

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 ACCOMPANIED BY 245MHZ RADIO
BURST OF 1500SFU. REGION 4396 REVERSED ITS TREND OF SHRINKING
AREA AND LONGITUDNAL 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 UNSETTLED 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

BT