

HFUS 3 BOU 05 1400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 005A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 05 JAN 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
~4/1200UT TO 05/1200UT:

SOLAR ACTIVITY IS AT A LOW LEVEL. REGION 2875 (S14E48) MAY PRODUCE A SLIGHT INCREASE IN THE LEVEL OF ACTIVITY AS IT IS BECOMING MORE DYNAMIC. ALONG WITH THE FLARE ACTIVITY, REGION 2875 IS GROWING, SHOWING FLUCTUATIONS/POINT BRIGHTENINGS AND IS INCREASING IN MAGNETIC COMPLEXITY. REGION 2873 (N08W40) IS ALSO PRODUCING AN OCCASIONAL FLARE WHILE EXHIBITING AN ARCH/FILAMENT SYSTEM. LITTLE ELSE ON THE DISK HAS CHANGED ALTHOUGH SMALL SURGES ARE ACCOMPANYING THE DEPARTURE OF REGION 2866 AT NW 14.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD REMAIN LOW. THE POSSIBILITY OF AN "M" CLASS EVENT IS INCREASING.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. NO CHANGE EXPECTED.

III. EVENT PROBABILITIES: 06-08 JAN

CLASS M 15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 04 JAN 173

ESTIMATED 05 JAN 168

PREDICTED 06-08 JAN 164/164/166

90 DAY MEAN 04 JAN 218

V. GEOMAGNETIC INDICES

OBSERVED AFR 03 JAN 06 AP 04 JAN 10

ESTIMATED AFR/AP 05 JAN 09/08

PREDICTED AFR/AP 06-08 JAN 13/10 11/10 10/10

SOLTERWARN

BT

KBOU

HFUS 3 BOU 052200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 005B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200UT 05 JANUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
05/1200UT TO 05/2200UT:

SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 10 HOURS. AN IMPULSIVE M3 X-RAY EVENT OCCURED AT 1621UT WHICH WAS NOT CLEARLY ASSOCIATED WITH AN OPTICAL FLARE. COINCIDENT WITH THE XRAY EVENT WERE A SUBFAINT FLARE FROM 2875 (S14E45), A BRIGHT KNOT ON THE WEST LIMB NEAR THE LOCATION OF DEPARTING 2857 (S07W92), AND A SURGE ON THE WEST LIMB NEAR THE LOCATION OF DEPARTING 2872 (N03W89). SUBSEQUENTLY, SURGING NEAR NE23, NE8, AND SE20 HAS BEEN OBSERVED. TWO NEW GROUPS FORMED ON THE DISK TODAY. THEY ARE 2878 (S15W41), A B-TYPE GROUP, AND 2879 (S15W27), AN A-TYPE SPOT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD REMAIN LOW. HOWEVER, ISOLATED M-CLASS XRAY EVENTS COULD AGAIN OCCUR.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO QUIET. NO CHANGE IS EXPECTED.

III. EVENT PROBABILITIES: 06-08 JANUARY

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 05 JAN 167

PREDICTED 06-08 JAN 164/164/166

90 DAY MEAN 05 JAN 218

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 04 JAN 12/10

ESTIMATED AFR/AP 05 JAN 07/08

PREDICTED AFR/AP 06-08 JAN 13/10 11/10 10/10

SOLIERWARN

BT