

HFUS3 BOU 172800

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 199

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 17 JUL 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/2100 TO 17/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4537 (S09W72) PRODUCED A C5/1B EVENT AT 17/0109Z WITH SMALL CENTIMETRIC RADIO BURSTS (BELOW ALERT THRESHOLDS) AND IMPORTANCE THREE TYPE II RADIO SWEEP. THIS REGION REMAINED A CSD CLASSIFICATION IN WHITE-LIGHT, BUT DECAYED IN MOST OTHER RESPECTS. ONE NEW REGION WAS ASSIGNED: REGION 4544 (N11W43) WAS A SIMPLE ALPHA-TYPE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. NO RETURNING REGIONS PROVIDE ANY SIGNIFICANT POTENTIAL ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 16/2100Z TO 17/2100Z: GEOMAGNETIC ACTIVITY WAS AT MINOR STORM LEVELS. MAJOR LEVELS WERE REPORTED AT HIGH LATITUDES FROM 16/2230-17/0300Z; 17/0600-1200Z; AND 17/1500-2100Z.. MINOR LEVELS WERE REPORTED AT MID-LATITUDES 17/0130-0300Z; 17/0600-0900Z; AND 17/1200-1330Z. THIS DISTURBANCE WAS ATTRIBUTED TO A RECURRENT NEGATIVE CORONAL HOLE STREAM ENHANCED BY DEBRIS FROM DISAPPEARING FILAMENTS AND SECTOR BOUNDARY RECONFIGURATION IN THE GENERAL REGION OF CAR-150 TO CAR-360 , NORTH OF EQUATOR. THIS RESTRUCTURING PROCESS HAS BEEN TWO ROTATIONS IN PROGRESS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT MINOR STORM TO ACTIVE LEVELS. THE RECURRENT ACTIVE CARRINGTON LONGITUDES PLUS THE RECONFIGURATION PROCESS SHOULD PROLONG STORM LEVELS AT HIGH LATITUDES THROUGH THE FIRST DAY (18 JUL), AND BRIEFLY THE SECOND DAY'S NIGHT-TIME PERIODS. THE MID-LATITUDES WILL PROBABLY DECREASE BELOW STORM LEVELS LATE ON THE FIRST DAY (18 JUL), TO ACTIVE LEVELS. THE REMAINDER OF THE PERIOD, 19-20 JULY, IS EXPECTED TO BE AT ACTIVE TO OCCASSIONALLY UNSETTLED DAYTIME PERIOD.

III. EVENT PROBABILITIES 18 JUL-20 JUL

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 JUL 085

PREDICTED 18 JUL-20 JUL 084/088/090

90 DAY MEAN 17 JUL 116

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 16 JUL 019/030

ESTIMATED AFR/AP 17 JUL 032/048

PREDICTED AFR/AP 18 JUL-20 JUL 025/030-015/020-011/015

SOLTERWARN

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