

HFUS3 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 053

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 22 FEB 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/2100 TO 22/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4628 (S09W56) DISPLAYED A MARKED DECAY IN SIZE AND ACTIVITY SINCE YESTERDAY AND NOW IS AN ALPHA OPTICAL CLASS. REGION 4629 (N03E39) HAS DECAYED SLIGHTLY TO DS1 OPTICAL CLASS, BUT STILL EXHIBITS A KINKED ACTIVE DARK FILAMENT. BOTH REGIONS ARE BETA MAGNETIC CONFIGURATION. NO NEW REGIONS WERE NUMBERED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. REGION 4628 SHOULD CONTINUE ITS DECAY. REGION 4629 STILL HAS THE POTENTIAL TO PRODUCE LOW-LEVEL X-RAY ACTIVITY. NO RETURNING REGIONS ARE EXPECTED TO PRODUCE ANY SIGNIFICANT ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 21/2100Z TO 22/2100Z: GEOMAGNETIC ACTIVITY WAS UNSETTLED WITH PERIODS OF ACTIVE CONDITIONS AT ALL LATITUDES EARLY IN THE PERIOD. ISOLATED PERIODS OF ACTIVE CONDITIONS CONTINUED AT HIGH LATITUDES. THE DISTURBANCES COULD BE ATTRIBUTED TO THE 14 DEG LONG DISAPPEARING FILAMENT AT S22W35 ON 17 FEBRUARY.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE UNSETTLED TO ACTIVE ON THE FIRST DAY OF THE PERIOD. ACTIVE CONDITIONS ARE EXPECTED TO PREVAIL FOR THE REST OF THE PERIOD. THIS ACTIVITY IS FORECAST BASED ON THE LINGERING EFFECTS OF THE DISAPPEARING FILAMENT ON 17 FEB AND THE LARGE CORONAL HOLE INFERRED TO HAVE PASSED THE CENTRAL MERIDIAN ON 20 FEB.

III. EVENT PROBABILITIES 23 FEB-25 FEB

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 FEB 075

PREDICTED 23 FEB-25 FEB 075/075/075

90 DAY MEAN 22 FEB 076

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 21 FEB 007/012

ESTIMATED AFR/AP 22 FEB 011/012

PREDICTED AFR/AP 23 FEB-25 FEB 014/015-019/020-020/025

SOLTERWARN

BT