

HFUS 1 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 293

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 20 OCTOBER 1978

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. A
C4/IN FLARE OCCURED IN REGION 1348 (S22W52) WHICH MAXED AT 2144Z.
NUMEROUS SUBFLARE C CLASS X-RAY EVENTS OCCURRED FROM REGIONS
1348, 1357 (S27E02), 1355 (N27E45) AND 1351 (N30W05). REGIONS
1360 (N17E18) AND 1361 (S16E03) HAVE GROWN TO D-TYPE GROUPS.
NEW REGION 1362 (N16E74) IS RETURNING REGION 1310 WHICH HAD NO
FLARE ACTIVITY REPORTED LAST ROTATION.

IB. SOLAR ACTIVITY SHOULD REMAIN MODERATE WITH GOOD PROBABILITIES
FOR ENERGETIC ACTIVITY FROM REGIONS 1348 AND 1355 WHICH ARE NOW
THE MOST MAGNETICALLY COMPLEX GROUPS (BETA-GAMMA) ON THE
VISIBLE DISK.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED FOR THE PAST
24 HOURS. THE GEOMAGNETIC FIELD SHOULD REMAIN UNSETTLED FOR THE
NEXT 48 HOURS, APPROACHING ACTIVE CONDITIONS FOR THE FOLLOWING
24 HOURS OWING TO A NEGATIVE POLARITY CORONAL HOLE NOW LOCATED
NEAR S10W20.

III. EVENT PROBABILITIES 21 - 23 OCTOBER

CLASS M 80/80/70

CLASS X 15/15/10

PROTON 15/15/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 OCTOBER 173

PREDICTED 21-23 OCTOBER 171/168/165

90-DAY MEAN 20 OCTOBER 140

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 19 OCTOBER 15

ESTIMATED AFR/AP 20 OCTOBER 07/10

PREDICTED AFR/AP 21 - 23 OCTOBER 10/15 - 15/15 - 19/26

SOLTERWARN

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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 293

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 20 OCT 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE TODAY. THE LARGEST FLARES
OBSERVED DURING THE PAST 24 HOURS WERE AS FOLLOWS:

M1/2B	1829Z	REGION 2058 (N27W03)
M1/1B	1155Z	REGION 2058, BETA-GAMMA-DELTA.
-/SN	1233Z	REGION 2049 (N31W47)
-/SB	1439Z	REGION 2049, BETA-GAMMA.
-/SN	1425Z	REGION 2045 (N29W66)
-/SN	1700Z	REGION 2045, BETA.

OTHER REGIONS THAT HAVE SHOWN GROWTH ARE REGION 2066 (S11E36),
MAGNETIC BETA-GAMMA AND REGION 2064 (S08E22), MAGNETIC BETA.
SURGING HAS BEEN OBSERVED AT SE25. ALL OTHER DISK AND LIMB FEATURES
APPEAR QUIET AND STABLE.

IB. SOLAR ACTIVITY WILL BE MODERATE WITH THE HIGH PROBABILITY OF
M-CLASS OR GREATER X-RAY EVENTS FROM REGIONS 2058 AND/OR 2049.
WITH CONTINUED GROWTH IN REGIONS 2066 AND 2064 POTENTIAL FOR C
AND M-CLASS EVENTS ALSO EXISTS.

III. EVENT PROBABILITIES 21 - 23 OCTOBER

CLASS M 90/90/90

CLASS X 40/35/35

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 OCT 241

PREDICTED 21 - 23 240/239/236

90-DAY MEAN 20 OCT 192

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 19 OCT 03

ESTIMATED AFR/AP 20 OCT 06/08

PREDICTED AFR/AP 21 - 23 OCT 12/12 18/25 12/15

SOLTERWARN

BT