

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 02/14/86 00:00:00

: 02/14/86 23:59:00

02/14 22:00

2210

HFUS3 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 045

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 14 FEB 1986

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/2100 TO 14/2100Z: SOLAR ACTIVITY WAS MODERATE. REGION 4713 (S01W88) PRODUCED AN M6/1B FLARE AT 14/0929Z WITH SIGNIFICANT RADIO EVENT ASPECTS: 2695MHZ-2100 SFU// TYPE II/IMP3-3 MIN// TYPE IV/IMP3-95 MIN (THIS DURATION STOPPED BY LOCAL SUNSET).

CONSIDERING ITS EXTREME WESTERN POSITION, IT IS IMPRESSIVELY STILL AN EKO - BETA-DELTA TYPE. NO NEW REGION WAS ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE THE FIRST DAY (15 FEB). THE LAST TWO DAYS ARE EXPECTED TO BE VERY LOW WITH THE CHANCE OF MODERATE ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 13/2100Z TO 14/2100Z: THE GEOMAGNETIC FIELD WAS ACTIVE. A 10MEV PROTON EVENT STARTED AT 14/1155Z AND CONTINUES IN PROGRESS. THE PEAK VALUE TODAY WAS 98 P/CM-CM-SEC-STER AT 14/1755Z. A 50 MEV PROTON EVENT STARTED AT 14/1100Z AND CONTINUES IN PROGRESS. THE PEAK VALUE TODAY WAS 68 P/CM-CM-SEC-STER AT 14/2048Z. THIS PROTON ENHANCEMENT IS ATTRIBUTED TO THE M6/1B FLARE OF REGION 4713.

GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE ACTIVE. OCCASIONAL STORM CONDITIONS ARE POSSIBLE THROUGHOUT THE PERIOD, DUE TO THE ALMOST DAILY SIGNIFICANT FLARE ACTIVITY DURING THE LAST FIVE DAYS. THE LAST DAY (17 FEB) IS EXPECTED TO SEE A MINOR STORM COMMENCEMENT AT HIGH LATITUDES. THE CURRENT PROTON ENHANCEMENT IS EXPECTED TO CONTINUE THROUGH 15 FEB, WITH A POSSIBLE EXTENSION OF INTERMITTENT VALUES HOVERING AROUND THE EVENT THRESHOLDS FOR THE FOLLOWING DAY (16 FEB). A POLAR CAP ABSORPTION EVENT IS EXPECTED FROM 15/0000 UNTIL 15/2400Z.

III. EVENT PROBABILITIES 15 FEB-17 FEB

CLASS M 55/35/05

CLASS X 05/03/01

PROTON 35/20/05

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 FEB 090

PREDICTED 15 FEB-17 FEB 085/079/073

90 DAY MEAN 14 FEB 078

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 FEB 012/017

ESTIMATED AFR/AP 14 FEB 025/020

PREDICTED AFR/AP 15 FEB-17 FEB 020/020-020/025-020/030

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