

HFUS 1 BOU 272200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 361

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 27 DECEMBER 1978

IA. SOLAR ACTIVITY HAS BEEN MODERATE TO HIGH FOR THE PAST 24 HOURS. REGION (1476 (S14E41) PRODUCED AN X1/3B FLARE WHICH BEGAN NEAR 1626 UT AND ENDED AFTER 1640 UT. THE FLARE WAS ACCOMPANIED BY A TYPE II RADIO BURST, STRONG SHORT WAVE FADING, AND A 540 F.U. RADIO BURST AT 2695 MHZ. THE FLARE HAD PARALLEL RIBBON STRUCTURE AND A STRONG ABSORPTION FEATURE. REGION 1474 (N12E12) HAS SHOWN CONSIDERABLE GROWTH AND IS NOW MAGNETICALLY COMPLEX. REGION 1472 (N23E19) HAS REDEVELOPED FROM A PLAGE TO A B-TYPE GROUP. NEW REGION 1480 (S22W51) IS A C-TYPE GROUP AND HAS SHOWN SOME SUB-FLARE ACTIVITY. SEVERAL SMALL C-CLASS X-RAY EVENTS OCCURRED BUT WERE UNASSOCIATED WITH SPECIFIC FLARE ACTIVITY.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE TO HIGH THROUGHOUT THE FORECAST PERIOD. REGION 1476, 1474, AND THE POSSIBLE RETURN OF REGION 1447 ARE CONTRIBUTING TO THE FORECAST PROBABILITIES.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO QUIET FOR THE PAST 24 HOURS. MAGNETIC ACTIVITY IS EXPECTED TO REMAIN UNSETTLED. TODAY'S MAJOR FLARE IS NOT FAVORABLY LOCATED FOR NEAR EARTH EFFECTS, ALTHOUGH FUTURE MAJOR FLARE ACTIVITY COULD PRODUCE SIGNIFICANT EFFECTS.

III. EVENT PROBABILITIES 28-30 DECEMBER

CLASS M 50/60/70

CLASS X 30/40/50

PROTON 10/20/40

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 DECEMBER 170 (FLARE ENHANCED)

PREDICTED 28-30 DECEMBER 160/168/176

90-DAY MEAN 27 DECEMBER 162

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 26 DECEMBER 08

ESTIMATED AFR/AP 27 DECEMBER 12/14

PREDICTED AFR/AP 28-30 DECEMBER 10/10 - 10/10 - 12/12

SOLTERWARN

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SDF NUMBER 361

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 27 DEC 1979

IA. SOLAR ACTIVITY HAS BEEN LOW. CLASS C FLARES HAVE OCCURRED IN
REGIONS 2208 (S14W19), 2212 (S15E35) AND 2213 (S24E36). LARGEST
WAS A C7 AT 27/0443 UT IN REGION 2212. REGIONS HAVE ROTATED OVER
THE EAST LIMB AT N13 AND S14. THUS FAR, BOTH HAVE SHOWN SIMPLE
SPOT STRUCTURES AND WEAK, DIFFUSE PLAGE. REGIONS 2212/2213 HAVE
BOTH GROWN IN AREA AND COMPACTNESS SINCE YESTERDAY.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW. CLASS C FLARES ARE
EXPECTED TO CONTINUE WITH A CHANCE OF AN ISOLATED CLASS M EVENT.

II. GEOMAGNETIC ACTIVITY HAS BEEN UNSETTLED. IT IS EXPECTED TO
CONTINUE QUIET TO UNSETTLED, WITH AN INCREASINGLY ACTIVE TREND
POSSIBLE DUE TO A NUMBER OF ERUPTING SOLAR PROMINENCES.

III. EVENT PROBABILITIES 28 DEC - 30 DEC

CLASS M 50/40/40

CLASS X 05/03/03

PROTON 10/05/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 162

PREDICTED 28 - 30 DEC 160/158/158

90-DAY MEAN 27 220

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 26 DEC 09

ESTIMATED AFR/AP 27 DEC 10/14

PREDICTED AFR/AP 28 - 30 DEC 08/10 10/15 12/20

SOLTERWARN

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