

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 07/22/87 00:00:00

End : 07/22/87 23:59:00

07/22 22:00

2200Z

HFUS3 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 203

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 22 JUL 1987

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/2100Z TO 22/2100Z: SOLAR ACTIVITY WAS LOW. NEWLY NUMBERED REGION 4830 (S20E39) EMERGED AS A SMALL, SIMPLE GROUP. REGION 4826 (S28W20) PRODUCED TWO C-LEVEL X-RAY SUBFLARES WITHIN THE LAST SIX HOURS. APPARENT MAGNETIC EVOLUTION TOWARDS A BETA-GAMMA CONFIGURATION ACCOMPANIED SURGING AND ACTIVE FILAMENT SYSTEMS IN THIS REGION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW. REGION 4826 PROVIDES A SLIGHT CHANCE OF MODERATE ACTIVITY AS IT EVOLVES INTO A MORE COMPLICATED MAGNETIC AND STRUCTURAL PATTERN. REGION 4827 STILL PROVIDES A VERY SLIGHT CHANCE OF MODERATE ACTIVITY DUE TO INHERENT CLASSIFICATION CORRELATION AS A DSO, ALTHOUGH IT HAS BEEN OBSERVED TO PRODUCE ONLY FAINT SUBFLARES SO FAR.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 21/2100Z TO 22/2100Z: THE GEOMAGNETIC FIELD WAS UNSETTLED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE THE FIRST AND SECOND DAYS (23-24 JUL) IN RESPONSE TO THE 25 DEGREE LONG FILAMENT THAT APPEARED BY 20/1320Z. OCCASIONAL STORM CONDITIONS ARE POSSIBLE DURING THESE TWO DAYS. THE LAST DAY SHOULD BE RECOVERING BACK TO AN UNSETTLED LEVEL.

III. EVENT PROBABILITIES 23 JUL-25 JUL

CLASS M 10/15/20

CLASS X 01/02/03

PROTON 01/02/03

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 JUL 106

PREDICTED 23 JUL-25 JUL 106/110/112

90 DAY MEAN 22 JUL 081

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 21 JUL 008/011

ESTIMATED AFR/AP 22 JUL 009/012

PREDICTED AFR/AP 23 JUL-25 JUL 012/020-010/016-008/015

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