

HFUS 1 BOU 072200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER CO

SDF NUMBER 280

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 7 OCT 1978

IA. SOLAR ACTIVITY HAS BEEN AT A LOW LEVEL THE PAST 24 HOURS WITH ONLY SMALL CLASS C EVENTS BEING OBSERVED. REGION 1320 (S14W32) CONTINUES TO DOMINATE THE DISK WITH RAPID CHANGES IN SPOT AND MAGNETIC CONFIGURATION. A DELTA IS AGAIN EVIDENT ALONG THE NORTHERN END OF THE MAIN SPOT. SOME COMPLEXITY IS ALSO PRESENT IN THE INTERMEDIATE AREA TO THE EAST. GROWTH IS OCCURRING IN REGION 1337 (N22E19). THE REGIONS NEAR THE SE LIMB HAVE BEEN RELATIVELY QUIET SINCE THE LIMB TRANSIT BUT MAY JOINTLY BE COMPLEX. SMALL SURGES WERE OBSERVED NEAR NE23.

IB. SOLAR ACTIVITY IS EXPECTED TO BE GENERALLY QUIET WITH INFREQUENT ENERGETIC EVENTS EXPECTED FROM REGION 1320 AND THE SE LIMB AREA. REGION 1320 IS APPROACHING FAVORABLE LONGITUDES FOR PROTON EVENT EFFECTS AT THE EARTH. THIS REGION IS EXPECTED TO PRODUCE ENERGETIC ACTIVITY BEFORE IT REACHES WEST LIMB.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET, ESPECIALLY AT MID-LATITUDES. CONDITIONS ARE EXPECTED TO RUN FROM QUIET TO SLIGHTLY UNSETTLED THRU THE FORECAST PERIOD. NO SIGNIFICANT CORONAL HOLES ARE PRESENT NEAR CM AS DETERMINED FROM HELIUM 10830 IMAGES. THE NEXT MAJOR CORONAL HOLE IS NEAR S15 E50.

III. EVENT PROBABILITIES 08 - 10 OCT

CLASS M 50/50/50

CLASS X 20/20/20

PROTON 20/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 07 OCT 142

PREDICTED 08-07 OCT 145/147/152

90-DAY MEAN 07 OCT 136

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 06 OCT 04

ESTIMATED AFR/AP 07 OCT 02/06

PREDICTED AFR/AP 08-10 OCT 08/08 - 10/12 - 10/12

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SDF NUMBER 280

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 07 OCTOBER 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS.  
SEVERAL CLASS "C" X-RAY BURSTS HAVE BEEN OBSERVED, BUT THE MOST  
ENERGETIC EVENT WAS AN M2/1B FROM REGION 2032 (N15E25) AT 1414 UT  
(MAX). THIS FLARE HAD SHORTWAVE FADES UP TO 18 MHZ AND A 10 CM  
BURST OF 480 FLUX UNITS. REGION 2032 HAS DECAYED SLIGHTLY IN THE  
LARGE LEADER PENUMBRA, BUT THE TRAILER IS STILL COMPLEX. A BRIGHT  
PATCH OF FLARE OVERLYING THIS COMPLEX TRAILER IS COMPACT, BRIGHT  
AND MAKES THIS REGION SUSPECT FOR ADDITIONAL FLARE ACTIVITY. THE  
SECOND MOST INTERESTING REGION IS 2030 (N25E14) WHICH IS A BETA-  
GAMMA MAGNETIC CLASS WITH THE TRAILER BEING THE MORE COMPLEX AREA.  
TWO NEW SPOT GROUPS WERE NUMBERED TODAY, REGION 2039 (N21E26) AND  
2040 (N28E07).

IB. SOLAR ACTIVITY WILL BE LOW TO MODERATE WITH REGIONS 2032 AND  
2030 BEING LIKELY CANDIDATES FOR ISOLATED "M" CLASS FLARES.

II. THE GEOMAGNETIC FIELD EXPERIENCED MINOR STORM CONDITIONS  
DURING THE PAST 24 HOURS. GENERALLY UNSETTLED CONDITIONS WITH  
PERIODS OF ACTIVE CONDITIONS ARE EXPECTED FOR THE NEXT 24  
HOURS.

III. EVENT PROBABILITIES 08 OCTOBER - 10 OCTOBER

CLASS M 90/90/90

CLASS X 25/25/25

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 07 OCTOBER 197

PREDICTED 08-10 OCTOBER 198/199/200

90-DAY MEAN 07 OCTOBER 181

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 06 OCTOBER 29

ESTIMATED AFR/AP 07 OCTOBER 26/32

PREDICTED AFR/AP 08-10 OCTOBER 16/18 - 12/12 - 10/15

SOLTERWARN

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