

HFUS 3 BOU 092200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 068

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 09 MAR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 08/2100 TO 09/2100Z: SOLAR ACTIVITY WAS LOW DURING THE PAST 24 HOURS. REGION 4104 (S20W54) PRODUCED THE LARGEST EVENT OF THE PERIOD, A C3/LARGE SF FLARE AT 0017Z MAXIMUM. THIS REGION PRODUCED FREQUENT SUBFLARE ACTIVITY DURING THE PERIOD, BUT MOST REMAINED SUB-CLASS IN SIZE. IN WHITE LIGHT THIS REGION DISPLAYED SLIGHT DECAY ALONG WITH A WEAKENING OF THE MAGNETIC GRADIENT, BUT STILL RETAINS A BETA GAMMA MAGNETIC COMPLEXITY. REGION 4110 (S02W25) IS THE ONLY OTHER SIGNIFICANT DISK REGION. IT HAS PRODUCED SIX SUB-CLASS FLARES, BUT NONE WITH ANY ASSOCIATED XRAY RESPONSE. THIS REGION DISPLAYS RAPID GROWTH WITH STRONG ARCH FILAMENTS, BUT HAS NOT DEVELOPED A STRONG MAGNETIC GRADIENT YET. TWO NEW REGIONS WERE NUMBERED TODAY, REGION 4111 (N12E30), A GROWING B-TYPE GROUP, AND 4112 (N25W64), A SIMPLE A-TYPE SPOT. A SMALL FILAMENT DISAPPEARED FROM A LOCATION AT S28W50 BETWEEN 0030Z AND 1400Z TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW. REGIONS 4104 AND 4110 POSSESS A SLIGHT CAPABILITY FOR AN ISOLATED M-CLASS EVENT PRIOR TO LIMB ROTATION.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 08/2100Z TO 09/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO QUIET DURING THE 24 HOUR PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO CONTINUE AT QUIET TO OCCASIONALLY UNSETTLED LEVELS THROUGH THE NEXT 24 HOURS. ACTIVITY SHOULD INCREASE TO ACTIVE LEVELS ON THE 11TH OF MARCH IN RESPONSE TO THE AFFECTS OF A FAVORABLY LOCATED CORONAL HOLE NOW AT W35 ON THE EQUATOR. ACTIVE LEVELS WILL CONTINUE FOR THE DURATION OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 10 MAR-12 MAR

CLASS M 10/05/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 09 MAR 124

PREDICTED 10 MAR-12 MAR 118/110/098

90 DAY MEAN 09 MAR 149

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 08 MAR 003/010

ESTIMATED AFR/AP 09 MAR 007/015

PREDICTED AFR/AP 10 MAR-12 MAR 010/015-020/015-025/015

SOLTERWARN

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