

FUS 3 BOU 272200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 178

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 27 JUN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 26/2100 TO 27/2100Z: SOLAR ACTIVITY DECREASED TO THE LOW CATEGORY DURING THE PAST 24 HOURS. REGION 4227 (S09E53), WHICH PRODUCED ALL OF THE SIGNIFICANT ACTIVITY YESTERDAY, HAS BEEN RELATIVELY DORMANT TODAY. THE LARGEST EVENT THIS REGION HAS PRODUCED DURING THE PERIOD WAS A C2/1N FLARE AT 1859Z (XRAY MAXIMUM). THE REGION APPEARS TO BE UNDERGOING SOME GROWTH; HOWEVER, ITS DYNAMICS ARE DIFFICULT TO ANALYZE DUE TO LIMB PROXIMITY. IT NOW DISPLAYS A BETA-GAMMA DELTA MAGNETIC CONFIGURATION WITH THE STRONGEST OF ITS MAGNETIC GRADIENTS LOCATED IN THE TRAILER PORTION OF THE REGION. REGION 4219 (S10W20) IS THE ONLY OTHER DISK REGION SHOWING ANY SIGNIFICANT DEVELOPMENT WITH GROWTH EVIDENT TO THE SOUTH AND EAST OF ORIGINAL SPOT CLUSTER. THIS NEW GROWTH COULD BE THE EMERGENCE OF A NEW SEPARATE REGION. TWO NEW REGIONS WERE NUMBERED TODAY, REGION 4229 (N06W34) HAS EMERGED AS A SIMPLE A-TYPE SPOT GROUP WHILE 4230 (S18E76) HAS ROTATED OVER EAST LIMB AS A B-TYPE GROUP. THE REMAINING FOUR SPOTTED DISK GROUPS HAVE SHOWN LITTLE CHANGE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD RETURN TO THE MODERATE LEVEL WITH M-CLASS XRAY EVENTS LIKELY FROM REGION 4227.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 26/2100Z TO 27/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO SLIGHTLY ACTIVE DURING THE 24 HOUR PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE FIELD IS EXPECTED TO REMAIN GENERALLY UNSETLED THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 28 JUN-30 JUN

CLASS M 85/85/85

CLASS X 30/30/30

PROTON 10/15/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 JUN 133

PREDICTED 28 JUN-30 JUN 135/138/140

90 DAY MEAN 27 JUN 131

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 26 JUN 017/014

ESTIMATED AFR/AP 27 JUN 010/015

PREDICTED AFR/AP 28 JUN-30 JUN 010/015-010/010-008/010

SOLTERWARN

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