

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 10/07/87 00:00:00

End : 10/07/87 23:59:00

1007 22:00

2201

HFUS3 BOU 072200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 280

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 07 OCT 1987

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 06/2100Z TO 07/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4862 (N33E04) DEVELOPED NEW EMERGING FLUX AHEAD OF ITS OLDER, INITIAL PLAGE LOCATION OF FOUR DAYS AGO. THIS MORE WESTERLY PLAGE AND SPOTTED AREA IS SEPARATED VERY SLIGHTLY FROM THE MORE EASTERLY LOCATION, BUT IS VIRTUALLY ABUTTED LONGITUDINALLY AND WILL BE CONSIDERED A COMPOUND REGION 4862 WITH TWO BI-POLES. THE COMPOUND REGION 4862 PRODUCED ALL OF THE FLARE ACTIVITY DURING THE PERIOD. THE LARGER OF THE TWO C-CLASS X-RAY FLARES OCCURRED AT 7/0251Z WITH A VAGUELY DEFINED TYPE II RADIO SWEEP AS WELL AS OTHER MINOR DISCRETE RADIO BURSTS. EXCEPTING THE CREATION OF THE COMPOUND REGION 4862 TO INCLUDE THE TWO DISTINCT BI-POLAR PLAGE AREAS, NO NEW REGION WAS ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW TO LOW. COMPOUND REGION 4862 IS EXPECTED TO PRODUCE MORE C-CLASS X-RAY EVENTS WITH A VERY SLIGHT CHANCE OF MODERATE ACTIVITY THE NEXT THREE DAYS AS IT PEAKS AND STARTS TO DECAY. RETURNING REGION 4857 IS EXPECTED THE SECOND DAY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 06/2100Z TO 07/2100Z: THE GEOMAGNETIC FIELD WAS QUIET TO UNSETTLED. MINOR STORM CONDITIONS OCCURRED AT HIGH LATITUDES LATE IN THE PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE. A DISTURBANCE CAUSED BY A C1/1F FLARE WITH AN EIGHT DEGREE DISAPPEARING FILAMENT FROM REGION 4859 ON 3/1659Z IS EXPECTED. HIGH LATITUDES SHOULD OBSERVE ACTIVE TO MINOR STORM LEVELS WITH OCCASIONAL MAJOR STORM PERIODS DURING LOCAL MIDDNIGHTS.

III. EVENT PROBABILITIES 08 OCT-10 OCT

CLASS M 06/05/04

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 07 OCT 091

PREDICTED 08 OCT-10 OCT 089/087/084

90 DAY MEAN 07 OCT 089

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 06 OCT 004/008

ESTIMATED AFR/AP 07 OCT 010/013

PREDICTED AFR/AP 08 OCT-10 OCT 016/018-016/020-015/020

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