

HFUS 3 BOU 042200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 035

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 04 FEB 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 03/2100 TO 04/2100Z: SOLAR ACTIVITY WAS LOW TO MODERATE DURING THE PAST 24 HOURS. AN M1 XRAY BURST AT 2103 UT (MAX) ON 3 FEB WAS PROBABLY ASSOCIATED WITH A FILAMENT DISAPPEARANCE. FROM 032103 UT UNTIL 041748 UT SMALL RADIO BURSTS AND C-CLASS FLARES WAS THE ONLY ACTIVITY OBSERVED. THEN AT 041758 UT, REGION 4399 (N11W88) PRODUCED A RAPID RISE, SLOW DECAY M1/1N EVENT. ONLY THE TRAILER OF 4399 IS STILL VISIBLE ON THE DISK. REGION 4410 (S09E61) IS FULLY ON THE DISK AND IS COMPRISED OF A MODERATE SIZE D TYPE SPOT GROUP WITH A SMALL, RATHER MOTTLED PLAGE. SMALL SURGE REGION IS FOLLOWING 4410 ONTO THE DISK WHICH MAY PRESAGE EVEN ANOTHER SPOT GROUP. A NEW GROUP, REGION 4411 (N09E57) WAS NUMBERED TODAY; IS A SMALL H TYPE SPOT. THE OTHER VISIBLE REGIONS ARE BASICALLY STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE FOR THE NEXT 24 HOURS. REGION 4399 COULD STILL PRODUCE AN M EVENT AS IT DEPARTS THE DISK AND REGION 4410 MAY DEVELOPE INTO AN M PRODUCER IN THE NEXT 24 HOURS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 03/2100Z TO 04/2100Z: THE GEOMAGNETIC FIELD WAS AT ACTIVE TO STORM LEVELS DURING THE PAST 24 HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT ACTIVE LEVELS THE NEXT THREE DAYS WITH BRIEF STORM CONDITIONS IN NIGHTTIME SECTORS. A LARGE CORONAL HOLE, ABETTED BY RECENT FLARE AND FILAMENT ACTIVITY IS THOUGHT TO BE THE IMPETUS FOR THIS DISTURBANCE.

III. EVENT PROBABILITIES 05 FEB-07 FEB

CLASS M 40/20/20

CLASS X 05/01/01

PROTON 05/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 FEB 130

PREDICTED 05 FEB-07 FEB 123/117/115

90 DAY MEAN 04 FEB 103

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 03 FEB 014/022

ESTIMATED AFR/AP 04 FEB 034/045

PREDICTED AFR/AP 05 FEB-07 FEB 020/020-025/025-020/020

SOLTERWARN

BT