

SESC Solar Summary and Forecast - For Joe Hirman

Begin: 11/08/87 00:00:00

End : 11/08/87 23:59:00

11/08 22:00

2208

HFUS3 BOU 082200 COR

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 312

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 08 NOV 1987

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 07/2100Z TO 08/2100Z: SOLAR ACTIVITY HAS BEEN LOW. YESTERDAY'S M1.2/1N FLARE (MAXIMUM AT 07/2014Z) DECAYED SLOWLY AND DID NOT DROP BELOW C-LEVEL UNTIL APPROXIMATELY 0100Z. A CORRELATED CORONAL MASS EJECTION WAS OBSERVED BY SMM: THE EVENT WAS DESCRIBED AS FAST AND EXPLOSIVE WITH MULTIPLE STREAMERS. THIS FLARE WAS FOLLOWED BY A PROTON EVENT DESCRIBED BELOW IN PART IIA. SOLAR ACTIVITY HAS SINCE BEEN AT A LOW LEVEL AND THE ACTIVE REGIONS ARE IN GENERAL ON THE DECLINE. TWO NEW REGIONS WERE NUMBERED TODAY: REGION 4888 (S26W03) WHICH EMERGED TO THE SOUTH OF REGION 4883 AS A SEPERATE BIPOLE GROUP; AND REGION 4889 (N17E73) WHICH APPEARS AT THIS TIME TO BE A UNIPOLAR SPOT WITH RUDIMENTARY PENUMBRA.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 07/2100Z TO 08/2100Z: THE GEOMAGNETIC FIELD WAS GENERALLY QUIET WITH A FEW BRIEF PERIODS OF UNSETTLED LEVELS AT HIGH LATITUDES. A SATELLITE PROTON EVENT (MORE THAN 10 PROTONS/CM<sup>2</sup>/S/STER GREATER THAN OR EQUAL TO 10MEV) BEGAN AT 08/0200Z, REACHED A MAXIMUM AT 08/0940Z OF 120 PROTONS AND APPEARED TO HAVE ENDED AT FORECAST ISSUED TIME. THIS EVENT IS PROBABLY FROM THE LONG DURATION M1.2/1N ERUPTIVE PROMINENCE/LOOP FLARE AT THE WEST LIMB REPORTED IN YESTERDAY'S FORECAST AND MENTIONED IN PART IA ABOVE.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT ACTIVE TO MINOR STORM LEVELS FOR THE NEXT THREE DAYS. THE PRIMARY BASIS FOR THE INCREASE IS FOR EFFECTS FROM THE FLARE/PROTON EVENT MENTIONED IN PARTS IA AND IIA. ADDITIONAL EFFECTS ARE ALSO POSSIBLE FROM THE C4.3/2N DSF/CME THAT OCCURRED AT 06/2008Z OUT OF REGION 4886.

III. EVENT PROBABILITIES 09 NOV-11 NOV

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 NOV 095

PREDICTED 09 NOV-11 NOV 095/095/095

90 DAY MEAN 08 NOV 093

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 07 NOV 005/008

ESTIMATED AFR/AP 08 NOV 010/012

PREDICTED AFR/AP 09 NOV-11 NOV 026/035-030/040-020/025

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