

HFUS 1 BOU 082200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 312

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 08 NOVEMBER 1978

IA. SOLAR ACTIVITY HAS BEEN GENERALLY LOW THE PAST 24 HOURS.
REGIONS 1385 (N18E13) AND 1382 (S12W17) REMAIN INTERESTING WITH
1385 PRODUCING A C5 X-RAY EVENT REACHING A MAX AT 08/1753Z
AND 1382 PRODUCING A C4 AT 08/1707Z. BOTH X-RAY EVENTS HAD
ASSOCIATED B OPTICAL FLARES. SEVERAL SUBFLARES AND SMALL
C-CLASS X-RAY EVENTS HAVE ALSO BEEN OBSERVED FROM THESE REGIONS.
REGION 1381 (S18W64) HAS SHOWN SOME SIGNS OF DECAY AND HAS
PRODUCED SEVERAL OPTICAL SUBFLARES ALTHOUGH NO SIGNIFICANT X-RAYS
HAVE BEEN ASSOCIATED WITH THESE EVENTS. A NEW REGION DESIGNATED
1391 (S18E42) IS PRESENTLY A B-TYPE GROUP AND HAS SHOWN SIGNS OF
GROWTH. THE TRAILER OF REGION 1385 APPEARS TO BE A SEPERATE
GROUP OF LEADER POLARITY AND HAS BEEN DESIGNATED 1392 (N18E22).
IB. SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE DURING THE
NEXT 24 HOURS. ENERGETIC EVENTS REMAIN PROBABLE AS REGIONS
1385 AND 1382 CONTINUE THEIR DEVELOPMENT.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED THE PAST 24 HOURS.
MARGINALLY UNSETTLED CONDITIONS ARE EXPECTED TO CONTINUE THROUGH
THIS FORECAST PERIOD.

III. EVENT PROBABILITIES 09-11 NOVEMBER

CLASS M 60/60/60

CLASS X 10/10/10

PROTON 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 NOV 130

PREDICTED 09-11 NOV 167/166/165

90-DAY MEAN 08 NOV 151

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 07 NOV 09

ESTIMATED AFR/AP 08 NOV 11/12

PREDICTED AFR/AP 09-11 NOV 07/06 - 08/08 - 07/06

SOLTERWARN

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SDF NUMBER 312

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 08 NOV 1979

IA. SOLAR ACTIVITY HAS BEEN HIGH WITH 10 CLASS M AND ONE CLASS X
EVENT SO FAR TODAY. THE 10 CM RADIO FLUX IS THE HIGHEST SINCE
JANUARY 1959. REGION 2099 (S14E06) PRODUCED THE X1 EVENT AT
1118Z DURING THE DECLINE OF AN M4 EVENT THAT CORRELATED WITH SMALL
OPTICAL FLARES IN REGIONS 2100 (S21W31) AND 2106 (S16E39). REGIONS
2099 AND 2106 ARE GIANT SPOT GROUPS OF TYPE FKC AND CONTAIN DELTA
MAGNETIC CONFIGURATIONS. REGION 2100 IS A SIMPLER CLASS E GROUP
BUT GROWING SPOTS NEAR ITS LEADER SPOT MAY CREATE COMPLEX FIELDS
TOMORROW. AN M5 EVENT AT 0116Z FROM REGION 2110 (N32E59) WAS
ACCOMPANIED BY STRONG TYPE II AND TYPE III RADIO BURSTS. THIS
REGION IS A COMPLEX CLASS E. 10 CM BURSTS WERE 100 TO 500 F.U.
FROM THESE EVENTS. AN M2 EVENT AT 1350Z ORIGINATED IN REGION 2112
(N11E80), A SMALL SPOT GROUP WITHIN THE REMNANTS OF AN AREA THAT
PRODUCED GREAT ACTIVITY IN SEPTEMBER.

IB. MAJOR FLARES ARE EXPECTED THROUGHOUT THIS FORECAST PERIOD.
PROTON EVENTS ARE MORE LIKELY AS REGION 2099 ROTATES WEST OF
CENTRAL MERIDIAN.

II. THE GEOMAGNETIC FIELD WAS ACTIVE DURING THE EARLY PART OF
TODAY BUT HAS BECOME QUIET. A MINOR MAGNETIC STORM IS EXPECTED
TO COMMENCE MIDDAY TOMORROW AS A RESULT OF TODAY'S FLARE ACTIVITY.
THERE IS A CHANCE OF A MINOR PROTON EVENT LATER TODAY.

III. EVENT PROBABILITIES 09-11 NOVEMBER

CLASS M 95/95/95

CLASS X 40/40/40

PROTON 15/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 NOV 324

PREDICTED 09-11 NOV 330/325/312

90-DAY MEAN 08 NOV 208

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 07 NOV 06

ESTIMATED AFR/AP 08 NOV 12/14

PREDICTED AFR/AP 09-11 NOV 30/30 30/30 15/20

SOLTERWARN

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