

HFUS 3 BOU 09 1425

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 314 A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 1200 UT 09 NOVEMBER 1980

IA. SOLAR ACTIVITY HAS BEEN HIGH DURING THE PAST 24 HOURS. THE FOLLOWING ENERGETIC FLARES, WITH X-RAY MAX TIMES GIVEN, HAVE OCCURRED. REGION 2776 (N12W40): X3/2B AT 08/1336Z WITH STRONG SHORT WAVE FADE AND 1,075 FU BURST AT 2800 MHZ REPORTED BY ALGONQUIN RADIO OBSERVATORY; AND, M1/SB AT 09/0404Z WITH MINOR CENTIMETRIC BURSTS. REGION 2779 (S10E27): M2/1B AT 08/1453Z WITH MODERATE SHORT WAVE FADE AND 1,100 FU BURST AT 2695 MHZ; M1/1B AT 08/2008Z WITH MINOR CENTIMETRIC BURSTS (A IN FLARE OCCURRED SIMULTANEOUSLY IN REGION 2772 (N23W70)); AND, M1/SB AT 09/0429Z WITH MINOR CENTIMETRIC BURSTS. REGION 2782 (S18W06): M1/2B AT 09/0101Z WITH MINOR CENTIMETRIC BURSTS. REGION 2776 CONTINUES A SLIGHT DECAY BUT STILL RETAINS ITS DELTA AND MODERATE GRADIENT. REGION 2779 CONTINUES TO GROW IN WHITE LIGHT AND H-ALPHA. THE DELTA REMAINS AND THE ADDED GROWTH HAS INTENSIFIED THE MAGNETIC GRADIENT. THE NEUTRAL LINE REMAINS VERY COMPLEX. REGION 2782 HAS CONTINUED ITS GROWTH WITH SLIGHT INCREASE IN COMPLEXITY AND MAGNETIC GRADIENT.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN HIGH. REGION 2776, THOUGH DECAYING, RETAINS ITS POTENTIAL FOR MAJOR FLARE ACTIVITY. THE CONTINUING GROWTH OF REGION 2779 INDICATES THE STRONG PROBABILITY OF A RETURN TO MAJOR FLARE ACTIVITY FROM THIS REGION. OLD REGION 2751, WHICH PRODUCED ENERGETIC FLARES LAST ROTATION, IS DUE BACK 11 NOVEMBER.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET. THE IMF TURNED SOUTHWARD AT THE ISEE-3 SATELLITE AT 1044Z (BUT ONLY 8 GAMMA). BOULDER'S MAGNETOMETER RECORDED A SUDDEN IMPULSE OF 10 GAMMA AT 1122Z. BOTH OF THESE RESPONSES ARE RELATIVELY WEAK; HOWEVER, THIS IS THE FIRST INDICATION OF A POSSIBLE SHOCK FRONT REACHING THE EARTH'S ENVIRONMENT AS A RESULT OF THE MAJOR FLARES WHICH HAVE OCCURRED THROUGH THE PAST SEVERAL DAYS. THE FIELD IS EXPECTED TO BE GENERALLY ACTIVE THOUGH THE FORECAST PERIOD WITH SHORT INTERVALS ATTAINING MINOR STORM INTENSITY.

III. EVENT PROBABILITIES: 10-12 NOVEMBER

CLASS M 95/95/95

CLASS X 35/35/35

PROTON 35/35/35

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 08 NOV 278

ESTIMATED 09 NOV 275

PREDICTED 10-12 NOV 272/268/264

90 DAY MEAN 09 NOV 198

V. GEOMAGNETIC A INDICES

OBSERVED AFR 07 NOV 08 AP 08 NOV 06

ESTIMATED AFR 08 NOV 06 AFR/AP 09 NOV 10/15

PREDICTED AFR/AP 10/12 NOV 20/30 18/25 15/15

SOLTERWARN

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HFUS 1300 092200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 314B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200UT 09 NOV 1980

IA. SOLAR ACTIVITY HAS DECLINED SOMEWHAT DURING THE PAST 24 HOURS, ESPECIALLY THE MAJOR ACTIVITY. REGIONS 2776 (N11W48) 2779 (S10E19) AND 2782 (S18W13) HAVE EACH PRODUCED 1 CLASS M FLARE; M1/5B MAX 090404Z, M1/5B MAX 090429Z AND M1/2B MAX 090410Z RESPECTIVELY.

IB. SOLAR ACTIVITY SHOULD REMAIN HIGH. REGIONS 2772, 2776, AND 2779 RETAIN THEIR POTENTIAL FOR SIGNIFICANT ACTIVITY.

II. THE GEOMAGNETIC FIELD HAS SHOWN OCCASIONAL PERTURBATIONS SINCE THE SUDDEN IMPULSE (10 GAMMA) AT 091122Z. IT IS EXPECTED THAT THESE PERTURBATIONS WILL INCREASE IN BOTH FREQUENCY AND MAGNITUDE RESULTING IN GENERALLY ACTIVE CONDITIONS DURING THE COMING 24 HOURS.

III. EVENT PROBABILITIES: 10-12 NOV

CLASS M 95/95/95

CLASS X 35/35/35

PROTON 35/35/35

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 09 NOV 266

PREDICTED 10-12 NOV 255/245/239

90 DAY MEAN 09 NOV 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 08 NOV 07/06

ESTIMATED AFR/AP 09 NOV 10/12

PREDICTED AFR/AP 10-12 NOV 20/30 18/25 15/15

SOLTERWARN

BT