

HFUS 3 BOU 022200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 275

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 02 OCT 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 01/2100 TO 02/2100Z: SOLAR ACTIVITY WAS LOW TO MODERATE DURING THE PAST 24 HOURS. SEVERAL DEVELOPMENTS DURING THE PAST 24 HOURS CHANGED THE SOLAR CONDITIONS RATHER DRAMATICALLY. THE FIRST DEVELOPMENT WAS THE APPEARANCE OF TWO REGIONS ON THE EAST LIMB: REGIONS 4328 (N06E70) AND 4329 (N19E68). ANOTHER DEVELOPMENT WAS THE OCCURRENCE OF AN M1/2N FLARE FROM REGION 4324. THIS FLARE WAS ACCOMPANIED AND PRECEDED BY A FLURRY OF ACTIVITY WHICH EXTENDED INTO THE TIME FRAME OF THE M1/2N THUS MASKING THE RESOLUTION AND REGION ASSOCIATION OF DISTINCT EVENTS. MIXED IN THIS FLURRY OF ACTIVITY WAS A 10CM BURST OF 170 FLUX UNITS THAT LASTED FOR 47 MINUTES. REGION 4330 (N12E15) WAS ALSO NUMBERED DURING THE PAST 24 HOURS. THE DISK HAS BEEN QUIET DURING THE PAST 12 HOURS AS FAR AS FLARE PRODUCTION IS CONCERNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE LOW TO MODERATE. REGION 4328 APPEARS CAPABLE OF M FLARE PRODUCTION AND 4324 COULD AGAIN BECOME DYNAMIC.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 01/2100Z TO 02/2100Z: THE GEOMAGNETIC FIELD APPARENTLY RESPONDED TO A CORONAL HOLE AND REACHED MINOR STORM LEVELS BETWEEN 03Z AND 09Z. GENERALLY UNSETTLED CONDITIONS WERE OBSERVED THE REST OF THE DAY.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO RETURN TO UNSETTLED LEVELS AS THE CORONAL HOLE IS THOUGHT TO BE A NARROW, SHORT LIVED EFFECT.

III. EVENT PROBABILITIES 03 OCT-05 OCT

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 02 OCT 120

PREDICTED 03 OCT-05 OCT 120/120/119

90 DAY MEAN 02 OCT 120

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 01 OCT 008/011

ESTIMATED AFR/AP 02 OCT 019/028

PREDICTED AFR/AP 03 OCT-05 OCT 010/010-013/015-010/015

SOLTERWARN

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