

HFUS 3 BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 138

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 17 MAY 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/2100 TO 17/2100Z: SOLAR ACTIVITY HAS BEEN LOW THIS PERIOD. REGION 4481 (N08W72) HAS PRODUCED SEVERAL C LEVEL X-RAY FLARES, AS

WELL AS NUMEROUS OPTICAL SUBFLARES. THE LARGEST X-RAY FLARE OF THE PERIOD WAS A C7 WHICH OCCURRED AT 0821 UT. THE SOURCE REGION FOR THIS EVENT IS UNKNOWN. REGION 4481 HAS REMAINED STABLE THIS PERIOD, MAINTAINING IT'S F TYPE SPOT

CLASSIFICATION, AND BETA GAMMA DELTA MAGNETIC CONFIGURATION.

REGIONS 4487 (S13W06) AND 4490 (S14E33) HAVE GROWN SLIGHTLY IN WHITE LIGHT, THEY ARE NOW D TYPE SPOT GROUPS. ACTIVITY HAS BEEN REPORTED ON THE EAST LIMB, PROBABLY THE RETURN OF OLD REGION 4474. NO NEW REGIONS WERE NUMBERED THIS PERIOD AND THE REMAINDER OF THE DISK APPEARS STABLE AT THIS TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE LOW TO MODERATE THROUGHOUT THE FORECAST PERIOD. THE RETURN OF OLD REGION 4474 MAY INCREASE THE CHANCES OF SIGNIFICANT FLARE ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 16/2100Z TO 17/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO STORM LEVELS, AT ALL LATITUDES, THIS PERIOD. THE SOURCE OF THIS ACTIVITY IS UNKNOWN.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD SHOULD BE UNSETTLED TO ACTIVE, AT ALL LATITUDES, THROUGHOUT THE FORECAST PERIOD.

III. EVENT PROBABILITIES 18 MAY-20 MAY

CLASS M 40/40/40

CLASS X 01/01/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 MAY 127

PREDICTED 18 MAY-20 MAY 128/132/134

90 DAY MEAN 17 MAY 131

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 16 MAY 008/010

ESTIMATED AFR/AP 17 MAY 026/025

PREDICTED AFR/AP 18 MAY-20 MAY 015/015-008/010-008/015

SOLTERWARN

BT