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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDE NUMBER 081A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 22 MARCH 1981

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

21/1200UT TO 22/1200UT:

SOLAR ACTIVITY WAS AT MODERATE LEVELS THIS PERIOD. TWO M-CLASS EVENTS WERE RECORDED, NO OPTICAL CORRELATION, AN M2 AT 21/1301UT AND A M3 AT 21/1614UT. THE EVENT AT 21/1614UT HAD 359 FLUX UNITS AT 10-M ALONG WITH A TYPE IV IMPORTANCE 2 SWEEP. REGIONS 2993 (N14E39) AND 2984 (N09W36) ARE STILL THE MOST ACTIVE ON THE VISIBLE DISK. AN ERUPTIVE FROMINENCE AT SE 19 WAS OBSERVED OUT TO .57 RADII BETWEEN 22/0658UT TO 22/0755UT. NEW REGIONS ARE 2997 (S07E01), SIMPLE B TYPE, 2998 (S23E42) A C TYPE, 2999 (S45E63) H TYPE, AND REGION 3000 (S19E81) WHICH PRODUCED A SN FLARE AT 22/0626UT.

I.B. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DURING THE FORECAST PERIOD. REGIONS 2993 AND 2984 ARE CAPABLE OF PRODUCING M-CLASS ACTIVITY AND WITH THE NEW REGIONS IN THE EAST AND WITH OLD REGION 2958, WHICH PRODUCED 3 X-CLASS EVENTS LAST ROTATION, DUE TO RETURN AN ISOLATED X-CLASS EVENT IS EXPECTED DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET TO OCCASIONALLY UNSETLED. THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETLED DURING THE FORECAST PERIOD EXCEPT FOR A SHORT PERIOD OF ACTIVE CONDITIONS ON 24 MARCH AS THE EFFECTS OF A SMALL CORONAL HOLE ARE REALIZED AT EARTH.

III. EVENT PROBABILITIES: 23 - 25 MARCH

CLASS M 60/70/70

CLASS X 10/10/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 21 MAR 183

ESTIMATED 22 MAR 188

PREDICTED 23-25 MAR 193/205/215

90 DAY MEAN 21 MAR 198

V. GEOMAGNETIC A INDICES

OBSERVED AFR 20 MAR 08 - AP 21 MAR 07

ESTIMATED AFR 21 MAR 06 AFR/AP 22 MAR 07/10

PREDICTED AFR/AP 23-25 MAR 11/20 18/25 12/25

SOLARWARN

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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 081B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 22 MARCH 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
22/1200UT TO 22/2200UT:

SOLAR ACTIVITY WAS AT A LOW LEVEL UNTIL 1942Z WHEN REGION 2984  
(N09W91) PRODUCED AN M1/1B. PRIOR TO THAT TIME THE MOST  
SIGNIFICANT EVENT WAS A C5/1B AT 1430Z. NO MAJOR CHANGES  
HAVE OCCURRED IN THE VISIBLE FEATURES ALTHOUGH ANOTHER REGION  
ROTATED OVER THE NE LIMB AS A SIMPLE H TYPE GROUP AND IS NUMBERED  
3001 (N21E67).

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD BE AT A GENERALLY MODERATE LEVELS FOR  
THE DURATION OF THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET. ACTIVE CONDITIONS ARE  
EXPECTED BY 24 MARCH AS THE FIELD REFLECTS THE RECURRENT  
PATTERN AND RECENT FLARE ACTIVITY.

III. EVENT PROBABILITIES: 23 MARCH - 25 MARCH

CLASS M 60/70/70

CLASS X 10/10/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 22 MARCH 184

PREDICTED 23-25 MARCH 190/196/198

90 DAY MEAN 22 MARCH 197

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 21 MARCH 07/07

ESTIMATED AFR/AP 22 MARCH 07/10

PREDICTED AFR/AP 23-25 MARCH 11/20 18/25 12/25

SOLIERWARN

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