

HFUS 3 BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 271

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 28 SEP 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 27/2100 TO 28/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. A LIMITED NUMBER OF X-RAY BURSTS HAVE OCCURRED, ALL BELOW THE CLASS C LEVEL.

REGION 4324 (S20W07) CONTINUES A SLOW DECAY. LITTLE CHANGE IN THE STRUCTURAL ALIGNMENT HAS OCCURRED. REGION 4327 (S13W81) HAS BEEN QUIET AS IT APPROACHES WEST LIMB TRANSIT. A SINGLE SPOT HAS EMERGED AT S21W21 IN THE UNIPOLAR STRUCTURE WEST OF REGION 4324. IT IS SUFFICIENTLY CLOSE ENOUGH TO BE ASSIGNED TO REGION 4323. A TWO-SEGMENTED BUSHY FILAMENT CENTERED AT N26W20 AT 27/1530Z HAS DISAPPEARED. HOWEVER, GEOMETRY AND A NOMINAL WIND SPEED WOULD PLACE ANY ESCAPED PLASMA AHEAD OF EARTH.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 27/2100Z TO 28/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE AT MID LATITUDES AND ACTIVE WITH PERIODS AT MINOR STORM LEVEL AT HIGH LATITUDES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE DURING THE FORECAST PERIOD. A NARROW N/S ORIENTATED CORONAL HOLE CROSSED CENTRAL MERIDIAN DURING THE PAST 24 HOURS. NORMAL RESPONSE WOULD BE ON 01 OCTOBER. HOWEVER, DURING THE LAST DISK TRANSIT OF THIS FEATURE, THE GEOMAGNETIC FIELD WAS QUIET.

III. EVENT PROBABILITIES 29 SEP-01 OCT

CLASS M 10/05/05

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 SEP 114

PREDICTED 29 SEP-01 OCT 112/109/105

90 DAY MEAN 28 SEP 120

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 27 SEP 012/017

ESTIMATED AFR/AP 28 SEP 012/020

PREDICTED AFR/AP 29 SEP-01 OCT 010/015-010/015-013/015

SOLTERWARN

BT