

HFUS3 BOU 152200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 258

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY:

ISSUED 2200Z 15 SEP 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 14/2100 TO 15/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4694 (S10E41) WAS THE ONLY SPOTTED REGION ON THE DISK AND REMAINED A CSO.

MAGNETIC ANALYSIS INDICATES THE POSSIBILITY OF A MORE COMPLICATED CONFIGURATION, BUT ITS EASTERLY LOCATION PROHIBITS ANY DEFINITE CONCLUSION OTHER THAN A BETA-TYPE. IT PRODUCED A C4/1B FLARE WITH SMALL RADIO BURSTS AT 15/0737Z. A PROMINENCE ERUPTED FROM N22W90 AT 1400Z. IT WAS SEEN EXTENDING TO .17

SOLAR RADII BUT THE FALLING AND APPARENTLY RECONDENSING MATERIAL WAS SIGHTED AT .24 RADII. NO NEW REGION WAS ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 14/2100Z TO 15/2100Z:

THE GEOMAGNETIC DISTURBANCE THAT STARTED AT 14/0600Z WITH A SUDDEN GLOBAL IMPULSE ENDED AT 14/2100Z. IT PRODUCED BRIEF STORM CONDITIONS AT BOTH MID AND HIGH LATITUDES FROM 14/0730 UNTIL 14/1630Z. THE FIELD DECREASED FROM ACTIVE TO UNSETTLED AFTER 14/2100Z UNTIL A GRADUAL GLOBAL IMPULSE OCCURRED AT 15/1900Z. STORM CONDITIONS THEN AGAIN PREVAILED AT HIGH LATITUDES WITH ACTIVE LEVELS AT MID LATITUDES THE LAST TWO HOURS OF THE PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE THE FIRST TWO DAYS (16-17 SEP), AND INCREASINGLY ACTIVE THE THIRD DAY (18 SEP) DUE TO A WEAKENING RECURRENT CORONAL HOLE.

III. EVENT PROBABILITIES 16 SEP-18 SEP

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 SEP 070

PREDICTED 16 SEP-18 SEP 071/072/073

90 DAY MEAN 15 SEP 074

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 14 SEP 027/032

ESTIMATED AFR/AP 15 SEP 012/015

PREDICTED AFR/AP 16 SEP-18 SEP 014/015-014/015-017/020

SOLTERWARN

BT