REC
	5200 BERN	41 F	1331.2	1348.3	55.0	22.0			
	2800 OTTA	4 S/F	1345.5	1348.4	6.5	16.4	7.0		
	9500 POTS	4 S/F	1346.0	1348.5	6.5	22			
	9400 HUAN	S	1347.8	1405.3	41.8	15.1	7.6		0
	3200 BERN	41 F	1433.5	1434.0	4.0U	.0			ONLY PAPER REC
	5200 BERN	41 F	1433.5	1434.1	4.0U	60.0			
	4995 SGMR	4 S/F	1433.6	1434.1	3.7	56			
	2800 OTTA	4 S/F	1433.7	1434.3	4.0	39.0	9.8		
	2695 SGMR	4 S/F	1433.8	1434.1	2.2D	63			
	930 BORD	41 F	1434.0	1434.7	2.0	207	3		
	2695 SGMR	4 S/F	1444.6	1448.3	8.2D	22			
	4995 SGMR	4 S/F	1445.3	1448.3	5.5	28			
	1415 SGMR	4 S/F	1446.1	1448.6	4.0D	08			
	2800 OTTA	1 S	1458.0	1500	6.0	2.8	1.3		
	2800 OTTA	3 S	1700.0	1702	3.5	11.6	5.0		
	2800 OTTA	29 PBI	1703.5	1703.5	16.0	4.6	2.2		
	2800 OTTA	21 GRF	1928.0	1939	42.0	10.6			
	1415 PALE	4 S/F	1929.6	1930.6	12.4	49			
	2695 PALE	4 S/F	1929.6	1930.8	12.4	25			
	2800 OTTA	4 S/F	1930.0	1930.8	4.5	19.6	9.0		
	2800 OTTA	20 GRF	2030.0	2033.5	17.0	4.6	2.0		
	2800 OTTA	8 S	2056.7	2056.7	.1	12.0			
25	3750 TYKW	32 ABS	0150.0	0220	60.0	-3	-2		
	9400 TYKW	32 ABS	0150.0	0215	60.0	-6	-3		
	2000 TYKW	32 ABS	0205.0	0220	45.0	-2	-1.4		
	1000 TYKW	45 C	0228.0	0229.9	3.0	23	1.5		
	9400 TYKW	5 S	0228.0	0230	10.0	6	3		
	3750 TYKW	45 C	0228.0	0229.3	4.0	7	3		
	2000 TYKW	5 S	0228.5	0229.5	2.5	1.5	.7		
	2000 TYKW	45 C	0245.0	0246.4	4.0	4	1		
	3750 TYKW	5 S	0245.0	0246.3	5.0	6	2.5		
	1000 TYKW	8 S	0309.2	0309.3	.3	10	3		
	3750 TYKW	21 GRF	0355.0	0413	105.0	7	2.5		
	9400 TYKW	20 GRF	0355.0	0420	85.0	5	2.5		
	2000 TYKW	21 GRF	0400.0	0412	80.0	3	1.5		
	1000 TYKW	45 C	0444.0	0445.0	4.0	60	20		
	2000 TYKW	5 S	0444.0	0445.4	4.0	5	1.5		
	3750 TYKW	20 GRF	0445.0	0452	30.0	2.5	1		

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
25	1415 LEAR	8 S	0445.1	0445.3	.2	31			
	9100 GORK	1 S	0649.5	0650.2	1.2	6	3		
	950 GORK	2 S/F	0649.5	0650.2	1.3	5			
	2950 GORK	1 S	0649.7	0650.0	1.1	12	6		
	650 GORK	4 S/F	0649.7	0650.1	1.0	45			
	650 GORK	4 S/F	0655.0	0655.2	1.4	30			
	9400 TYKW	45 C	0655.0	0656.4	2.5	27	7		
	3750 TYKW	45 C	0655.0	0656.1	2.5	64	10		
	2000 TYKW	45 C	0655.0	0656.1	2.5	31	6		
	1000 TYKW	45 C	0655.0	0656.1	2.5	106	10		
	9100 GORK	1 S	0655.1	0656.3	2.3	25	12		
	950 GORK	4 S/F	0655.2	0656.0	1.8	83			
	2950 GORK	1 S	0655.5	0656.2	1.6	30			
	8800 LEAR	8 S	0656.0	0656.3	.1	28			
	2695 LEAR	8 S	0656.1	0656.1	.2	36			
	245 LEAR	8 S	0743.8	0744.0	.3	110			
	810 KRAK	8 S	0857.7	0857.7	.2	11			
	3200 BERN	4 S/F	0901.3	0901.3	3.0	.0			ONLY PAPER REC
	5200 BERN	4 S/F	0901.3	0901.3	3.0	18.0			ONLY PAPER REC
	2650 DWIN	2 S/F	0902.0	0902.5	2.0	20	10		
	930 BORD	41 F	0902.0	0902.4	1.6	17	3		
	3000 POTS		0902.0	0903.0		9.3			
	1470 POTS	3 S	0902.0	0903.0	1.5	11			
	9500 POTS	3 S	0902.0	0903	1.7	14			
	3000 POTS	4 S/F	0902.0	0902.5	1.5	9.3			
	9100 GORK	1 S	0902.2	0902.9	1.3	18	9		
	810 KRAK	8 S	0902.3	0902.3	.2	6			
	3100 CRIM		0902.7	0903.7		8			
	3100 CRIM	45 C	0902.7	0903.1	1.0	8	3		
	260 ONDR	41 F	0907.2	0938	63.0	10	3		
	930 BORD	41 F	0914.2	0914.4	.5	15	2		
	810 KRAK	8 S	1025.0	1025.0	.1	12			
	930 BORD	41 F	1029.7	1029.8	1.2	218	2		
	33 UPIC	45 C	1029.8	1030.3	1.1				
	800 ONDR	8 S	1030.0	1030	.2	192			
	430 KRAK	8 S	1030.0	1030.2	.3	100			
	810 KRAK	42 SER	1030.0	1030.2	.8	290			
	29 UPIC	45 C	1030.2	1030.6	1.6				
	9100 GORK	1 S	1057.4	1057.7	.7	23	12		
	234 POTS	4 S/F	1208.3	1208.4	.2	170	40		
	260 ONDR	42 SER	1208.5	1344.7	103.0	67			
	536 ONDR	8 S	1301.7	1301.7	.2	53			
	930 BORD	46 C	1526.0	1526.1	2.0	216	6		
	4995 SGMR	4 S/F	1609.8	1613.0	7.0D	13			
	8800 SGMR	4 S/F	1611.0	1613.0	3.3	23			
	2800 OTTA	20 GRF	1625.0	1740	140.0	4.0	3.2		
	2800 OTTA	240 R	1935.0	2000	25.0	4.6			
	8800 SGMR	4 S/F	2003.3	2003.6	2.7	150			
	9400 HUAN	S	2033.5	2042.7	19.6	12.8	9.9		0
	2695 PENT	21 GRF	2034.0	2110	60.0	4.8	2.4		
	2800 OTTA	1 S	2035.0	2040	10.0	5.4	2.8		
	245 SGMR	8 S	2042.8	2042.8	1.2	40			
	2000 TYKW	20 GRF	2320.0	2330	120.0	2	1		
	3750 TYKW	20 GRF	2320.0	2335	130.0	4	2		
26	8800 PALE	8 S	0053.3	0054.0	.8	32			
	15400 PALE	8 S	0053.6	0054.0	.5	35			
	9400 TYKW	21 GRF	0428.5	0429.3	35.0	5	2		
	3750 TYKW	21 GRF	0429.0	0429.3	35.0	2	1		
	3750 TYKW	5 S	0438.0	0439.7	7.0	5	1		
	1000 TYKW	45 C	0451.7	0452.1	.5	4	1.5		
	3750 TYKW	5 S	0451.8	0452.0	.6	8	2		
	2000 TYKW	5 S	0451.8	0452.1	.6	3	1		
	9400 TYKW	5 S	0451.8	0452.0	.5	14	3		
	3100 CRIM	26 FAL	0700.0	0820.0		6			
	2800 OTTA	21 GRF	1435.0	1610	115.0	3.4	1.7		
	2800 OTTA	1 S	1604.0	1604.5	1.0	2.4	1.2		
27	9400 TYKW	45 C	2247.3	2248.6	2.0	19	6		
	260 ONDR	44 NS	0840.0E		322.0D	74			
	3750 TYKW	20 GRF	0310.0	0350	100.0	4	2		
	1000 TYKW	5 S	0318.4	0318.6	.6	2	.5		
	930 BORD	41 F	1300.0	1300.2	.3	18	2		
	810 KRAK	8 S	1300.5	1300.5	.3	34			
28	430 KRAK	42 SER	1325.0	1327.5	3.3	70			
	930 BORD	41 F	1441.0	1441.2	.3	14	2		
	200 GORK	43 NS	0949.5		120.5		5		
	127 TORN	43 NS	1000.0	1000.7	260.0	280	5		V1
	410 LEAR	8 S	0543.1	0543.3	.2	13			
	2650 DWIN	8 S	0910.0			140			
	2950 GORK	21 GRF	0933.0	1024.5	120.0E	22			
	950 GORK	23 GRF	0933.0	1045.0	93.0	8			
	2650 DWIN	21 GRF	0935.0	0943	25.0	40	20		
	3200 BERN	20 GRF	0935.0	0940.1	300.0	.0			ONLY PAPER REC

