

HFUS 3 BOU 262200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 026

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 26 JAN 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 25/2100 TO 26/2100Z: SOLAR ACTIVITY HAS BEEN AT A MODERATE LEVEL DURING THE PAST 24 HOUR PERIOD. REGION 4398 (N15E11) PRODUCED A M3/SB EVENT AT 26/0046UT WITH TYPE II AND IV SWEEPS, A CENTIMETRIC RADIO BURST OF 220SFU, A 245MHZ RADIO BURST OF 460SFU, AND A SHORT WAVE FADE REPORTED BY MAUI, HAWAII. THIS REGION HAS CONTINUED TO GROW IN AREA AND REMAINS A BETA/GAMMA/DELTA-TYPE MAGNETIC CONFIGURATION. REGION 4396 (S06W70) ALSO PRODUCED A M2/SB EVENT AT 26/1628UT. THIS WAS ACCCOMPANIED BY 245MHZ RADIO BURST OF 1500SFU. REGION 4396 REVERSED ITS TREND OF SHRINKING AREA AND LONGITUDINAL EXTENT DURING THIS PERIOD. REGIONS 4399 (N12E33) AND 4397 (N15W00) CONTRIBUTED SEVERAL SMALLER X-RAY AND OPTICAL EVENTS DURING THE PERIOD, BUT ONLY 4399 WAS STILL GROWING IN AREA, EXTENT, AND NUMBER OF WHITE-LIGHT SPOTS. NO NEW REGIONS WERE ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE AT A MODERATE LEVEL THROUGHOUT THE FORECAST PERIOD. REGION 4398 (WITH NEIGHBORS 4397/4399) SHOULD CONTINUE TO PROVIDE A VERY SLIGHT CHANCE OF HIGH LEVEL ACTIVITY. REGION 4396 SHOULD STILL PRODUCE MODERATE LEVEL ACTIVITY THROUGH THE FIRST 2 DAYS OF THE FORECAST PERIOD (27/28 JAN), BEFORE IT ROTATES AROUND THE WEST LIMB.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 25/2100Z TO 26/2100Z: GEOMAGNETIC ACTIVITY HAS BEEN AT UNSETLED TO ACTIVE LEVELS DURING THE PAST 24 HOUR PERIOD. INTERMITTENT STORM LEVELS HAVE BEEN REPORTED AT BOTH MID AND HIGH LATITUDE SITES. THIS WAS THE SUM TOTAL OF THE SOLAR ACTIVITY OF THE PAST 5 DAYS PLUS THE DELAYED EFFECT OF THE CORONAL HOLES THAT PAST THE CENTRAL MERIDIAN ON THE 20/21ST JAN.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE LEVELS THROUGHOUT THE FORECAST PERIOD. BRIEF STORM LEVELS ARE EXPECTED AT MID/HIGH LATITUDES. NO CHANGE IS EXPECTED UNTIL A GRADUAL DECREASE ON THE 31ST OF JAN. THIS IS ATTRIBUTED TO THE ACCUMULATIVE EFFECTS OF THE PRIOR CORONAL HOLE PASSAGES AND THE SOLAR ACTIVITY.

III. EVENT PROBABILITIES 27 JAN-29 JAN

CLASS M 85/85/85

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 26 JAN 165

PREDICTED 27 JAN-29 JAN 175/180/180

90 DAY MEAN 26 JAN 097

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 25 JAN 007/012

ESTIMATED AFR/AP 26 JAN 019/020

PREDICTED AFR/AP 27 JAN-29 JAN 015/020-020/025-020/025

SOLTERWARN

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