

HFUS 1 BOU 131230  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 194A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 1300Z 13 JULY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
12/1200Z TO 13/1200Z:

SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. REGION 3204 (S28E19) PRODUCED AN M1/SB FLARE MAXING ON JULY 12/1210UT. THIS REGION IS STILL GROWING SLOWLY AND POSSESSES A STRONG DELTA MAGNETIC CONFIGURATION IN ITS LEADER SPOT. REGION 3209 (N21W53) HAS SHOWN RAPID GROWTH TO A D-TYPE GROUP AND HAS PRODUCED NUMEROUS C-CLASS X-RAY FLARES SINCE YESTERDAY. REGION 3203 (S09E21) HAS STABILIZED BUT REMAINS AN IMPRESSIVE E-TYPE GROUP CAPABLE OF SIGNIFICANT FLARES. REGION 3210 (N23E11) HAS AN ACTIVE CIRCULAR INVERSION LINE AND AN ARCH FILAMENT SYSTEM EMBEDDED IN A BRIGHT COMPACT PLAGE. NEW REGION 3213 (S23E31) IS A SPOTLESS BUT FLARING PLAGE EAST OF REGION 3204. A SPOTTED REGION IS CROSSING THE EAST LIMB NEAR NORTH 14.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE WITH THE POSSIBILITY OF SIGNIFICANT ACTIVITY FROM 3204, 3210, AND 3203. IF DEVELOPMENT CONTINUES IN 3204 AND 3210, MAJOR FLARES COULD OCCUR.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO ACTIVE FOR THE PAST 24 HOURS. THE FIELD IS EXPECTED TO REMAIN MOSTLY UNSETLED THROUGHOUT THE FORECAST PERIOD WITH ISOLATED ACTIVE PERIODS POSSIBLE THROUGH 14 JULY.

III. EVENT PROBABILITIES: 14 - 16 JUL

CLASS M 70/75/80

CLASS X 15/20/20

PROTON 05/10/15

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 12 JUL 164

ESTIMATED 13 JUL 170

PREDICTED 14-16 JUL 173/175/178

90 DAY MEAN 12 JUL 180

V. GEOMAGNETIC A INDICES

OBSERVED AFR 11 JUL 17 AP 12 JUL 21

ESTIMATED AFR 12 JUL 18 AFR/AP 13 JUL 13/12

PREDICTED AFR/AP 14-16 JUL 15/12 10/10 12/12

SOLTERWARN

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HFUS 3 BOU 132200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 194B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 13 JULY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/1200Z TO 13/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST NINE HOURS. ONLY LOW LEVEL C-CLASS SUBFLARES WERE OBSERVED DURING THE PERIOD FROM REGIONS 3208 (N14E09), 3210 (N23E05), 3209 (N21W60) AND 3203 (S09E13). ALL THESE REGIONS EXCEPT 3208 HAVE SHOWN GROWTH AND INCREASING COMPLEXITY. REGION 3204 (S28E12), WHICH HAS NOT FLARED DURING THE PERIOD, HAS AN IMPRESSIVE MAGNETIC GRADIENT WITH A BETA-DELTA CONFIGURATION. NEW REGION 3214 (N5E67) HAS ROTATED OVER EAST LIMB.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD INCREASE TO THE MODERATE LEVEL WITH M-CLASS OR GREATER X-RAY EVENTS LIKELY FROM REGIONS 3203, 3204 AND 3210.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED DURING THE PAST NINE HOURS. AN INCREASE TO SLIGHTLY ACTIVE CONDITIONS IS EXPECTED DURING THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 14 JULY - 16 JULY

CLASS M 70/75/80

CLASS X 15/20/20

PROTON 05/10/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 JULY 171

PREDICTED 14-16 JULY 175/178/183

90-DAY MEAN 13 JULY 179

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 JULY 20/21

ESTIMATED AFR/AP 13 JULY 11/12

PREDICTED AFR/AP 14-16 JULY 15/12 - 10/10 - 12/12

SOLTERWARN

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