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DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
28	5200 BERN	20 GRF	0935.0	1010.3	300.0	140.0			
	3100 CRIM	28 RPE	0935.0	0943.0	10.0	14			
	9100 GORK	22 GRF	0936.0	0948.7	120.0E	40			
	6100 KISV	3 S	0938.0	0949	12.0	20			
	930 BORD	40 F	0943.0	1013.2	82.0	55		6	
	8400 BERN	20 GRF	0944.0	1127.8	200.0	72.0			
	11800 BERN	20 GRF	0944.0	1127.4	200.0	83.0			
	9500 POTS	3 S	0945.0	0949	12.0	16			
	1470 POTS	4 S/F	0945.0	0948.5	11.0	14			
	3100 CRIM	47 GB	0945.0	0948.7	10.0	59		20	
	4995 ATHN	4 S/F	0945.3	0948.1	9.0D	46			
	2950 GORK	3 S	0945.5	0948.5	7.5	28		14	
	950 GORK	1 S	0945.5	0948.7	7.0	5			
	2695 ATHN	4 S/F	0945.8	0948.3	9.2D	33			
	650 GORK	22 GRF	0945.9	0949.7	27.0	2			
	8800 ATHN	4 S/F	0946.3	0948.5	7.0	41			
	8800 ATHN	4 S/F	0946.3	0948.5	7.0	40			
	4995 LEAR	8 S	0947.1	0948.5	1.9	30			
	8800 LEAR	4 S/F	0947.1	0949.3	9.0	43			
	15400 LEAR	4 S/F	0947.5	0950.1	2.8	34			
	260 ONDR	41 F	0948.0	0950.5	28.0	78		9	
	2695 LEAR	8 S	0948.1	0948.6	1.2	30			
	1415 LEAR	8 S	0948.5	0949.3	.1	13			
	3000 POTS	4 S/F	0950.0	0948.5	13.0	41			
	3100 CRIM	30 PBI	0955.0	0955.0	110.0	11			
	3000 POTS	45 C	1002.5	1010.9	48.0	23			
	1470 POTS	46 C	1002.5	1030.5	88.0	450			
	100 GORK		1003.0	1004.1		155	D		
	100 GORK		1003.0	1004.5		155	D		
	100 GORK	46 C	1003.0	1003.1	1.7	155	D		
	1415 LEAR	47 GB	1006.8	1011.3	7.0	340			
	200 GORK		1008.3	1014.3		40			
	200 GORK	46 C	1008.3	1012.2	8.0	16			
	950 GORK	2 S/F	1008.7	1010.5	4.2	8			
	3100 CRIM		1009.3	1010.8	3.0	27			
	3100 CRIM	45 C	1009.3	1010.0		28		9	
	2950 GORK	4 S/F	1009.4	1010.1	6.2	19			
	810 KRAK	8 S	1011.0	1011.2	.4	39			
	1415 LEAR	47 GB	1025.1	1030.3	8.9D	950			
	950 GORK	3 S	1030.8	1031.3	1.1	22			
	810 KRAK	8 S	1031.0	1031.2	.5	39			
	430 KRAK	8 S	1037.5	1037.5	.3	32			
	260 ONDR	42 SER	1145.8	1316.3	90.0	61			
	536 ONDR	8 S	1221.6	1221.6	.2	42			
	536 ONDR	8 S	1316.2	1316.2	.2	57			
	2800 OTTA	1 S	1435.0	1437.3	6.0	8.6		3.0	
	1415 SGMR	4 S/F	1435.8	1436.1	2.8	22			
	606 SGMR	4 S/F	1436.1	1437.6	2.5D	57			
	930 BORD	46 C	1437.0	1437.6	1.5	15		3	
	245 SGMR	8 S	1438.5	1439.1	.8D	35			
	15400 LEAR	8 S	2302.8	2302.8	1.7	20			
29	100 GORK	43 NS	1004.7		46.0			10	
	245 PALE	43 NS	2109.8	0229.6	381.2	98			
	245 PALE	8 S	0010.8	0011.1	.5	119			
	9400 TYKW	5 S	0028.5	0028.8	1.5	4		1	
	245 PALE	8 S	0032.8	0033.1	.5	119			
	3750 TYKW	5 S	0054.0	0057.5	7.0	30		10	
	2000 TYKW	5 S	0054.0	0057.6	6.0	15		5	
	9400 TYKW	5 S	0055.0	0057.6	5.0	18		8	
	2695 PALE	4 S/F	0055.3	0057.8	4.3	36			
	8800 PALE	4 S/F	0055.6	0057.6	3.7	33			
	4995 LEAR	4 S/F	0056.0	0057.5	4.0	24			
	2695 LEAR	4 S/F	0056.0	0057.6	4.0	21			
	4995 PALE	4 S/F	0056.0	0057.6	3.3	34			
	1415 PALE	8 S	0056.8	0057.5	2.0	25			
	1415 LEAR	4 S/F	0057.1	0057.5	2.5	18			
	9400 TYKW	29 PBI	0100.0		70.0	6		3	
	2000 TYKW	29 PBI	0100.0		60.0	4		2	
	3750 TYKW	29 PBI	0101.0		70.0	6		2	
	260 ONDR	42 SER	1102.0	1113.2	72.0	21			
	2800 OTTA	21 GRF	1435.0	1442	13.0	3.8		1.7	
	4995 SGMR	8 S	1440.3	1440.8	1.5	13			
	1415 SGMR	4 S/F	1440.3	1441.0	2.5D	29			
	2695 SGMR	8 S	1440.3	1441.0	1.3D	17			
	930 BORD	46 C	1440.4	1440.8	2.6	23		3	
	2800 OTTA	3 S	1440.5	1441	1.5	14.6		5.0	
	410 SGMR	8 S	1440.5	1440.8	.6D	13			
	245 SGMR	8 S	1440.6	1440.8	.5D	10			
	606 SGMR	8 S	1440.6	1440.8	.5D	22			
	2800 OTTA	23 GRF	1555.0	1630	180.0	11.2		5.6	
	1415 SGMR	4 S/F	1611.3	1618.0	7.3	21			
	606 SGMR	8 S	1617.1	1617.3U	.2D	15.0			
	2800 OTTA	1 S	1617.8	1617.9	1.0	7.8			
	410 SGMR	4 S/F	1617.8	1618.1	2.5D	33			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1980

