

HFUS 1 BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 260

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 17 SEPTEMBER 1978

I A. SOLAR ACTIVITY HAS BEEN MODERATE. REGION 1294 (N36E18) HAS PRODUCED TWO CLASS M X-RAY FLARES AT APPROXIMATELY 0830 U.T. AND 1500 U.T. SOME GROWTH HAS BEEN OBSERVED IN REGION 1294. APPARENT INTERACTION IS OCCURRING BETWEEN REGIONS 1294, 1287 (N37E01), 1289 (N29E08), AND 1292 (N31E21). THIS ALONG WITH THE PROXIMITY OF THESE REGIONS HAS RESULTED IN A VERY STRONG AND COMPLEX MAGNETIC CONFIGURATION COVERING A LARGE AREA. TWO NEW REGIONS HAVE BEEN OBSERVED AND HAVE BEEN NUMBERED 1300 (N12E48) AND 1301 (N28E77). BOTH OF THESE REGIONS APPEAR SIMPLE.

I B. SOLAR ACTIVITY SHOULD CONTINUE AT MODERATE LEVELS WITH A SIGNIFICANT PROBABILITY OF HIGH LEVELS OF ACTIVITY BEING OBSERVED DURING THE FORECAST PERIOD.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED. CONDITIONS SHOULD REMAIN GENERALLY UNSETTLED WITH ACTIVE PERIODS PROBABLE. THE POSSIBILITY OF A FLARE INDUCED MAGNETIC STORM IS INCREASING AS THE ACTIVE NORTHEAST COMPLEX APPROACHES CENTRAL MERIDIAN.

III. EVENT PROBABILITIES 18 SEPT - 20 SEPT

CLASS M 90/90/90

CLASS X 30/30/30

PROTON 10/15/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 SEPT 160

PREDICTED 18 - 20 SEPTEMBER 162/160/158

90-DAY MEAN 17 SEPT 136

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 16 SEPT 06

ESTIMATED AFR/AP 17 SEPT 07/09

PREDICTED AFR/AP 18 - 20 SEPT 11/12 - 14/15 - 16/18

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JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 17 SEPTEMBER 1979

IA. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE THE PAST 24 HOURS.
REGION 1982 (N08W58) A MAGNETICALLY COMPLEX BETA-GAMMA-DELTA,
E-TYPE REGION HAS BEEN RELATIVELY STABLE, BUT HAS EXHIBITED SOME
PLAGE FLUCTUATIONS. REGION 1994 (N05E61) AN F-TYPE, BETA-GAMMA-
DELTA HAS GROWN IN SIZE AND COMPLEXITY. THIS REGION IS ORIENTED
NORTH-SOUTH AND HAS A STRONG ACTIVE DARK FILAMENT WITH MANY BRIGHT
POINTS AND PLAGE FLUCTUATIONS. A NEW COMPACT PLAGE AREA HAS APPEARED
NEAR EAST LIMB AT ABOUT N27. REGION 1994 DID PRODUCE A C8/2N FLARE
AT 16/2355 UT (MAX) AND A ON/C4 EVENT ON 17/1040 UT (MAX).

IB. SOLAR ACTIVITY IS EXPECTED TO BE HIGH OVER THE NEXT 24 HOURS.
REGION 1994 CONTINUES TO MAINTAIN A VERY HIGH POTENTIAL FOR
PRODUCTION OF MAJOR FLARES AND REGION 1982 HAS THE POSITION AND THE
POTENTIAL TO PRODUCE A MAJOR PROTON FLARE.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED DURING THE LAST PERIOD.
IT IS EXPECTED TO BECOME PREDOMINATELY ACTIVE OVER THE NEXT 24
HOURS. POLAR CAP ABSORPTION REACHED EVENT CRITERIA DURING THE LAST
24 HOURS AND SHOULD CONTINUE DURING THE NEXT 24 HOUR PERIOD. THE
PROTON EVENT REACHED A PARTICLE FLUX OF 61 AT ENERGIES GREATER THAN
10 MEV. THIS EVENT SHOULD CONTINUE OVER THE NEXT PERIOD.

III. EVENT PROBABILITIES 18 SEPTEMBER - 20 SEPTEMBER

CLASS M 9/9/90

CLASS X 6/6/60

PROTON 6/6/60

PCA IN PROGRESS

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 SEPTEMBER 2.03

PREDICTED 18-20 SEPTEMBER 2.09/2.15/2.20

90-DAY MEAN 17 SEPTEMBER 171

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 16 SEPTEMBER 08

ESTIMATED AFR/AP 17 SEPTEMBER 10/12

PREDICTED AFR/AP 18-20 SEPTEMBER 20/30 - 15/20 - 12/15

SOLTERWARN

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