

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

KBOU

HFUS 3 ROM 101410

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SD F NUMBER 315A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 10 NOVEMBER 1980

I. SOLAR ACTIVITY HAS BEEN MODERATE TO HIGH. A M1/1B BEGAN IN REGION 2779 (S11E13) AT 0304Z. THEN, FROM A C3 BACKGROUND, A M1/5B BEGAN IN REGION 2776 (N12W54) AT 0353Z. AFTER A SLIGHT DECAY, THE X-RAY FLUX ROSE TO M1.5 AT 0937Z. A VERY SLOW DECAY FOLLOWED, WITH CS THRESHOLD CROSSED AT 1024Z. THE X-RAY FLUX WAS STILL AT CS WHEN A M2/2B ERUPTED AT 1137Z IN REGION 2777 (S11W50). FOR THIS FLARE STRONG SHORT WAVE FADE WAS RECORDED THROUGH 30 MHZ AND ATHENE REPORTED A 520 FM BURST AT 12595 MHZ WITH MAJOR BURSTS OCCURRING IN THE CENTIMETRIC AND METRIC RANGE. REGION 2776 CONTINUED A SLOW DECAY AND LEAVENING OF MAGNETIC GRADIENT. THE DELTA, HOWEVER, STILL REMAINS. SLIGHT REARRANGEMENT OF THE SUNSPOTS HAS ALSO LENGTHENED THE GRADIENTS IN REGION 2779. HOWEVER, THE REGION CONTAINS A COMPLEX DELTA AND NEUTRAL LINE CONFIGURATION. REGION 2772 (S13W20) STILL IS GROWING WITH A DELTA-CAMYA CONFIGURATION. THE KITT PEAK MAGNETOGRAM FOR 09 NOVEMBER SHOWED ISOLATED POLES NORTH AND SOUTH OF THE LEADER SUNSPOT OF REGION 2777. THESE MAY HAVE BEEN THE TRIGGER MECHANISM FOR TODAY'S 22 FLARE. LEARNMONT OBSERVED NEW REGIONS NEAR N11E77 AND N12E56.

II. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE TO HIGH WITH REGIONS 2779, 2772, AND 2777 CONTRIBUTING TO ENERGETIC FLARES.

III. THE GEOMAGNETIC FIELD WAS UNSETLED. THE FIELD IS EXPECTED TO BE UNSETLED TO ACTIVE THROUGH 13 NOVEMBER.

IV. EVENT PROBABILITIES: 11-13 NOV

CLASS X 25/25/25

CLASS Y 10/20/15

PROTON 70/30/30

PCAF YELLOW

IV. CITANAL 10.7 FLUX

OB-SERVED 10 NOV 264

EST-IMATED 10 NOV 270

PREDICTED 11-13 NOV 260/250/240

30 DAY MEAN 10 NOV 192

V. GEOMAGNETIC INDICES

OB-SERVED AFR 09 NOV 07 AP 09 NOV 07

EST-IMATED AFR 10 NOV 07 AFR/AP 10 NOV 13/00

PREDICTED AFR/AP 11-13 NOV 17/25 13/15 14/20

SOLARFLARE

PT

HRUS 1 BOU 102200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
REF NUMBER 3151B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED ~200 UT 10 NOVEMBER 1980

I. SOLAR ACTIVITY HAS BEEN MODERATE TO HIGH. A M1/1B BEGAN IN REGION 2779 (S11E13) AT 0804Z. THEN, FROM A C5 BACKGROUND, A M1/SB BEGAN IN REGION 2776 (N19W54) AT 0853Z. AFTER A SLIGHT DECAY, THE X-RAY FLUX ROSE TO M1.5 AT 0938Z. A VERY SLOW DECAY FOLLOWED, WITH C5 THRESHOLD CROSSED AT 1024Z. THE X-RAY FLUX WAS STILL AT C5 WHEN A M3/2B ERUPTED AT 1138Z IN REGION 2777 (S11W50).

FOR THIS FLARE STRONG SHORT WAVE FADE WAS RECORDED THROUGH 22 MHZ AND AT HENS REPORTED A 520 FU BURST AT 2595 MHZ WITH MAJOR BURSTS OCCURRING IN THE CENTIMETRIC AND METRIC RANGE. REGION 2776 CONTINUES A SLOW DECAY AND LESSENING OF MAGNETIC GRADIENT. THE DELTA, HOWEVER, STILL REMAINS. SLIGHT REARRANGEMENT OF THE SUNSPOTS HAS ALSO LESSENED THE GRADIENTS IN REGION 2779. HOWEVER, THE REGION CONTAINS A COMPLEX DELTA AND NEUTRAL LINE CONFIGURATION. REGION 2782 (S19W20) STILL IS GROWING WITH A BETA/GAMMA CONFIGURATION. TWO NEW REGIONS HAVE BEEN NUMBERED TODAY: 2788 (N18E72) AND 2787 (S09W09). BOTH APPEAR SIMPLE THUS FAR.

II. SOLAR ACTIVITY SHOULD CONTINUE AT MODERATE TO HIGH LEVELS AS THE REGIONS MENTIONED ABOVE RETAIN THEIR POTENTIAL.

III. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. UNSETLED TO ACTIVE CONDITIONS ARE EXPECTED FOR THE COMING 24 HOURS.

IV. EVENT PROBABILITIES: 11-13 NOV.

CLASS M 95/95/95

CLASS X 30/20/15

PREDICTED 30/30/20

PCAF YELLOW

V. OTTAWA 10.7 FLUX

OBSERVED 10 NOV 271

ESTIMATED 11-13 NOV 255/248/230

90 DAY MEAN 10 NOV 200

V. GEOMAGNETIC A INDEX

OBSERVED AFR/AP 09 NOV 07/07

ESTIMATED AFR/AP 10 NOV 12/11

PREDICTED AFR/AP 11-13 NOV 18/25 13/15 14/20

SOLTERWARN

BT