

HFUS 3 BOU 141308

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SOF NUMBER 288 A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 14 OCT 1980

IA. SOLAR ACTIVITY HAS BEEN HIGH THE PAST 24 HOURS. A FLARE WITH A DOUBLE MAXIMUM BEGAN AT 0541 UT IN REGION 2725 (S09W05). THE FIRST MAX AT 0544 UT WAS A M2/1B, THE SECOND AT 0613 UT WAS A X3/2B. THE ASSOCIATED RADIO BURST WAS 290 EU AT 2695 MHZ AND ONLY A WEAK TYPE II. NO TYPE IV BURST WAS OBSERVED. THIS REGION ALSO PRODUCED SEVERAL CLASS C FLARES THROUGHOUT THE DAY. IT REMAINS A COMPLEX REGION WITH RESTRUCTURING IN THE SPOT GROUP AND A BRIGHT COMPACT FLARE. REGION 2724 (N12W48) HAS PRODUCED NUMEROUS SUBFLARES. THE LARGEST WAS A C7/SB AT 2138 UT. THIS REGION IS GROWING IN SPOT COMPLEXITY AND CONTAINS AN ARCH FILAMENT SYSTEM WHICH INDICATES FURTHER GROWTH CAN BE EXPECTED. REGION 2717 (N14W29) IS DECAYING SLOWLY BUT CONTINUES TO PRODUCE MINOR FLARES. REGION 2736 (N08E57) CONTAINS A SMALL C TYPE SPOT GROUP OF REVERSED POLARITY. IT PRODUCED A C5/IN EVENT AT 2000 UT AND A C5/SB AT 2013 UT.

IB. SOLAR ACTIVITY IS EXPECTED TO BE AT MODERATE LEVELS THROUGHOUT THE FORECAST PERIOD. REGIONS 2725 AND 2724 ARE CAPABLE OF MAJOR FLARES. NO PROTON EVENT IS EXPECTED FROM THE X3/2B FLARE BECAUSE OF THE VERY WEAK RADIO RESPONSE.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET THE PAST 24 HOURS. A MINOR GEOMAGNETIC STORM IS EXPECTED TO BEGIN BETWEEN 15/1500 UT AND 16/0200 UT AS A RESULT OF THE X3/2B FLARE AT 14/0617 UT.

III. EVENT PROBABILITIES: 15 - 17 OCTOBER

CLASS M 95/95/95

CLASS X 15/15/15

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 OCT 257

ESTIMATED 14 OCT 250

PREDICTED 15 - 17 OCT 240/230/225

90 DAY MEAN 13 OCT 186

V. GEOMAGNETIC A INDICES

OBSERVED AFR 12 OCT 14 AP 13 OCT 06

ESTIMATED AFR 13 OCT 07 AFR/AP 14 OCT 10/10

PREDICTED AFR/AP 15 - 17 OCT 15/15 30/30 10/10

SOLTERWARN

BT

HFUS 1 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 288B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 14 OCTOBER 1980

IA. SOLAR ACTIVITY HAS BEEN HIGH DURING THE PAST 24 HOURS. THE X3/3B FLARE THAT MAXED AT 14/0613 UT DID NOT PRODUCE ANY PROTON FLUXES, AND REGION 2725 (S10W20) HAS BEEN FAIRLY QUIET SINCE THE MAJOR FLARE.

IB. SOLAR ACTIVITY SHOULD REMAIN AT MODERATE LEVELS, WITH M-CLASS EVENTS EXPECTED FROM REGION 2725 AND/OR REGION 2724 (N12W61).

II. THE GEOMAGNETIC FIELD HAS BEEN MOSTLY QUIET DURING THE PAST 24 HOURS. A MINOR SUDDEN COMMENCEMENT (27 GAMMAS) OCCURRED AT 14/1948 UT, BUT IT IS NOT BELIEVED TO BE RELATED TO THE X3 FLARE, WHOSE GEOMAGNETIC EFFECTS ARE EXPECTED AFTER ABOUT 15/2000 UT.

III. EVENT PROBABILITIES 15 OCTOBER - 17 OCTOBER

CLASS M 95/95/95

CLASS X 15/15/15

PROTON 15/20/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 OCTOBER 352

PREDICTED 15-17 OCTOBER 244/237/230

90-DAY MEAN 14 OCTOBER 187

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 OCTOBER 37/06

ESTIMATED AFR/AP 14 OCTOBER 37/07

PREDICTED AFR/AP 15-17 OCTOBER 18/18 - 33/33 - 10/12

SOLTERWARN

BT