

HFUS 1 BOU 09 1400

FROM SPACE ENVIRONMENT SERVICES CENTER . BOULDER . COLORADO
SDF NUMBER 040A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1200UT 09 FEB 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
08/1200UT TO 09/1200UT :

SOLAR ACTIVITY HAS BEEN MODERATE SINCE 08/1200UT. ONE M-CLASS FLARE OCCURRED, AN M1/1B AT 09/0655UT FROM REGION 2930 (N12E20). THIS REGION HAS STRENGTHENED ITS DELTA MAGNETIC CONFIGURATION AND HAS SHOWN CONTINUED DEVELOPMENT IN BOTH WHITE LIGHT AND HYDROGEN-ALPHA. THIS MAY BE TWO SEPARATE REGIONS, BUT MAGNETIC AND HYDROGEN-ALPHA DATA HAVE NOT BEEN SUFFICIENT TO CONFIRM THIS. REGION 2926 (S15W75) HAS LOST ITS DELTA MAGNETIC CONFIGURATION AND, WITH THAT, MOST OF ITS ENERGETIC FLARE POTENTIAL. SEVERAL SUBFLARES OCCURRED SINCE 08/1200UT, ALL BUT ONE FROM REGIONS 2926 AND 2930. THE OTHER WAS A SN AT 09/0602UT FROM REGION 2923 (N18W68), WHICH HAS SHOWN SOME SIGN OF MINOR DEVELOPMENT. REGION 2918 HAS PASSED OVER THE WEST LIMB PRODUCING AN ERUPTIVE PROMINENCE AT 08/1512UT. NO NEW REGIONS WERE NUMBERED.

IB. SOLAR ACTIVITY FORECAST :

SOLAR ACTIVITY IS EXPECTED TO CONTINUE MODERATE FOR THE FORECAST PERIOD DUE ENTIRELY TO POTENTIAL IN REGION 2930.

II. GEOPHYSICAL SUMMARY AND FORECAST :

THE GEOMAGNETIC FIELD WAS QUIET UNTIL 08/1500UT, BECOMING ACTIVE TO MINOR STORM LEVEL UNTIL 09/0600UT, THEN BECOMING UNSETTLED TO QUIET. THE FIELD IS EXPECTED TO BE UNSETTLED FOR THE FORECAST PERIOD, APPROACHING ACTIVE CONDITIONS ON 12 FEB.

III. EVENT PROBABILITIES: 10 - 12 FEB

CLASS M 70/70/70

CLASS X 05/10/10

PROTON 05/10/10

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 08 FEB 184

ESTIMATED 09 FEB 180

PREDICTED 10-12 FEB 168/162/160

90 DAY MEAN 08 FEB 200

V. GEOMAGNETIC INDICES

OBSERVED AFR 07 FEB 17 AP 08 FEB 11

ESTIMATED AFR 08 FEB 13 AFR/AP 09 FEB 21/20

PREDICTED AFR/AP 10-12 FEB 08/12 10/14 14/18

SOLTERWARN

BT

HFUS 3, ROU 092200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 040B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200UT 09 FEBRUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

09/1200UT TO 09/2200UT:

SOLAR ACTIVITY DROPPED TO A LOW LEVEL SINCE 1200UT WITH THE LARGEST EVENT OBSERVED ONLY REACHING C5 IN X-RAY CLASS. THIS EVENT WAS OBSERVED AS A SUBNORMAL FLARE FROM REGION 2930 (N12E15) AT 1555Z MAXIMUM. REGION 2930 CONTINUES TO BE THE MOST DOMINANT DISK FEATURE. NEW REGION 2939 (S14W10) WAS NUMBERED TODAY IN THE LOCATION WHERE A FILAMENT INDUCED HYDER FLARE WAS OBSERVED AT 09/0536UT. ALTHOUGH STILL SPOTLESS, THIS REGION HAS BEEN NEAR FLARE INTENSITY THROUGH MUCH OF THE PERIOD.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO RETURN TO MODERATE LEVELS WITH REGION 2930 REMAINING THE PRIME PRODUCER OF ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN MOSTLY UNSETTLED SINCE 09/1200UT. ACTIVITY IS EXPECTED TO INCREASE AGAIN EARLY IN THE UT DAY TOMORROW AND REMAIN AT THE ACTIVE TO UNSETTLED LEVELS THROUGH THE FORECAST PERIOD, DUE TO THE INFLUENCE OF FLARES, DISAPPEARING FILAMENTS AND SIGNIFICANT RESTRUCTURING IN THE SOUTHWEST QUADRANT OF THE SUN.

III. EVENT PROBABILITIES: 10 - 12 FEBRUARY

CLASS M 70/70/70

CLASS X 05/10/10

PROTON 05/10/10

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 09 FEB 182

PREDICTED 10-12 FEB 173/166/160

90 DAY MEAN 09 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 08 FEB 13/11

ESTIMATED AFR/AP 09 FEB 22/24

PREDICTED AFR/AP 10-12 FEB 18/18 10/14 14/18

SOLTERWARN

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