

HFUIS 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

PREDICTED 20-22 SEPTEMBER 171/172/173

90-DAY MEAN 19 SEPTEMBER 136

V. GEOMAGNETIC 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

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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 UNSETLED 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 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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