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HFUS I BOU 141400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 073A

JOINT USAF/NOAA REOPRT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 14 MARCH 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/1200UT TO 14/1200UT:

SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PERIOD. TWO M-CLASS EVENTS HAVE BEEN REPORTED, BOTH FROM REGION 2971 (N08W35) A M1/1B AT 13/2106UT AND A M2/1B AT 13/2330UT. THE EVENT AT 13/2106UT PRODUCED A TENFLARE OF 350 FLUX UNITS AT 2695 MHZ. ONLY A FEW SMALL C-CLASS EVENTS WERE REPORTED DURING THE REST OF THE PERIOD. REGION 2973 (S12W75) HAS SHOWN RAPID GROWTH IN ITS SOUTHERN PORTION AND MAY CONTAIN A DELTA.

IB. SOLAR ACTIVITY FORECAST:

THE SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE WITH REGION 2971, WHICH HAS SHOWN RAPID GROWTH, TO BE THE PRIME PRODUCER OF M-CLASS EVENTS. REGION 2973 MAY PRODUCE AN ISOLATED M-CLASS EVENT PRIOR TO LIMB PASSAGE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN ACTIVE WITH A PERIOD OF MINOR STORM CONDITIONS AT THE END OF THE PERIOD. VERY RAPID FLUCTUATIONS HAVE BEEN RECORDED IN THE BOULDER MAGNETIC TRACE DURING THE PAST 12 HOURS. AURORA BOREALIS HAS BEEN REPORTED IN THE CENTRAL PORTION OF THE UNITED STATES AS FAR SOUTH AS 41 DEGREES NORTH. A SOLAR WIND SPEED OF 655 KM/S HAS BEEN RECORDED, NEAR EARTH, BY INTERPLANETARY SCINTILLATIONS. THE CAUSE OF THIS HIGH SPEED STREAM MAY BE A MAJOR CHANGE IN THE CONFIGURATION OF THE SOLAR SECTOR BOUNDARY, NOW LOCATED NEAR WEST 50 DEGREES AND A POSSIBLE CORONAL HOLE NEAR (SAOL 330). THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT OR NEAR UNSETTLED CONDITIONS FOR THE REST OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 15-17 MARCH

CLASS M 30/20/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 13 MAR 204

ESTIMATED 14 MAR 218

PREDICTED 15-17 MAR 218/210/200

90 DAY MEAN 13 MAR 204

V. GEOMAGNETIC A INDICES

OBSERVED AFR 12 MAR 14 AP 13 MAR 20

ESTIMATED AFR 13 MAR 16 AFR/AP 14 MAR 25/28

PREDICTED AFR/AP 15-17 MAR 12/10 09/08 08/08

SOLTERWARN

HFUS 3 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SD F NUMBER 073B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 14 MARCH 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
14/1200UT TO 14/2200UT:

SOLAR ACTIVITY HAS BEEN LOW SINCE 14/1200UT WITH ONLY A FEW SUBFLARES OCCURRING IN REGIONS 2971 (N07W42) AND 2973 (S13W87). REGION 2971 GREW SEVERAL DELTAS WITHIN NEW PENUMRA AND HAS DEVELOPED A STRONG MAGNETIC GRADIENT. REGION 2973 CONTINUES GROWING AS IT ROTATES OVER THE WEST LIMB. REGION 2975 (S04W00) HAS APPARENTLY RELAXED AND ELONGATED INTO A MATURE AND STABLE REGION. ONE NEW REGION WAS CONFIRMED TODAY, 2985 (S15W11).

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE, WITH THE GREATEST MODERATE ACTIVITY POTENTIAL IN REGION 2971.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN AT MINOR STORM LEVEL FROM 0400 TO 1600 UT TODAY. THE STORM SUBSIDED ABRUPTLY, BUT RAPID FLUCTUATIONS IN THE BOULDER MAGNETOMETER HAVE PERSISTED. THE FIELD IS EXPECTED TO BECOME UNSETLED FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES: 15 MAR - 17 MAR

CLASS M 30/30/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 14 MAR 211

PREDICTED 15-17 MAR 200/195/188

90 DAY MEAN 14 MAR 203

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 MAR 21/20

ESTIMATED AFR/AP 14 MAR 33/33

PREDICTED AFR/AP 15-17 MAR 12/10 09/08 08/08

SOLTERWARN

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