

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 09/20/87 00:00:00

End : 09/20/87 23:59:00

09/20 22:00

2201

HFUS3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 263

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 SEP 1987

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100Z TO 20/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. REGION 4857

(S30W31) CONTINUED TO GROW, DEVELOPING PENUMBRA ON BOTH LEADER AND TRAILER SPOTS, AND PRODUCED SOME SUBFLARE ACTIVITY. REGION 4853 (S33W61) CONTINUED TO DECAY AND WAS RELATIVELY QUIET. AN IMPRESSIVE ACTIVE PROMINENCE WAS OBSERVED ON THE SOUTHWEST LIMB. THE REMAINING ACTIVE REGIONS WERE QUIET AND STABLE. NO NEW REGIONS WERE NUMBERED.

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

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z: THE GEOMAGNETIC FIELD WAS MOSTLY QUIET FROM THE BEGINNING OF THE PERIOD UNTIL ABOUT 1515Z WHEN A SMALL IMPULSE WAS OBSERVED AT SEVERAL MAGNETIC OBSERVATORIES. SINCE THEN THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED AT MID-LATITUDES AND UNSETTLED TO SLIGHTLY ACTIVE AT HIGH LATITUDES. THIS IMPULSE MAY INDICATE THE ONSET OF THE PREVIOUSLY FORECAST ACTIVITY DUE TO THE DISAPPEARING FILAMENT OF 17 SEPTEMBER.

I. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT MINOR STORM LEVELS FOR 21 SEPTEMBER, FOLLOWED BY ACTIVE TO MINOR STORM CONDITIONS ON 22-23 SEPTEMBER. THE 21 SEPTEMBER INCREASE IS EXPECTED FROM THE 17 SEPTEMBER DISAPPEARING FILAMENT AND THE 22-23 ACTIVITY IS EXPECTED FROM THE C2 CORONAL MASS EJECTION FLARE OF 17 SEPTEMBER.

III. EVENT PROBABILITIES 21 SEP-23 SEP

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 SEP 084

PREDICTED 21 SEP-23 SEP 086/086/085

90 DAY MEAN 20 SEP 087

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 SEP 003/009

ESTIMATED AFR/AP 20 SEP 010/030

PREDICTED AFR/AP 21 SEP-23 SEP 032/045-025/040-016/040

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