

HFUS 1 BOU 092200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 282

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 09 OCTOBER 1978

IA. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE DURING THE PAST 24 HOURS. REGION 1320 (S13W60) HAS BEEN RESPONSIBLE FOR MOST OF THE ACTIVITY, WITH THE MOST SIGNIFICANT BEING AN M4 AT 09/1940Z. THIS EVENT WAS ASSOCIATED WITH A 1B FLARE, A 170 FLUX UNIT BURST AT 2695 MHZ AND IMPORTANCE 2 SHORTWAVE FADES. REGION 1320 IS THE MOST COMPLEX REGION ON THE DISK WITH A BETA GAMMA DELTA CONFIGURATION IN A FAIRLY COMPACT CLASS "D" SPOT GROUP. SEVERAL ADDITIONAL SPOT GROUPS ARE VISIBLE TODAY - REGION 1330 (N29W56) REAPPEARED AFTER A ONE DAY ABSENCE, 1341 (N37E09) FORMED ON THE DISK AND REGION 1342 (S18E71) ROTATED OVER THE LIMB. ALSO, THERE IS AN UNNUMBERED REGION ROTATING OVER THE NORTHEAST LIMB ABOUT NE28. SO FAR THIS REGION HAS REVEALED AN "H" CLASS SPOT GROUP. THE REST OF THE DISK IS FAIRLY QUIET.

IB. SOLAR ACTIVITY WILL BE LOW TO MODERATE DURING THE COMING 24 HOURS. THE RADIO SPECTRUM ASSOCIATED WITH THE M-4 X-RAY BURST WOULD SUGGEST THAT A PROTON EVENT IS UNLIKELY. HOWEVER, THE INTEGRATED X-RAY FLUX ALONG WITH THE MAGNITUDE OF THE RADIO BURST AT 1415 MHZ WOULD INDICATE THAT PROTON EMISSION SHOULD NOT BE IGNORED.

II. THE GEOMAGNETIC FIELD IS QUIET TO OCCASIONALLY UNSETTLED. NO SIGNIFICANT CHANGE IS EXPECTED DURING THE COMING 24 HOURS. THE FIELD IS LIKELY TO RESPOND TO THE M4 X-RAY BURST BUT THE MAGNITUDE SHOULD BE SMALL AND THE DELAY TIME BEYOND THE VALID PERIOD OF THIS FORECAST.

III. EVENT PROBABILITIES 10 OCTOBER - 12 OCTOBER

CLASS M	60/50/50
CLASS X	30/25/15
PROTON	30/25/25
PCAF	YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED	09 OCTOBER 156
PREDICTED	10-12 OCTOBER 159/161/164
90-DAY MEAN	09 OCTOBER 136

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG	08 OCTOBER 05
ESTIMATED AFR/AP	09 OCTOBER 09/07
PREDICTED AFR/AP	10-12 OCTOBER 10/15 - 12/15 - 14/20

SOLTERWARN

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JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 09 OCTOBER 1979

IA. SOLAR ACTIVITY HAS BEEN LOW TO OCCASIONALLY MODERATE. CLOUDS  
HAVE HAMPERED OBSERVATIONS AT SEVERAL OBSERVATORIES, BUT X-RAY  
AND RADIO DATA, ALONG WITH OCCASIONAL GLIMPSES, SUGGEST THAT THE  
SUN IS BEHAVING JUST ABOUT THE SAME AS YESTERDAY. REGIONS 2030  
(N25W12) AND 2032 (N16W02) CONTINUE TO DOMINATE THE DISK IN SIZE  
BUT NONE OF THE FEW OPTICAL FLARES REPORTED WERE FROM THESE  
REGIONS. THE DYNAMIC OCCURRENCES ARE FROM REGIONS 2041 (S14W71),  
2031 (N11W45), 2042 (N25E66), 2036 (S14W21) AND 2025 (N09W51).  
ALL OF THESE REGIONS HAVE PRODUCED SUBFLARES, HAVE POINT BRIGHTENINGS  
AND/OR FLARE FLUCTUATIONS AND, WITH THE EXCEPTIONS OF 2042 AND  
2025, ALL ARE SMALL "D" TYPE GROUPS. REGION 2042 IS A SMALL "E"  
TYPE GROUP AND 2025 IS A SMALL "B" TYPE GROUP. REGION 2042 HAS  
SPOTS TRAILING IT OVER THE LIMB AND MAY BE DIVIDED INTO TWO  
GROUPS TOMORROW. TWO ADDITIONAL REGIONS WERE NUMBERED TODAY,  
2043 (S07W22) AND 2044 (S32E60).

IB. SOLAR ACTIVITY SHOULD BE LOW TO MODERATE DURING THE NEXT 24  
HOURS.

II. THE GEOMAGNETIC FIELD WAS DISTURBED AGAIN DURING THE PAST  
24 HOURS. MINOR STORM CONDITIONS WERE OBSERVED AT 091200Z BUT  
UNSETTLED, TRENDING TOWARD QUIET CONDITIONS, HAVE PERSISTED SINCE  
THEN. GENERALLY QUIET TO UNSETTLED CONDITIONS SHOULD PERSIST FOR  
THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 10 OCTOBER - 12 OCTOBER

CLASS M 80/80/80

CLASS X 20/20/20

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 09 OCTOBER 214

PREDICTED 10-12 OCTOBER 205/205/205

90-DAY MEAN 09 OCTOBER 182

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 08 OCTOBER 31

ESTIMATED AFR/AP 09 OCTOBER 18/25

PREDICTED AFR/AP 10-12 OCTOBER 10/16 - 10/10 - 08/10

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