

HFDS 1 BOU 192200  
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO  
SDF NUMBER 262

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 19 SEPTEMBER 1978

IA. SOLAR ACTIVITY HAS BEEN LOW. REGION 1294 (N35W06) IS CONTINUING  
ITS GROWTH TREND BUT THE DELTA CONFIGURATION IS WEAKENING. DESPITE  
THE LACK OF FLARE PRODUCTION FROM 1294, THIS REGION REMAINS QUITE  
IMPRESSIVE AND RETAINS ITS MAJOR FLARE PRODUCTION POTENTIAL. REGION  
1295 (S28W09) HAS CEASED ITS GROWTH AND HAS SHOWN A REVERSAL TO A  
DECAY TREND. A SMALL NEW REGION HAS BEEN OBSERVED AT S14E56 AND  
HAS BEEN NUMBERED 1303.

IB. SOLAR ACTIVITY SHOULD RETURN TO A MODERATE LEVEL. THE POSSIBILITY  
OF THE OCCURRENCE OF MAJOR FLARE ACTIVITY REMAINS. PREVIOUSLY  
ACTIVE LONGITUDES ARE DUE TO BEGIN RETURNING ON 21 SEPTEMBER WHICH  
SHOULD CAUSE AN INCREASE IN ACTIVITY LEVELS.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET. THE FIELD SHOULD REMAIN  
GENERALLY QUIET WITH INCREASINGLY UNSETTLED CONDITIONS TOWARDS THE  
END OF THE FORECAST PERIOD. THE POSSIBILITY OF A FLARE INDUCED  
MAGNETIC STORM REMAINS.

III. EVENT PROBABILITIES 20 SEPTEMBER - 22 SEPTEMBER

CLASS M	80/80/80
CLASS X	20/20/20
PROTON	15/15/15
PCAF	YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED	19 SEPTEMBER	169
PREDINTED	20-22 SEPTEMBER	171/172/173
90-DAY MEAN	19 SEPTEMBER	136

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG	18 SEPTEMBER	02
ESTIMATED AFR/AP	19 SEPTEMBER	01/04
PREDICTED AFR/AP	20-22 SEPTEMBER	06/07 - 09/10 - 14/15

SOLTERWAR  
BT

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SDF NUMBER 262

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 19 SEPTEMBER 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE. AN M4 XRAY EVENT AT 1358Z  
WAS ACCOMPANIED BY A 1B FLARE WITH ERUPTIVE PROMINENCE FROM REGION  
1982 (N08W84). X-RAY EMISSION FROM REGION 1994 (N06E31) HAS INCREASED  
IN STEPS DURING THE PAST 10 HOURS, REACHING M2 LEVEL AT 2057Z WITH  
A 2B FLARE. THE SUNSPOTS HAVE EVOLVED A COMPLEX DELTA CONFIGURATION  
WITH EXTRAORDINARY MAGNETIC GRADIENT. IT HAS CLASSIC PROTON-FLARE  
REGION QUALITIES. THE WEAK PROTON EVENT AND POLAR CAP ABSORPTION  
DECREASED TO ABOUT 10 COUNTS/SQ. CM/SEC/STER AT 10 MEV BY 1800Z.  
COUNTS HAVE SINCE INCREASED TO 20. THERE ARE 15 SPOTTED REGIONS.  
AN M3 XRAY EVENT AT 0408Z OCCURRED WHEN OPTICAL OBSERVATIONS WERE  
MISSING.

IB. A MAJOR PROTON FLARE IS IMMINENT. REGION 1994 WILL PRODUCE MOD-  
ERATE TO HIGH ACTIVITY THROUGHOUT THE NEXT THREE DAYS.

II. THE GEOMAGNETIC FIELD BECAME QUIET EARLY TODAY AND HAS REMAINED  
SO ALL DAY. CONDITIONS WILL REMAIN QUIET TO SLIGHTLY UNSETTLED UNTIL  
FLARE ACTIVITY INDUCES A MAJOR STORM, PROBABLY BY THE THIRD DAY.

III. EVENT PROBABILITIES 20 - 22 SEPTEMBER

CLASS M 99/99/99

CLASS X 50/30/30

PROTON 50/50/30

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 SEPT 217

PREDICTED 20 - 22 SEPTEMBER 218/214/214

90-DAY MEAN 19 SEPT 173

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 18 SEPTEMBER 45

ESTIMATED AFR/AP 19 SEPTEMBER 05/10

PREDICTED AFR/AP 20 - 22 SEPTEMBER 12/12 50/21 50/30

SOLTERWARN

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