

HFUS 3 BOU 081310

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 2824

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 08 OCT 1980

I A. SOLAR ACTIVITY WAS AT MODERATE LEVELS DURING THE PAST 24 HOURS WITH SIX CLASS M X-RAY BURSTS BEING OBSERVED. THE LARGEST OF THESE BURSTS WAS AN M5 FROM REGION 2717 (N15E43) AT 2310Z MAX ON THE 7TH. THE OPTICAL CLASS OF THIS EVENT WAS IMPORTANCE 2B AND BOTH SWEEP FREQUENCY (TYPE IV) AND DISCRETE FREQUENCY (750 F.U. AT 8800 MHZ MAX) BURST ACCOMPANIED THIS FLARE. REGION 2717, WHICH WAS RESPONSIBLE FOR THREE OTHER LESSER MAGNITUDE "M" CLASS EVENTS, IS STILL THE MOST COMPLEX REGION ON THE DISK. ITS LARGE "E" TYPE SPOT GROUP IS A BETA/GAMMA/DELTA MAGNETICALLY AND ITS H-ALPHA PLAGE IS COMPOSED OF SEGMENTED RIBBONS OF VARIOUS BRIGHTNESSES. THE NEUTRAL LINE DISPLAYS SEVERAL SHARP KINKS. AN ADF IS OCCASIONALLY BEING OBSERVED AND SUBFLARES ALONG WITH POINT BRIGHTENINGS ARE COMMON PLACE. OBSERVATIONS OF REGION 2725 (S10E69) ARE STILL AFFECTED BY FORESHORTENING BUT HAVING PRODUCED THE OTHER TWO CLASS M EVENTS, IT IS REASONABLE TO ASSUME THAT 2725 ALSO POSSESSES A CERTAIN DEGREE OF COMPLEXITY. IT IS PRODUCING SUBFLARES, POINT BRIGHTENINGS AND IS DESCRIBED AS A MAGNETIC BETA-TYPE WITH A CLASS DKI SPOT GROUP. REGION 2726 (S14E70) CLOSELY RESEMBLES REGION 2725 ALTHOUGH NOT AS LARGE AND APPARENTLY NOT AS DYNAMIC. HOWEVER, AN ADF, PLAGE FLUCTUATIONS AND SOME SPOT GROWTH WOULD SUGGEST THAT THIS REGION BEARS WATCHING. THE REMAINING DISK REGIONS ARE SHOWING LITTLE CHANGE.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN AT MODERATE LEVELS.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETLED.

DISTURBED CONDITIONS TO ACTIVE LEVELS ARE EXPECTED LATE TODAY OR EARLY ON 9 OCT AS A RESULT OF A CORONAL HOLE.

III. EVENT PROBABILITIES: 09 OCT - 11 OCT

CLASS M 9/0/9/9/0

CLASS X 10/15/20

PREDICTED 05/05/10

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OB SERVED 07 OCT 204

ESTIMATED 08 OCT 215

PREDICTED 09-11 OCT 220/232/240

90 DAY MEAN 07 OCT 183

V. GEOMAGNETIC ALINDICES

OB SERVED AFR 06 OCT 16 AP 07 OCT 13

ESTIMATED AFR 07 OCT 10 AFR/AP 08 OCT 10/10

PREDICTED AFR/AP 09-11 OCT 16/16 18/17 10/10

SOLTERWARM

PT

HFUS 1 BOII 082200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO
SDF NUMBER 282B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1220Z 08 OCTOBER 1980

I. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. THE LARGEST EVENT WAS AN M5/2B FLARE FROM REGION 2717 (N15E37) WHICH MAXED AT 2310 UT ON 07 OCTOBER. THE NEXT LARGEST WAS AN M3/1B FLARE FROM REGION 2725 (S07E63) WHICH MAXED AT 2034 UT ON 08 OCTOBER. THREE OTHER M-CLASS FLARES WERE OBSERVED ON 08 OCTOBER FROM REGIONS 2726 (S12E62), 2717 (N15E37) AND 2701 (N13W69). REGION 2717 REMAINED COMPLEX AND RAPID GROWTH WAS SEEN IN 2724 (N12E24) WHICH IS INTERACTING WITH 2717. REGION 2725 AND 2726 ARE DIFFICULT TO SEPARATE IN H-ALPHA AND WHITE LIGHT BUT ARE CLEARLY DIFFERENT FLARE CENTERS. ONE NEW REGION WAS ADDED TODAY. IT IS REGION 2728 (S19W05).

II. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE Owing TO THE SEVERAL REGIONS WITH SIGNIFICANT TO MAJOR FLARE POTENTIAL.

III. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED FOR THE PAST 24 HOURS. GEOMAGNETIC LEVELS ARE EXPECTED TO INCREASE TO NEAR ACTIVE LEVELS FOR THE NEXT TWO DAYS Owing TO A SOUTHERN CORONAL HOLE. ON THE THIRD DAY, POTENTIAL EFFECTS OF A NORTHERN CORONAL HOLE SHOULD MAINTAIN UNSETTLED TO ACTIVE CONDITIONS.

IV. EVENT PROBABILITIES: 09 OCTOBER - 11 OCTOBER

CLASS M 9/9 0/9 0

CLASS X 10/15 1/20

PREDICTED 05/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 OCTOBER 212

PREDICTED 09-11 OCTOBER 220/225/220

90-DAY MEAN 08 OCTOBER 183

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 07 OCTOBER 08/13

ESTIMATED AFR/AP 08 OCTOBER 12/07

PREDICTED AFR/AP 09-11 OCTOBER 16/16 - 18/17 - 15/15

SOLAR/PWARN

BT