

HFUS 3 BOU 021400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SOF NUMBER 337A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 120011Z DEC 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. REGION 2810 (S10E07) PRODUCED 2 SIGNIFICANT FLARES WITHIN 6 HOURS. THE FIRST WAS AN M1/1B AT 0630 UT WHICH WAS OBSERVED BY LEARMONTH TO HAVE PARALLEL RIBBONS WHICH COMPLETELY COVERED 2 OF THE 4 LARGE UMBRA IN THE DELTA CONFIGURATION TRAILER SPOT. THE SECOND EVENT WAS AN M7/SB FLARE MAXING AT 1128 UT. THIS FLARE CAUSED SHORT WAVE FADES OUT TO 15 MHZ. REGION 2812 (N17W59) IS STILL EXPERIENCING SLOW GROWTH INCLUDING UMBRAL DARKENING, AND HAS PRODUCED C-CLASS SUBFLARES. REGIONS 2817 (S20E47) AND 2818 (N26E54) ARE NOW SEEN TO BE DULL AND UNINTERESTING. AN ACTIVE SURGE REGION ON THE SOUTH EAST LIMB MAY BE SIGNALING THE RETURN OF OLD REGION 2779.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE. REGIONS 2810 AND 2812 ARE BOTH CAPABLE OF SIGNIFICANT FLARES, AND 2810 COULD PRODUCE A MAJOR FLARE.

II. THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DECREASING TO QUIET DURING THE PAST 24 HOURS. AT APPROXIMATELY 01/2100 UT THE INTER-PLANETARY FIELD CHANGED FROM POINTING AWAY FROM THE SUN TO POINTING PREDOMINATELY TOWARD THE SUN WHILE OTHERWISE REMAINING MOSTLY NORTHWARD. IF THE FIELD CONTINUES NORTHWARD, THE DISTURBANCE FORECAST AS A RESULT OF THE SOUTHERN, NEGATIVE CORONAL HOLE WILL NOT OCCUR, AND YESTERDAY'S ESTIMATES OF GEOMAGNETIC ACTIVITY HAVE BEEN DECREASED FROM UNSETTLED TO QUIET LEVELS FOR THE NEXT TWO DAYS. ON THE THIRD DAY, A DISTURBANCE CAUSED BY TODAY'S M7 FLARE IS POSSIBLE. A PROTON EVENT IS NOT EXPECTED FROM THIS FLARE.

III. EVENT PROBABILITIES: 03 - 05 DEC

CLASS M 75/80/85

CLASS X 25/25/25

PROTON 10/10/15

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 01 DEC 229

ESTIMATED 02 DEC 237

PREDICTED 03-05 DEC 245/250/250

90 DAY MEAN 01 DEC 204

V. GEOMAGNETIC A INDICES

OBSERVED AFR 30 NOV 16 AP 01 DEC 14

ESTIMATED AFR 01 DEC 17 AFR/AP 02 DEC 04/05

PREDICTED AFR/AP 03-05 DEC 07/08 07/08 15/15

SOLTERWARN

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HFUS 1 BOU 022200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SOF NUMBER 337B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 02 DECEMBER 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. REGION 2810 (S10E07) PRODUCED 2 SIGNIFICANT FLARES WITHIN 6 HOURS. THE FIRST WAS AN M1/1B AT 0630 UT WHICH WAS OBSERVED BY LEARMONTH TO HAVE PARALLEL RIBBONS WHICH COMPLETELY COVERED 2 OF THE 4 LARGE UMBRA IN THE DELTA CONFIGURATION TRAILER SPOT. THE SECOND EVENT WAS AN M7/SB FLARE MAXING AT 1128 UT. THIS FLARE CAUSED SHORT WAVE FADES OUT TO 15 MHZ. REGION 2812 (N17W59) IS STILL EXPERIENCING SLOW GROWTH INCLUDING UMBRAL DARKENING, AND HAS PRODUCED C-CLASS SUBFLARES. REGIONS 2817 (S20E47) AND 2818 (N26E54) ARE NOW SEEN TO BE DULL AND UNINTERESTING. AN ACTIVE SURGE REGION ON THE SOUTH EAST LIMB MAY BE SIGNALING THE RETURN OF OLD REGION 2779.

ADDITIONS TO 1200Z ---

SOLAR ACTIVITY HAS CONTINUED AT A MODERATE LEVEL, WITH TWO M CLASS X-RAY EVENTS FROM REGION 2810 (S10E01) AN M2/1B AT 1241 UT AND A M1/1B AT 1342 UT, ONLY MINOR RADIO BURSTS, AT DISCRETE FREQUENCIES, WERE REPORTED WITH THESE EVENTS. FIVE NEW REGIONS WERE NUMBERED TODAY 2820 (N25W21), 2821 (S11E24), 2822 (N15E34) AND 2823 (S28E44) ARE ALL SIMPLE GROUPS. REGION 2824 (S12E73), THE RETURN OF OLD 2779, CURRENTLY IS AW TYPE GROUP. HOWEVER IT APPEARS MORE IS TO FOLLOW.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE. REGION 2810 IS CAPABLE OF CONTINUED M CLASS EVENTS.

II. THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DECREASING TO QUIET DURING THE PAST 24 HOURS. AT APPROXIMATELY 01/2100 UT THE INTER-PLANETARY FIELD CHANGED FROM POINTING AWAY FROM THE SUN TO POINTING PREDOMINATELY TOWARD THE SUN WHILE OTHERWISE REMAINING MOSTLY NORTHWARD. IF THE FIELD CONTINUES NORTHWARD, THE DISTURBANCE FORECAST AS A RESULT OF THE SOUTHERN, NEGATIVE CORONAL HOLE WILL NOT OCCUR, AND YESTERDAY'S ESTIMATES OF GEOMAGNETIC ACTIVITY HAVE BEEN DECREASED FROM UNSETTLED TO QUIET LEVELS FOR THE NEXT TWO DAYS. ON THE THIRD DAY, A DISTURBANCE CAUSED BY TODAY'S M7 FLARE IS POSSIBLE. A PROTON EVENT IS NOT EXPECTED FROM THIS FLARE.

III. EVENT PROBABILITIES: 03 - 05 DEC

CLASS M 70/70/70

CLASS X 15/15/15

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 02 DEC 219

PREDICTED 03-05 DEC 228/228/228

90 DAY MEAN 02 DEC 204

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 01 DEC 17/14

ESTIMATED AFR/AP 02 DEC 07/05

PREDICTED AFR/AP 03-05 DEC 07/07 07/07 15/15

SOLTERWARN

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