DAY OF MONTH	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
29	245 SGMR	8 S	2047.6	2048.1	.7D	22			
	410 PALE	8 S	2047.8	2047.8	1.0	95			
	245 PALE	8 S	2047.8	2048.0	.3	48			
	410 SGMR	8 S	2048.0	2048.1	.8	67			
	2695 PENT	22 GRF	2100.0	2112	85.0	7.8			
	410 PALE	47 GB	2119.6	2126.3	8.5	78			
30	245 LEAR	43 NS	0002.0	0844.0	634.0	98			
	410 LEAR	43 NS	0045.0	0513.5	343.0	41			
	127 TORN	44 NS	0720.0E		420.0D		4		V0
	410 LEAR	43 NS	0735.0	1002.5	181.0	62			
	260 ONDR	44 NS	0805.0E		370.0D	54	8		
	245 SGMR	43 NS	1158.0	1438.1	548.0D	490			
	410 SGMR	43 NS	1158.0	1834.8	548.0D	47			
	245 PALE	43 NS	1822.1	2204.8	548.9D	139			
	410 PALE	43 NS	2047.0	0041.1	404.0D	41			
	245 LEAR	43 NS	2149.0	2325.3	767.0D	410			
	410 LEAR	43 NS	2149.0	0604.6	767.0D	71			
	245 PALE	4 S/F	0042.6	0045.1	5.0	59			
	245 LEAR	4 S/F	0042.6	0045.3	4.9	48			
	2000 TYKW	45 C	0320.0	0324.6	10.0	6	1.5		
	245 LEAR	8 S	0326.3	0327.1	1.2	75			
	606 LEAR	8 S	0537.1	0537.3	.2	36			
	15000 KISV	4 S/F	0630.8	0631.5	1.2	9			
	245 LEAR	8 S	0907.5	0907.6	1.6	100			
	650 GORK	22 GRF	0930.4	0951.7	71.4	14			
	536 ONDR	41 F	0938.0	1003.3	68.0	18	11		
	606 LEAR	4 S/F	0951.0	0952.0	25.5	21			
	650 GORK	20 GRF	1112.8	1116.0	8.2	4			
	2800 OTTA	20 GRF	1535.0	1600	40.0	2.0	1.2		
	2800 OTTA	22 GRF	1635.0	1722	90.0	2.8	1.8		
	2800 OTTA	1 S	1830.0	1835	10.0	2.4	1.2		
	606 PALE	4 S/F	1830.1	1835.8	13.0	13			
	410 PALE	4 S/F	1830.1	1831.8	16.2	72			
	245 PALE	47 GB	1830.1	1830.8	17.2	65			
	245 PALE	8 S	1928.6	1928.8	.7	320			
	2800 OTTA	2 S/F	1955.3	1955.5	1.0	3.8	1.9		
	2695 PENT	24 R	2008.0	2016	8.0	10.2	5.1		
	2695 PENT	27 RF	2008.0		112.0	10.2	7.6		
	2800 OTTA	24P R	2016.0		54.0	10.2			
	2695 PENT	26 FAL	2110.0	2200	50.0	-10.2	-5.1		
	9400 TYKW	5 S	2240.0	2240.7	3.0	5	2		
	9400 TYKW	5 S	2258.0	2258.2	.7	11	4		
	3750 TYKW	5 S	2321.0	2324	10.0	3	1.5		
	9400 TYKW	5 S	2335.0	2339	15.0	3	1.5		
	3750 TYKW	5 S	2335.0	2339	15.0	2	1		

Reports are received routinely from the following observatories:

ABST = Abastumania	HARS = Harestua	LEAR = Learmonth	PENT = Penticton	TRST = Trieste
ATHN = Athens	HIRA = Hiraio	MANI = Manila	POTS = Potsdam	UPIC = Upice
BERN = Berne	HUAN = Huancayo	NAGO = Nagoya	SAOP = Sao Paulo	VORD = Voroshilov
BORD = Bordeaux	IRKU = Irkutsk	NOBE = Nobeyama	SGMR = Sagamore Hill	
CRIM = Crimea	IZMI = Izmiran	ONDR = Ondrejov	SYDN = Sydney	
DWIN = Dwingeloo	KISV = Kislovodsk	OTTA = Ottawa	TORN = Torun	
GORK = Gorky	KRAK = Krakow	PALE = Palehua	TYKW = Toyokawa	

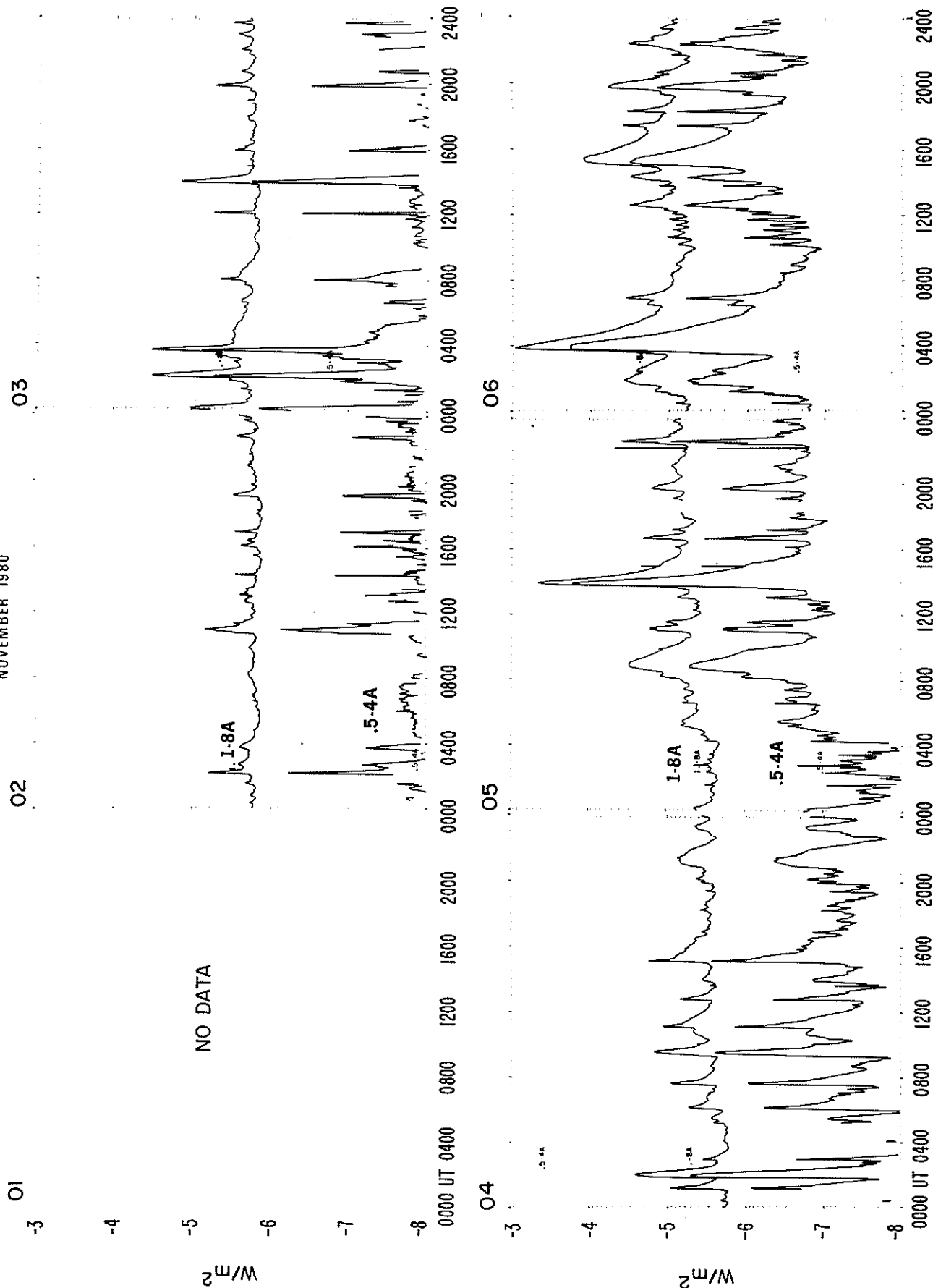
Explanation of Type Code:

