

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 01/16/86 00:00:00

End : 01/16/86 23:59:00

01/16 22:00

2148

HFUS3 BOU 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 016

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 16 JAN 1986

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/2100 TO 16/2100Z: SOLAR ACTIVITY HAS BEEN LOW TO MODERATE FOR THE PAST 24 HOURS. REGION 4710 (S12W90) WAS A CSD SPOT GROUP WHEN LAST SEEN AT 0027 UT. SINCE THAT TIME REGION HAS BEGUN ROTATING AROUND THE WEST LIMB. THE REGION HAS CONTINUED TO PRODUCE BOTH OPTICAL AND XRAY FLARES DURING THE PAST 24 HOURS. THERE WERE TWO M-CLASS XRAY EVENTS (MAX: M6 AT 1616UT AND M1 AT 1849UT WITH ASSOCIATED TENFLARE OF 210SFU) AND SEVERAL XRAY FLARES IN THE B AND C CLASS. THE ONLY OTHER RADIO OBSERVATIONS WERE SMALL DISCREET FREQUENCY BURSTS ASSOCIATED WITH THE M-LEVEL EVENTS. OPTICAL LOOPS WERE ALSO REPORTED BY SEVERAL STATIONS BETWEEN 1730 AND 1749 UT.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO DECREASE TO VERY LOW DURING THE NEXT 24 HOURS AS REGIONS 4710 CONTINUES TO ROTATE AROUND THE WEST LIMB.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 15/2100Z TO 16/2100Z: THE GEOMAGNETIC FIELD HAS BEEN GENERALLY QUIET TO UNSETTLED FOR THE PAST 24 HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE QUIET TO UNSETTLED ON 17 JANUARY AND THEN INCREASE TO UNSETTLED TO ACTIVE ON THE SECOND DAY WITH THE FIELD BEING AT ACTIVE LEVELS ON THE FINAL DAY OF THE FORECAST PERIOD. THE INCREASE TO POSSIBLE ACTIVE LEVELS ON 18 AND 19 JANUARY IS THE EXPECTED RESULT OF THE TYPE II AND TYPE IV RADIO BURSTS OF YESTERDAY AND THE M-CLASS XRAY FLARES OF YESTERDAY AND TODAY.

III. EVENT PROBABILITIES 17 JAN-19 JAN

CLASS M 50/10/01

CLASS X 10/02/01

PROTON 10/02/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 JAN 083

PREDICTED 17 JAN-19 JAN 083/079/077

90 DAY MEAN 16 JAN 076

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 JAN 005/007

ESTIMATED AFR/AP 16 JAN 008/015

PREDICTED AFR/AP 17 JAN-19 JAN 005/010-012/015-015/020

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