

HFUS 1 BOU 301300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 030A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 30 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 29/1200Z TO 30/1200Z: SOLAR ACTIVITY HAS BEEN LOW WITH REGIONS 4073 (N05W27) AND 4075 (S14E32) PRODUCING SMALL CLASS C FLARES. REGION 4073 IS GROWING SLOWLY AND SMALL SPOTS HAVE EMERGED IN ITS INTERIOR. REGION 4075 IS ALSO GROWING AND INDICATIONS OF INCREASING MAGNETIC COMPLEXITY HAVE BEEN REPORTED. NEW REGION 4077 (S18E43) HAS EMERGED RAPIDLY NEAR REGION 4075 AND IS NOW A SMALL CLASS D GROUP. REGION 4070 (S11W52) WAS INADVERTENTLY RENUMBERED AS REGION 4078. REGION 4078 IS NOW LOCATED AT N09W09 AND APPEARS TO BE TRAILER POLARITY SPOTS WHICH HAVE EMERGED AHEAD OF REGION 4071'S CLASS H SPOT AT N05W04. MINOR SURGING HAS BEEN REPORTED AT THE NORTH AND SOUTHEAST LIMB AND NON-ENERGETIC ERUPTIVE EVENTS HAVE OCCURRED AT THE NORTHWEST LIMB.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE GENERALLY LOW FOR THE NEXT THREE DAYS. THE POSSIBILITY OF AN ISOLATED CLASS M FLARE FROM REGIONS 4073 AND 4075 EXISTS. CONTINUED RAPID GROWTH OF REGION 4077 COULD INCREASE THE FREQUENCY OF SMALL FLARES IN BOTH THAT REGION AND NEARBY 4075. LARGER FLARES FROM THIS COMPLEX COULD COME WITHIN TWO DAYS SHOULD FLUX EMERGENCE CONTINUE. SEVERAL SMALL REGIONS SHOULD ROTATE OVER THE EAST LIMB DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO SLIGHTLY ACTIVE EXCEPT FOR PERIODS BETWEEN 29/1500-1800Z AND 30/0900-1200Z WHEN MINOR STORM LEVELS WERE EXPERIENCED. THE ONLY LIKELY SOURCE OF THESE DISTURBANCES IS A CORONAL HOLE IN THE NORTHWEST QUADRANT. UNSETTLED CONDITIONS ARE FORECAST TO OCCUR DURING THE NEXT THREE DAYS WITH SHORT PERIODS AT ACTIVE LEVELS POSSIBLE.

III. EVENT PROBABILITIES 31 JAN-02 FEB

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 JAN 154

ESTIMATED 30 JAN 164

PREDICTED 31 JAN-02 FEB 170/175/175

90 DAY MEAN 29 JAN 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR 28 JAN 009 AP 29 JAN 017

ESTIMATED AFR 29 JAN 014 AFR/AP 30 JAN 012/015

PREDICTED AFR/AP 31 JAN-02 FEB 010/010-008/010-010/010

SOLTERWARN

BT

HFUS 3 BOU 302200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO.

SDF NUMBER 030B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 30 JAN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 30/1200Z TO 30/2100Z: SOLAR ACTIVITY REMAINS AT A LOW LEVEL. REGION 4077 (S18E36) HAS GROWN SIGNIFICANTLY SINCE YESTERDAY AND IS NOW A MODERATE SIZE D GROUP. REGION 4077 WILL PROBABLY CONTINUE TO GROW AS IT HAS A WELL DEVELOPED ARCH FILAMENT SYSTEM; IS FLUCTUATING IN BRIGHTNESS AND THE NEUTRAL LINE FILAMENT IS ACTIVE. THE OTHER DISK REGIONS ARE FAIRLY STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN AT A LOW LEVEL. THE GROWTH AND DEVELOPMENT IN 4077 MAY RESULT IN AN ISOLATED M EVENT.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS UNSETTLED TO ACTIVE. UNSETTLED TO OCCASIONALLY ACTIVE. CONDITIONS SHOULD CONTINUE.

III. EVENT PROBABILITIES 31 JAN-02 FEB

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 30 JAN 160

PREDICTED 31 JAN-02 FEB 170/175/175

90 DAY MEAN 30 JAN 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 29 JAN 016/017

ESTIMATED AFR/AP 30 JAN 015/015

PREDICTED AFR/AP 31 JAN-02 FEB 010/010-008/010-010/010

SOLTERWARN

BT

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