

HFUS3 BOU 152200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 289

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 15 OCT 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 14/2100 TO 15/2100Z: ALTHOUGH ACTIVITY HAS BEEN VERY LOW, THERE HAS BEEN DRAMATIC DEVELOPEMENT IN WHAT WAS LABELED A SIMPLE PLAGE REGION YESTERDAY. THIS REGION, 4586 (N05E53), CONTAINS A D-TYPE SPOT GROUP. THIS REGION HAS EXHIBITED STRONG ARCH FILAMENT SYSTEMS AND NUMEROUS POINT BRIGHTENINGS THROUGHOUT THE DAY. THIS REGION ALSO PRODUCED AN OPTICAL SUBFLARE AT 1149UT. CURRENTLY THIS IS THE ONLY SPOTTED REGION ON THE DISK.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN AT VERY LOW LEVELS. THE ONLY REGION CAPABLE OF POSSIBLY PRODUCING A SIGNIFICANT EVENT IS REGION 4586.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 14/2100Z TO 15/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT GENERALLY UNSETTLED LEVELS DURING THE LAST 24 HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN AT UNSETTLED LEVELS ON THE 16TH OF OCTOBER. THE FIELD SHOULD THEN BECOME ACTIVE ON THE 17TH DUE TO A RECURRENT PATTERN THAT HAS SET UP OVER THE LAST THREE ROTATIONS. ON THE 18TH OF OCTOBER THE GEOMAGNETIC FIELD IS ANTICIPATED TO STABILIZE TO UNSETTLED LEVELS AT MIDDLE LATITUDES, BUT REMAIN AT ACTIVE LEVELS AT HIGH LATITUDES.

III. EVENT PROBABILITIES 16 OCT-18 OCT

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 OCT 077

PREDICTED 16 OCT-18 OCT 078/079/080

90 DAY MEAN 15 OCT 080

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 14 OCT 012/013

ESTIMATED AFR/AP 15 OCT 010/015

PREDICTED AFR/AP 16 OCT-18 OCT 013/015-019/025-013/020

SOLTERWARN

BT