

HFUS 1 BOU 042200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 338

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 04 DECEMBER 1978

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS.
REGION 1442 (S24E47) HAS PRODUCED THE MOST ACTIVITY WITH A M1/SB
FLARE AT 1842 UT, A C7/SB AT 1545 UT, AND A SB/C9 AT 1320
UT. REGION 1429 (S18W12) ALSO WAS ACTIVE WITH A B/C6 AT 1453
UT. AND SEVERAL SMALL C-CLASS SUBFLARES. TWO M1 XRAY FLARES
(0547Z MAX AND 1058Z MAX) HAD NO CORRELATING OPTICAL DATA.
REGIONS 1432 (S20W00) AND 1426 (N24W27) ALSO PRODUCED SMALL
OPTICAL FLARES. NEW REGION 1443 (S20E25) IS A SIMPLE B TYPE
GROUP.

IB. SOLAR ACTIVITY WILL REMAIN AT MODERATE LEVELS WITH ENERGETIC
EVENTS CONTINUING FROM THE 1429/1432 COMPLEX WHICH IS LARGE AND
COMPLEX ENOUGH TO PRODUCE AN ISOLATED X-CLASS EVENT. REGION 1442
IS GROWING AND SHOULD CONTINUE TO PRODUCE M-CLASS FLARES.

II. THE GEOMAGNETIC FIELD HAS BECOME UNSETTLED DURING THE PAST
24 HOURS. UNSETTLED CONDITIONS ARE EXPECTED THROUGH THE FORECAST
PERIOD WITH THE POSSIBILITY OF A FLARE INDUCED MAGNETIC STORM.

III. EVENT PROBABILITIES 05 DECEMBER - 07 DECEMBER

CLASS M 70/70/75

CLASS X 10/10/20

PROTON 10/10/20

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 DECEMBER 169

PREDICTED 05 - 07 DECEMBER 168/167/167

90-DAY MEAN 04 DECEMBER 157

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 03 DECEMBER 04

ESTIMATED AFR/AP 04 DECEMBER 08/08

PREDICTED AFR/AP 05 - 07 DECEMBER 08/08 - 10/12 - 14/20

SOLTERWARN

BT

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SDF NUMBER 338

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 04 DECEMBER 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS.
ONLY ONE M CLASS X-RAY FLARE WAS REPORTED, A M1 AT 0456 U. T., NO
OPTICAL REPORT AVAILABLE. SEVERAL C CLASS EVENTS HAVE BEEN REPORTED
THE LARGEST A C8/SB FROM REGION 2161 (S25E42) AT 1818 U. T.,
MINOR RADIO WAS ALSO REPORTED. REGION 2159 (S15E16) PRODUCED A
C6/IN FLARE AT 0227 U.T. REGIONS 2164 (S19W21), 2156 (S24E04)
AND 2165 (S14W17) HAVE ALL PRODUCED SN FLARES WITH ASSOCIATED C1
OR C2 X-RAY FLARES. NEW REGIONS TODAY ARE 2167 (S15E52), WHICH
WAS CARRIED AS PART OF REGION 2162 ON THE PREVIOUS REPORT,
AND 2168 (S16E26) WHICH IS A SIMPLE B TYPE GROUP.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN AT MODERATE LEVELS.
REGIONS 2164 AND 2165 CONTINUE TO SHOW GROWTH AND APPARENTLY ARE
INTERACTING. REGION 2162 CONTINUES TO SHOW AN INCREASED MAGNETIC
COMPLEXITY. REGION 2159 APPARENTLY CONTINUES TO HAVE THE POTENTIAL
FOR A LARGE M CLASS X-RAY EVENT.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED, WITH AN OCCASIONAL
ACTIVE PERIOD, DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED
TO REMAIN UNSETTLED DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 05-07 DECEMBER

CLASS M 45/50/60

CLASS X 01/01/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 DEC 227

PREDICTED 05-07 DEC 245/255/265

30-DAY MEAN 04 DEC 219

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 03 DEC 06

ESTIMATED AFR/AP 04 DEC 14/22

PREDICTED AFR/AP 05-07 DEC 12/14 12/14 06/08

SOLTERWARN

BT