

HFUS 1 BOUL 222200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO  
SDF NUMBER 295

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 22 OCTOBER 1978

I A. SOLAR ACTIVITY HAS BEEN SURPRISINGLY LOW DURING THE PAST 24 HOURS. DESPITE THE FOURTEEN ACTIVE REGIONS CURRENTLY VISIBLE ON THE SOLAR DISK; LESS THAN HALF A DOZEN C-CLASS SUBFLARES WERE NOTED IN X-RAYS AND ONLY ONE OF THESE, A SN, WAS OBSERVED OPTICALLY. THAT FLARE WAS SEEN IN REGION 1356 (S22E11). ALTHOUGH IT HAS BEEN QUIET, REGION 1355 (N26E22) IS A BETA-GAMMA MAGNETICALLY AND HAS THE BEST POTENTIAL OF ANY CURRENT REGION FOR AN ENERGETIC FLARE. TWO NEW QUIET REGIONS HAVE APPEARED TODAY - REGION 1364 (S17E37) AND REGION 1365 (N19E74).

I B. SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE DURING THE NEXT 24 HOURS. ONLY C-CLASS SUBFLARES CAN BE EXPECTED WITH ANY SIGNIFICANT FREQUENCY. AN ISOLATED M-CLASS FLARE IS A POSSIBILITY FROM REGION 1355.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO BECOME ACTIVE WITHIN HOURS AND MINOR MAGNETIC STORM CONDITIONS MAY BE EXPECTED DURING LOCAL NIGHTTIME HOURS FOR THE NEXT 72 HOURS.

III. EVENT PROBABILITIES 23 OCTOBER - 25 OCTOBER

CLASS M 60/50/40

CLASS X 10/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 OCTOBER 163

PREDICTED 23-25 OCTOBER 160/158/157

90-DAY MEAN 22 OCTOBER 141

V. GEOMAGNETIC A. INDICES

OBSERVED FREDERICKSBURG 21 OCTOBER 10

ESTIMATED AFR/AP 22 OCTOBER 10/15

PREDICTED AFR/AP 23-25 OCTOBER 20/20 - 25/25 - 22/30

SOLTERWARN

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ISSUED 2200Z 22 OCTOBER 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE. REGION 2058 (N27W29) PRODUCED A M2/SB AT 1541 UT AND A M1/SB AT 1810 UT. MODERATE TO STRONG SHORT WAVE FADES AND MINOR CENTIMETRIC BURSTS ACCCOMPANIED THESE TWO FLARES. REGIONS 2049 (N32W76); 2064 (S09W03); AND 2072 (N11E51) HAVE PRODUCED C LEVEL X-RAY FLARES. REGION 2058 CONTINUES A SLOW DECAY IN SUNSPOT STRUCTURE BUT STILL RETAINS ITS DELTA MAGNETIC CONFIGURATION. THOUGH INACTIVE, REGION 2066 (S12E49) STILL RETAINS A BETA GAMMA MAGNETIC CONFIGURATION WITH MODERATE GRADIENT. SUNSPOT STRUCTURE HAS REEMERGED IN REGION 2065 (N19W48) AND NEW REGION 2075 (N19E14) HAS EMERGED TODAY.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE WITH REGIONS 2058 AND 2066 PRODUCING THE CLASS M ACTIVITY.

II. THE GEOMAGNETIC FIELD HAS BEEN SLIGHTLY ACTIVE. THE FIELD IS EXPECTED TO BE STRONGLY UNSETLED TO SLIGHTLY ACTIVE THROUGH 25 OCTOBER.

III. EVENT PROBABILITIES 23 OCTOBER - 25 OCTOBER

CLASS M 9/0/9 0/9 0

CLASS X 25/25/25

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 OCTOBER 224

PREDICTED 23-25 OCTOBER 220/216/211

90-DAY MEAN 22 OCTOBER 193

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 21 OCTOBER 08

ESTIMATED AFR/AP 22 OCTOBER 16/17

PREDICTED AFR/AP 23-25 OCTOBER 15/15 - 15/15 - 12/14

SOLTERWARN

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