

HFUS 3 BOU 19 1300

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLORADO

SFC NUMBER 293 A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 19 OCTOBER 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. TWO LOW LEVEL M-CLASS EVENTS WERE ASSOCIATED WITH REGION 2744 (S18E52), WHICH HAS EXPERIENCED CONSIDERABLE GROWTH IN WHITE LIGHT AND H-ALPHA SINCE YESTERDAY. IT'S LARGE LEADER SPOT IS DEFINATELY OF DELTA MAGNETIC CONFIGURATION AND THERE IS PENUMBRAL MERGING. REGION 2725 (S10W77) HAS DECAYED AND STABILIZED ALTHOUGH LIMB PROXIMITY MAKES ANALYSIS DIFFICULT. REGION 2739 (S34E02) HAS SHOWN REMARKABLE GROWTH AND HAS PRODUCED SEVERAL C-CLASS X-RAY FLARES WITH STRONG RADIO BURSTS AT 245 MHZ. THREE NEW REGIONS HAVE BEEN NUMBERED. REGION 2748 (S14E61) IS A D-TYPE GROUP FOLLOWING AND SHARING A COMMON NEUTRAL LINE WITH 2744. REGIONS 2749 (N20W01) AND 2750 (N24E04) ARE EMERGING SPOT GROUPS EMBEDDED IN A LARGE DIFFUSE CENTRAL FLARE REGION.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH BASED ON THE FLARE POTENTIAL OF REGION 2744. HOWEVER, ISOLATED M-CLASS ACTIVITY IS POSSIBLE FROM REGIONS 2725 AND 2739.

II. GEOMAGNETIC ACTIVITY HAS BEEN UNSETTLED FOR THE PAST 24 HOURS. LOW LEVELS OF ENERGETIC PORTONS (APPROXIMATELY 5 P/CM²/SEC/STER AT GREATER THAN 10 MEV) ARE STILL BEING OBSERVED AND A POLAR CAP ABSORPTION EVENT BEGAN GRADUALLY NEAR 0800UT AND IS PRESENTLY AT .9 DB. (NIGHTTIME). THE PCA IS EXPECTED TO LAST FROM 12 TO 18 HOURS. IN THE ABSENCE OF MAJOR FLARES, GEOMAGNETIC ACTIVITY WILL BE LOW UNSETTLED TO QUIET FOR THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 20 - 22 OCTOBER

CLASS M 75/75/75

CLASS X 15/15/15

PROTON 05/05/10

PCAF IN PROGRESS

IV. OTTAWA 10.7 FLUX

OBSERVED 18 OCTOBER 202

ESTIMATED 19 OCTOBER 196

PREDICTED 20 - 22 OCTOBER 188/182/180

90 DAY MEAN 18 OCTOBER 185

V. GEOMAGNETIC A INDICES

OBSERVED AFR 17 OCT 09 AP 18 OCT 21

ESTIMATED AFR 18 OCT 20 AFR/AP 19 OCT 10/18

PREDICTED AFR/AP 20 - 22 OCT 08/08 06/08 06/08

SOLTERWARM

BT

HFUS 1 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO
SDF NUMBER 293B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 19 OCTOBER 1980

IA. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 10 HOURS.
ONLY SMALL C-CLASS EVENTS HAVE BEEN REPORTED. REGIONS 2749
AND 2750 HAVE BEEN COMBINED INTO REGION 2749. TWO NEW
REGIONS NUMBERED TODAY ARE 2751 (N37E13) AND 2752 (N19E33)
BOTH SIMPLE B-TYPE.

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

II. THE GEOMAGNETIC FIELD HAS BEEN SLIGHTLY UNSETTLED AND IS
EXPECTED TO BE UNSETTLED TO QUIET DURING THE NEXT 72 HOURS.

III. EVENT PROBABILITIES 20 OCTOBER - 22 OCTOBER

CLASS M 75/75/75

CLASS X 15/15/15

PROTON 05/05/10

PCA IN PROGRESS

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 OCTOBER 204

PREDICTED 20-22 OCTOBER 202/196/195

90-DAY MEAN 19 OCTOBER 185

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 18 OCTOBER 17/21

ESTIMATED AFR/AP 19 OCTOBER 10/13

PREDICTED AFR/AP 20-22 OCTOBER 08/08 - 08/08 - 06/08

SOLTERWARN

BT

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Not
on
region
rept