1 Simple 1	6 Minor	22 Simple 3F	27 Rise and Fall	32 Absorption	44 Noise Storm in Progress
2 Simple 1F	7 Minor +	23 Simple 3AF	28 Precursor	40 Fluctuation	45 Complex
3 Simple 2	8 Spike	24 Rise	29 Post Burst Increase	41 Group of Bursts	46 Complex F
4 Simple 2F	20 Simple 3	25 Rise A	30 Post Burst Increase A	42 Series of Bursts	47 Great Burst
5 Simple	21 Simple 3A	26 Fall	31 Post Burst Decrease	43 Onset of Noise Storm	48 Major
					49 Major +

1A Simple 1A	2A Simple 1AF	240 Rise only	26A Fall A	27F Rise and Fall F	31A P.B. Decrease A
3A Simple 2A	4A Simple 2AF	240F Rise only F	260 Fall Only	27AF Rise and Fall AF	32A Absorption A
21A Simple 3A GRF		24P Post Rise	26F Fall F		46F Complex F
		24PF Post Rise F			

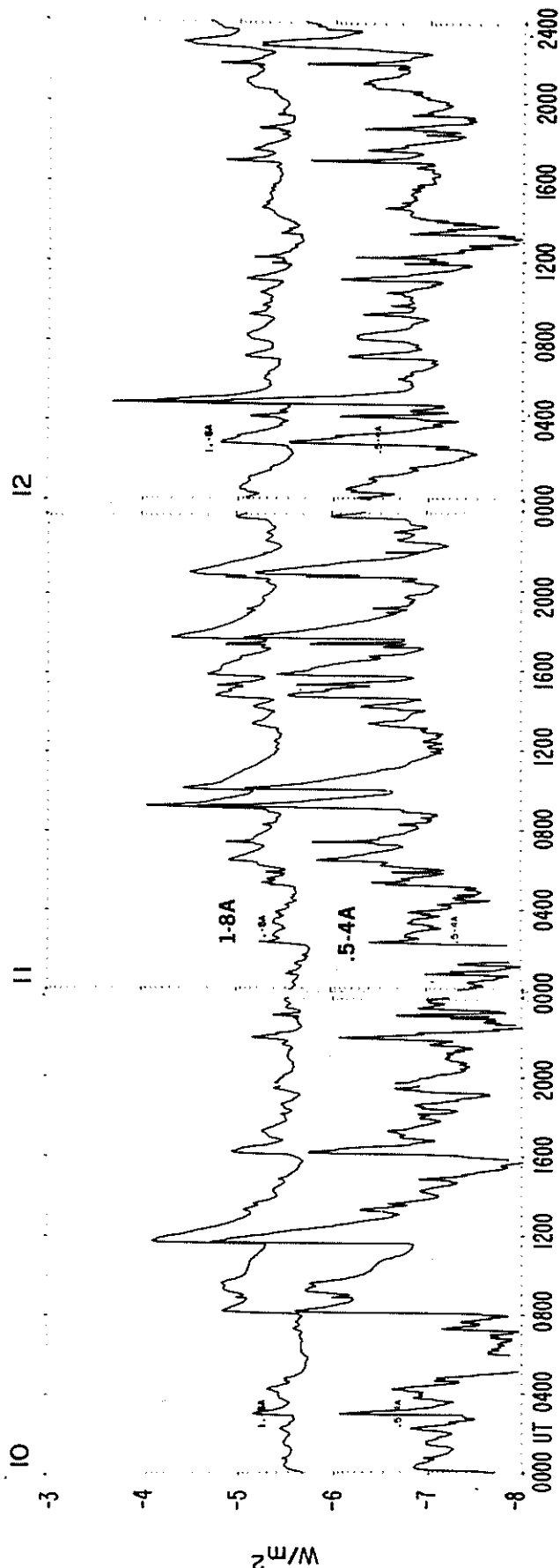
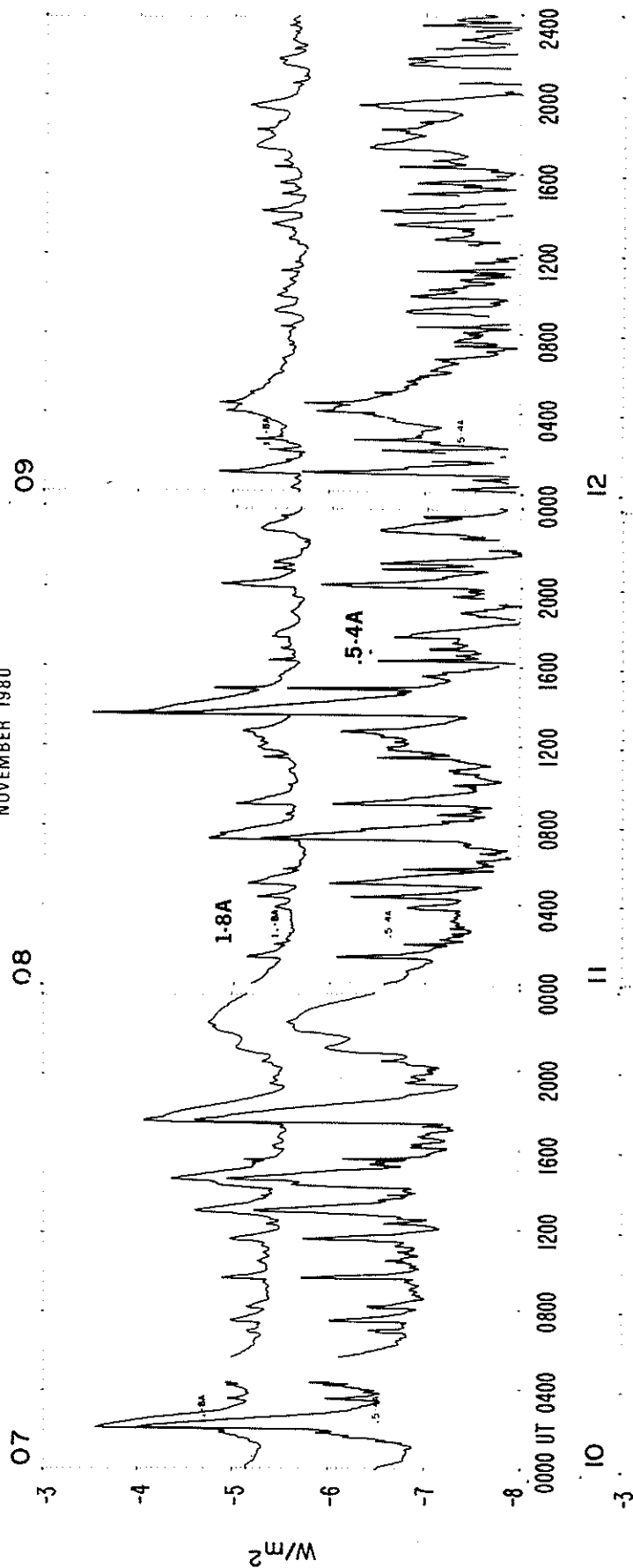
SMS-GOES X-RAYS

