

ISRTS

HXUS 1 ROU 091300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER: 313A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 09 NOV 1981

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 08/1200Z TO 09/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE DUE TO AN M1/1B, 1N IN REGIONS 3450 (S20E51) AND 3452 (S17E28). THESE TWO REGIONS SHARE A COMMON NEUTRAL LINE AND FLARED SYMPATHETICALLY WITH EACH OTHER, INDICATING THEY ARE MAGNETICALLY COUPLED. REGION 3432 (S10W62) HAS DECAYED AND RELAXED, LEAVING REGION 3450 THE DOMINANT REGION CURRENTLY ON THE DISK. REGION 3444 (S15W13) REMAINED MILDLY ERUPTIVE WHILE REGIONS 3451 (N17E25) AND 3454 (N03E-4) HAVE SHOWN FEATURES CHARACTERISTIC OF INCREASINGLY ERUPTIVE REGIONS.

II. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE FOR THE FORECAST PERIOD. ALTHOUGH REGION 3432 MAY HAVE DECAYED TOO MUCH TO RETAIN ITS M-CLASS FLARE POTENTIAL, THE 3450-3452 COUPLE CAN CONTINUE MODERATE ACTIVITY.

III. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE THROUGH 8 NOV, BECOMING QUIET FOR THE FIRST HALF OF 9 NOV. UNSETTLED CONDITIONS ARE EXPECTED UNTIL THE LATTER HALF OF 10 NOV WHEN ACTIVE CONDITIONS ARE EXPECTED TO BEGIN IN RESPONSE TO THE M5/1B FLARE ON 7/0357 UT. UNSETTLED CONDITIONS SHOULD THEN RETURN NEAR THE END OF 11 NOV AND REMAIN UNSETTLED FOR THE REMAINDER OF THE FORECAST PERIOD.

IV. EVENT PROBABILITIES 10 NOV-12 NOV

CLASS M 70/70/80

CLASS X 10/10/10

PROTON 05/05/10

PCAF GREEN

V. OTTAWA 10.7 CM FLUX

OBSERVED 08 NOV 245

ESTIMATED 09 NOV 238

PREDICTED 10 NOV-12 NOV 233/226/220

90 DAY MEAN 08 NOV 228

VI. GEOMAGNETIC A INDICES

OBSERVED AFR 07 NOV 013 AP 08 NOV 026

ESTIMATED AFR 08 NOV 026 AFR/AP 09 NOV 010/015

PREDICTED AFR/AP 10 NOV-12 NOV 020/025-018/015-010/015

SOLTERWARN

BT

HXUS ROU 091300

PREDM 07010 07011 08012

PREDX 01010 01011 01012

PREDP 00510 00511 01012

PCAFI 00110

TENCM 23310 22611 22012

AERFD 02010 01811 01012

AFAPP 02510 01511 01512

XKK 32244-43323 44433

BT

HFUS 3 BOU 092200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 313B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 09 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 09/1200Z TO 09/2100Z: SOLAR ACTIVITY REMAINS MODERATE. REGIONS 3450 (S19E10) AND 3452 (S19E23) AGAIN COMBINED FORCES TO PRODUCE AN M3/LARGE 1B AT 1312Z MAXIMUM. ACCORDING TO RADIO AND OPTICAL REPORTS THE FLARE EVIDENTLY BEGAN IN REGION 3452 AND THEN SPREAD NORTHWESTWARD INTO REGION 3450 CAUSING WHAT APPEARED TO BE A DOUBLE MAXIMUM. A 10CM RADIO BURST OF 1485 SOLAR FLUX UNITS WAS RECORDED AT 1315Z ALONG WITH A TYPE IV SWEEP. REGION 3450'S AREA AND MAGNETIC COMPLEXITY CONTINUE TO INCREASE. REGION 3451 (N18E19) IS ALSO GROWING AND BECOMING MORE ACTIVE AS WELL AS REGION 3454 (N03E19). ALL THREE OF THESE REGIONS ARE LOCATED ON NEARLY THE SAME LONGITUDE. NEW REGIONS 3457 (S12E68) AND 3458 (N13E43) WERE NUMBERED TODAY, BOTH SIMPLE GROUPS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN MODERATE. ALTHOUGH THE SOLAR INDICES ARE DROPPING DUE TO THE LOSS OF REGION 3432 (S09W72) OVER WEST LIMB, THE FLARE PRODUCTION FROM REGIONS 3450, 3451 AND 3454 SHOULD MAINTAIN THE MODERATE LEVELS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. ACTIVE CONDITIONS ARE EXPECTED EARLY IN THE ZULU DAY ON THE 10TH AS A RESULT OF THE M6/1B FLARE FROM REGION 3432 ON THE 7TH OF NOV.

III. EVENT PROBABILITIES 10 NOV-12 NOV

CLASS M 70/70/30

CLASS X 10/10/10

PROTON 05/05/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 09 NOV 237

PREDICTED 10 NOV-12 NOV 229/222/213

90 DAY MEAN 09 NOV 229

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 08 NOV 027/026

ESTIMATED AFR/AP 09 NOV 010/010

PREDICTED AFR/AP 10 NOV-12 NOV 025/025-015/015-010/015

SOLTERWARN

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