

HFUS 1 BOU 311412

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 031A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 31 JANUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
30/1200UT TO 31/1200UT:

SOLAR ACTIVITY WAS LOW FOR MOST OF THE PAST 24 HOURS. ONLY THREE SMALL C-CLASS SUBFLARES WERE NOTED DURING THAT TIME, TWO OF WHICH WERE IN REGION 2911 (S13E10). THEN AT 31/1130UT AN EXTREMELY IMPULSIVE M2 X-RAY BURST (SB OPTICALLY WITH MAXIMUM AT 1135 UT) OCCURRED IN REGION 2911. THIS WAS THE FIRST M-CLASS EVENT IN NEARLY THREE DAYS. DESPITE WORLDWIDE OBSERVING PROBLEMS OVER THE LAST 24 HOURS, THERE HAS BEEN SOME OPTICAL COVERAGE OF THE SUN AND THAT COVERAGE INDICATES THAT REGIONS 2911 AND 2918 (S11-E30) (PERHAPS THE TWO STRONGEST REGIONS ON THE SOLAR DISK) ARE MORE OR LESS STABLE NOW. REGION 2916 (N16E23) HAS BEEN GROWING IN SIZE AND COMPLEXITY BUT HAS BEEN QUIET. OTHERWISE, THE DISK AND LIMBS ARE QUIET.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO CONTINUE LOW, ALTHOUGH THERE IS A CHANCE OF A ISOLATED M-CLASS EVENT. REGIONS 2911 AND 2918 DO NOT NOW SEEM LIKELY TO PRODUCE FURTHER MAJOR EVENTS ALTHOUGH THEY WERE VERY ACTIVE WHEN THEY ARRIVED AT THE EAST LIMB. THEIR HISTORY DICTATES THAT THEY CONTINUE TO BE REGARDED WITH SOME CAUTION.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD WAS GENERALLY QUIET UNTIL ABOUT 31/0230 UT WHEN THE FIELD BECAME ACTIVE. THE FIELD SHOULD CONTINUE MILDLY ACTIVE TO UNSETLED FOR THE NEXT 24 HOURS WITH CONDITIONS SLOWLY RETURNING TO MILDLY UNSETLED LEVELS.

III. EVENT PROBABILITIES: 01 FEBRUARY - 03 FEBRUARY

CLASS M 35/35/35

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 30 JANUARY 216

ESTIMATED 31 JANUARY 218

PREDICTED 01-03 FEBRUARY 216/216/213

90 DAY MEAN 30 JANUARY 207

V. GEOMAGNETIC INDICES

OBSERVED AFR 29 JANUARY 15 AP 30 JANUARY 05

ESTIMATED AFR 30 JANUARY 05 AFR/AP 31 JANUARY 15/15

PREDICTED AFR/AP 01-03 FEBRUARY 11/12 09/10 08/10

SOLIERWARN

BT

HFUS 3 BOU 312200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 031B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 31 JAN 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

31/1200UT TO 31/2200UT:

ACTIVITY SINCE 1200UT HAS BEEN LIMITED TO C CLASS X-RAY ACTIVITY WITH SUB CLASS OPTICAL ACTIVITY ASSOCIATED, EXCEPT FOR A C5/1B FLARE AT 1934 UT MAXIMUM. ALL EVENTS ASSOCIATED WITH AN ACTIVE REGION OCCURRED IN REGION 2911 (S13E03).

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO CONTINUE LOW, ALTHOUGH THERE IS A CHANCE OF A ISOLATED M-CLASS EVENT. REGIONS 2911 AND 2918 DO NOT NOW SEEM LIKELY TO PRODUCE FURTHER MAJOR EVENTS ALTHOUGH THEY WERE VERY ACTIVE WHEN THEY ARRIVED AT THE EAST LIMB. THEIR HISTORY DICTATES THAT THEY CONTINUE TO BE REGARDED WITH SOME CAUTION.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD WAS GENERALLY QUIET UNTIL ABOUT 31/0230 UT WHEN THE FIELD BECAME ACTIVE. THE FIELD SHOULD CONTINUE MILDLY ACTIVE TO UNSETLED FOR THE NEXT 24 HOURS WITH CONDITIONS SLOWLY RETURNING TO MILDLY UNSETLED LEVELS.

III. EVENT PROBABILITIES: 01 FEBRUARY - 03 FEBRUARY

CLASS M 35/35/35

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 31 JAN 215

PREDICTED 01-03 FEB 216/216/213

90 DAY MEAN 31 JAN 206

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 30 JAN 07/05

ESTIMATED AFR/AP 31 JAN 15/15

PREDICTED AFR/AP 01-03 FEB 11/12 09/10 08/10

SOLIERWARN

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