

HFUS 1 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 297

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 24 OCTOBER 1978

IA. SOLAR ACTIVITY HAS REMAINED LOW. THERE HAVE BEEN ONLY MINOR CLASS C X-RAY FLARES, WHICH OCCURRED FROM REGIONS 1355 (N26W05), 1365 (N19E48) AND 1366 (S17E58). TWO NEW REGIONS HAVE APPEARED, REGION 1368 AT N19E24 AND REGION 1369 AT S17E73. REGION 1355 HAS DECAYED SLIGHTLY, BUT MAY REMAIN A WEAK BETA GAMMA MAGNETIC TYPE AND HAS HAD BRIGHT POINTS OCCUR DURING THE PERIOD.

IB. SOLAR ACTIVITY SHOULD REMAIN LOW DURING THE NEXT 24 HOUR PERIOD. REGION 1355 IS STILL CAPABLE OF PRODUCING AN ENERGETIC M-CLASS X-RAY FLARE EVEN THOUGH IT IS STILL DECLINING. REGION 1320 (S13) IS STILL EXPECTED TO RETURN ON 25 OCTOBER. THE REGION PRODUCED 35 FLARES WITH 3 M-CLASS FLARES ON ITS LAST TRANSIT. REGIONS 1365 AND 1366 ARE EXPECTED TO CONTINUE TO PRODUCE SOME C-CLASS X-RAY FLARES.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED. THE EFFECTS OF A CORONAL HOLE IN TRANSIT ACROSS THE SOLAR CENTRAL MERIDIAN IS EXPECTED TO AFFECT THE GEOMAGNETIC FIELD BETWEEN 25 AND 26 OCTOBER CAUSING GENERALLY UNSETTLED TO ACTIVE CONDITIONS DURING THE NEXT 24-48 HOURS.

III. EVENT PROBABILITIES 25 OCTOBER - 27 OCTOBER

CLASS M 40/40/50

CLASS X 10/10/10

PROTON 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 OCTOBER 159

PREDICTED 25-27 OCTOBER 156/154/154

90-DAY MEAN 24 OCTOBER 142

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 23 OCTOBER 05

ESTIMATED AFR/AP 24 OCTOBER 05/06

PREDICTED AFR/AP 25-27 OCTOBER 15/15 - 25/30 - 10/15

SOLTERWARN

BT

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JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 24 OCTOBER 1979

IA. SOLAR ACTIVITY HAS BEEN RELATIVELY LOW DURING THE PAST 24 HOURS (RELATIVE TO RECENT DAYS). REGION 2058 (N27W55) CONTINUES TO DECAY AND HAS UNDERGONE SOME RESTRUCTURING WITHOUT PRODUCING MUCH IN THE WAY OF FLARES. REGION 2069 (N25W67) WHICH IS JUST WEST OF 2058 HAS PRODUCED HALF A DOZEN C-CLASS SUBFLARES TODAY AND THUS RATES AS THE MOST PRODUCTIVE REGION. NEW REGION 2078 (S19E27) HAS EMERGED SUDDENLY BETWEEN OLD REGIONS 2073 (S12E22) AND 2074 (S22E28) AND GROWN RAPIDLY. THIS REGION HAS MIXED MAGNETIC POLARITIES AND HAS PRODUCED A FEW SMALL C-CLASS SUBFLARES.

IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE LOW TO MODERATE. REGION 2058 STILL HAS SOME ENERGETIC FLARE POTENTIAL BUT IS NOWHERE NEAR THE THREAT IT WAS SEVERAL DAYS AGO. REGION 2078 MAY DEVELOP INTO AN ENERGETIC FLARE PRODUCER BUT IT HAS TO GROW MORE TO ACHIEVE THIS. OTHER REGIONS ARE EXPECTED TO REMAIN MORE OR LESS QUIET.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO MILDLY ACTIVE DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO BE GENERALLY UNSETTLED FOR THE NEXT THREE DAYS WITH ACTIVITY LEVELS DECLINING SLOWLY DURING THAT TIME.

III. EVENT PROBABILITIES 25 OCTOBER - 27 OCTOBER

CLASS M 50/50/50

CLASS X 05/05/05

PROTON 10/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 OCTOBER 230

PREDICTED 25-27 OCTOBER 228/225/223

30-DAY MEAN 24 OCTOBER 195

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 23 OCTOBER 06

ESTIMATED AFR/AP 24 OCTOBER 15/16

PREDICTED AFR/AP 25-27 OCTOBER 12/15 - 12/12 - 10/12

SOLTERWARN

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