

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 060

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 01 MAR 1989

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 28/2100Z
TO 01/2100Z: SOLAR ACTIVITY WAS MODERATE. TWO M-CLASS FLARES
WERE OBSERVED TODAY: AN M1 AT 1023Z WHICH WAS NOT SEEN
OPTICALLY, AND AN M2/SF AT 1213Z FROM REGION 5378 (N15W78).
REGION 5378 PRODUCED SURGING AND A LOOP PROMINENCE SYSTEM
AT ABOUT N13 AS IT APPROACHED THE WEST LIMB. THE GROUP
CONTINUES TO GROW. FOUR NEW REGIONS WERE ASSIGNED TODAY:
THE MOST SIGNIFICANT OF THESE WAS REGION 5385 (N24E43) WHICH
DEVELOPED INTO A D-CLASS GROUP AND PRODUCED A SUBFLARE. THE
REMAINDER OF THE SOLAR DISK AND LIMBS WERE ESSENTIALLY QUIET.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW TO MODERATE. THE PRIMARY THREAT FOR M-CLASS FLARES OVER THE
NEXT TWO DAYS IS REGION 5378. OLD REGION 5354 (N30, L-283),
WHICH PRODUCED 11 M-CLASS FLARES AND 1 X-CLASS FLARE ON ITS
PREVIOUS TRANSIT IS DUE TO RETURN LATE ON THE SECOND DAY
(03 MARCH) AND IS EXPECTED TO CONTRIBUTE SIGNIFICANTLY TO
ACTIVITY AND BACKGROUND LEVELS AT THAT TIME.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 28/2100Z TO 01/2100Z:
THE GEOMAGNETIC FIELD WAS GENERALLY UNSETTLED. A BRIEF ACTIVE
PERIOD OCCURRED AT MIDDLE LATITUDES FROM APPROXIMATELY 1200-
1500Z AND AT HIGHER LATITUDES FROM 0900-1800Z.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS
EXPECTED TO BE MOSTLY UNSETTLED FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 02 MAR-04 MAR

CLASS M 30/35/35

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 MAR 170

PREDICTED 02 MAR-04 MAR 165/170/180

90 DAY MEAN 01 MAR 220

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 28 FEB 011/012

ESTIMATED AFR/AP 01 MAR 013/013

PREDICTED AFR/AP 02 MAR-04 MAR 012/015-012/012-010/010