

HF053 BUU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 051

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 FEB 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100 TO 20/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4629 (N02E66) PRODUCED TWO B-LEVEL X-RAY EVENTS. THE LARGER WAS A B7/0F EVENT AT 20/0252Z. NEITHER EVENT WAS ACCCOMPANIED BY ANY SIGNIFICANT RADIO ASPECTS. THE REGION WAS A DHO IN WHITE-LIGHT CLASSIFICATION WITH 10 SPOTS, A NINE DEG EXTENT, AND AN AREA OF 240 MILLIONTHS. IT REMAINED A BETA-TYPE. REGION 4628 (S09W25) PRODUCED AN ARCHED FILAMENT SYSTEM BUT LITTLE ELSE OF CONSEQUENCE DURING THE PERIOD. NO NEW REGION WAS ASSIGNED. AN EMERGING FLUX REGION AT N05E23 WAS NOTED LATE IN THE PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. REGION 4629 IS EXPECTED TO PRODUCE ONLY B-LEVEL X-RAYS. NO RETURNING REGION PROVIDES SIGNIFICANT ACTIVITY POTENTIAL.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z: GEOMAGNETIC ACTIVITY WAS UNSETTLED-TO-ACTIVE. MINOR/MAJOR STORM LEVELS OCCURRED AT HIGH LATITUDES FROM 20/0400-0930Z. ONLY ACTIVE LEVELS WERE REPORTED AT MID LATITUDES DURING THIS TIME. WITHOUT ICE SATELLITE DATA TO CONFIRM THE STATUS OF THE INTERPLANETARY MEDIUM, THE DISTURBANCE CAN ONLY BE ASSUMED TO BE THE EFFECT OF THE DISAPPEARING 14 DEG LONG FILAMENT FROM S22W35 AT 17/2103Z.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE UNSETTLED-TO-ACTIVE. THE POSSIBILITY OF BRIEF HIGH LATITUDE STORM LEVELS CONTINUES THROUGH THE FIRST DAY (21 FEB), BUT A GENERAL DECREASE TO GENERALLY UNSETTLED CONDITIONS SHOULD PERDOMINATE THE LAST TWO (22-23 FEB).

III. EVENT PROBABILITIES 21 FEB-23 FEB

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 FEB 077

PREDICTED 21 FEB-23 FEB 080/083/086

90 DAY MEAN 20 FEB 076

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 FEB 005/008

ESTIMATED AFR/AP 20 FEB 012/020

PREDICTED AFR/AP 21 FEB-23 FEB 015/020-013/015-014/015

SOLTERWARN

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