

HFUS 1 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 359

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 25 DECEMBER 1978

IA. SOLAR ACTIVITY HAS BEEN GENERALLY LOW FOR THE PAST 24 HOURS.
AN M.1 X-RAY EVENT OCCURRED ON 24 DECEMBER AT 2231 UT (MAX) WHICH
HAS BEEN ATTRIBUTED TO AN ERUPTIVE PROMINENCE ON THE EAST LIMB
ABOVE REGION 1476 (S17E66). OTHER SMALL C CLASS X-RAY BURSTS
WERE OBSERVED. TWO OF THESE WERE ASSOCIATED WITH SUBFLARES
FROM REGIONS 1474 (N11E37) AND 1476, AND A C2/1N FLARE OCCURRED
IN REGION 1475 (S29E59) AT 2139 UT (MAX) ON 25 DECEMBER. REGION
1476 HAS ROTATED FAR ENOUGH ONTO THE DISK TO BE SEEN AS A MAG-
NETICALLY COMPLEX E-TYPE GROUP.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW TO MODERATE BUT
WITH INCREASING PROBABILITY OF MAJOR ACTIVITY TOWARD THE END OF
THE FORECAST PERIOD DEPENDING ON FURTHER DEVELOPMENT OF 1476 AND
THE POTENTIAL RETURN OF REGION 1447, WHICH PRODUCED SEVERAL X
CLASS EVENTS LAST ROTATION.

II. DURING THE PAST 24 HOURS, THE GEOMAGNETIC FIELD WAS UNSETTLED
UNTIL A SUDDEN COMMENCEMENT AT APPROXIMATELY 1208 UT ON 25 DECEMBER
WHICH INITIATED A MINOR GEOMAGNETIC STORM. HOWEVER, GEOMAGNETIC
ACTIVITY IS EXPECTED TO DIMINISH TO ACTIVE LEVELS WITHIN 24
HOURS, FURTHER DECREASING TO UNSETTLED CONDITIONS FOR THE REMAINDER
OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 26 DECEMBER-28 DECEMBER

CLASS M 30/43/50

CLASS X 01/05/10

PROTON 01/01/01

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 DECEMBER 143

PREDICTED 26-28 DECEMBER 150/155/160

90-DAY MEAN 25 DECEMBER 161

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 24 DECEMBER 24

ESTIMATED AFR/AP 25 DECEMBER 23/23

PREDICTED AFR/AP 26-28 DECEMBER 20/22 - 15/15 - 10/10

SOLTERWARN

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SDF NUMBER 359

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 25 DECEMBER 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE. THE EXCEPTION TO AN OTHERWISE QUIET DAY WAS A CLASS M2 FLARE IN REGION 2204 (S16W48) AT 25/0654 UT. THE FLARE WAS OPTICALLY IN WITH A 10CM RADIO BURST OF 160 F.U. IT WAS PROBABLY ASSOCIATED WITH A TYPE II RADIO BURST THAT BEGAN AT 0711 UT. REGIONS 2204 AND 2208 (S15E08) HAVE CHANGED SLIGHTLY WITH COMPENSATING DEVELOPMENT AND DECAY OCCURRING IN BOTH. REGION 2212 (S15E59) IS SMALL IN AREA BUT HAS REMAINED NEAR-FLARE-BRIGHT FOR THE LAST SEVERAL HOURS, KEEPING THE X-RAY BACKGROUNDS OSCILLATING AROUND C1 LEVELS.

IB. ACTIVITY IS EXPECTED TO BE LOW TO MODERATE, WITH A CHANCE OF A CLASS M FLARE IN ANY OF THE REGIONS MENTIONED ABOVE.

II. GEOMAGNETIC ACTIVITY HAS BEEN QUIET. AN UNSETTLED PERIOD IS EXPECTED BEGIN ON 26 DEC.

III. EVENT PROBABILITIES 26 DEC - 28 DEC

CLASS M 60/60/60

CLASS X 10/10/10

PROMPT 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 DEC 167

PREDICTED 26-28 DEC 168/170/177

90-DAY MEAN 25 DEC 222

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 24 DEC 05

ESTIMATED AFR/AP 25 DEC 01/05

PREDICTED AFR/AP 26-28 DEC 08/08 10/12 08/08

SOLARWARN

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