

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 085

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 26 MAR 1989

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 25/2100Z TO 26/2100Z: SOLAR ACTIVITY WAS HIGH. REGION 5409 (N18W74) PRODUCED TODAY'S ONLY M-CLASS FLARE: AN M6/2N AT 1313Z WHICH WAS ACCOMPANIED BY STRONG TYPE II AND TYPE IV SWEEPS AND MODERATE DISCRETE RADIO BURSTS. THE EVENT WAS OBSERVED TO PRODUCE BRIGHT SURGING ON THE DISK AND ON THE LIMB OUT TO .20 SOLAR RADII. REGION 5409 CONTINUES TO DECLINE. THE ONLY OTHER SOLAR ACTIVITY DURING THE PERIOD CONSISTED OF OCCASIONAL SUBFLARE FLUCTUATIONS FROM REGIONS 5409 AND 5417 (S26E13). THE REMAINDER OF THE DISK AND LIMBS WERE QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW. THERE IS A SLIGHT CHANCE FOR AN ISOLATED M-CLASS EVENT FROM REGION 5409.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 25/2100Z TO 26/2100Z: THE GEOMAGNETIC FIELD WAS MOSTLY UNSETTLED. A BRIEF PERIOD OF ACTIVE TO MINOR STORM CONDITIONS OCCURRED FROM 1030-1500Z.

IIIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE MOSTLY ACTIVE TOMORROW IN RESPONSE TO RECENT SOLAR FLARE ACTIVITY. CONDITIONS SHOULD SUBSIDE TO UNSETTLED TO ACTIVE LEVELS ON THE SECOND AND THIRD DAYS.

III. EVENT PROBABILITIES 27 MAR-29 MAR

CLASS M 25/25/20

CLASS X 05/05/01

PROTON 05/05/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 26 MAR 168

PREDICTED 27 MAR-29 MAR 160/150/145

90 DAY MEAN 26 MAR 224

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 25 MAR 008/011

ESTIMATED AFR/AP 26 MAR 015/017

PREDICTED AFR/AP 27 MAR-29 MAR 020/020-010/018-010/020