

HFUS 3 BOU 042200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 277

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 04 OCT 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 03/2100 TO 04/2100Z: SOLAR ACTIVITY REMAINS LOW. REGION 4324 (S20W85) IS NEARING WEST LIMB PASSAGE AND REGION 4328 (N07E50) IS NOW THE FOCUS OF ATTENTION. 4328 IS QUITE LARGE WITH AMPLE PENUMBRA ON BOTH LEADER AND TRAILER AND A SIGNIFICANT AMOUNT IN ITS CENTRAL PORTIONS. THE H-ALPHA PLAGE IS MODERATELY BRIGHT, PARTICULARLY JUST AHEAD OF THE TRAILER SPOT. THE UMBRAE ARE LARGE AND FAIRLY DARK. REGION 4330 (N13W12) WHICH GREW RATHER RAPIDLY WHEN IT FIRST APPEARED HAS NOW SETTLED INTO A DORMANT STATE AS A SMALL CLASS C GROUP. REGIONS 4329 (N19E44) AND 4331 (N13E68) ALSO APPEAR STABLE AND SIMPLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE LOW. ISOLATED M FLARES ARE POSSIBLE AS THE SIZE OF 4328 CANNOT BE IGNORED.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 03/2100Z TO 04/2100Z: THE GEOMAGNETIC FIELD BRIEFLY REACHED MAJOR STORM PROPORTIONS AT 041544Z AND THEN BEGAN TO QUIETEN. REASSESSMENT OF THE RECENT GEOMAGNETIC CONDITIONS HAS LED TO THE ASSUMPTION THAT SEVERAL FACTORS WERE OPERATIVE: A CORONAL HOLE, A SECTOR BOUNDARY AND A FILAMENT DISAPPEARANCE.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE AFOREMENTIONED OPERATIVES SHOULD HAVE EXHAUSTED THEIR LONGEVITY BY THIS TIME AND THE FIELD IS EXPECTED TO BE AT UNSETTLED TO ACTIVE LEVELS FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 05 OCT-07 OCT

CLASS M 20/30/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 OCT 125

PREDICTED 05 OCT-07 OCT 129/132/133

90 DAY MEAN 04 OCT 120

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 03 OCT 017/024

ESTIMATED AFR/AP 04 OCT 027/040

PREDICTED AFR/AP 05 OCT-07 OCT 015/020-012/015-012/015

SOLTERWARN

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