

HFUS 3.8.00 131300

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SOF NUMBER 287A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 13 OCTOBER 1980

IA. SOLAR ACTIVITY RETURNED TO THE MODERATE LEVEL AS EXPECTED WITH THE OCCURRENCE OF TWO M2 X-RAY FLARES WITHIN THE PAST 12 HOURS. THE FIRST, AN M2/2B FROM REGION 2725 (S10E02) REACHED MAXIMUM AT 0417Z. THIS PARALLEL RIBBON FLARE OCCURRED IN THE SOUTHWEST PORTION OF THE REGION ALONG THE NEUTRAL LINE. NO SIGNIFICANT RADIO BURSTS WERE OBSERVED WITH THIS EVENT. REGION 2724 (N12W40) PRODUCED THE OTHER M2 EVENT, A 1B FLARE AT 0947Z MAXIMUM. BOTH THESE REGIONS CONTINUE TO DOMINATE THE DISK BOTH IN APPEARANCE AND FLARE PRODUCTION. REGION 2724 CONTINUES TO GROW WITH A SPOT AREA NOW APPROACHING 1000 MILLIONTHS OF THE SOLAR HEMISPHERE. COALESCENCE IN REGION 2725 CONTINUES AS THE MANY SMALL SPOTS APPEAR TO BE GROUPING INTO LARGER PENUMBRAL AREAS. REGION 2717 (N15W25) HAS MANAGED TO PRODUCE A C4/SB AT 0621Z WHILE IT CONTINUES TO DECAY. REGIONS 2713 (S08W74), 2733 (N05W61) AND 2736 (N10E65) HAVE ALSO PRODUCED SUBFLARES TODAY. IB. SOLAR ACTIVITY WILL CONTINUE MODERATE WITH THE POSSIBILITY OF HIGH ACTIVITY FROM REGIONS 2724 AND 2725.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET SINCE 0000Z TODAY. QUIET TO LOW UNSETTLED LEVELS IS FORECAST FOR THE NEXT 24 HOURS.

III. EVENT PROBABILITIES: 14 - 16 OCTOBER

CLASS M 95/95/95

CLASS X 25/30/30

PROTON 25/30/30

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 OCT 259

ESTIMATED 13 OCT 250

PREDICTED 14 - 16 OCT 245/230/220

90 DAY MEAN 12 OCT 186

V. GEOMAGNETIC A INDICES

OBSERVED AFR 11 OCT 31 AP 12 OCT 10

ESTIMATED AFR 12 OCT 11 AFR/AP 13 OCT 06/08

PREDICTED AFR/AP 14 - 16 OCT 08/10 08/10 10/10

SOLTERWARN

BT

4EUS 1600 132200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER R 287B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 13 OCTOBER 1980

IA. SOLAR ACTIVITY HAS BEEN LOW SINCE THE M2 EVENT AT 0945Z.  
CLASS C EVENTS HAVE OCCURRED IN REGIONS 2717 (N14W29), 2725  
(S29W45) AND 2736 (N08E57). RAPID GROWTH AMONG THE LEADER  
SPOTS OF REGION 2724 (N12W48) HAS BEEN ACCOMPANIED BY ONLY  
MINOR FLARE FLUCTUATIONS. THERE HAS BEEN A SIGNIFICANT LOSS  
OF FLARE BRIGHTNESS AND SPOT COUNT IN REGION 2725, BUT SPOT  
AREA IS SLIGHTLY LARGER TODAY. MINOR REGIONS HAVE APPEARED  
AT N26E25 (REGION 2738) AND S34E73 (REGION 2739).

IB. CLASS M EVENTS ARE EXPECTED DAILY IN BOTH REGION 2724  
AND REGION 2725. MORE ENERGETIC ACTIVITY NOW SEEMS LESS  
LIKELY AS GROWTH RATES AND EVOLUTIONARY PATTERNS ARE NOT  
CONDUCTIVE TO STORING GREAT AMOUNTS OF FLARE ENERGY.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET TODAY. QUIET  
CONDITIONS SHOULD PREVAIL UNLESS A MAJOR FLARE OCCURS,  
WHICH WOULD GIVE A STORM BY THE THIRD DAY.

III. EVENT PROBABILITIES 14 OCTOBER - 16 OCTOBER

CLASS M 90/90/90

CLASS X 15/15/15

PROTON 05/05/05

POAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 OCTOBER 257

PREDICTED 14-16 OCTOBER 250/240/230

90-DAY MEAN 13 OCTOBER 186

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 OCTOBER 14/10

ESTIMATED AFR/AP 13 OCTOBER 07/08

PREDICTED AFR/AP 14-16 OCTOBER 08/10 - 08/10 - 10/10

SOLTERWARN

BT