

HFUS 1 BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 362

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 28 DECEMBER 1978

IA. SOLAR ACTIVITY WAS MODERATE DURING THE LAST 24 HOURS WITH ONLY C-CLASS/SUBFLARES OCCURRING. REGION 1476 (S15E26) WHICH PRODUCED THE X1/2B FLARE ON 27/162Z HAS BEEN LARGELY INACTIVE THIS PERIOD WITH MOSTLY STABLE PLAGE WHICH HAS REDUCED IN H-ALPHA INTENSITY; HOWEVER, THIS REGION REMAINS COMPLEX MAGNETICALLY AND COULD PRODUCE ANOTHER MODERATELY ENERGETIC FLARE. FOUR NEW REGIONS, 1481 (S18E13), 1482 (S22E40), 1483 (S33E47), AND 1484 (S35E73) HAVE APPEARED WITHIN THE ALREADY COMPLEX SOUTHEASTERN AREA OF THE DISK.

IB. REGION 1474 (N12W01) HAS BEEN ENHANCED DURING THE PERIOD AND COULD HAVE A MODERATELY ENERGETIC EVENT, ALTHOUGH A MAJOR FLARE IS UNLIKELY. REGION 1447 FROM THE PREVIOUS ROTATION IS DUE TO RETURN AT ABOUT S15. THIS REGION PRODUCED SIGNIFICANT ACTIVITY DURING THE LAST ROTATION. SOLAR ACTIVITY SHOULD REMAIN MODERATE TO HIGH, INCREASING DURING THE FORECAST PERIOD. REGIONS 1476, 1474, 1484 AND REGIONS RETURNING AROUND THE SE LIMB ALL CONTRIBUTE TO THE HIGH FORECAST PROBABILITIES.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO QUIET DURING THE PAST 24 HOURS. THE FIELD SHOULD REMAIN AT PREDOMINATELY UNSETTLED LEVELS DURING THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 29-31 DECEMBER

CLASS M 60/65/70

CLASS X 30/40/40

PROTON 10/15/20

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 DECEMBER 174

PREDICTED 29-31 DECEMBER 181/185/191

90-DAY MEAN 28 DECEMBER 162

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 27 DECEMBER 11

ESTIMATED AFR/AP 28 DECEMBER 10/14

PREDICTED AFR/AP 29-31 DECEMBER 15/20 - 10/15 - 10/12

SOLTERWARN

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JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 28 DECEMBER 1979

IA. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE. A CLASS M1 X-RAY
EVENT AT 2142Z OCCURRED IN REGION 2204 (S18W83), A SMALL DECLINING
SPOT GROUP. CLASS C EVENTS OCCURRED IN GROWING REGIONS 2212 (S13E23)
AND 2215 (S13E70). REGION 2215 HAS A COMPACT CLASS E SPOT GROUP WITH
COMPLEX MAGNETIC CONFIGURATION. TWO NEW SINGLE SPOTS HAVE FORMED ON
THE DISK.

IB. SOLAR ACTIVITY WILL RISE AS GROWTH CONTINUES IN REGIONS 2212
AND 2215 AND AS ACTIVE LONGITUDES ROTATE INTO VIEW AT EAST LIMB.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED WITH AN INTERVAL OF
ACTIVE CONDITIONS 1100Z - 1300Z. UNSETTLED CONDITIONS WILL CONTINUE
FOR THE NEXT DAY FOLLOWED BY A 12-HOUR PERIOD OF ACTIVE CONDITIONS
CAUSED BY AN ERUPTIVE SOLAR FILAMENT.

III. EVENT PROBABILITIES 29-31 DECEMBER

CLASS M 50/70/90

CLASS X 05/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 DEC 169

PREDICTED 29-31 DEC 174/182/190

90-DAY MEAN 28 DEC 220

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 27 DEC 11

ESTIMATED AFR/AP 28 DEC 14/14

PREDICTED AFR/AP 29-31 DEC 12/15 15/20 12/15

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