

HFUS 3 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 021

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 21 JAN 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/2100
TO 21/2100Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PERIOD.

SEVERAL C CLASS XRAY/ SUBFLARE CLASS OPTICAL EVENTS WERE
OBSERVED IN REGION 4393(S16W72). REGION 4396(S05W03) HAS
CONTINUED TO GROW RAPIDLY AND MAY SOON DEVELOP FLARE POTENTIAL
AT M CLASS. REGION 4397(N16E69) HAS ROTATED FURTHER INTO VIEW
AND MAY BE A CANDIDATE FOR SIGNIFICANT ACTIVITY PENDING SOME
FURTHER DEVELOPMENT. REGION 4398(N14E78) IS FOLLOWING REGION
4397 SHARING THE SAME NEUTRAL LINE. ANALYSIS OF THIS REGION
REQUIRES TIME FOR IT TO MOVE FURTHER ONTO THE DISK.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW EARLY IN THE FORECAST PERIOD WITH MODERATE ACTIVITY
STARTING TO OCCUR BRIEFLY LATE IN THE PERIOD. INCREASED
ACTIVITY IS EXPECTED WITH GROWTH IN REGION 4396 AND POSSIBLY
REGIONS 4397 AND 4398.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 20/2100Z TO 21/2100Z:
THE GEOMAGNETIC FIELD HAS BEEN ACTIVE FOR BRIEF ISOLATED
INTERVALS DURING THE REPORT PERIOD. ACTIVITY HAS DECLINED
TOWARD FILE TIME. ACTIVITY MAY HAVE BEEN ASSOCIATED WITH
FILAMENT DISAPPEARANCES AND IF SO IMAGE QUALITY LATELY HAS
HAMPERED ANALYSIS. CORONAL HOLE PASSAGE IS EXPECTED TO ACCOUNT
FOR ACTIVITY DURING THE FORECAST PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS
EXPECTED TO INTENSIFY TO ACTIVE LEVELS ON 23 JAN. AND TO BE
ACTIVE AT LEAST INTO THE UT DAY 24 JAN. DUE TO THE CORONAL HOLE
TO THE WEST OF CENTRAL MERIDIAN ON THE SOLAR EQUATOR.

III. EVENT PROBABILITIES 22 JAN-24 JAN

CLASS M 30/35/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 JAN 107

PREDICTED 22 JAN-24 JAN 112/114/116

90 DAY MEAN 21 JAN 094

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 JAN 009/009

ESTIMATED AFR/AP 21 JAN 015/015

PREDICTED AFR/AP 22 JAN-24 JAN 012/015-018/020-014/020

SOLTERWARN

BT