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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SOF NUMBER 3124

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 07 NOVEMBER 1980

IA. SOLAR ACTIVITY REMAINS HIGH WITH REGIONS 2776 (N11W13) AND 2779 (S11E53) DOMINATING THE FLARE OCCURRENCES. IN TOTAL, TWO CLASS X AND 13 CLASS M X-RAY FLARES HAVE OCCURRED DURING THE PAST 24 HOURS. REGION 2776 PRODUCED A X2/2B FLARE AT 07/0208Z (MAX). CULGOORA REPORTED INTENSE SHORT WAVE FADE AND STRONG MICROWAVE CONTINUUM BUT NOT TYPE II OR IV DEKAMETRIC BURST. LEARMONTH REPORTED A 1,100 FU BURST AT 2695 MHZ. ADDITIONALLY, REGION 2776 PRODUCED: M5/2B AT 06/1947Z (MAX); M3/1B AT 06/2226Z (MAX); AND M1/5B AT 07/0731Z (MAX). REGION 2779 PRODUCED A X1/5B AT 06/1526Z (MAX). STRONG SHORT WAVE FADE THROUGH 15 MHZ AND A 190 FU BURST AT 2695 MHZ ACCOMPANIED THIS FLARE. ADDITIONALLY, REGION 2779 PRODUCED: M4/2B AT 06/1727Z (MAX); M3/5B AT 06/1821Z (MAX); M1/1B AT 07/0421Z (MAX); M1/5B AT 07/0939Z (MAX); AND, M1/5B AT 1138Z (MAX). LOCAL SPECTROGRAPHIC ANALYSIS SHOWS THAT REGION 2776 CONTAINED TWO DELTA CONFIGURATIONS ON 06 NOV. MAGNETIC EVALUATION OF REGION 2779 IS STILL QUESTIONABLE BECAUSE OF ITS DISTANCE FROM CENTRAL MERIDIAN. ADDITIONALLY, REGIONS 2777 (S10W10) AND 2782 (S19E23) CONTAIN MIXED POLARITIES AND BETA GAMMA CONFIGURATIONS. REGION 2772 (N23W43) CONTAINS A DELTA CONFIGURATION IN THE CENTER OF ITS SUNSPOT STRUCTURE.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN HIGH WITH REGIONS 2776 AND 2779 CAPABLE OF SUSTAINED MAJOR FLARE ACTIVITY. ALSO, CLASS M ACTIVITY IS POSSIBLE FROM REGIONS 2772, 2777, AND 2782.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET DURING THE PAST 24 HOURS. REGION 2772, THE FIRST OF THE DISK REGIONS THAT HAVE PRODUCED ENERGETIC FLARES, IS APPROACHING THE GEOMETRICAL POSITION FOR CONNECTION WITH EARTH. WITHIN THE NEXT 24 HOURS, THE FIELD IS EXPECTED TO BECOME, AND REMAIN, QUITE VARIABLE AS THE SOLAR WIND BRINGS IN INTERMITTENT STREAMS OF PARTICLES FROM THE NUMEROUS ENERGETIC FLARES THAT HAVE OCCURED DURING THE PAST WEEK. THE PROTON FLUENCE HAS NOT INCREASED AS A RESULT OF THE RECENT CLASS X FLARES. HOWEVER, PROTON ENHANCEMENTS AT SATELLITE LEVELS MAY OCCUR ON 08-09 NOV AT ENERGY RANGES LESS THAN 10 MEV.

III. EVENT PROBABILITIES: 08-10 NOV

CLASS M 99/99/99

CLASS X 60/60/60

PROTON 40/40/40

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 06 NOV 302

ESTIMATED 07 NOV 295

PREDICTED 08-10 NOV 300/305/308

90 DAY MEAN 07 NOV 196

V. GEOMAGNETIC A INDICES

OBSERVED AFR 05 NOV 08 AP 06 NOV 06

ESTIMATED AFR 06 NOV 07 AFR/AP 07 NOV 07/10

PREDICTED AFR/AP 08-10 NOV 22/26 33/34 24/20

SOLTERWARM

BT

NNNNBVZCVZDZEZFZGVZIVZLVZOUU.

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HFJLS 1 BOU 072200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 312B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 07 NOV 1980

IA. SOLAR ACTIVITY IS HIGH. FLARES DURING THIS ZULU DAY INCLUDE:
REGION 2776 (N11W21) X2/2B MAX 070208Z; M1/SB MAX 070731Z; M2/1B
071304Z MAX; M4/1B MAX 071441Z; M3/2B 071739Z MAX. REGION
2779 (S10E46) M1/1B 070421Z MAX; M2/SN 070458Z MAX; M1/SB
070939Z MAX; M1/SB 071138Z MAX. NUMEROUS FLARES OF LESSER
MAGNITUDES WERE OBSERVED.

IB. SOLAR ACTIVITY SHOULD REMAIN HIGH AS 2776 AND 2779 MAINTAIN
THEIR COMPLEXITY.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED. THE FIELD
IS EXPECTED TO BECOME ACTIVE ON 8 NOV WITH POSSIBLE MINOR
STORM CONDITIONS ON 9 NOV.

III. EVENT PROBABILITIES 8-10 NOV

CLASS M 99/99/99

CLASS X 60/60/60

PROTON 40/40/40

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 07 NOV 273

PREDICTED 8-10 NOV 230/280/275

90 DAY MEAN 7 NOV 197

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 06 NOV 07/06

ESTIMATED AFR/AP 07 NOV 10/06

PREDICTED AFR/AP 8-10 NOV 22/30 - 33/34 - 24/20

SOLTERWARN

BT