NOVEMBER 1980



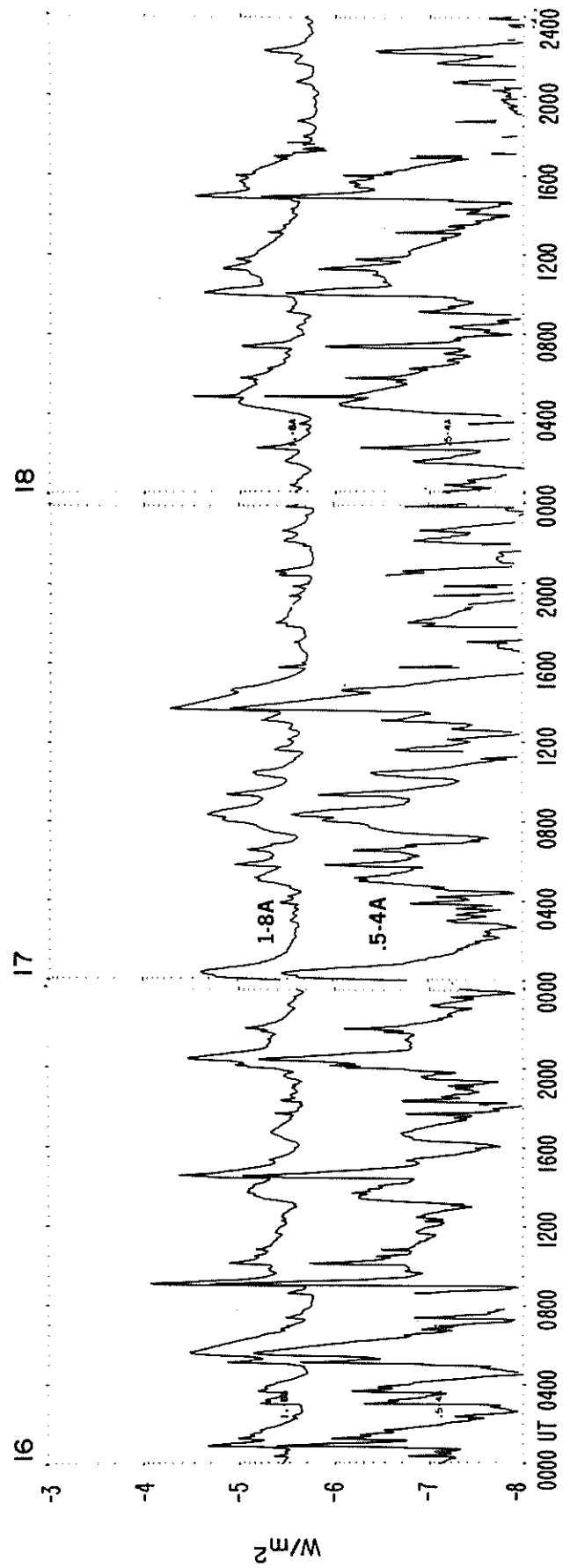
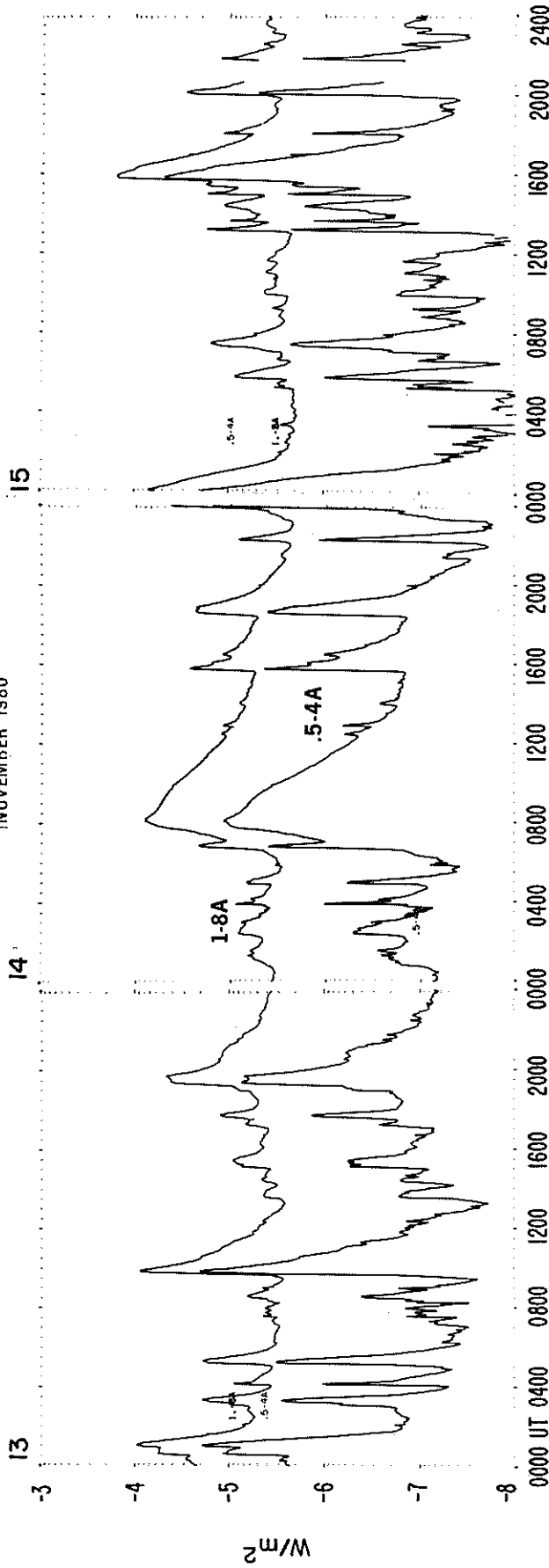
SMS-GOES X-RAYS

