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HFUS 1 BOU 151300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 349A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 15 DEC 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
14/1200Z TO 15/1200Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE
PAST 24 HOURS. SIXTEEN SMALL (NO GREATER THAN C2) C-CLASS
SUBFLARES HAVE BEEN NOTED FROM A VARIETY OF REGIONS. A VERY
SLOW RISING X-RAY EVENT BEGAN AT 15/0858Z AND REACHED MAXIMUM
AT 1139Z AT THE C9.9 LEVEL. THE SLOW RISING SIGNATURE AND
ABSENCE OF OPTICAL REPORTS SUGGESTS ACTIVITY FROM A REGION TWO
OR THREE DAYS OVER THE WEST LIMB.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
CONTINUE LOW. THERE IS DIMINISHING LIKELIHOOD OF M-CLASS
ACTIVITY. REGIONS WHICH HAVE HAD M-CLASS POTENTIAL ARE EITHER
NEARING WEST LIMB OR DECLINING.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN QUIET DURING THE PAST 24 HOURS. 27-DAY ROTATION CHARTS
INDICATE THE POSSIBILITY OF RECURRENT UNSETTLED CONDITIONS FOR
THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 16 DEC-18 DEC

CLASS M 30/25/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 DEC 199

ESTIMATED 15 DEC 181

PREDICTED 16 DEC-18 DEC 170/161/160

90 DAY MEAN 14 DEC 220

V. GEOMAGNETIC A INDICES

OBSERVED AFR 13 DEC 011 AP 14 DEC 005

ESTIMATED AFR 14 DEC 006 AFR/AP 15 DEC 003/010

PREDICTED AFR/AP 16 DEC-18 DEC 012/012-012/014-010/014

SOLTERWARN

BT

NNNNZS

HFUS 3 ROU 152200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 349B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 15 DEC 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200Z TO 15/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE THIS PERIOD DUE TO AN M3/SB FLARE FROM REGION 3492 (N19W90) AT 15/1949UT. A SPRAY WAS OBSERVED TO 0.38 RADII. THE FLARE WAS ACCOMPANIED BY A TENFLARE OF 190 FLUX UNITS AND SHORT WAVE FADES. MAGNETIC GRADIENTS HAVE RELAXED SIGNIFICANTLY IN REGIONS 3504 (S15W46), 3505 (S07W31), AND 3507 (S08W60) AND REGION 3504 HAS APPARENTLY DECAYED ENOUGH TO CAUSE THE LOSS OF ITS DELTA. HOWEVER, THESE THREE REGIONS CONTINUE TO SHOW BRIGHT POINTS AND PLAGE FLUCTUATIONS. NO NEW REGIONS WERE CONFIRMED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BECOME LOW FOR THE FORECAST PERIOD. WITH REGION 3492 ALREADY OVER WEST LIMB AND DECAY IN OTHER REGIONS, M CLASS FLARES ARE BECOMING LESS PROBABLE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET FOR THE PAST 24 HOURS AND IS EXPECTED TO BECOME UNSETTLED FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 16 DEC-18 DEC

CLASS M 30/25/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 DEC 178

PREDICTED 16 DEC-18 DEC 167/157/152

90 DAY MEAN 15 DEC 220

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 14 DEC 007/005

ESTIMATED AFR/AP 15 DEC 004/007

PREDICTED AFR/AP 16 DEC-18 DEC 012/012-012/012-010/014

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HXUS BOU 152200

PREDM 03016 02517 02018

PREDX 00116 00117 00118

PREDP 00116 00117 00118

PCAFT 00116

TENCM 16716 15717 15218

AFRED 01216 01217 01018

AFAPF 01216 01217 01418

BT