

HFUS 1 BOU

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 072A

ISSUED 1200UT 13 MARCH 1981

1A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

12/1200UT TO 13/1200UT:

SOLAR ACTIVITY HAS REMAINED LOW DURING THIS PERIOD. ONLY C-CLASS EVENTS HAVE BEEN RECORDED, THE LARGEST A C7/1N FROM REGION 2971 (NO6W22), MAXIMUM AT 12/1756UT, MINOR RADIO BURSTS AND A WEAK SHORT WAVE FADE WERE RECORDED WITH THE EVENT. AT 12/2243UT A C3/1B WAS RECORDED, THE OPTICAL EVENT WAS SEEN AT N05E90, THIS MAY BE OLD REGION 2951 SIGNALLING IT'S RETURN. REGION 2975 (SC0E19) PRODUCED A C3/1B EVENT AT 13/0934UT.

1B. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE LOW DURING THE FORECAST PERIOD. REGIONS 2971 AND 2975 ARE BOTH GENERALLY STABLE WITH ONLY MINOR STRUCTURAL CHANGES BEING REPORTED. THE POTENTIAL FOR M-CLASS EVENTS WILL REMAIN LOW UNLESS A LARGE ACTIVE REGION ROTATES ONTO THE VISIBLE DISK.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. THE FIELD IS EXPECTED TO BE SLIGHTLY UNSETTLED TILL NEAR THE END OF THE FORECAST PERIOD WHEN NEAR ACTIVE CONDITIONS ARE POSSIBLE.

III. EVENT PROBABILITIES: 14-16 MARCH

CLASS M 10/10/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 12 MAR 191

ESTIMATED 13 MAR 185

PREDICTED 14-16 MAR 178/174/174

90 DAY MEAN 12 MAR 205

V. GEOMAGNETIC A INDICES

OBSERVED AFR 11 MAR 07 AP 12 MAR 11

ESTIMATED AFR 12 MAR 10 AFR/AP 13 MAR 12/08

PREDICTED AFR/AP 14-16 MAR 07/05 09/10 08/08

SOLTERWARN

HFUS 3 BOU 132200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 072B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 0200UT 13 MARCH 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

13/1200UT TO 13/2200UT:

SOLAR ACTIVITY APPROACHED MODERATE LEVELS SINCE 13/1200UT DUE TO AN M1/1B AT 13/2106 FROM REGIONS 2971 (N08W28). THIS REGION HAS BEEN RESPONSIBLE FOR MOST OF TODAY'S FLARES. A FEW SUBFLARES WERE PRODUCED BY REGIONS 2973 (S12W75) AND 2975 (S03E13). SURPRISING REGROWTH OCCURRED IN REGION 2973 TODAY, CAUSING THE RADIO FLUX AT 2695 MHZ TO RISE. TWO NEW REGIONS WERE IDENTIFIED, 2983 (N19W55) AND 2984 (N08E76).

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE. ISOLATED M-CLASS X-RAY ACTIVITY FROM REGION 2971 AND, TO A LESSER EXTENT, REGION 2975 ARE STILL POSSIBLE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN MOSTLY UNSETTLED FOR THE PAST 24 HOURS WITH ACTIVE CONDITIONS DURING THE 15-18 UT TIME PERIOD. INSUFFICIENT DATA ON CORONAL HOLE LOCATIONS MAKES IDENTIFICATION OF THE SOURCE OF THIS DISTURBANCE UNCERTAIN. THE FIELD IS EXPECTED TO BE UNSETTLED FOR THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 14 MAR - 16 MAR

CLASS M 10/10/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 13 MAR 204

PREDICTED 14-16 MAR 198/190/183

90 DAY MEAN 13 MAR 204

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 MAR 14/11

ESTIMATED AFR/AP 13 MAR 16/18

PREDICTED AFR/AP 14-16 MAR 12/15 09/10 08/08

SOLTERWARM

BT