NOVEMBER 1980



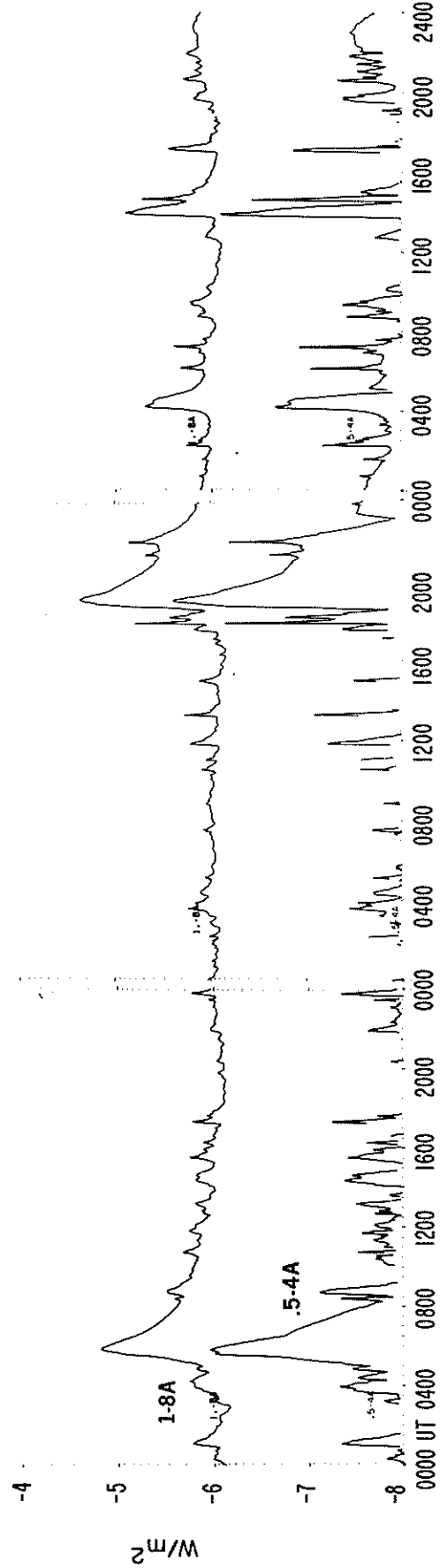
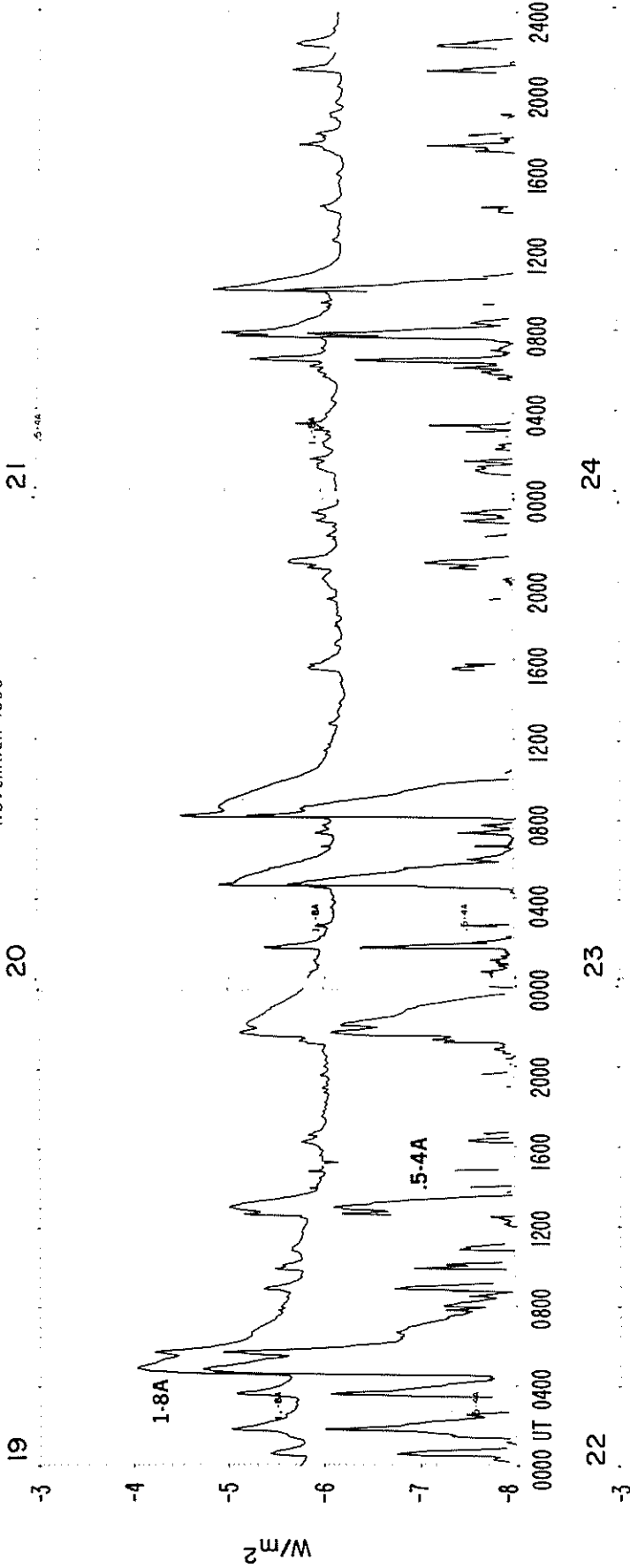
SMS-GOES X-RAYS

NOVEMBER 1980



SMS-GOES X-RAYS

NOVEMBER 1980



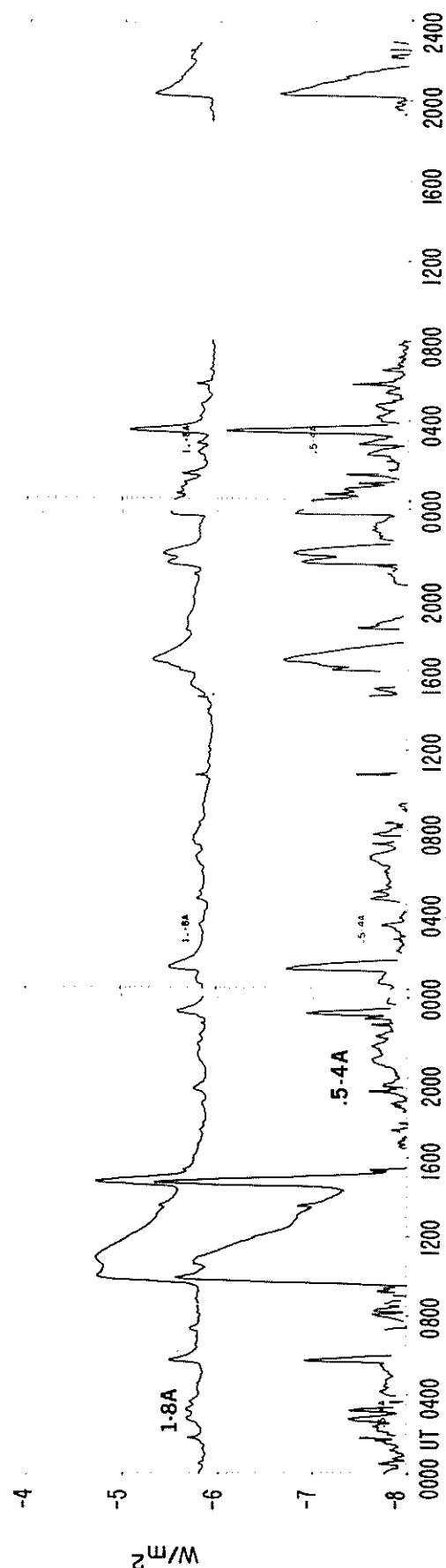
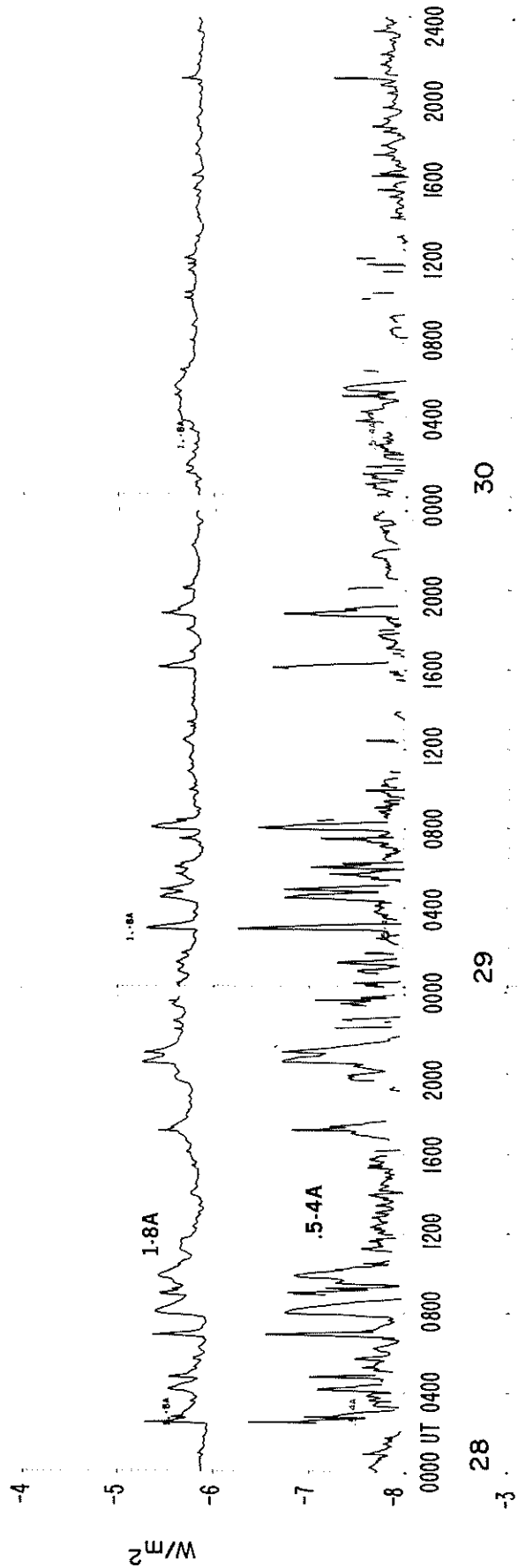
SMS-GOES X-RAYS

