

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 02/08/86 00:00:00

End : 02/08/86 23:59:00

08 22:00

2155

HFUS3 BOU 082200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 039

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 08 FEB 1986

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 07/2100 TO 08/2100Z: SOLAR ACTIVITY HAS BEEN GENERALLY LOW FOR THE PAST 24 HOURS. REGION 4711 (S08W42) HAS DECAYED TO A DAI/BETA SPOT GROUP WITH DETERIORATION IN ALMOST ALL PARAMETERS. THE REGION HAS BEEN RELATIVELY QUIET BY COMPARISON TO THE PAST FEW DAYS. THE STRONGEST FLARE THAT CAN BE ATTRIBUTED TO 4711 IN THE PAST 24 HOURS IS A C1 X-RAY FLARE THAT OCCURRED ON 07/2206UT. REGION 4713 (S02E00) HAS SHOWN NOTICEABLE GROWTH SINCE THE LAST FORECAST REPORT. IT IS NOW AN ESO/BETA GROUP THAT HAS HAD SOME FLARING TODAY WITH THE STRONGEST BEING A C1 X-RAY FLARE OCCURRING AT 08/0520UT. NO NEW REGIONS WERE NUMBERED TODAY AND THE REST OF THE DISK AND LIMBS ARE QUIET AND STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE FOR THE NEXT 24 HOURS AS BOTH NUMBERED REGIONS STILL EXHIBIT POTENTIAL FOR HIGH ACTIVITY. REGION 4711 IS APPROACHING THE LIMB AND ANY SIGNIFICANT FLARING COULD FURTHER CONTINUE THE LEVEL OF ACTIVITY ALREADY EXPERIENCED. HOWEVER, AFTER THE NEXT 24 HOURS SOLAR ACTIVITY IS EXPECTED TO BE

GERALLY LOW.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 07/2100Z TO 08/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT MAJOR STORM LEVELS FOR THE PAST 24 HOURS AS THE EFFECTS OF THE PREVIOUS DAYS HIGH FLARE ACTIVITY CONTINUE TO BE FELT AT BOTH MID AND HIGH LATITUDES. THE POLAR CAP ABSORPTION THAT BEGAN ON 07/2200UT ENDED AT 08/1130UT. THE INFLUX OF PROTONS ABOVE EVENT THRESHOLD STILL EXISTS AT THIS TIME, BUT AT A MUCH LOWER LEVEL THAN HAS BEEN EXPERIENCED DURING THE PAST 24 HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN AT MAJOR STORM LEVELS FOR THE NEXT 24 HOURS AND THEN DROP TO THE ACTIVE LEVELS. THE FORECAST IS BASED ON PREVIOUS FLARING AND UNLESS THERE IS ANOTHER MAJOR FLARE OCCURRENCE, ACTIVITY SHOULD BEGIN TO DECREASE BY LATE 09 FEB. THE PROTON EVENT IN PROGRESS IS EXPECTED TO END BY THE END OF THE UT DAY ON 08 FEB.

III. EVENT PROBABILITIES 09 FEB-11 FEB

CLASS M 30/10/05

CLASS X 10/05/02

PROTON 05/02/01

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 FEB 098

PREDICTED 09 FEB-11 FEB 098/096/092

90 DAY MEAN 08 FEB 077

GEOMAGNETIC A INDICES

SERVED AFR/AP 07 FEB 057/089

ESTIMATED AFR/AP 08 FEB 110/200

PREDICTED AFR/AP 09 FEB-11 FEB 050/080-025/030-018/020

SOLTERWARN