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HFUS 1 BOU 011300

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 060B

JOINT AESU/SEFC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1300Z 01 MARCH 1973

IA. FLARE ACTIVITY HAS INCREASED DUE TO THE DEVELOPMENT OF TRAILING POLARITY SPOTS AHEAD OF THE MAIN LEADER IN REGION 044 (N08W01).

IMPORTANCE IB FLARES IN THIS REGION PRODUCED THE FOLLOWING SIGNIFICANT X-RAY BURSTS: M-7 28/2152Z, C-8 01/0824Z, AND M-6 01/1117Z.

SHORTWAVE FADES WERE OBSERVED TO NEAR 16 MHZ WITH THE FIRST TWO FLARES, WHILE THE LAST FLARE PRODUCED FADES TO NEAR 22 MHZ WITH TOTAL FADES DETECTED AT 13 MHZ. A MAJOR RADIO BURST WITH A PEAK OF NEAR 7,000 FLUX UNITS AT 1415 MHZ ALSO ACCOMPANIED THE 1117Z FLARE. SPOT GROWTH IS STILL OCCURRING NEAR THE LEADER SPOT OF REGION 044 AND GROWTH HAS ALSO BEEN OBSERVED IN REGION 045 (S13W35).

IB. CLASS M ACTIVITY IS EXPECTED TO CONTINUE IN REGION 044 AND THERE IS NOW A FAIR CHANCE OF CLASS X ACTIVITY DUE TO THE ADDITIONAL GROWTH. A SMALL PROTON ENHANCEMENT AT SATELLITE ALTITUDES IS POSSIBLE DURING THE EARLY HOURS OF 02 MAR DUE TO THE 1117Z FLARE.

II. THE GEOMAGNETIC FIELD HAS BEEN MILDLY UNSETTLED AND SIMILAR CONDITIONS ARE EXPECTED TO CONTINUE DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 01 MAR - 03 MAR

CLASS M 90/90/85

CLASS X 20/20/15

PROTON 15/20/15

PCAF YELLOW

IV. OTTAWA 10.7 CM OBSERVED 28 FEB 104

PREDICTED 01 MAR - 03 MAR 108/108/106

90-DAY MEAN 28 FEB 102

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 27 FEB 31

ESTIMATED 28 FEB 14

PREDICTED 01 MAR - 03 MAR 12/10/10

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HFUS BOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 060

JOINT AESU/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 01 MAR 1973

IA. SOLAR ACTIVITY HAS BEEN HIGH DURING THE PAST 24 HOURS WITH THREE IMPORTANCE 1B FLARES FROM REGION 044/N08W03/. THE ACTIVITY BEGAN WITH A CLASS M6 AT 28/2155Z AND CONTINUED DURING THE 1ST WITH A CLASS C8 AT 0830Z AND A CLASS M8 AT 1110Z. ALL THREE FLARES WERE ACCOMPANIED BY PHASE ANOMALIES ON VLF CIRCUITS AND FADES ON HF CIRCUITS. THE MOST INTENSE EFFECTS WERE ASSOCIATED WITH THE 1110Z FLARE WHICH PRODUCED FADES UP TO 22 MHZ AND LASTED ABOUT 45 MINUTES ON SOME PATHS. REGION 044 HAS BEEN CHANGING SIGNIFICANTLY. IT DEVELOPED SPOTS LATE YESTERDAY OF TRAILING POLARITY IN THE PLAGE WHICH HAD FORMED AHEAD OF THE LEADER SPOT. OBSERVATION TODAY, HOWEVER, SHOWED THESE SPOTS DECLINING, BUT THE REGION REMAINS MAGNETICALLY COMPLEX.

IB. ENERGETIC FLARE ACTIVITY IS EXPECTED FROM REGION 044. THE DECLINE IN SPOTS AND MAGNETIC FIELD INTENSITY AHEAD OF THE LEADER SPOT INDICATES THAT THE FLARES SHOULD BE LESS INTENSE AND LESS FREQUENT. THE IONOSPHERIC EFFECTS ARE EXPECTED TO BE OF MODERATE INTENSITY AND LAST LESS THAN 30 MINUTES. ENERGETIC PARTICLE EMISSION AND AN ASSOCIATED PCA IS POSSIBLE BUT IS NOT EXPECTED.

II. THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED WITH AN ACTIVE PERIOD BETWEEN 1500 AND 1800Z TODAY. UNSETTLED GEOMAGNETIC CONDITIONS ARE EXPECTED FOR THE NEXT 48 HOURS.

III. EVENT PROBABILITIES 02-04 MARCH

CLASS M 80/60/50

CLASS X 10/10/05

PROTON 05/05/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 MAR 101

PREDICTED 02-04 MARCH 101/99/97

90-DAY MEAN 01 MARCH 102

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 28 FEB 16

ESTIMATED 01 MAR 14

PREDICTED 02-04 MARCH 12/12/10

SOLTERWARN

SPAN

BT