

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 11/20/87 00:00:00

End : 11/20/87 23:59:00

11/20 22:00

2251

HFUS3 BOU 202200 RTD

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 324

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 NOV 1987

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100Z TO 20/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 4891 (S22E20) PRODUCED AN M1/1N FLARE AT 20/0424Z, ACCOMPANIED BY MODEST RADIO BURSTS AT DISCRETE FREQUENCIES. REGION 4891 CONTINUES TO GROW IN BOTH WHITE LIGHT AND H-ALPHA. REGION 4890 (S24W39) REMAINS ACTIVE. IT HAS PRODUCED NUMEROUS SUB-FLARES. THE AREA NEAR OLD REGION 4875 (N30E86) HAS SHOWN ACTIVITY IN THE FORM OF SURGING AND FACULAE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE. REGIONS 4890 AND 4891 HAVE THE POTENTIAL TO SIGNIFICANTLY INCREASE THE ACTIVITY LEVEL. THE SURGING NEAR THE LOCATION OF OLD REGION 4875 (N30 L-358 CLASS/AREA EAI/350 ON 29 OCTOBER) SHOWS POTENTIAL TO ALSO INCREASE THE ACTIVITY LEVELS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT QUIET TO UNSETTLED LEVELS AT MID-LATITUDES AND UNSETTLED TO ACTIVE CONDITIONS AT HIGH LATITUDES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE. HIGH LATITUDES MAY EXPERIENCE SOME MINOR STORM CONDITIONS. THE INCREASE IN ACTIVITY IS BASED ON RECURRENCE AND THE SOLAR FLARE ACTIVITY OF THE LAST THREE DAYS.

III. EVENT PROBABILITIES 21 NOV-23 NOV

CLASS M 25/25/25

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 NOV 115

PREDICTED 21 NOV-23 NOV 117/118/120

90 DAY MEAN 20 NOV 093

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 NOV 010/017

ESTIMATED AFR/AP 20 NOV 008/015

PREDICTED AFR/AP 21 NOV-23 NOV 015/030-015/030-010/015

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