

HFUS3 BOU 042200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 185

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 04 JUL 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 03/2100 TO 04/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4671 (S14E31) PRODUCED A FEW B-LEVEL X-RAY EVENTS WITH SUB-FLARES. NO RADIO EVENTS ACCOMPANIED THEM. IT REMAINED A DSO/BETA (WHITE LIGHT CLASSIFICATION/MAGNETIC) WITH LITTLE OVERALL CHANGE. NEWLY NUMBERED REGION 4672 (S18E34) EMERGED IMMEDIATELY SOUTH OF REGION 4671 AS A BXO/BETA. NEWLY NUMBERED REGION 4673 (N06W11) WAS AN AXB/ALPHA. A FOUR DEGREE LONG DISAPPEARING FILAMENT FROM S21E09 WAS GONE BY 4/1323Z.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. REGION 4671 PROVIDES A VERY SLIGHT CHANCE OF MODERATE (M-LEVEL X-RAYS) ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 03/2100Z TO 04/2100Z: GEOMAGNETIC ACTIVITY WAS UNSETTLED TO ACTIVE FROM START-OF-PERIOD UNTIL 4/1330Z. BOTH MID AND HIGH LATITUDES THEN EXPERIENCED STORM CONDITIONS (MINOR AND MAJOR RESPECTIVELY) UNTIL 1630Z. MINOR STORM LEVELS CONTINUED AT HIGH LATITUDES UNTIL END-OF-PERIOD. THIS BRIEF DISTURBANCE WAS PROBABLY THE RESULT OF THE M4/2B EVENT OF 2/2128Z. THAT FLARE INDICATED AN ESTIMATED SHOCK SPEED OF 2500 KM/S.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE TO MINOR STORM LEVELS THE FIRST AND POSSIBLY SECOND DAYS (5-6 JUL). THIS DISTURBANCE IS BASED PRIMARILY ON THE M4/2B EVENT OF 2/2128Z CORRELATED TO A TYPE II/IMPORTANCE 3 RADIO SWEEP WITH AN ESTIMATED SHOCK SPEED OF 2500 KM/S. THIS FLARE IS THOUGHT TO HAVE ENHANCED THREE PREVIOUS EVENTS: DISAPPEARING FILAMENT (8 DEG LENGTH) AT S12W66 OF 30 JUN, NEGATIVE CORONAL HOLE (APPROX. 40 SQ DEG) CENTERED AT N10E00 OF 1 JUL, AND ANOTHER DISAPPEARING FILAMENT (6 DEG LENGTH) OF 2 JUL. MAJOR STORM CONDITIONS ARE POSSIBLE AT HIGH LATITUDES FROM START-OF-PERIOD UNTIL 5/1800Z. THE THIRD DAY (7 JUL) AND OUTLOOK PERIOD (8-11 JUL) ARE EXPECTED TO BE ACTIVE TO UNSETTLED.

III. EVENT PROBABILITIES 05 JUL-07 JUL

CLASS M 05/05/05

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 JUL 078

PREDICTED 05 JUL-07 JUL 079/080/081

90 DAY MEAN 04 JUL 078

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 03 JUL 007/010

ESTIMATED AFR/AP 04 JUL 025/035

PREDICTED AFR/AP 05 JUL-07 JUL 020/025-016/025-015/025

SOLTERWARN

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