

HFSUS-3 BOU, 02 14 05

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 307A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 02 NOV 1980

I.A. SOLAR ACTIVITY HAS BEEN MODERATE. A CLASS M1 (IB) FLARE OCCURRED IN REGION 2776 (N12E52) AT 01/19 15Z. MINOR RADIO ACTIVITY AT LOW FREQUENCIES ACCOMPANIED THE FLARE. REGION 2776 APPEARS TO BE A MATURE REGION WITH A LARGE LEADER SUNSPOT AND EXTENSIVE TRAILER PLAGE. THE REGION IS A POTENTIAL SOURCE OF MAJOR FLARE ACTIVITY BUT A NOTABLE ABSENCE OF COHERENT FILAMENT STRUCTURES WITHIN THE REGION INDICATE THAT IT IS NOT READY TO PRODUCE MAJOR EVENTS. A FILAMENT EXTENDING NORTH-EAST FROM THE NORTHERN EDGE OF THE PLAGE DOES APPEAR SOMEWHAT ACTIVE. REGION 2772 (N22E22) APPEARS TO BE A YOUNG DEVELOPING REGION. AN EAST-WEST NEUTRAL LINE BISECTS THE PLAGE AND SPOTS AND THE REGION IS SIMILAR TO CLASSICAL ENERGETIC PROTON REGIONS OF THIS TYPE STRUCTURE. HOWEVER, IT TOO IS LACKING ANY SIGNIFICANT FILAMENTS AND THE PLAGE IS ONLY MODERATE IN EXTENT. OTHER REGIONS, INCLUDING 2773 (N03E30), 2763 (N13W30), 2765 (N31E04) AND 2777 (S14E59) HAVE PRODUCED MINOR FLARES. ALL ARE SMALL AND COMPARATIVELY SIMPLE. 2777 IS YOUNG AND GROWING SLIGHTLY WHILE 2774 DOES HAVE SOME MAGNETIC COMPLEXITY BUT SCATTERED PLAGE STRUCTURE.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. DEVELOPMENT OF EMBEDDED FILAMENTS IN EITHER REGION 2772 OR 2776 COULD PRESAGE HIGHER LEVELS OF ACTIVITY IN THE NEXT FEW DAYS. 2776 TYPICALLY MAY PRODUCE SPORADIC FLARES WHILE 2772 APPEARS LIKELY TO PRODUCE FREQUENT SMALLER EVENTS WITH AN OVERALL TREND TO MAJOR ACTIVITY.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. LACK OF ANY DOMINATING SOURCE OF ACTIVITY INDICATES UNSETLED CONDITIONS ARE LIKELY TO CONTINUE. THE LOCATION OF THE TWO LARGEST ACTIVE REGIONS AND INDICATIONS THAT MAJOR FLARES ARE NOT IMMINENT SUGGEST THAT FLARE INDUCED MAGNETIC STORMS OR PROTON EVENTS ARE UNLIKELY BEFORE THE END OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 03 - 05 NOV

CLASS M: 65/70/70

CLASS X: 05/10/10

PROTON: 01/01/05

PCAF: GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 01 NOV 230

ESTIMATED 02 NOV 238

PREDICTED 03-05 NOV 245/250/253

90 DAY MEAN 01 NOV 188

V. GEOMAGNETIC ACTIVITIES

OBSERVED AFR 31 OCT 25 AP 01 NOV 17

ESTIMATED AFR 01 NOV 14 AFR/AP 02 NOV 09/09

PREDICTED AFR/AP 03-05 NOV 08/10 10/10 10/10

SOLTERWARN

BT

HFUS 1 BOU 022200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 307 B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200UT 02 NOV 1980

IA. SOLAR ACTIVITY HAS BEEN LOW TODAY. ONLY C-CLASS-SUBFLARES OCCURRED IN REGIONS 2761 (S04W58), 2762 (N07W34), 2772 (N22E15), 2773 (N03E22), 2774 (S18W72), AND 2776 (N12E45). THE LARGEST WERE TWO CS/SB BOTH FROM REGION 2772 AT 0205 UT AND 1043 UT.

IB. SOLAR ACTIVITY IS EXPECTED TO BECOME MODERATE DUE TO POTENTIAL IN REGIONS 2772 AND 2776.

II. THE GEOMAGNETIC FIELD WAS MILDLY UNSETLED AND IS EXPECTED TO REMAIN UNSETLED FOR THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 03-05 NOV

CLASS M 05/7.0/70

CLASS X 05/1.0/10

PROMPT 01/01/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 02 NOV 238

PREDICTED 03-05 NOV 245/250/253

90 DAY MEAN 02 NOV 190

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 01 NOV 15/17

ESTIMATED AFR/AP 02 NOV 06/10

PREDICTED AFR/AP 03-05 NOV 08/10 10/10 10/10

SOLTERWARN

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