

HFUS 3 BOU 251314

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 299A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 25 OCTOBER 1980

IA. A MAJOR SOLAR FLARE OCCURRED AT 0950Z (MAX) X3/2B FROM REGION 2751 (N19W66). RADIO OBSERVATIONS WERE VERY LIMITED, AND SUGGESTING ONLY 330 F.U. AT 10 CM. HOWEVER, THE HISTORY OF CLASS M EVENTS FROM THIS REGION INCLUDES STRONGER RADIO ACTIVITY, INCLUDING TYPE IV. NO SWEEP FREQUENCY DETECTOR WAS OPERATING AT THE TIME OF THIS EVENT. THIS REGION PRODUCED AN M1 EVENT AT 0648Z (MAX). THE SPOTS IN THIS REGION HAVE GROWN DARKER AND INCLUDE A SMALL BUT STRONG DELTA CONFIGURATION. THE SIZE AND RATE OF EVOLUTION IN REGION 2751 DID NOT PREDICT SUCH STRONG ACTIVITY. SPOTS IN THE COMPOUND REGION 2744/48 ARE LARGE AND LITTLE CHANGED DURING THE PAST THREE DAYS. ACTIVITY HERE HAS BEEN LIMITED TO INFREQUENT SUBFLARES. MINOR GROWTH HAS BEEN OBSERVED IN REGION 2758 (N17E56) WHICH IS PART OF AN EXTENSIVE PLAGE THAT INCLUDES REGION 2759 (N21E61). A MINOR AREA OF SURGES MARKS EAST LIMB TRANSIT OF A SMALL REGION AT S08.

IB. A LOW-INTENSITY PROTON EVENT IS EXPECTED 1300-2400Z TODAY WITH POLAR CAP ABSORPTION LESS THAN 4 DB. ADDITIONAL LARGE EVENTS ARE EXPECTED FROM REGION 2751.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO ACTIVE TODAY. CONDITIONS ARE EXPECTED TO BECOME QUIET TO ONLY SLIGHTLY UNSETLED BEFORE COMMENCEMENT OF ACTIVE CONDITIONS EARLY ON 27 OCTOBER. ACTIVE CONDITIONS WILL CONTINUE INTO EARLY 28 OCTOBER.

III. EVENT PROBABILITIES: 26-28 OCTOBER

CLASS M 80/80/60

CLASS X 25/25/10

PROTON 70/25/10

PCAF RED

IV. OTTAWA 10.7 FLUX

OBSERVED 24 OCTOBER 195

ESTIMATED 25 OCTOBER 193

PREDICTED 26-28 OCTOBER 192/190/183

90 DAY MEAN 24 OCTOBER 184

V. GEOMAGNETIC INDICES

OBSERVED AFR 23 OCTOBER 33 AP 24 OCTOBER 12

ESTIMATED AFR 24 OCTOBER 11 AFR/AP 25 OCTOBER 15/20

PREDICTED AFR/AP 26-28 OCTOBER 10/10 20/25 15/12

SOLTERWARN

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HFUS 1 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO  
SDF NUMBER 299B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 25 OCT 1980

IA. SOLAR ACTIVITY HAS BEEN HIGH WITH THE OCCURRENCE OF THE X3/2B FROM REGION 2751 AT 0950Z MAXIMUM. THIS REGION ALSO PRODUCED AN M1/SB AT 0542Z MAXIMUM. REGION 2744 PRODUCED A C3/IN AT 1843Z MAXIMUM. NEW REGION 2760 (S13E38) EMERGED ON THE DISK TODAY.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DURING THE NEXT 24 HOURS.

II. THE EXPECTED PARTICLE EVENT AND ASSOCIATED POLAR CAP ABSORPTION FROM TODAY'S X3/2B HAS NOT MATERIALIZED. WITH 12 HOURS NOW PAST SINCE THIS EVENT, IT NOW APPEARS DOUBTFUL IF ANY PARTICLE ENHANCEMENT WILL BE DETECTED. THE GEOMAGNETIC FIELD HAS BEEN ACTIVE.

UNSETTLED CONDITIONS ARE EXPECTED DURING THE NEXT 24 HOURS.

III. EVENT PROBABILITIES: 26 - 28 OCTOBER

CLASS M 80/80/60

CLASS X 25/25/10

PREDICTED 20/20/05

IV. OTTAWA 10.7 FLUX

OBSERVED 25 OCT 185

PREDICTED 26 - 28 OCT 183/180/175

90 DAY MEAN 25 OCT 184

PCAF YELLOW

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 24 OCT 14/12

ESTIMATED AFR/AP 25 OCT 16/20

PREDICTED AFR/AP 26 - 28 OCT 12/12 20/25 15/12

SOLTERWARN

BT