NOVEMBER 1980

27

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25



MASS EJECTIONS FROM THE SUN

NOVEMBER 1980

Station	Date 1980	Observed UT			Location		Wavelength	Type of Event
		Start	Max	End	RA°	R/R ₀		
HALE	Nov 01	1900	1950	2130	060	1.42	H-alpha	S
HALE	Nov 01	2200	2220	2350	145		H-alpha	Q
CULG	Nov 03	0213		0221			Meter	II
CULG	Nov 03	0345		0346			Meter	Possible II
HARV	Nov 03	1358		1409			Decimeter; meter	II
BLEN	Nov 03	1359.7		1406			Meter	II
WEIS	Nov 03	1401.5		1409.0			50-280	II Harm, Herringbone
DWIN	Nov 04	1245.7		1249.2			Decimeter	IV Pulsations
BLEN	Nov 04	1302		1331			Decimeter	IV
HALE	Nov 04	2027E		0117D	326		H-alpha	Q
WEND	Nov 05	0914	0945	1047	101	0.99-1.03	H-alpha	A
DWIN	Nov 05	1345		1353			Decimeter	IV
BLEN	Nov 05	1347.2		1351.3			Meter	II
WEIS	Nov 05	1347.3		1354.2			110-400	II Harmonic
WEIS	Nov 05	1409.3		1418.3			46-86	II
CULG	Nov 06	0344		0435			Decimeter; meter	IV
CULG	Nov 06	0346		0435			Decimeter; meter	II
CULG	Nov 06	0415		0415.5			Dekameter	II
CULG	Nov 06	0435		0515			Meter	IV
DWIN	Nov 06	1501		1538			Decimeter	IV Fiber bursts
HARV	Nov 06	1516		1537			Decimeter	IV Zebra patterns
HALE	Nov 06	1730	1850	2223	075	1.09	H-alpha	Q
HALE	Nov 06	1731	1800	2144	292	1.06	H-alpha	A
HALE	Nov 06	1731		292	292	1.22	5303A	E
HALE	Nov 06	1950	2010	2050	097		H-alpha	A
HALE	Nov 06	1950		097	097	1.06	5303A	E
DWIN	Nov 07	0710.6		0711.2			Decimeter	IV
DWIN	Nov 08	1335.7		1337.2			Decimeter	IV
BLEN	Nov 08	1335.7		1349.5			Decimeter	IV Pulsations
HALE	Nov 08	1805E		2110	077	1.14	H-alpha	A
HALE	Nov 08	2045	2156	0138D	057		H-alpha	Q
DWIN	Nov 10	0807.0		0809.0			Decimeter	IV
DWIN	Nov 10	0839.0		0845.0			Decimeter	IV
BLEN	Nov 10	1138.8		1205.8			Decimeter; meter	IV Pulsations
WEIS	Nov 10	1138.9		1144.0			Decimeter	IV
WEIS	Nov 10	1147.6		1158.0			50-140	II Harmonic
HARV	Nov 11	1743		1753			Decimeter; meter	IV
HARV	Nov 11	1744		1749			Meter; dekameter	II
DWIN	Nov 12	1211.6		1211.9			Decimeter	IV
BIGB	Nov 12	1811	1837	1848	275	1.0	H-alpha	A
BIGB	Nov 12	1814	1823	1840	254	1.0	H-alpha	A
HALE	Nov 12	1926	2203	0147D	276	1.15	H-alpha	A
HALE	Nov 12	1926		276	276	1.16	5303A	E
BIGB	Nov 12	2131	2144	2155	275	1.0	H-alpha	SP
BIGB	Nov 13	1915	1925	1952	300	0.6	H-alpha	SP
WEND	Nov 14	0839		1254	273-288	1.12	H-alpha	A, CB
WEIS	Nov 14	1230.5		1257.4			40-160	II
HALE	Nov 14	1903E	1909	2225	100	1.15	H-alpha	Loops
BLEN	Nov 16	0903.3		0907.0			Decimeter	IV Pulsations
WEIS	Nov 16	0906.0		0927.0			40-200	II Harm, Herringbone
LEAR	Nov 16	0907.3		0927.0			Meter	II
BIGB	Nov 16	1547	1615	1703	102	1.0	H-alpha	A
BIGB	Nov 16	1721	1839	2040	205	1.0	H-alpha	A
DWIN	Nov 17	0902.8		0903.5			Decimeter	IV
DWIN	Nov 17	0916.5		0922.5			Decimeter	IV
BLEN	Nov 17	1134.3		1142.3			Decimeter; meter	IV Fiber bursts
BIGB	Nov 17	1529	1602	1635	270	1.0	H-alpha	A

MASS EJECTIONS FROM THE SUN

NOVEMBER 1980

Station	Date 1980	Observed UT			Location		Wavelength	Type of Event
		Start	Max	End	RA°	R/R ₀		
HALE	Nov 18	0013	0113	0123	250		H-alpha	A
DWIN	Nov 18	0957.0		1014.5			Decimeter	IV
DWIN	Nov 18	1038.5		1040.3			Decimeter	IV
DWIN	Nov 18	1053		1117			Decimeter	IV
HALE	Nov 18	1832		2111	250		H-alpha	A
HALE	Nov 18	1832			250		5303A	E
CULG	Nov 22	0554		0555			Dekameter	Possible II
CULG	Nov 22	2307.5		2323			Meter	II
HARV	Nov 23	1845		1919			Meter; dekameter	II Herringbone
PALE	Nov 23	1846.4		1856.4			Meter	II
SGMR	Nov 23	1848.2		1857.1			Meter	II
HARV	Nov 23	1858		1916			Meter	IV Pulsations
HARV	Nov 23	1911		1915			Decimeter	IV
HARV	Nov 23	1927		1952			Meter	IV Pulsations
HARV	Nov 24	1931		1940			Meter; dekameter	II, IV
BIGB	Nov 24	1935	1941	1949	085	1.0	H-alpha	A
HARV	Nov 24	1940		1956			Meter; dekameter	II, IV
CULG	Nov 24	2201		2222			Meter	II Herringbone
CULG	Nov 25	2041		2106			Meter	II
HARV	Nov 25	2042		2054			Meter; dekameter	II
CULG	Nov 25	2047		2130			Meter	IV Weak
HALE	Nov 27	1844	2012	2147	283	1.11	H-alpha	A
HARV	Nov 28	1441		1453			Meter	II
HALE	Nov 28	1718	1804	1818	068	1.09	H-alpha	Q
BIGB	Nov 28	2325	2329	2334	108	1.0	H-alpha	A
DWIN	Nov 29	1440.5		1441.0			Decimeter	IV
CULG	Nov 29	2124.5		2134.5			Meter	II
CULG	Nov 29	2129		2159			Meter	IV Weak

