

HFUS3 BOU 182200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 200

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 18 JUL 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/2100
TO 18/2100Z: SOLAR ACTIVITY WAS LOW. REGION 4537 (S08W87)
PRODUCED A B-LEVEL X-RAY EVENT IN CONJUNCTION WITH ACTIVE
PROMINENCES/SURGES BUT NO SIGNIFICANT ASSOCIATIVE RADIO
PHENOMENA. TWO NEW REGIONS WERE ASSIGNED. REGION 4545 (S07E33)
WAS A SIMPLE BETA-TYPE WITH FOUR SPOTS IN WHITE-LIGHT; AND
REGION 4546 (S15E34) WAS A SIMPLE BETA-TYPE WITH TWO SPOTS.
REGION 4545 DISPLAYED ARCHED FILAMENT SYSTEMS WITH INCREASING
PLAGE INTENSITY. REGION 4541 (S17W12) RENEWED ITS LIFE ANOTHER
DAY WITH A BX0 WHITE-LIGHT CLASSIFICATION FOLLOWING ITS
SUB-FLARE LATE IN YESTERDAY'S PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW. REGION 4537 WILL ROTATE AROUND THE LIMB SOON, BUT STILL
PROVIDES A VERY SLIGHT CHANCE OF ENERGETIC ACTIVITY IN RESPECT
FOR ITS SURGING AND PROMINENCE REGIONS. NO RETURNING REGIONS
DEMONSTRATED ANY CHARACTERISTICS DURING THEIR LAST ROTATION
THAT WOULD PROVIDE POTENTIAL SIGNIFICANT PROMISE DURING THEIR
RETURN.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 17/2100Z TO 18/2100Z:
GEOMAGNETIC ACTIVITY WAS AT MINOR STORM TO ACTIVE LEVELS. MAJOR
STORM LEVELS WERE REPORTED AT HIGH LATITUDES. THIS DISTURBANCE
WAS ATTRIBUTED TO A RECURRENT CORONAL HOLE STREAM ENHANCED BY
RECONFIGURATION AND CONSEQUENT MINOR FILAMENT ERUPTIONS IN THE
LARGE SECTOR NORTH OF THE EQUATOR BETWEEN CARRINGTONS 150 TO
360. THE MINOR GEOMAGNETIC STORM CONTINUED IN PROGRESS AT HIGH
LATITUDES, BUT ENDED AT LOW AND MID-LATITUDES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS
EXPECTED TO BE AT ACTIVE TO MINOR STORM LEVELS. THE HIGH
LATITUDINAL STORM LEVELS ARE EXPECTED TO CONTINUE THROUGH THE
FIRST DAY (19 JUL), DECREASING TO OCCASSIONALLY MINOR PERIODS
ON THE SECOND DAY (20 JUL). A DECREASE TO UNSETTLED-TO-ACTIVE
LEVELS IS EXPECTED OVER-ALL FOR THE LATTER PART OF THE SECOND
DAY THROUGHOUT THE THIRD DAY (20-21 JUL).

III. EVENT PROBABILITIES 19 JUL-21 JUL

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

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 JUL 083
PREDICTED 19 JUL-21 JUL 083/084/085
90 DAY MEAN 18 JUL 115

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 JUL 030/045
ESTIMATED AFR/AP 18 JUL 018/022
PREDICTED AFR/AP 19 JUL-21 JUL 010/015-011/015-014/020
SOLTERWARN

BT