

HEUS 3 BOU 121400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SITE NUMBER 317A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 12 NOV 1980

I. SOLAR ACTIVITY WAS HIGH TODAY DUE TO AN X2/2B FLARE FROM REGION 2776 (N 12W 81) AT 0445Z. THIS REGION SHOWS NO SIGN OF REDUCED ACTIVITY AS IT ROTATES OVER THE WEST LIMB. SINCE YESTERDAY'S M9/2B FROM REGION 2776 AT 0904Z, THERE HAS BEEN ONE M1 FROM REGION 2776, ONE M4/2B FROM REGION 2777 (S 11W 80) AT 1738Z 11 NOV, AND SEVEN M-CLASS FLARES FROM REGION 2779 (S 11W 12), THE LARGEST AN M3/1B AT 1001Z 11 NOV. THE RECENT ABSENCE OF SIGNIFICANT FLARES FROM REGION 2779 IS NOT CAUSE FOR COMPLACENCY. AN ARCH FILAMENT SYSTEM AND AN ACTIVE NEUTRAL LINE, IN ADDITION TO A DELTA MAGNETIC CONFIGURATION, MAKE THIS HUGE AND STILL GROWING REGION AN EXCELLENT POTENTIAL SOURCE OF LARGE FLARES. REGION 2782 (S 19W 47) HAS SHOWN SOME SIGNS OF GROWTH IN HYDROGEN ALPHA. NO NEW REGIONS WERE CONFIRMED TODAY.

II. SOLAR ACTIVITY IS EXPECTED TO REMAIN HIGH. ALTHOUGH REGION 2776 IS ABOUT TO ROTATE OVER THE WEST LIMB, REGION 2779 APPEARS IMPRESSIVE AND MAY PRODUCE AN X-CLASS FLARE ANYTIME. THIS REGION IS ALSO IN A FAVORABLE LOCATION TO PRODUCE TERRESTRIAL EFFECTS SHOULD IT PRODUCE A LARGE FLARE.

III. THE GEOMAGNETIC FIELD WAS ACTIVE ON 11 AND 12 NOV, AND IS EXPECTED TO BECOME HIGH UNSETTLED FOR THE FORECAST PERIOD.

IV. EVENT PROBABILITIES: 13 NOV - 15 NOV

CLASS M: 95/85/85

CLASS X: 35/30/25

PREDICTED: 30/25/20

PCAF: YELLOW

V. OTTAWA 10.7 FLUX

OBSERVED: 10 NOV 12.25

ESTIMATED: 12 NOV 12.50

PREDICTED: 13-15 NOV 12.40/13.0/12.0

90-DAY MEAN: 11 NOV 12.01

V. GEOMAGNETIC INDICES

OBSERVED: AFR 10 NOV 12.5 AP 11 NOV 19.0

ESTIMATED: AFR 11 NOV 18.0 AP/AP 12 NOV 16.25

PREDICTED: AFR/AP 13-15 NOV 14.20, 14.20, 14.12

SOLIERWARN:

BT

4FUS 1 BOUL 1980 00

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SD F NUMBER 3 17B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200UT 12 NOV 1980

IA. SOLAR ACTIVITY WAS HIGH TODAY DUE TO AN X2/2B FLARE FROM REGION 2776 (N12W81) AT 2445Z. THIS REGION SHOWS NO SIGN OF REDUCED ACTIVITY AS IT ROTATES OVER THE WEST LIMB. SINCE YESTERDAY'S M9/2B FROM REGION 2776 AT 0904Z, THERE HAS BEEN ONE M1 FROM REGION 2776, ONE M4/2B FROM REGION 2777 (S11W80) AT 1738Z 11 NOV, AND EIGHT M-CLASS FLARES FROM REGION 2779 (S11W12), THE LARGEST AN M3/1B AT 1001Z 11 NOV. THE RECENT ABSENCE OF SIGNIFICANT FLARES FROM REGION 2779 IS NOT CAUSE FOR COMPLACENCY. AN ARCH FILAMENT SYSTEM AND AN ACTIVE NEUTRAL LINE, IN ADDITION TO A DELTA MAGNETIC CONFIGURATION, MAKE THIS HUGE AND STILL GROWING REGION AN EXCELLENT POTENTIAL SOURCE OF LARGE FLARES. REGION 2782 (S19W47) HAS SHOWN SOME SIGNS OF GROWTH IN HYDROGEN ALPHA. NO NEW REGIONS WERE CONFIRMED TODAY.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN HIGH. ALTHOUGH REGION 2776 IS ABOUT TO ROTATE OVER THE WEST LIMB, REGION 2779 APPEARS IMPRESSIVE AND MAY PRODUCE AN X-CLASS FLARE ANYTIME. THIS REGION IS ALSO IN A FAVORABLE LOCATION TO PRODUCE TERRESTRIAL EFFECTS SHOULD IT PRODUCE A LARGE FLARE.

II. THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DURING THE PAST 24 HOURS. HIGH UNSETTLED CONDITIONS ARE EXPECTED FOR THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 13 NOV - 15 NOV

CLASS M 95/85/85

CLASS X 35/30/25

PROTON 30/25/20

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 12 NOV 246

PREDICTED 13-15 NOV 235/230/220

90 DAY MEAN 12 NOV 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 11 NOV 20/18

ESTIMATED AFR/AP 12 NOV 16/13

PREDICTED AFR/AP 13-15 NOV 14/14 14/14 10/12

SOLTERWARN

BT