

HFUS3 BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 169

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 17 JUN 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/2100 TO 17/2100Z: SOLAR ACTIVITY HAS CONTINUED LOW DURING THE PAST 24 HOURS. REGION 4513 HAS PRODUCED SEVERAL SMALL X RAY EVENTS. TODAY THE LARGEST WAS A B5 AT 0503UT. REGION 4513 (S07E09) HAS REMAINED STABLE IN SIZE HOWEVER THE MAGNETIC GRADIENT, IN THE MIDDLE OF THE GROUP, HAS INCREASED FROM YESTERDAY. THE LARGE FILAMENT WHICH HAS DOMINATED THE NORTHERN HEMISPHERE DURING THE PAST TEN DAYS LOST MOST ITS EASTERN PORTION (N40W20) TO (N33W63) TODAY. NEW REGION OBSERVED TODAY IS 4418 (N19W15) A SIMPLE A TYPE GROUP.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW DURING THIS FORECAST PERIOD. REGION 4413 MAY BEGIN TO PRODUCE M CLASS EVENTS IF RAPID CHANGE OCCURS IN SIZE OR MAGNETIC GRADIENT STRENGTH.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 16/2100Z TO 17/2100Z: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE TO UNSETTLED DURING THIS PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE MAGNETIC FIELD IS EXPECTED TO BE AT ACTIVE TO UNSETTLED LEVELS DURING THE FORECAST PERIOD. THE ACTIVITY SHOULD BE DUE TO A LARGE NORTHERN CORONAL HOLE. THE FILAMENT WHICH DISAPPEARED TODAY IS NOT THOUGHT TO BE IN POSITION TO PRODUCE STORM LEVEL ACTIVITY HOWEVER SOME MINOR INCREASE IN ACTIVITY MAY BE OBSERVED ON 20 TO 21 JUNE.

III. EVENT PROBABILITIES 18 JUN-20 JUN

CLASS M 10/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 JUN 109

PREDICTED 18 JUN-20 JUN 109/110/110

90 DAY MEAN 17 JUN 123

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 16 JUN 034/043

ESTIMATED AFR/AP 17 JUN 012/020

PREDICTED AFR/AP 18 JUN-20 JUN 020/020-015/020-020/025

SOLTERWARN

BT