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HFUS 3 BOU 161435

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 321A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1200UT 16 NOV 1980

I A. SOLAR ACTIVITY HAS BEEN HIGH. ON 15/1553Z AN X1/1B FLARE OCCURRED IN REGION 2779 (S11W64). THIS REGION HAS ALSO PRODUCED AN M3/1B, AN M2/2B, AND SIX M1 EVENTS. REGION 2783 (N19W02) HAS ALSO CONTRIBUTED TO ACTIVITY WITH AN M8/2B ON 16/0906Z AND AN M2/1B. BOTH THE X1 AND THE M8 EVENTS WERE ACCCOMPANIED BY SIGNIFICANT RADIO EMISSION, 1700 FU OF 245 MHZ, 370 FU OF 2695 MHZ, AND 340 FU OF 245 MHZ, 200 FU OF 2695 MHZ RESPECTIVELY. REGION 2779 HAS SHOWN DECLINE IN ALL ASPECTS AND THE MAGNETIC GRADIENTS HAVE DECREASED DRAMATICALLY. REGION 2783 HAS GROWN AND REORGANIZED. SPOTS WHICH HAD APPEARED NEARBY HAVE BEEN INCORPORATED INTO THE NEW STRUCTURE. INCREASED ACTIVITY WAS OBSERVED DURING THIS TIME. REGION 2790 (N16E39) REMAINS A FAIRLY SIMPLE GROUP SHOWING SOME RECENT GROWTH. TWO OBSERVERS HAVE REPORTED A NEW REGION 2793 (N11E79) IN RECENT HOURS. AND TWO MORE POSSIBLE REGIONS ARE OBSERVED FROM N08 TO N18 ON THE EAST LIMB. PLAGE ENHANCEMENT, ACTIVE PROMINENCE AND EJECTA HAVE BEEN REPORTED FROM THIS AREA. UNASSOCIATED XRAY ACTIVITY MAY HAVE COME FROM HERE.

I B. SOLAR ACTIVITY SHOULD REMAIN HIGH WITH POSSIBLE DECREASE FROM REGION 2779 BALANCED BY POSSIBLE INCREASE IN ACTIVITY FROM REGIONS 2783, 2790 AND FROM THE EAST LIMB.

II. THE GEOMAGNETIC FIELD HAS BEEN ACTIVE WITH K INDICES OF FOUR DURING THE PERIOD. IT IS EXPECTED TO REMAIN UNSETTLED TO NEAR ACTIVE LEVELS FOR ANOTHER DAY.

III. EVENT PROBABILITIES: 17-19 NOV

CLASS M 95/95/95

CLASS X 25/25/20

PROTON 20/20/20

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 15 NOV 212

ESTIMATED 16 NOV 202

PREDICTED 17-19 NOV 195/188/180

90 DAY MEAN 15 NOV 203

V. GEOMAGNETIC A INDICES

OBSERVED AFR 14 NOV 10 AP 15 NOV 25

ESTIMATED AFR 15 NOV 18 AFR/AP 16 NOV 18/20

PREDICTED AFR/AP 17-19 NOV 16/16 14/14 10/10

SOLTERWARN

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NNNZPVZ SV

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HFUS 1 BOULDER 00

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLORADO
SDF NUMBER 321B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200UT 16 NOV 1980

I.A. SOLAR ACTIVITY HAS BEEN HIGH. REGION 2779 (S11W70) HAS PRODUCED AN M2/1B AT 2055Z, AN M3/2N AT 0535Z AND AN M4/SB AT 1429Z PLUS 3 M1 EVENTS ON 16 NOV. REGION 2788 (N18W12) HAS ALSO CONTRIBUTED TO ACTIVITY WITH AN M8/2B AT 16/0906Z ACCCOMPANIED BY SIGNIFICANT RADIO EMISSION OF 340 FU AT 245 MHZ AND 200 FU AT 2695 MHZ. POOR OBSERVING CONDITIONS AT ALL U.S. STATIONS PREVENTED OPTICAL CORRELATIONS OF AN M3 XRAY EVENT AT 16/2027Z. REGION 2779 HAS SHOWN DECLINE IN ALL ASPECTS AND THE MAGNETIC GRADIENTS HAVE DECREASED DRAMATICALLY. REGION 2788 HAS GROWN AND REORGANIZED. SPOTS WHICH HAD APPEARED NEARBY HAVE BEEN INCORPORATED INTO THE NEW STRUCTURE. INCREASED ACTIVITY WAS OBSERVED DURING THIS TIME. REGION 2790 (N16E39) REMAINS A FAIRLY SIMPLE GROUP SHOWING SOME RECENT GROWTH. TWO OBSERVERS HAVE REPORTED A NEW REGION 2793 (N11E79) IN RECENT HOURS. AND TWO MORE POSSIBLE REGIONS ARE OBSERVED FROM N08 TO N18 ON THE EAST LIMB. PLAGE ENHANCEMENT, ACTIVE PROMINENCE AND EJECTA HAVE BEEN REPORTED FROM THIS AREA. UNASSOCIATED XRAY ACTIVITY MAY HAVE COME FROM HERE.

I.B. SOLAR ACTIVITY SHOULD REMAIN HIGH WITH POSSIBLE DECREASE FROM REGION 2779 BALANCED BY POSSIBLE INCREASE IN ACTIVITY FROM REGIONS 2788, 2790 AND FROM THE EAST LIMB.

II. THE GEOMAGNETIC FIELD HAS BEEN ACTIVE WITH K INDICES OF FOUR DURING THE PERIOD. IT IS EXPECTED TO REMAIN UNSETTLED TO NEAR ACTIVE LEVELS FOR ANOTHER DAY.

III. EVENT PROBABILITIES: 17-19 NOV

CLASS M 95/95/95

CLASS X 25/25/20

PREDICTED 20/20/20

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 16 NOV 195

PREDICTED 17-19 NOV 185/178/170

90 DAY MEAN 16 NOV 200

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 NOV 13/25

ESTIMATED AFR/AP 16 NOV 15/19

PREDICTED AFR/AP 17-19 NOV 16/16 14/14 10/10

SOLTERWARN

BT