

FUS 3 BQU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 180

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 29 JUN 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 28/2100 TO 29/2100Z: SOLAR ACTIVITY HAS REMAINED LOW. REGION 4227 (S08E27) CONTINUES TO BE THE MOST COMPLEX OF THE DISK REGIONS WITH A BETA-GAMMA DELTA MAGNETIC COMPLEXITY, BUT HAS RELAXED BOTH VISUALLY IN H-ALPHA AND IN ITS MAGNETIC GRADIENT. THIS REGION HAS PRODUCED ONLY MINOR XRAY BURSTS, THE LARGEST A C1/IN AT 0402Z. REGION 4230 (S18E46) HAS BEEN THE MOST DYNAMIC OF THE SPOTTED DISK GROUPS, WITH A SPOT AREA TRIPLE WHAT WAS OBSERVED YESTERDAY. DESPITE THIS RAPID GROWTH, THE REGION HAS PRODUCED ONLY MINOR SUBFLARE ACTIVITY. REGION 4222 (N11W53) HAS ALSO SHOWN SOME MINOR DEVELOPMENT ALONG WITH SUBFLARE ACTIVITY. NEW REGION 4231 (S13E14) WAS NUMBERED TODAY AND IS A GROWING B-TYPE SPOT GROUP.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW, WITH THE EXCEPTION OF AN ISOLATED M-CLASS XRAY EVENT POSSIBLE FROM EITHER REGION 4227 OR 4230.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 28/2100Z TO 29/2100Z: THE GEOMAGNETIC FIELD WAS UNSETTLED TO SLIGHTLY ACTIVE FOR THE 24-HOUR PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE FIELD IS EXPECTED TO CONTINUE AT UNSETTLED LEVELS UNTIL LATE TOMORROW WHEN A SLIGHT INCREASE IS FORECAST DUE TO A SMALL CORONAL HOLE NOW ROTATING INTO A FAVORABLE SUN-EARTH CONNECTION LONGITUDE. THIS INCREASE SHOULD ONLY REACH INTO THE LOW ACTIVE LEVELS AND LAST THROUGH THE 1ST OF JULY.

III. EVENT PROBABILITIES 30 JUN-02 JUL

CLASS M 30/30/30

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 JUN 125

PREDICTED 30 JUN-02 JUL 123/122/120

90 DAY MEAN 29 JUN 132

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 28 JUN 010/014

ESTIMATED AFR/AP 29 JUN 015/010

PREDICTED AFR/AP 30 JUN-02 JUL 015/015-015/015-010/010

SOLTERWARN

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