

HXUS 1 BOU 241300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 024A
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 24 JAN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/1200Z TO 24/1200Z: SOLAR ACTIVITY WAS AT MODERATE LEVELS THIS PERIOD WITH ONE M-CLASS EVENT. THIS EVENT, AT LEVEL M2, APPARENTLY CAME FROM A REGION (OLD REGION 3537?) STILL BEHIND THE NORTHEAST LIMB. LOOPS WERE OBSERVED AT NO9 FOR MORE THAN AN HOUR FOLLOWING THE XRAY MAX. ALL SEVEN SPOTTED REGIONS ON THE DISK HAVE BEEN QUIET AND STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE AT MODERATE LEVELS. SINCE THE REGION AT THE NORTHEAST LIMB IS STILL HIDDEN FROM VIEW, IT IS DIFFICULT TO ACCESS ITS MAJOR FLARE POTENTIAL AT THIS TIME. IN ANY CASE, ALL SOLAR INDICES ARE FORECAST TO INCREASE FOR THE NEXT SEVERAL DAYS AS A BAND OF ACTIVE SOLAR LONGITUDES ROTATES ONTO THE DISK.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS STILL AT ACTIVE LEVELS TODAY AND APPEARS TO BE TAKING ITS TIME IN SETTLING DOWN FROM THE CORONAL HOLE-RELATED ACTIVITY WHICH BEGAN ON 22 JAN. UNSETTLED LEVELS ARE FORECAST FOR THE NEXT 72 HOURS.

III. EVENT PROBABILITIES 25 JAN-27 JAN

CLASS M 50/65/65

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 JAN 153

ESTIMATED 24 JAN 148

PREDICTED 25 JAN-27 JAN 148/153/160

90 DAY MEAN 23 JAN 195

V. GEOMAGNETIC A INDICES

OBSERVED AFR 22 JAN 020 AP 23 JAN 018

ESTIMATED AFR 23 JAN 017 AFR/AP 24 JAN 015/015

PREDICTED AFR/AP 25 JAN-27 JAN 010/015-008/012-008/010

SOLTERWARN

BT

HXUS BOU 241300
PREDM 05025 06526 06527
PREDX 00525 00526 00527
PREDP 00125 00126 00127
PCAF 00125
TENCM 14825 15326 16027
AFRED 01025 00826 00827
AFAPF 01525 01226 01027
KKK 33222 33222 32222
BT

HFUS 3 BOU 242200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 024B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 24 JAN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/1200Z TO 24/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE DUE TO A LONG-LIVED M6/1B/LPS FROM NEW REGION 3573 (N09E90). THE X-RAY MAXIMUM WAS 24/2003UT. AT PRESS TIME NO RADIO BURSTS HAD BEEN REPORTED WITH THIS EVENT. THIS REGION IS ABOUT THREE WEEKS OLD WHICH IN MANY CASES IS PEAK DEVELOPMENT FOR RAPIDLY GROWING REGIONS. IN CALCIUM LIGHT, 3573 SHOWS ABOUT SIX DEGREES OF LATITUDINAL EXTENT. SUBFLARES HAVE BEEN OBSERVED FROM REGION 3557 (N04W32) WHERE SOME MAGNETIC FLUX MAY BE EMERGING. FOUR SMALL REGIONS HAVE BEEN NUMBERED TODAY - 3572 (N22E37), 3571 (S07W13), 3574 (N20E65), AND 3575 (N11E76).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN MODERATE DUE TO THE APPARENT FLARE POTENTIAL OF REGION 3573. CLASS X FLARES ARE A POSSIBILITY FROM THIS REGION. PREVIOUSLY ACTIVE LONGITUDES ARE EXPECTED TO BEGIN RETURNING TO THE EAST LIMB NEAR THE END OF THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO SLIGHTLY ACTIVE DURING THE PERIOD. THE M6 FLARE IS NOT EXPECTED TO CAUSE A SIGNIFICANT GEOMAGNETIC DISTURBANCE. UNSETLED CONDITIONS ARE FORECAST FOR THE NEXT THREE DAYS. SHOULD REGION 3573 CONTINUE TO PRODUCE SIGNIFICANT FLARE ACTIVITY, FLARE RELATED DISTURBANCES COULD BEGIN NEAR 29 JANUARY.

III. EVENT PROBABILITIES 25 JAN-27 JAN

CLASS M 80/90/90

CLASS X 10/15/15

PROTON 05/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 JAN 154

PREDICTED 25 JAN-27 JAN 165/175/180

90 DAY MEAN 24 JAN 195

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 23 JAN 017/018

ESTIMATED AFR/AP 24 JAN 016/015

PREDICTED AFR/AP 25 JAN-27 JAN 010/015-010/012-010/010

SOLTERWARN

BT

HXUS BOU 242200

PREDM 08025 09026 09027

PREDX 01025 01526 01527

PREDP 00525 01026 01027

PCAF 00125

TENCM 16525 17526 18027

AFRED 01025 01026 01027

AFAPP 01525 01226 01027

BT