

HFUS 3 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
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JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 25 JAN 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/2100 TO 25/2100Z: THE SOLAR ACTIVITY HAS BEEN AT A LOW LEVEL OF ACTIVITY DURING THE PAST 24 HOUR PERIOD. REGION 4398 (N15E24) PRODUCED MANY CLASS "C3" OR LOWER X-RAY EVENTS AND MANY SUB-FLARES. IT PRODUCED ONLY 1 C3/1N EVENT AT 24/0800UT. THIS REGION WAS A CATEGORY "DKI" WITH A BETA/GAMMA/DELTA-TYPE MAGNETIC CONFIGURATION. IT ALSO CONTRIBUTED 2 RADIO BURSTS OF OVER 100FU AT 245MHZ AND A RADIO NOISE STORM WITH 420FU AT 245MHZ. REGION 4399 (N12E46) PRODUCED MANY SUB-FLARES BUT NO ASSOCIATED CLASS "C" X-RAYS. IT WAS A CATEGORY "DKI" ALSO BUT WITH A BETA-TYPE MAGNETIC CONFIGURATION. REGION 4399 DECREASED IN SIZE COMPARED TO THE PRIOR DAY FROM 880 MILLIONTHS TO 770 MILLIONTHS FOR THIS PERIOD. 2 NEW REGIONS WERE ASSIGNED. REGION 4401 (N07W23) WAS CATEGORY "BXO" WITH 4 SPOTS. REGION 4402 (S12E67) WAS A CATEGORY "AXX". THIS LAST REGION PRODUCED A SUB-FLARE AT 24/1741UT.

IB. SOLAR ACTIVITY FORECAST: THE SOLAR ACTIVITY IS EXPECTED TO BE AT A MODERATE LEVEL THROUGHOUT THE FORECAST PERIOD. REGION 4398 IS EXPECTED TO INCREASE ITS NUMBER OF SPOTS AND SIZE SLOWLY, AND PROVIDES THE VERY SLIGHT CHANCE OF HIGH LEVEL ACTIVITY. REGION 4399 APPEARS TO BE SIMPLIFYING ITSELF AND IS EXPECTED TO BE LESS OF A PRODUCER..

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 24/2100Z TO 25/2100Z: THE GEOMAGNETIC ACTIVITY HAS BEEN AT AN UNSETTLED LEVEL DURING THE PAST 24 HOUR PERIOD. BRIEF PERIODS OF ACTIVE/MINOR STORM LEVELS WERE REPORTED AT HIGH LATITUDE SITES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT AN ACTIVE LEVEL THROUGHOUT THE FORECAST PERIOD. **BRIEF** PERIODS OF STORM LEVELS ARE EXPECTED AT MID AND HIGH LATITUDES DURING NIGHT-TIME HOURS. THE PREVIOUS 4 DAYS OF SOLAR ACTIVITY PLUS THE HISTORICAL EFFECT OF THE ACTIVE CARRINGTON LONGITUDES AT 150- 210 SHOULD COMBINE TO MAINTAIN THE FORECAST ACTIVE LEVEL.

III. EVENT PROBABILITIES 26 JAN-28 JAN

CLASS M	70/70/70
CLASS X	05/05/05
PROTON	01/01/01
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	25 JAN	152
PREDICTED	26 JAN-28 JAN	165/175/180
90 DAY MEAN	25 JAN	096

V. GEOMAGNETIC A INDICES

OBSERVED	AFR/AP	24 JAN	008/008
ESTIMATED	AFR/AP	25 JAN	009/010
PREDICTED	AFR/AP	26 JAN-28 JAN	015/020-015/020-020/025

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