

HFUS 1 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 292

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 19 OCTOBER 1978

I A. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS.

REGION 1355 (N27E56) PRODUCED A M2/1B AT 0747Z ANOTHER M2

EVENT AT 0404 HAD NO OPTICAL DATA. REGNS 1340 (N21W73), 1348

(S22W43) AND 1355 PRODUCED NUMEROUS SUBFLARES THROUGHOUT THE

1340 DAY. AN EPL WAS OBSERVED AT 1400 NEAR NE26 ASSOCIATED WITH

REGION 1355. REGION 1348 HAS GROWN TO AN F TYPE AND REGION

1355 IS NOW A BETA GAMMA. THE ONLY SIGNIFICANT DEPARTURE WILL

BE REGION 1346. TWO NEW REGIONS 1360 (N16E29) AND 1361 (S16E15)

ARE SIMPLE THUS FAR.

B. THE CURRENT MODERATE LEVEL OF ACTIVITY SHOULD CONTINUE

THROUGH THE NEXT 24 HOURS WITH BRIEF PERIODS OF HIGH ACTIVITY

ASSOCIATED WITH REGIONS 1348, 1351 AND 1355. ALL ARE

SUFFICIENTLY COMPLEX TO PRODUCE AN ENERGETIC EVENT. CONTINUED

GROWTH AND MAGNETIC COMPLEXITY IS EXPECTED IN REGIONS 1351 AND

1355.

II. THE GEOMAGNETIC FIELD WAS AT MINOR STORM LEVEL EARLY IN
THE DAY, BECOMING UNSETLED BY MID DAY. THE GEOMAGNETIC FIELD
SHOULD BE UNSETLED TO OCCASIONALLY ACTIVE FOR THE NEXT 48 HOURS.

III. EVENT PROBABILITIES 20 OCT - 22 OCT

CLASS M 80/80/80

CLASS X 20/20/20

PROTON 20/20/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 OCTOBER 172

PREDICTED 20-22 OCTOBER 170/166/164

90-DAY MEAN 19 OCTOBER 139

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 18 OCTOBER 21

ESTIMATED AFR/AP 19 OCTOBER 15/18

PREDICTED AFR/AP 20-22 OCTOBER 15/15 - 15/15 - 15/15

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JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 19 OCT 1979

IA. SOLAR ACTIVITY WAS MODERATE TODAY. THE LARGEST FLARES OBSERVED TODAY WERE AS FOLLOWS: M1 XRAY CLASS/1N OPTICAL, 0038Z, REGION 2058 (N27E08); M9/UNK, 0419Z, REGION UNK; X1/1B, 1158Z, REGION 2058. THE X1 EVENT ALSO PRODUCED A 10 CM RADIO BURST WITH 1600 FLUX UNITS. OTHER ACTIVE REGIONS WHICH PRODUCED FLARES TODAY INCLUDE 2049 (N31W36), 2045 (N28W55), 2060 (S17W27), AND 2051 (S07W18). A LARGE FILAMENT AT N40W00 DISAPPEARED SOMETIME DURING THE FIRST HALF OF THE PERIOD.

IB. SOLAR ACTIVITY WILL BE MODERATE FOR THE NEXT 24 HOURS. REGION 2058, A BETA-GAMMA-DELTA MAGNETIC TYPE, HAS SIMPLIFIED SOMEWHAT BUT STILL HAS HIGH MAJOR FLARE POTENTIAL. REGION 2049 COULD ALSO PRODUCE AN M-CLASS EVENT TOMORROW.

II. THE GEOMAGNETIC FIELD WAS QUIET TODAY, AS IT HAS BEEN FOR THE PAST 72 HOURS. IT IS EXPECTED TO INCREASE TO UNSETLED LEVELS BY 21 OCTOBER.

III. EVENT PROBABILITIES 20 - 22 OCTOBER

CLASS M 90/90/90

CLASS X 40/40/40

PROTON 10/10/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 OCT 242

PREDICTED 20 - 22 OCT 245/248/251

90-DAY MEAN 19 OCT 191

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 18 OCT 02

ESTIMATED AFR/AP 19 OCT 02/06

PREDICTED AFR/AP 20 - 22 OCT 06/10 08/15 14/25

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