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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 310A

JOINT USAF/NASA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 1200UT 05 NOV 1980

I. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS.  
M-CLASS EVENTS WERE PRODUCED WITH MAXIMUM TIMES AS NOTED IN  
REGION 2772 (N23W17) (M1/SB AT 04/1508 UT), AND NEW REGION 2779  
(S16E74) (M3/SB AT 05/0838 AND M2/SB AT 1106 UT). REGIONS 2776  
(N12E12), 2777 (S11E16) AND 2773 (N04W11) ALSO PRODUCED THE IR  
SHARE OF C-CLASS SUBFLARES DURING THE PAST 24 HOURS. TAKEN IN  
ORDER OF THEIR PERCEIVED MAJOR FLARE THREAT THE FIVE MAJOR  
PERFORMERS ARE: REGION 2776 - STILL APPARENTLY INCREASING IN  
COMPLEXITY BUT NOW FLARING MORE REGULARLY; REGION 2779 - APPARENTLY  
QUIET ENERGETIC BUT NOT SUFFICIENTLY IN VIEW ON THE DISK FOR  
PROPER ANALYSIS; REGION 2772 - STABILIZING NOW AND ITS FLARE PRO-  
DUCTION RATE HAS DROPPED SHARPLY; REGION 2773 - HAS ALSO SHOWN A  
DRAMATIC REDUCTION IN ITS FLARE RATE AND MAY BE FINISHED AS AN  
ENERGETIC REGION; AND REGION 2777 - AFTER FURTHER GROWTH HAS NOW  
BEGUN TO PRODUCE STRONGER OPTICAL FLARES WITH MIDDLE C-CLASS LEVEL  
X-RAYS. THE OTHER TEN ACTIVE REGIONS ON THE DISK ARE, BY AND LARGE,  
PASSIVE.

II. REGION 2776 STILL CONTAINS THE HIGHEST POTENTIAL FOR A MAJOR  
X-CLASS FLARE. SINCE THE REGION HAS NOW BEGUN TO FLARE MORE  
REGULARLY, IT MAY RELIEVE THE STRESS SEEN IN THE REGION IN A  
RELATIVELY PEACEFUL FASHION. REGION 2779 HAS MADE A STORMY ENT-  
RANCE AT THE SE LIMB. AT THIS POINT IT IS IMPOSSIBLE TO ASSESS  
ITS POTENTIAL WITHOUT HAVING A GOOD LOOK AT IT. FOR THE TIME  
BEING IT SHOULD BE REGARDED WITH CAUTION. REGION 2772, 2773 AND  
2779 NOW LOOK ABOUT EQUAL IN FLARE POTENTIAL (A DIMINISHING POTEN-  
TIAL) ALTHOUGH ALL THREE REGIONS SEEMED TO GET TO THIS POINT IN  
THEIR EVOLUTION BY DIFFERENT ROUTES. PROSPECTS ARE GOOD FOR ONE OR  
MORE M-CLASS EVENTS PER DAY FOR A FEW DAYS. IT IS REASONABLE  
TO EXPECT AT LEAST ONE X-CLASS EVENT BEFORE THE CURRENT SET OF  
INTERESTING ACTIVE REGIONS LEAVES THE SOLAR DISK.

III. THE GEOMAGNETIC FIELD IS CURRENTLY QUIET AND HAS BEEN  
MILDLY UNSETLED DURING MOST OF THE PAST 24 HOURS. THE FIELD IS  
EXPECTED TO BE UNSETLED TO OCCASIONALLY ACTIVE FOR THE NEXT  
THREE DAYS.

III. EVENT PROBABILITIES: 06 - 08 NOV 1980

CLASS M 80/80/80

CLASS X 15/15/15

PREDICTED 10/15/15

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 04 NOV 261

ESTIMATED 05 NOV 268

PREDICTED 06-08 NOV 273/277/278

90 DAY MEAN 05 NOV 194

V. GEOMAGNETIC INDICES

OBSERVED AFR 03 NOV 06 AP 04 NOV 12

ESTIMATED AFR 04 NOV 13 AFR/AP 05 NOV 05/06

PREDICTED AFR/AP 06-08 NOV 10/15 16/20 13/17

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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 3108

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 05 NOVEMBER 1980

I. SOLAR ACTIVITY HAS BEEN HIGH DURING THE LAST PERIOD. REGION 2779 (S10E78) PRODUCED AN X4/2B FLARE AT 1355Z MAXIMUM WITH 250 FLUX UNITS AT 2695 MHZ AND 1000 FLUX UNITS AT 245 MHZ RADIO BURST. REGION 2779 FLARED EARLIER AT 0856Z MAXIMUM GIVING AN M3/SB. AT 1110Z MAXIMUM GIVING AN M2/SB. REGION 2776 (N12E05) FLARED TO M2/1B AT 1540Z MAXIMUM. AN UNASSOCIATED MT AND NUMEROUS CLASS-C X-RAY AND SUBCLASS OPTICAL EVENTS ALSO OCCURRED DURING THE PERIOD.

II. REGIONS 2776 AND 2779 SHOULD KEEP ACTIVITY LEVELS MODERATE TO HIGH DURING THE FORECAST PERIOD. ALSO REGIONS 2777 (S10E09), 2782 (S19E38) ARE DEVELOPING AND ARE CAPABLE OF ACTIVITY.

III. GEOMAGNETIC FIELD HAS BEEN QUIET, BUT IS EXPECTED TO RETURN TO UNSETTLED LEVELS DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 06 NOVEMBER - 08 NOVEMBER

CLASS M 85/85/85

CLASS X 25/30/30

PREDICTED 15/20/20

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 05 NOVEMBER 272

PREDICTED 06-08 NOVEMBER 280/280/279

90-DAY MEAN 25 NOVEMBER 194

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 04 NOVEMBER 12/12

ESTIMATED AFR/AP 05 NOVEMBER 07/07

PREDICTED AFR/AP 06-08 NOVEMBER 10/15 - 16/20 - 10/12

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