

HFUS 3 BOU 14 1400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 349A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 14 DECEMBER 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS. REGION 2841 (N14E52) HAS PRODUCED THE ONLY M-CLASS EVENT A M1/SB AT 0313UT, MINOR RADIO BURSTS WERE ALSO REPORTED WITH THIS EVENT. REGION 2826 (N13W24) IS LESS COMPLEX MAGNETICALLY, HOWEVER IT STILL HAS STRONG MAGNETIC GRADIENTS. REGION 2840 (N07E44) HAS STABILIZED IN GROWTH BUT ITS LARGE SIZE AND DELTA CONFIGURATION MAKE IT A REGION TO WATCH.

IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT MODERATE LEVELS. IF REGION 2826 OR REGION 2840 STARTS TO EXHIBIT RAPID CHANGE THEN A PERIOD OF HIGH ACTIVITY IS POSSIBLE.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO BE SLIGHTLY UNSETTLED DURING THE FORECAST PERIOD. A LARGE ENERGETIC EVENT FROM REGION 2826 COULD PRODUCE A GEOMAGNETIC STORM TWO DAYS LATER.

III. EVENT PROBABILITIES: 15-17 DEC

CLASS M 90/90/90

CLASS X 15/15/15

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 13 DEC 252

ESTIMATED 14 DEC 263

PREDICTED 15-17 DEC 270/275/272

90 DAY MEAN 13 DEC 205

V. GEOMAGNETIC A INDICES

OBSERVED AFR 12 DEC 14 AP 13 DEC 06

ESTIMATED AFR 13 DEC 05 AFR/AP 14 DEC 06/10

PREDICTED AFR/AP 15-17 DEC 12/12 12/15 12/12

SOLTERWARN

BT

HFUS 1 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 349B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200UT 14 DECEMBER 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS. REGION 2841 (N14E52) HAS PRODUCED THE ONLY M-CLASS EVENT A M1/SB AT 0313UT. MINOR RADIO BURSTS WERE ALSO REPORTED WITH THIS EVENT. REGION 2840 (N07E44) HAS STABILIZED IN GROWTH BUT ITS LARGE SIZE AND DELTA CONFIGURATION MAKE IT A REGION TO WATCH. ADDITIONS TO 1200Z. ANOTHER M1/IB FLARE OCCURRED AT 14/1733UT FROM REGION 2840 (N07E38). THIS REGION HAS INTENSIFIED ITS MAGNETIC GRADIENT AND APPEARS TO BE COUPLED WITH REGION 2841 (N15E44). REGION 2841 HAS PRODUCED 3 ADDITIONAL FLARES, C4/IN, C5/IN, AND C6/SN. REGION 2826 (N13W31), ALTHOUGH STABLE, HAS RETAINED A WEAK DELTA AND A SIGNIFICANT MAGNETIC GRADIENT.

IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT MODERATE LEVELS. IF REGION 2826 OR REGION 2840 STARTS TO EXHIBIT RAPID CHANGE THEN A PERIOD OF HIGH ACTIVITY IS POSSIBLE.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO BE SLIGHTLY UNSETTLED DURING THE FORECAST PERIOD. A LARGE ENERGETIC EVENT FROM REGION 2826 COULD PRODUCE A GEOMAGNETIC STORM TWO DAYS LATER.

III. EVENT PROBABILITIES: 15-17 DEC

CLASS M 90/90/90

CLASS X 15/15/15

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 14 DEC 261

PREDICTED 15-17 DEC 270/270/270

90 DAY MEAN 14 DEC 206

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 DEC 04/06

ESTIMATED AFR/AP 14 DEC 05/07

PREDICTED AFR/AP 15-17 DEC 12/12 12/15 12/12

SOLTERWARN

BT