

HFUS 3 BOU 272200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 118

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 27 APR 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 26/2100 TO 27/2100Z: SOLAR ACTIVITY DURING THE PAST 24 HOURS HAS BEEN MODERATE WITH FOUR M CLASS EVENTS BEING RECORDED THE LARGEST WAS A M2/1B FROM REGION 4474 (S12E04) AT 1349UT. REGION 4474 CONTINUES TO BE THE DOMINANT REGION ON THE VISIBLE DISK. REGION 4474 IS A F TYPE GROUP OF 2500 MILLIONTHS BETA GAMMA DELTA WHICH HAS BEEN GENERALLY STABLE IN SIZE DURING THE PAST THREE DAYS. THE FLARES FROM REGION 4474 ARE STILL RICH IN RADIO HOWEVER THEY ARE MUCH SUBDUED FROM YESTERDAY WITH ONLY TWO SMALL TENFLARES OBSERVED AND NO REPORTS OF TYPE II/IV SWEEPS DURING THE PAST 24 HOURS. DUE TO LACK OF DATA WE ARE NOT SURE IF THE INTERNAL MAGNETIC GRADIENT OF REGION 4474 HAS CHANGED THIS PERIOD. THE REST OF THE REGIONS HAVE BEEN BENIGN THIS PERIOD. NO NEW REGIONS HAVE BEEN OBSERVED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DURING THIS FORECAST PERIOD AND IF CHANGE OCCURS IN REGION 4474 THEN X CLASS ACTIVITY IS TO BE EXPECTED.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 26/2100Z TO 27/2100Z: THE GEOMAGNETIC FIELD WAS AT MAJOR STORM LEVELS AT ALL STATIONS UNTIL 1200UT WHEN THE FIELD RETURNED TO UNSETTLED TO ACTIVE LEVELS. THE SATELLITE PROTON EVENT AND POLAR CAP ABSORPTION EVENT CONTINUE IN PROGRESS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD SHOULD BE AT ACTIVE TO MINOR STORM LEVELS DURING THIS FORECAST PERIOD. THE SATELLITE PROTON EVENT SHOULD CONTINUE FOR THE NEXT 36 HOURS WHILE THE POLAR CAP ABSORTION EVENT SHOULD END DURING THE NEXT 18 HOURS.

III. EVENT PROBABILITIES 28 APR-30 APR

CLASS M 99/99/99

CLASS X 40/40/40

PROTON 40/40/40

PCAF IN PROGRESS

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 APR 180

PREDICTED 28 APR-30 APR 183/183/178

90 DAY MEAN 27 APR 130

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 26 APR 072/100

ESTIMATED AFR/AP 27 APR 020/040

PREDICTED AFR/AP 28 APR-30 APR 028/035-030/035-030/035

SOLTERWARN

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