

HFUS 1 BOU 102200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 344

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 10 DECEMBER 1978

IA. SOLAR ACTIVITY HAS BEEN AT A MODERATE LEVEL DURING THE PAST 24 HOURS. REGION 1437 (S30W90) PRODUCED AN M2/SN FLARE AT 0207 UT AS IT ROUNDED THE WEST LIMB. REGION 1446 (N21E20) HAS INCREASED IN COMPLEXITY AND IS NOW AN E TYPE BETA-GAMMA REGION. REGION 1444 (S16E25) HAS ALSO SHOWN GROWTH AND IS NOW AN E TYPE BETA-GAMMA/DELTA REGION. REGIONS 1442 (S23W36) AND 1447 (S17W38) REMAIN LARGE D TYPE REGIONS. ALL OF THESE REGIONS HAVE PRODUCED SEVERAL SUBFLARES. ALTHOUGH NO XRAY EVENTS HAVE BEEN CORRELATED WITH THESE FLARES THE XRAY BACKGROUND FLUX HAS REMAINED ABOVE C LEVEL. NEW REGION 1452 (S18E12) IS A SMALL B TYPE GROUP.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN AT A MODERATE LEVEL DURING THE NEXT 24 HOURS. REGIONS 1446, 1444, 1447 AND 1442 ARE LIKELY CANDIDATES FOR ENERGETIC EVENTS.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET DURING THE LAST 24 HOURS. QUIET CONDITIONS ARE EXPECTED TO PERSIST THROUGH THE NEXT 24 HOURS. NEAR ACTIVE CONDITIONS ARE EXPECTED TOWARDS THE END OF THE FORECAST PERIOD AS THE GEOMAGNETIC FIELD RESPONDS TO A SOLAR BOUNDARY.

III. EVENT PROBABILITIES 11 - 13 DECEMBER

CLASS M 80/80/80

CLASS X 20/20/20

PROTON 20/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 DECEMBER 211

PREDICTED 11 - 13 DECEMBER 215/217/215

90-DAY MEAN 10 DECEMBER 159

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 09 DECEMBER 02

ESTIMATED AFR/AP 10 DECEMBER 01/02

PREDICTED AFR/AP 11-13 DECEMBER 03/05 - 12/15 - 14/20

SOLTERWARN

BT

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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 344

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 10 DEC 1979

IA. SOLAR ACTIVITY CONTINUES LOW AS SPOT GROUPS CONTINUE TO WAX
AND WANE. REGION 2162 (S13W22) HAS DECLINED IN AREA, IS ONLY A
BETA GAMMA MAGNETICALLY, BUT STILL APPEARS TO BE THE PRIME
CANDIDATE FOR FLARE PRODUCTION. REGIONS 2159 (S15W60) AND 2176
(N20E31) ARE THE SECOND AND THIRD LARGEST REGIONS RESPECTIVELY.
REGION 2159 IS A SIMPLE "C" TYPE GROUP COMPOSED OF A LARGE LEADER
WITH SATELLITE SPOTS. REGION 2176 IS ALSO A "C" TYPE GROUP
CONSISTING OF A LARGE LEADER WITH SATELLITE SPOTS BUT 2176 IS
INCREASING IN SPOT NUMBER AND LONGITUDINAL EXTENT. THE FLARE WITH
2176 IS ALSO BETTER STRUCTURED AND MORE ORGANIZED THAN THAT OF
REGION 2159. THREE NEW SPOTS WERE NUMBERED TODAY: 2189 (S06W23),
2190 (S26E28) AND 2191 (S18E74). ALL ARE SIMPLE AND STABLE.

IB. SOLAR ACTIVITY SHOULD CONTINUE LOW BUT THE THREAT FOR "M"
CLASS ACTIVITY REMAINS.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET. UNSETTLED TO ACTIVE
CONDITIONS ARE EXPECTED DURING THE COMING 24 HOURS.

III. EVENT PROBABILITIES II - 13 DEC

CLASS M 50/50/50

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 DEC 237

PREDICTED 11-13 DEC 235/232/223

90-DAY MEAN 10 DEC 222

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 09 DEC 06

ESTIMATED AFR/AP 10 DEC 07/06

PREDICTED AFR/AP 11-13 DEC 15/20 08/12 08/10

SOLTERWARN

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