

HFU\$3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 172

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 JUN 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100 TO 20/2100Z: SOLAR ACTIVITY HAS CONTINUED LOW DURING THE PAST 24 HOURS. ONLY A FEW SMALL B CLASS EVENTS HAVE BEEN OBSERVED THIS PERIOD. REGION 4513 (S07W30) HAS EXHIBITED MINOR SIZE GROWTH THIS PERIOD HOWEVER ONLY SMALL OPTICAL EVENTS HAVE BEEN OBSERVED. TWO NEW REGIONS WERE NUMBERED TODAY AND BOTH HAVE HAD SMALL OPTICAL FLARES. REGION 4519 (S07W22) A SIMPLE B TYPE GROUP PRODUCED A B5/SN EVENT WITH MINOR RADIO AT 1839UT. REGION 4520 (S14E42) WAS OBSERVED TO HAVE A SF FLARE , NO X-RAY, AT 1719UT. THE REST OF THE VISIBLE DISK HAS BEEN LITTLE CHANGED THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW DURING THIS FORECAST PERIOD.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z: THE GEOMAGNETIC FIELD WAS AT STORM LEVELS DURING THE FIRST PART OF THE PERIOD AT BOTH HIGH AND MID LATITUDE SITES. THE FIELD HAS BEEN GENERALLY ACTIVE TO UNSETTLED SINCE 0900UT.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE DURING 21 JUNE THEN ACTIVE WITH PERIODS OF MINOR STORM CONDITIONS FOR THE REST OF THE FORECAST PERIOD. THE ACTIVITY ON 22 AND 23 JUNE IS EXPECTED TO BE THE RESULT OF CORONAL HOLE HIGH SPEED STREAMS.

III. EVENT PROBABILITIES 21 JUN-23 JUN

CLASS M 05/05/05

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 JUN 103

PREDICTED 21 JUN-23 JUN 103/103/103

90 DAY MEAN 20 JUN 123

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 JUN 026/031

ESTIMATED AFR/AP 20 JUN 018/028

PREDICTED AFR/AP 21 JUN-23 JUN 012/020-020/030-020/025

SOLTERWARN

BT