

HFUS 3 BOU 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 136

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 16 MAY 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/2100 TO 16/2100Z: SOLAR ACTIVITY WAS MODERATE THIS PERIOD DUE TO A M1/SB EVENT FROM REGION 4173 (S11W100) AT 1359UT, ONLY MINOR RADIO WAS OBSERVED WITH THE EVENT. REGION 4172 (S12W53) REMAINS THE MOST ACTIVE AND COMPLEX GROUP ON THE VISIBLE DISK. MINOR GROWTH HAS OCCURRED DURING THE PAST 24 HOURS AND IT CONTAINS A STRONG DELTA. THE REST OF THE REGIONS HAVE BEEN GENERALLY STABLE OR EXHIBITED MINOR DECAY. NO NEW REGIONS WERE NUMBERED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE DURING THE NEXT 24 HOURS DUE TO REGION 4173 WHICH IS STILL CAPABLE OF GIVING "M" CLASS EVENTS. REGION 4172 MAY PRODUCE "M" LEVEL EVENTS IF RAPID CHANGE OCCURS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 15/2100Z TO 16/2100Z: THE GEOMAGNETIC FIELD HAS BEEN GENERALLY ACTIVE AT BOTH THE HIGH AND MID-LATITUDE SITES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETLED TO ACTIVE FOR THE NEXT 24 HOURS. ACTIVE TO MINOR STORM CONDITIONS ARE FORECAST FOR THE REST OF THE PERIOD DUE TO THE "X" EVENT AND THE SMALL FILAMENT WHICH DISAPPEARED.

III. EVENT PROBABILITIES 17 MAY-19 MAY

CLASS M 35/15/10

CLASS X 05/05/01

PROTON 05/05/01

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 MAY 133

PREDICTED 17 MAY-19 MAY 131/130/120

90 DAY MEAN 16 MAY 121

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 MAY 017/021

ESTIMATED AFR/AP 16 MAY 013/015

PREDICTED AFR/AP 17 MAY-19 MAY 013/020-018/025-015/025

SOLTERWARN

BT