

HFUS 1 BOU 071300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 311A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 07 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 06/1200Z TO 07/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS DUE TO AN M6/1B FLARE AT 07/0357 UT FROM REGION 3432 (S10W39). THIS FLARE WAS ACCOMPANIED BY NUMEROUS RADIO BURSTS AND A TYPE II SWEEP. REGION 3432 HAS PRODUCED ITS BEST ACTIVITY WHILE DECAYING RAPIDLY AND THIS TREND IS STILL IN PROGRESS. REGION 3444 (S16E14) BECAME INCREASINGLY ERUPTIVE THE PAST 24 HOURS, WHILE 3450 (S20E41) HAS PRODUCED ONLY OCCASIONAL SUBFLARES.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE WHILE REGION 3432 IS RAPIDLY DECAYING. MODERATE ACTIVITY WILL PROBABLY CONTINUE DIMINISHINGLY THROUGH THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED UNTIL 0500 UT WHEN ACTIVE CONDITIONS WERE INDICATED BY THREE CONSECUTIVE K INDICES OF FOUR. UNSETTLED CONDITIONS ARE EXPECTED TO RETURN DURING THE LATTER HALF OF 7 NOV AND REMAIN UNSETTLED FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 08 NOV-10 NOV

CLASS M 70/50/50

CLASS X 15/10/10

PROTON 15/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 06 NOV 249

ESTIMATED 07 NOV 245

PREDICTED 08 NOV-10 NOV 242/233/233

90 DAY MEAN 06 NOV 227

V. GEOMAGNETIC A INDICES

OBSERVED AFR 05 NOV 011 AP 06 NOV 009

ESTIMATED AFR 06 NOV 011 AFR/AP 07 NOV 017/020

PREDICTED AFR/AP 08 NOV-10 NOV 013/020-010/015-008/012

SOLTERWARN

BT

HXUS BOU 071300

PREDM 07003 03009 06010

PREDX 01503 01009 01010

PREDP 01503 01009 01010

PCAF 00208

TENCM 24208 23809 23310

AFRED 01308 01009 00810

AFAPF 02008 01509 01210

KKK 33333 43332 32232

BT

HFUS 3 BOU 072200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 311B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 07 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 07/1200Z TO 07/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST NINE HOURS WITH ONLY C-CLASS X-RAY EVENTS OBSERVED SINCE THIS MORNING'S M6/1B FLARE IN REGION 3432 (S10W43). THIS REGION CONTINUES TO FLARE, BUT THE LARGEST PRODUCED THIS PERIOD WAS A SN AT 1645Z MAXIMUM. THE SLOW DECAY OF THIS REGION CONTINUES AS WELL AS A DETERIORATION OF ITS MAGNETIC COMPLEXITY (POSSIBLE LOSS OF THE DELTA CONFIGURATION). REGION 3450 (S21E37) HAS DOMINATED THE DISK DURING THE PERIOD, PRODUCING NUMEROUS FLARES WHILE EXHIBITING SIGNIFICANT GROWTH AND INCREASING COMPLEXITY (NOW A BETA GAMMA). THE LARGEST OF THESE FLARES WAS A C3/1B AT 1828Z WITH MINOR RADIO BURSTS ASSOCIATED WITH IT. THREE NEW REGIONS WERE NUMBERED, 3453 (N25E56), 3454 (N04E46), AND 3455 (N17E57), ALL OF WHICH ARE SMALL SIMPLE GROUPS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO RETURN TO THE MODERATE LEVEL WITH M-CLASS EVENTS PROBABLE FROM REGION 3432 ALONG WITH THE INCREASING POTENTIAL FOR MODERATE EVENTS FROM THE DEVELOPING SOUTHEAST REGIONS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DURING THE FIRST PART OF THE PERIOD BUT GRADUALLY QUIETED BY THE END OF THE NINE HOUR PERIOD. THE SUSPECTED CAUSE OF THE ACTIVITY WAS THE PASSAGE OF A PLUS TO MINUS SECTOR BOUNDARY LEADING THE ACTIVE REGION 3432. UNSETTLED CONDITIONS ARE EXPECTED TO PERSIST UNTIL 9 NOV WHEN ACTIVE LEVELS ARE EXPECTED AS A RESULT OF TODAY'S M6 FLARE.

III. EVENT PROBABILITIES 08 NOV-10 NOV

CLASS M 70/60/60

CLASS X 15/10/10

PROTON 15/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 07 NOV 246

PREDICTED 08 NOV-10 NOV 242/233/233

90 DAY MEAN 07 NOV 228

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 06 NOV 008/009

ESTIMATED AFR/AP 07 NOV 018/020

PREDICTED AFR/AP 08 NOV-10 NOV 013/020-015/015-025/025

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