

FLUS 3 BOU 052200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 095

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 05 APR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 04/2100 TO 05/2100Z: SOLAR ACTIVITY HAS REMAINED LOW. REGION 4127

(S16W57) CONTINUES TO PRODUCE LOW LEVEL CLASS C SUBFLARES. THE TWO SPOTS FORMING THE DELTA ARE REPORTED AS SEPARATING AND ROTATING SLIGHTLY WITH A RESULTANT DECREASE IN THE STRENGTH OF THE GRADIENT. REGION 4135 (S12E37) HAS DECREASED IN SUNSPOT STRUCTURE; HOWEVER, REGION 4137 (S10E30) IS EMERGING RAPIDLY ADJACENT TO REGION 4135. THESE TWO REGIONS MAY START TO INTERACT TO PRODUCE MINOR FLARES. REGION 4138 (S15E72) HAS ROTATED ON TO THE DISK TODAY. A MODERATE SIZED FILAMENT IN THE SOUTH CENTRAL PORTION OF THE DISK DISAPPEARED ON 04 APRIL BETWEEN 0600-1530Z. ITS POSITION IS WHERE THE CORONAL HOLE STRUCTURE IS THE LEAST DISTINCT (WEAKEST). THEREFORE, THE MASS FROM THIS FILAMENT IS EXPECTED TO REACH THE ECLIPTIC PLANE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW. THERE IS A SLIGHT CHANCE FOR A CLASS M FLARE FROM REGION 4127.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 04/2100Z TO 05/2100Z: THE GEOMAGNETIC FIELD WAS UNSETTLED TO SLIGHTLY ACTIVE FOR THIS PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: SIMILAR CONDITIONS ARE EXPECTED TO CONTINUE UNTIL THE LATTER HALF OF 06 APRIL WHEN THE EARTH SHOULD COME UNDER THE INFLUENCE OF THE HIGH SPEED STREAM FROM A LARGE CORONAL HOLE. THE FIELD SHOULD THEN REACH STRONG ACTIVE CONDITIONS WITH STORM LEVELS EXPECTED ON 07-08 APRIL DUE TO THE CORONAL HOLE AND THE DISRUPTED FILAMENT OF 04 APRIL.

III. EVENT PROBABILITIES 06 APR-08 APR

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 05 APR 099

PREDICTED 06 APR-08 APR 100/099/095

90 DAY MEAN 05 APR 126

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 04 APR 013/019

ESTIMATED AFR/AP 05 APR 016/015

PREDICTED AFR/AP 06 APR-08 APR 017/020-035/035-045/045

SOLTERWARN

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