

HFUS 1 BOU 302200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 364

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 30 DECEMBER 1978

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOUR PERIOD. AN M3/3B FLARE WAS REPORTED FOR REGION 1487 (S13E53) WITH MAX BRIGHTNESS OCCURRING ON 30/0600Z FROM S12E63. A TYPE II RADIO BURST FOLLOWED BY TYPES III & V WAS ASSOCIATED WITH THE FLARE. REGION 1484 (S35E52) CONTINUES ITS GROWTH; IT IS AN E-TYPE BETA GAMMA. SEVERAL MINOR C-CLASS SUBFLARES HAVE BEEN OBSERVED.

IB. SOLAR ACTIVITY SHOULD REMAIN MODERATE; POSSIBLY INCREASING DURING THE NEXT FEW DAYS. REGIONS 1474 (N12W28) AN E-TYPE BETA GAMMA, 1476 (S15W00) A D-TYPE BETA GAMMA, 1479/1482 COMPLEX (S19E08, S22E05) AND REGION 1484 ALL CONTRIBUTE TO THE HIGH PROBABILITY FOR ENERGETIC EVENTS. REGION 1487 (POSSIBLY LAST ROTATION RGN 1447) ALREADY HAS PRODUCED THE M3/3B FLARE AND MAY STILL BE VERY ACTIVE.

II. THE GEOMAGNETIC FIELD HAS BEEN MOSTLY ACTIVE THIS PERIOD AND SHOULD DECREASE TO UNSETTLED LEVELS WITH OCCASIONAL ACTIVE PERIODS DURING THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 31 DEC - 02 JAN

CLASS M 65/70/70

CLASS X 30/40/40

PROTON 10/10/15

PACF GREEN

IV. OTTAWA (10.7 CM FLUX

OBSERVED 30 DEC 190

PREDICTED 31 DEC - 02 JAN 193/196/200

90-DAY MEAN 30 DEC 163

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 29 DEC 12

ESTIMATED AFR/AP 30 DEC 15/20

PREDICTED AFR/AP 31 DEC 20 JAN 08/10 - 08/10 - 10/12

SOLTERWARN

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HFUS 1 B O U 3 0 2 2 0 0

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 3 6 4

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 22 0 0 Z 3 0 DECEMBER 19 79

IA. SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 24 HOURS. NUMEROUS

C-CLASS X-RAY EVENTS OCCURRED, THE LARGEST A C-5 AT 1131Z.
REGION 2212 (S15W06) HAS SIMPLIFIED MAGNETICALLY, BUT STILL RETAINS
ITS POTENTIAL FOR ENERGETIC EVENTS. REGION 2215 (S13E43) IS STABLE
AND REMAINS MAGNETICALLY COMPLEX AND POTENTIALLY CAPABLE OF
SIGNIFICANT ACTIVITY. REGION 2208 (S16W61) SHOWED GROWTH AND BECAME
INCREASINGLY COMPLEX. REGION 2218 (S20E22) EXPERIENCED RAPID
GROWTH. NO NEW REGIONS WERE OBSERVED TODAY.

IB. SOLAR ACTIVITY IS EXPECTED TO BECOME MODERATE DUE PRIMARILY TO
THE FLARE POTENTIAL OF REGIONS 2212 AND 2215, AND SECONDARILY
TO THE GROWTH IN REGIONS 2208 AND 2218.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24
HOURS AND IS EXPECTED TO REMAIN UNSETTLED FOR THE FORECAST PERIOD.

III. EVENT PROBABILITIES 31 DEC 79 - 02 JAN 80

CLASS M - 9 0 / 9 0 / 9 0

CLASS X - 2 5 / 2 5 / 2 5

PROTON - 1 0 / 1 5 / 1 5

PCAF - GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 30 DEC - 192

PREDICTED 31 DEC 79 - 02 JAN 80 - 199/205/208

90-DAY MEAN 30 DEC - 219

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 29 DEC - 23

ESTIMATED AFR/AP 30 DEC - 14/22

PREDICTED AFR/AP 31 DEC 79 - 02 JAN 80 - 13/15 09/10 07/08

SOLTERWARN

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