

HFUS 3 BOU 161407

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 351A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 16 DECEMBER 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS. REGION 2841 (N15E26) PRODUCED TWO M-CLASS EVENTS, AN M1/1B AT 15/1841 UT AND A M5/2B AT 16/1155 UT. THE EVENT AT 1155 UT. HAD UMBRAL COVERAGE AND INVOLVED PART OF REGION 2840. REGION 2840 (N15E19) PRODUCED FOUR M-CLASS EVENTS, A M5/2B AT 15/1926 UT, A M1/1B AT 16/0149 UT, A M2/1B AT 16/0808 UT AND A M4/2B AT 16-1013 UT. REGIONS 2839 (S16E08), 2826 (N13W50), 2835 (S33W11) AND 2845 (S15E63) HAVE ALL PRODUCED SMALL OPTICAL EVENTS TODAY. REGIONS 2840 AND 2841 HAVE EXHIBITED GROWTH IN BOTH SIZE AND SPOT NUMBER. STRONG MAGNETIC GRADIENTS SHOULD CONTINUE AND MAY INCREASE AS THE REGIONS CONTINUE TO DEVELOP. THE DELTA CONFIGURATION IN THE TRAILER PORTION OF REGION 2840 HAS SHOWN SOME INCREASE IN SIZE, THERE MAY BE MORE THAN ONE DELTA.

IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT MODERATE LEVELS. CONTINUED GROWTH AND INTERACTION BETWEEN REGIONS 2840 AND 2841 INCREASES THE POSSIBILITY OF A PERIOD OF HIGH ACTIVITY NEAR THE END OF THE FORECAST PERIOD.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO BE UNSETTLED DURING THE FORECAST PERIOD. A LARGE ENERGETIC EVENT MAY CAUSE MINOR STORM CONDITIONS AT END OF FORECAST PERIOD.

III. EVENT PROBABILITIES: 17-19 DEC

CLASS M 99/99/99

CLASS X 15/25/25

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 15 DEC 264

ESTIMATED 16 DEC 273

PREDICTED 17-19 DEC 277/275/265

90 DAY MEAN 15 DEC 207

V. GEOMAGNETIC INDICES

OBSERVED AFR 14 DEC 07 AP 15 DEC 09

ESTIMATED AFR 15 DEC 09 AFR/AP 16 DEC 12/12

PREDICTED AFR/AP 17-19 DEC 12/12 10/10 12/12

SOLTERWARN

BT

HFUS 180U 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 35 1B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 12200UT 16 DECEMBER 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS. REGION 2841 (N15E26) PRODUCED TWO M-CLASS EVENTS, AN M1/1B AT 15/1841 UT AND A M5/2B AT 16/1155 UT. THE EVENT AT 1155 UT. HAD UMBRAL COVERAGE AND INVOLVED PART OF REGION 2840. REGION 2840 (N16E19) PRODUCED FOUR M-CLASS EVENTS, A M5/2B AT 15/1926 UT, A M1/5B AT 16/0149 UT, A M2/1B AT 16/0808 UT AND A M4/2B AT 16-1013 UT. REGIONS 2839 (S16E08), 2826 (N13W50), 2835 (S33W11) AND 2845 (S15E63) HAVE ALL PRODUCED SMALL OPTICAL EVENTS TODAY. REGIONS 2840 AND 2841 HAVE EXHIBITED GROWTH IN BOTH SIZE AND SPOT NUMBER. STRONG MAGNETIC GRADIENTS SHOULD CONTINUE AND MAY INCREASE AS THE REGIONS CONTINUE TO DEVELOP, THE DELTA CONFIGURATION IN THE TRAILER PORTION OF REGION 2840 HAS SHOWN SOME INCREASE IN SIZE, THERE MAY BE MORE THAN ONE DELTA. ADDITIONS TO 1200U.T.: THREE MORE M-CLASS X-RAY EVENTS HAVE OCCURRED SINCE THE M4/2B AT 16/1013UT FROM REGION 2840 (N07E07). REGION 2841 (N14E17) PRODUCED AN M5/2B AT 16/1154 UT, AND REGION 2840 PRODUCED AN M1/1B AT 16/1439UT AND AN M4/1B AT 16/1455 UT. TWO NEW REGIONS HAVE BEEN CONFIRMED 2847 (N04E71) AN H-TYPE GROUP AND 2848 (N11E73) A C-TYPE GROUP.

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II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO BE UNSETTLED DURING THE FORECAST PERIOD. A LARGE ENERGETIC EVENT MAY CAUSE MINOR STORM CONDITIONS AT END OF FORECAST PERIOD.

III. EVENT PROBABILITIES: 17-19 DEC

CLASS M 99/99/99

CLASS X 15/25/25

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 16 DEC 282

PREDICTED 17-19 DEC 277/275/269

90 DAY MEAN 16 DEC 208

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 DEC 09/09

ESTIMATED AFR/AP 16 DEC 16/15

PREDICTED AFR/AP 17-19 DEC 12/12 10/10 12/10

SOLTERWARN

BT