

HFUS I BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SF NUMBER 03

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 22 FEBRUARY 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE THE PAST 24 HOURS. REGION 1574 (N17W43) APPEARS TO HAVE STABILIZED IN GROWTH ALTHOUGH IT STILL REMAINS LARGE AND COMPLEX. THIS REGION HAS PRODUCED SEVERAL M-CLASS X-RAY EVENTS THROUGHOUT THE UT DAY; A M9/1B AT 22/0500Z, A M1/SN AT 22/1151Z, A M2/1B AT 22/1255Z, A M2/SB AT 22/1637Z, A M2/SB AT 22/1810Z AND A M5/1B AT 22/1904Z. REGION 1568 (N19W70) CONTINUES TO SIMPLIFY AND HAS PRODUCED ONLY SUBFLARES WITHOUT SIGNIFICANT X-RAY EVENTS. REMAINING REGIONS ARE EITHER STABLE OR UNIMPRESSIVE. NO NEW REGIONS WERE OBSERVED TODAY.

IB. SOLAR ACTIVITY IS EXPECTED TO BE AT MODERATE TO HIGH LEVELS DURING THE NEXT 24 HOURS. REGION 1574 IS CAPABLE OF PRODUCING CLASS X EVENTS. REGION 1568, ALTHOUGH SIMPLIFIED, CAN ALSO PRODUCE ENERGETIC EVENTS. NO SIGNIFICANT REGIONS ARE DUE TO RETURN.

II. THE GEOMAGNETIC FIELD HAS BEEN MOSTLY ACTIVE WITH PERIODS AT MINOR STORM LEVELS DURING THE LAST 24 HOURS. THE GEOMAGNETIC FIELD IS EXPECTED TO REACH STORM LEVELS WITHIN THE NEXT 24 HOURS DUE TO RECENT FLARE ACTIVITY. ACTIVE TO UNSETTLED CONDITIONS ARE EXPECTED TOWARDS THE END OF THIS FORECAST PERIOD AS THE GEOMAGNETIC FIELD RESPONDS TO SECTORE STRUCTURE AND A CORONAL HOLE.

III. EVENT PROBABILITIES 23-25 FEB

CLASS M 95/95/95

CLASS X 25/25/25

PROTON 20/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 FEB 230

PREDICTED 23-25 FEB 224/220/216

9-DAY MEAN 22 FEB 195

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 21 FEB 44

ESTIMATED AFR/AP 22 FEB 25/30

PREDICTED AFR/AP 23-25 FEB 35/40 - 18/20 - 15/20

SOLTERWAR N

BT