

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 07/28/86 00:00:00

End : 07/28/86 23:59:00

07/28 22:00

2124

HFUS3 BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 209

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 28 JUL 1986

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 27/2100 TO 28/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. REGION 4741

(N09E63) IS AN HHX TYPE SPOT GROUP WITH AN ARCH FILAMENT SYSTEM. IT PRODUCED MINOR FLARE ACTIVITY. MAGNETIC ANALYSIS OF THE REGION IS DIFFICULT BUT IT APPEARS TO BE LEADER-NEGATIVE TRAILER-POSITIVE (REVERSED FROM THE EXPECTED POLARITIES OF THE CURRENT SUNSPOT CYCLE). A 39 DEGREE LONG FILAMENT HAD COMPLETELY DISAPPEARED AT N36E63 BY 0114 UT 28 JULY. THE SMM SATELLITE OBSERVED A WEAK CORONAL MASS EJECTION NEAR THE FILAMENT. THE EJECTION CROSSED INTO THE SOUTHERN CORONA. THE REST OF THE DISK AND LIMBS WERE QUIET AND NO NEW REGIONS WERE NUMBERED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN VERY LOW FOR THE NEXT THREE DAYS. NO SIGNIFICANT REGIONS ARE DUE TO RETURN. CONTINUED MINOR FLARE ACTIVITY IS LIKELY IN REGION 4741.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 27/2100Z TO 28/2100Z: THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED AT MIDDLE LATITUDES AND UNSETTLED TO SLIGHTLY ACTIVE AT HIGH LATITUDES. BRIEF AND ISOLATED MINOR TO MAJOR STORM CONDITIONS WERE OBSERVED AT SOME HIGH LATITUDE STATIONS. THE GEOMAGNETIC STORM WHICH BEGAN WITH A SUDDEN COMMENCEMENT AT 1833 UT 24 JULY ENDED AT APPROXIMATELY 1300 UT ON 27 JULY.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE QUIET AT MIDDLE LATITUDES AND ACTIVE AT HIGH LATITUDES FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 29 JUL-31 JUL

CLASS M 02/04/05

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 JUL 070

PREDICTED 29 JUL-31 JUL 071/072/073

90 DAY MEAN 28 JUL 070

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 27 JUL 018/026

ESTIMATED AFR/AP 28 JUL 011/015

PREDICTED AFR/AP 29 JUL-31 JUL 007/020-005/020-005/015

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