

HFUS-1 BOU 081400
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 039A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1200UT 08 FEB 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

07/1200UT TO 08/1200UT :

SOLAR ACTIVITY HAS BEEN MODERATE SINCE 07/1200UT. FIVE M-CLASS X-RAY FLARES HAVE OCCURRED; AN M2/SB AT 07/1344UT FROM REGION 2926 (S15W61), AN M3/IN AT 07/1835UT FROM REGION 2930 (N11E31), AN M1/SB AT 07/2231UT FROM REGION 2930, AN M2/1B AT 08/0141UT FROM REGION 2930, AND AN M3/SB AT 08/0331UT FROM REGION 2930. ALL OF THESE FLARES HAVE BEEN CHARACTERIZED BY VARIOUS, SMALL RADIO BURSTS. NUMEROUS C-CLASS X-RAY EVENTS HAVE OCCURRED IN THE PAST 24 HOURS, ALL BUT THREE FROM REGIONS 2926 AND 2930, THE OTHER THREE BEING TWO FROM REGION 2918 (S08W82) AND ONE FROM REGION 2933 (N12E07). BOTH REGIONS 2926 AND 2930 NOW HAVE DELTA MAGNETIC CONFIGURATIONS. REGION 2926 HAS REPORTEDLY RELAXED ITS MAGNETIC GRADIENT, ALTHOUGH IT MAY NOT HAVE LOST ALL OF ITS POTENTIAL FOR M-CLASS FLARES. REGION 2930 GREW SIGNIFICANTLY DURING THE PAST 24 HOURS AND IS NOW THE MOST ACTIVE REGION ON THE DISK. THREE NEW REGIONS HAVE BEEN NUMBERED, 2936 (S06W34), 2937 (S17E31), AND 2938 (N17E17).

IB. SOLAR ACTIVITY FORECAST :

SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE FOR THE FORECAST PERIOD DUE PRIMARILY TO THE STRENGTHENING OF THE MAGNETIC GRADIENT IN REGION 2930 AND SECONDARILY TO THE POTENTIAL RETAINED IN REGION 2926.

II. GEOPHYSICAL SUMMARY AND FORECAST :

THE GEOMAGNETIC FIELD HAS BEEN QUIET THE PAST 24 HOURS AND IS EXPECTED TO REMAIN QUIET THE NEXT 24 HOURS, BECOMING MILDLY UNSETLED THE FOLLOWING TWO DAYS.

III. EVENT PROBABILITIES: 09 - 11 FEB

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 01/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 07 FEB 186

ESTIMATED 08 FEB 182

PREDICTED 09-11 FEB 178/168/162

90 DAY MEAN 07 FEB 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR 06 FEB 31 AP 07 FEB 15

ESTIMATED AFR 07 FEB 19 AFR/AP 08 FEB 04/06

PREDICTED AFR/AP 09-11 FEB 06/08 08/08 10/14

SOLIERWARN

BT

HFUS 3 BOU 082200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 039B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200UT 08 FEBRUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
08/1200UT TO 08/2200UT:

SOLAR ACTIVITY HAS DIMINISHED SOMEWHAT DURING THE PAST 10
HOURS, BUT STILL REMAINS NEAR THE MODERATE LEVEL DUE TO
REGION 2930'S (N12E28) ACTIVITY. THE LARGEST EVENT OBSERVED
DURING THE PERIOD WAS A C9/SB AT 1812Z MAXIMUM. AN ERUPTIVE
PROMINENCE ASSOCIATED WITH REGION 2918 (S08W90) WAS OBSERVED
AT 1512Z.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE, WITH REGION 2930
CONTINUING ITS PRODUCTION OF ISOLATED M-CLASS EVENTS.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD BECAME VERY ACTIVE FOLLOWING A SMALL
SUDDEN IMPULSE AT 1348UT. THE MOST ACTIVE PERIOD DURING THE
PAST 10 HOURS WAS FROM 15 TO 18 UT WHEN A K-VALUE OF 5 WAS
OBSERVED AT BOULDER. THE FIELD SHOULD GRADUALLY RETURN TO
UNSETTLED LEVELS THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 09 - 11 FEBRUARY

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 01/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 08 FEB 184

PREDICTED 09-11 FEB 178/168/162

90 DAY MEAN 08 FEB 200

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 07 FEB 17/15

ESTIMATED AFR/AP 08 FEB 13/13

PREDICTED AFR/AP 09-11 FEB 08/10 08/08 10/14

SOLIERWARN

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