

HFUS3 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 021

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 21 JAN 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/2100 TO 21/2100Z: SOLAR ACTIVITY WAS AT A MODERATE LEVEL DURING THE PAST 24 HOURS. REGION 4617 (S09W38) HAS BEEN RESPONSIBLE FOR 7 M LEVEL FLARES, THE LARGEST BEING AN M4/1B AT 202052Z (MAX). THIS FLARE WAS ACCOMPANIED BY RADIO BURSTS ON FREQUENCIES FROM 245 MHZ TO 8800 MHZ WITH THE MAXIMUM FLUX BEING 185 UNITS AT 1415 MHZ. THE FLUX AT 2695 MHZ WAS ONLY 98 UNITS. REGION 4617 NOW HAS A DELTA MAGNETIC CONFIGURATION ALTHOUGH THE H ALPHA PLAGE IS REPORTEDLY SOMEWHAT DIMMER THAN YESTERDAY. THE OTHER DISK REGIONS ARE COMPLETELY OVERSHADOWED BY 4617 AS THEY REMAIN SMALL AND SIMPLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT A MODERATE LEVEL.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 20/2100Z TO 21/2100Z: THE GEOMAGNETIC FIELD WAS AT QUIET TO UNSETTLED LEVELS WITH BRIEF MINOR STORM CONDITIONS AROUND 210600Z.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT UNSETTLED LEVELS WITH NIGHTTIME ACTIVE CONDITIONS THROUGH 22 JAN. PREDOMINATELY ACTIVE CONDITIONS ARE EXPECTED ON 23 AND 24 JAN AS THE FIELD IS EXPECTED TO BEGIN REACTING TO RECURRENT CONDITIONS ABETTED BY FILAMENT AND FLARE ACTIVITY.

III. EVENT PROBABILITIES 22 JAN-24 JAN

CLASS M 80/80/80

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 JAN 087

PREDICTED 22 JAN-24 JAN 087/088/088

90 DAY MEAN 21 JAN 075

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 JAN 006/008

ESTIMATED AFR/AP 21 JAN 017/017

PREDICTED AFR/AP 22 JAN-24 JAN 012/025-015/025-020/035

SOLTERWARN

BT