

/ HFUS3 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 083

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 24 MAR 1985

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/2100 TO 24/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4637 (N07E52) PRODUCED ARCHED FILAMENT SYSTEMS AND BRIGHT POINTS, BUT NO SIGNIFICANT EVENTS. IT REMAINED A BETA-TYPE WITH A DKO WHITE-LIGHT CLASSIFICATION. HAVING ROTATED INTO GOOD VIEWING POSITION, IT INCREASED VERY LITTLE IN AREA OR OTHER ASPECTS. THE HORSE-SHOE SHAPED LEADER GROUP CONTAINED ONLY UNIPOLAR UMBRAE. REGION 4638 (N04W48) EMERGED AS A CRO BETA-TYPE. IT ALSO PRODUCED ARCHED FILAMENTS AND ONE ACTIVE DISAPPEARING FILAMENT OF THREE DEGREES (N02W40 AT 24/1430Z) THAT LATER REAPPEARED (1517Z). NEWLY ASSIGNED REGION 4639 (S07E40) WAS A BXO BETA-TYPE WITH ARCHED FILAMENTS. BOTH REGIONS 4638 AND 4639 HAD AN AREA OF 20 MILLIONTHS, AN EXTENT OF THREE DEGREES, AND FOUR SPOTS IN WHITE-LIGHT. A SIX-DEGREE LONG DISAPPEARING FILAMENT AT S35E23 WAS GONE BY 24/0730Z. REGION 4633 (S12W58) HAD ANOTHER 14 DEGREE LONG DISAPPEARING FILAMENT AT S18W48 THAT WAS ALSO GONE BY 0730Z. EARLY IN THE PERIOD AT 23/2141Z, REGION 4636 (S16E21) PRODUCED A B3/0H EVENT. THIS SPOTLESS REGION WAS ORIGINALLY NUMBERED BECAUSE OF A SUB-FLARE AND HAS NOT SUSTAINED SPOTS DURING ITS HISTORY.

I.B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW.

II.A. GEOPHYSICAL ACTIVITY SUMMARY FROM 23/2100Z TO 24/2100Z: GEOMAGNETIC ACTIVITY WAS QUIET-TO-UNSETTLED.

II.B. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE ACTIVE. STORM CONDITIONS ARE POSSIBLE DUE TO THE TRIO OF DISAPPEARING FILAMENTS FROM APPROXIMATELY S10W20 ON 21 MAR. THEIR TOTAL LENGTH WAS ABOUT 20 DEGREES AND THE MOST PROBABLY BEGINNING TIME IS 25 MAR. THE OUTLOOK IS FOR UNSETTLED TO ACTIVE CONDITIONS.

III. EVENT PROBABILITIES 25 MAR-27 MAR

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 MAR 080

PREDICTED 25 MAR-27 MAR 080/081/082

90 DAY MEAN 24 MAR 074

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 23 MAR 006/011

ESTIMATED AFR/AP 24 MAR 007/015

PREDICTED AFR/AP 25 MAR-27 MAR 019/020-016/015-014/015

SOLTERWARN

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