

HFUS3 BOU 162200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 198
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 16 JUL 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/2100
TO 16/2100Z: SOLAR ACTIVITY WAS VERY LOW. ONE NEW REGION WAS
ASSIGNED: REGION 4543 (S11E22) WAS A SIMPLE BETA-TYPE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
VERY LOW. NO RETURNING REGIONS PROMISE ANY MORE THAN VERY LOW
TO LOW LEVELS. REGION 4537 (S09W49) PROVIDES ONLY A 10 PER CENT
PROBABILITY OF C-LEVEL X-RAYS; WHILE THE NEW REGION 4543
PROVIDES 20 PER CENT DUE TO ITS EMERGING BETA MAGNETIC
CONFIGURATION.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 15/2100Z TO 16/2100Z:
GEOMAGNETIC ACTIVITY WAS AT MINOR STORM TO ACTIVE LEVELS. MINOR
LEVELS WERE REPORTED AT MID-LATITUDES 16/1030-1330Z. MAJOR
LEVELS WERE REPORTED AT HIGH LATITUDES 15/2230-16/0130Z;
16/0600-0730Z AND 1200-2100Z. THIS SLOWLY DECREASING
DISTURBANCE WAS ATTRIBUTED TO A NEGATIVE CORONAL HOLE CENTERED
AT N16, CAR-058 (DETERMINED BY SPARSE DATA RECEIVED OVER THE
LAST THREE DAYS). TWO DISAPPEARING FILAMENTS WERE REPORTED FROM
BETWEEN 14/1506Z AND 15/1443Z: A 54 DEGREE LONG ENE-WSW
ORIENTED SECTION FROM N43, CAR-59 TO CAR-113 (FROM THE SECTOR
BOUNDARY JUST NW OF THE CURRENT STORM-PRODUCING CORONAL HOLE);
AND A 19 DEGREE LONG SECTION FROM N45, CAR-12 TO CAR-353 (NE OF
CORONAL HOLE).

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS
EXPECTED TO BE ACTIVE. MINOR STORM LEVELS ARE EXPECTED AT HIGH
LATITUDES AND POSSIBLY MID-LATITUDES DURING NIGHT-TIME PERIODS
THE FIRST DAY (17 JUL), BUT ARE ONLY BRIEFLY EXPECTED AT
NIGHTTIME/HIGH-LATITUDES DURING THE SECOND AND THIRD DAYS
(18-19 JUL). THIS IS THE CONTINUING STABILIZATION FROM THE
STORM PEAK ON 13 JULY. THE DISAPPEARING FILAMENTS ARE THOUGHT
TO BE TOO FAR NORTH TO BE SIGNIFICANTLY EFFECTIVE ON THE FIELD.

III. EVENT PROBABILITIES 17 JUL-19 JUL

CLASS M 01/01/01
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 JUL 087
PREDICTED 17 JUL-19 JUL 087/091/095
90 DAY MEAN 16 JUL 116

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 JUL 022/033
ESTIMATED AFR/AP 16 JUL 020/025
PREDICTED AFR/AP 17 JUL-19 JUL 015/020-010/015-010/015
SOLTERWARN
BT

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