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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SF NUMBER 318B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 13 NOVEMBER 1980

IA. SOLAR ACTIVITY REMAINS AT A HIGH LEVEL WITH EIGHT CLASS M FLARES OBSERVED THE PAST 24 HOURS: TWO FROM REGION 2776 (N12WL), FIVE FROM 2779 (S12W32) AND ONE FROM 2777 (S10WL) EVEN THOUGH 2776 IS BEHIND THE WEST LIMB, IT CONTINUES TO EXHIBIT ITS FLARE POTENTIAL. LOOPS AND A 2695 MHZ BURST OF 410 FU ACCCOMPANIED THE C9 FROM THIS REGION AT 13/0406Z. REGION 2779 WHICH PRODUCED AN M9 AT 13/0103Z AND AN M4/2B AT 13/1912Z, IS UNDERGOING SIGNIFICANT CHANGES IN ITS MAGNETIC COMPLEXITY WHICH MAY LEAD TO AN INCREASE IN ENERGETIC ACTIVITY. IN PARTICULAR NEGATIVE FIELDS ARE DEVELOPING SOUTH OF THE TRAILER WHILE POSITIVE FIELD CONTINUE TO CROWD BETWEEN THE TWO MAJOR LEADER SPOTS. THESE TWO LOCATIONS ARE ALSO THE AREAS OF STEEP GRADIENTS AND STRONG DELTAS. REGION 2777, A SLEEPER THE PAST COUPLE DAYS, PRODUCED AN M8 AT 13/0951Z ACCOMPANIED BY AN IMPORTANCE TWO SWF AND POST FLARE LOOPS. WITH THE WEST LIMB TRANSIT OF 2776 AND 2777. THE SOLAR DISK APPEARS TRANQUIL EXCEPT FOR THE OMINOUS PRESENCE OF 2779.

IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE TO BE MODERATE TO OCCASIONALLY HIGH. GEO-EFFECTIVE ENERGETIC EVENTS ARE STILL POSSIBLE FROM 2776 AND 2777. REGION 2779, PERHAPS THE LARGEST REGION OF THIS SOLAR CYCLE TO DATE, IS A MAJOR THREAT AND IS EXPECTED TO PRODUCE ENERGETIC EVENTS BEFORE ITS WEST LIMB TRANSIT ON 18 NOV.

IIV. THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETLED SINCE 1200Z. UNSETLED CONDITIONS ARE EXPECTED THROUGH THE NEXT THREE DAYS, WITH AN INCREASE TO NEAR ACTIVE LEVELS ON 16 NOV DUE TO THE PRESENCE OF A CORONAL HOLE LOCATED SOUTHEAST OF REGION 2779.

III. EVENT PROBABILITIES: 14 NOV - 16 NOV

CLASS M 95/95/95

CLASS X 35/30/30

PROTON 25/30/30

PCAF YELLOW

V. OTTAWA 10.7 FLUX

OBSERVED 13 NOV 232

PREDICTED 14-16 NOV 220/212/200

90 DAY MEAN 13 NOV 202

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 12 NOVEMBER 15/12

ESTIMATED AFR/AP 13 NOVEMBER 7/6

PREDICTED AFR/AP 14-16 NOVEMBER 8/12 8/12 14/18

SOLTERWARN

BT

HFUS 3 BOUL 131400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 318A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 13 NOV 1980

IA. SOLAR ACTIVITY REMAINS AT A HIGH LEVEL WITH SIX CLASS M FLARES OBSERVED THE PAST 24 HOURS: TWO FROM REGION 2776 (N12WL), THREE FROM 2779 (S12W25) AND ONE FROM 2777 (S10WL) EVEN THOUGH

2776 IS BEHIND THE WEST LIMB, IT CONTINUES TO EXHIBIT ITS FLARE POTENTIAL. LOOPS AND A 2.695 MHZ BURST OF 410 FU ACCCOMPANIED THE

ON FROM THIS REGION AT 13/0406Z. REGION 2779 WHICH PRODUCED AN M9 AT 13/0103Z IS UNDERGOING SIGNIFICANT CHANGES IN ITS MAGNETIC

COMPLEXITY WHICH MAY LEAD TO AN INCREASE IN ENERGETIC ACTIVITY.

IN PARTICULAR NEGATIVE FIELDS ARE DEVELOPING SOUTH OF THE TRAILER WHILE POSITIVE FIELD CONTINUE TO CROWD BETWEEN THE TWO MAJOR LEADER SPOTS. THESE TWO LOCATIONS ARE ALSO THE AREAS OF STEEP GRADIENTS AND STRONG DELTAS. REGION 2777, A SLEEPER THE PAST COUPLE DAYS, PRODUCED AN M8 AT 13/0951Z ACCCOMPANIED BY AN IMPORTANCE TWO SWF AND POST FLARE LOOPS. WITH THE WEST LIMB TRANSIT OF 2776 AND 2777, THE SOLAR DISK APPEARS TRANQUIL EXCEPT FOR THE OMINOUS PRESENCE OF 2779.

IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE TO BE MODERATE TO OCCASIONALLY HIGH. GEO-EFFECTIVE ENERGETIC EVENTS ARE STILL POSSIBLE FROM 2776 AND 2777. REGION 2779, PERHAPS THE LARGEST REGION OF THIS SOLAR CYCLE TO DATE, IS A MAJOR THREAT AND IS EXPECTED TO PRODUCE ENERGETIC EVENTS BEFORE IT'S WEST LIMB TRANSIT ON 18 NOV.

II. THE GEOMAGNETIC FIELD WAS ACTIVE EARLY IN THE PERIOD, BUT HAS BECOME QUIET THE PAST 12 HOURS. GENERALLY UNSETLED CONDITIONS ARE EXPECTED OVER THE NEXT THREE DAYS, WITH AN INCREASE TO NEAR ACTIVE LEVELS ON 16 NOV DUE TO THE PRESENCE OF A CORONAL HOLE LOCATED SOUTH OF REGION 2779.

III. EVENT PROBABILITIES: 14 NOV - 16 NOV

CLASS M 95/95/95

CLASS X 35/30/30

PROMPT 25/30/30

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 12 NOV 245

ESTIMATED 13 NOV 235

PREDICTED 14-16 NOV 230/220/215

90 DAY MEAN 12 NOV 201

V. GEOMAGNETIC ACTIVITIES

OBSERVED AFR 11 NOV 20 APR 12 NOV 112

ESTIMATED AFR 12 NOV 16 AFR/APR 13 NOV 08/14

PREDICTED AFR/APR 14-16 NOV 10/14 10/14 14/18

SOLARWARN

PT