QUALIFIERS ON START, MAX AND END TIMES

D = event ended after the tabulated time
 E = event began before the tabulated time
 U = uncertain time

TYPE OF EVENT

A = eruptive active region prominence
 CB = coronal cloud bubble
 D = coronal depletions
 E = coronal enhancement
 EL = coronal expanding loop
 II = Type II radio burst
 IVm = moving Type IV radio burst
 Q = eruptive quiescent prominence
 R = coronal ray or streamer
 S = flare-surge if there is a known flare association
 SP = flare-spray if there is a known flare association
 * = movement may be caused by ionospheric refraction

REPORTING STATIONS

BIGB = Big Bear
 BLEN = Bleien
 CULG = Culgoora
 DWIN = Dwingeloo
 GEOR = Georgiana
 HALE = Haleakala
 HAOC = High Altitude Observatory's SMM
 Coronagraph/Polarimeter
 HAOK = High Altitude Observatory's MARK-III
 Coronameter at Mauna Loa
 HARV = Harvard (Fort Davis)
 LEAR = Learmonth
 MANI = Manila
 MITK = Mitaka
 NRLC = Naval Research Laboratory's White-Light
 Coronagraph Experiment on P78-1
 PALE = Palehua
 SGMR = Sagamore Hill
 TELV = Tel Aviv
 WEIS = Weissenau
 WEND = Wendelstein
 UDAI = Udaipur

NOTE: Because only a small fraction of the data taken by satellite-borne coronagraph had been analyzed at the time this table was assembled, many events are defined solely by ground-based observatory reports.

SOME OTHER SOURCES OF DATA

Data Available: Some data available in publication form are cited here. A list is given, along with addresses of the responsible institutions. The WDC-A for Solar-Terrestrial Physics publishes the Toyokawa, Ottawa and Penticton radio data in its monthly publication, *Solar-Geophysical Data*. The WDC-A for Solar-Terrestrial Physics also receives most of the periodicals when they become available.

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|---|--|
| <p>Belgium: <i>Bulletin d'Observations: Activite Solaire - Observations Radio-electriques Solaires - 600 MHz (Humain, Belgium) Observatoire Royal de Belgique, Ave. Circulaire 3, Brussels, Belgium (monthly since 1962)</i></p> <p>Canada: <i>Solar Noise Observations at 2800 Mc/s (Ottawa - ARO) and 2700 Mc/s (Penticton - DRAO) Series C Monthly Report, National Research Council, Radio Astronomy Section Ottawa 7, Ontario, Canada (since 1947)</i></p> <p>France: <i>Carte Synoptiques de la Chromosphere Solaire Observatoire de Paris, 92 Meudon, France (monthly since 1931)</i></p> <p>Germany: <i>Daily Mean Value of Solar Flux Density Heinrich-Hertz Institut, 1199 Berlin-Adlershof, Rudower Chaussee 5, G.D.R. (monthly since Jul 1957)</i></p> <p>Italy: <i>Solar Phenomena - Monthly Bulletin and Photographic Supplement Osservatorio Astronomica di Roma, Monte Mario, Rome, Italy (monthly since 1958); Osservazione Solari, Solar Flux and Distinctive Events Osservatorio Astronomico Di Trieste (quarterly since 1965); Solar Observations made at Catania Astrophysical Observatory (annually since 1967)</i></p> | <p>Japan: <i>Monthly Report of Solar Radio Emission Radio Astronomy Section, Research Institute of Atmospheric, Nagoya University, Toyokawa, Japan (since 1956); Solar Activity Chart WDC-C2, Toyokawa Observatory, Nagoya University, Toyokawa, Japan (annually since 1968); IAU Quarterly Bulletin on Solar Activity Tokyo Astronomical Observatory, Mitaka, Tokyo, Japan (since 1978)</i></p> <p>Netherlands: <i>Geomagnetic Data IAGA Bulletin No. 12 (1932-69), No. 32 (since 1970) IUGG Publications Office, 39 ter, Rue Gay-Lussac, Paris V, France (annually)</i></p> <p>Philippines: <i>Manila Observatory "Solar Maps and Activity", Manila Observatory, P.O. Box 1231, Manila, Philippines (monthly)</i></p> <p>Switzerland: <i>Bulletin of "Berne Solar Observations", Institute of Applied Physics, Div. of Solar Observations, Sidlerstrasse 5, 3012 Berne, Switzerland (since 1968)</i></p> <p>Taiwan: <i>Report on Sunspot Observations Taiwan Provincial Weather Bureau Observatory, Taipei, Taiwan (quarterly since 1957)</i></p> <p>USSR: <i>СОЛНЕЧНЫЕ ДАННЫЕ (Solar Data) USSR Academy of Science (monthly since 1958); КОСМИЧЕСКИЕ ДАННЫЕ (Cosmic Data) (monthly since 1962); Magnetic Fields of Sunspots (bimonthly since 1964)</i></p> <p>USA: <i>Preliminary Report and Forecast of Solar-Geophysical Activity Space Environment Services Center, NOAA, Boulder, Colorado 80303 USA (weekly); Solar-Geophysical Data NOAA, Boulder, Colorado 80303 USA (monthly since November 1955)</i></p> |
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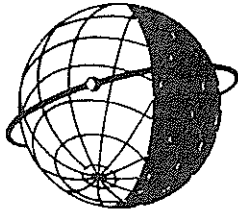
UAG Series of Reports

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- UAG-3 "Observations of Jupiter's Sporadic Radio Emission in the Range 7.6-41 MHz, 6 July 1966 through 8 September 1968," October 1968, 35 pp, \$0.55.
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- UAG-8 "Data on Solar-Geophysical Activity October 24 - November 6, 1968," Parts 1 and 2, March 1970, 312 pp, \$1.75 (includes Parts 1 and 2).
- UAG-9 "Data on Cosmic Ray Event of November 18, 1968 and Associated Phenomena," April 1970, 109 pp, \$0.55.
- UAG-10 "Atlas of Ionograms," May 1970, 243 pp, \$1.50.
- UAG-12 "Solar-Geophysical Activity Associated with the Major Geomagnetic Storm of March 8, 1970," Parts 1, 2 and 3, April 1971, 466 pp, \$3.00 (includes Parts 1-3).
- UAG-13 "Data on the Solar Proton Event of November 2, 1969 through the Geomagnetic Storm of November 8-10, 1969," May 1971, 76 pp, \$0.90.
- UAG-14 "An Experimental, Comprehensive Flare Index and Its Derivation for 'Major' Flares, 1955-1969," July 1971, 25 pp, \$0.30.
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- UAG-17 "Ionospheric Drift Velocity Measurements at Jicamarca, Peru (July 1967 - March 1970)," October 1971, 45 pp, \$0.55 (microfiche only).
- UAG-18 "A Study of Polar Cap and Auroral Zone Magnetic Variations," June 1972, 21 pp, \$0.20.
- UAG-19 "Reevaluation of Solar Flares 1967," June 1972, 15 pp, \$0.15.
- UAG-21 "Preliminary Compilation of Data for Retrospective World Interval July 26 - August 14, 1972," November 1972, 128 pp, \$0.70.
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- UAG-23 "U.R.S.I. Handbook of Ionogram Interpretation and Reduction," Second Edition, November 1972, 324 pp, \$1.75.
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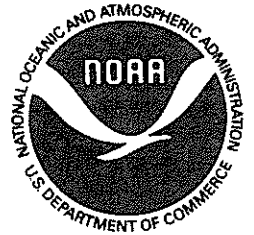
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