

HEUS 1 POU 291300 /
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 210A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 29 JULY 1981

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
28/1200Z TO 29/1200Z:

SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3234 (S12W17) PRODUCED A
M3/1R FLARE AT 28/2012UT AND NUMEROUS SUBFLARES DURING THE PAST
24 HOURS. THIS REGION REMAINS LARGE WITH A SPOT GROUP OF CLASS/
AREA F/1500 AND A MAGNETIC DELTA CONFIGURATION. REGION 3221
(S07W72) HAS PRODUCED ONLY 2 CLASS C EVENTS SINCE 28/1200UT. IT
APPEARS TO BE DECAYING SLIGHTLY AS IT APPROACHES WEST LIMB. THREE
SMALL REGIONS HAVE BEEN NUMBERED, REGIONS 3248 (N17E16), 3249
(S01E28) AND 3250 (S23E59).

II. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE WITH MAJOR FLARES
POSSIBLE FROM BOTH REGION 3234 AND REGION 3221.

III. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN SLIGHTLY UNSETTLED DURING THE
PAST 24 HOURS. ACTIVE CONDITIONS ARE EXPECTED 30-31 JULY AS A
RESULT OF RECENT FLARE ACTIVITY.

IV. EVENT PROBABILITIES: 30 JULY - 01 AUGUST

CLASS M 85/80/75

CLASS X 35/30/25

PROTON 30/25/20

PCAF YELLOW

V. OTTAWA 10.7 FLUX

OBSERVED 28 JUL 217

ESTIMATED 29 JUL 200

PREDICTED 30 JUL-01 AUG 190/184/180

90 DAY MEAN 28 JUL 181

VI. GEOMAGNETIC A INDICES

OBSERVED AFR 27 JUL 29 AP 28 JUL 13

ESTIMATED AFR 28 JUL 11 AFR/AP 29 JUL 12/33

PREDICTED AFR/AP 30 JUL-01 AUG 30/45 15/25 12/20

SOLTERWARM

RT

HFUS 3 BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO
SDF NUMBER 210B

JC INT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 29 JULY 1981

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 29/1200Z TO 29/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 9 HOURS. REGION 3234 (S11W25) SHOWS VERY SLIGHT SPOT DECAY WHILE RETAINING ITS VERY COMPLEX MAGNETIC STRUCTURE. REGION 3221 (S07W80) IS JUST AT THE LIMB AND REMAINS A POTENTIAL THREAT FOR AT LEAST ANOTHER COUPLE OF DAYS. SMALL SPOTS CONTINUE TO DEVELOP RANDOMLY ON THE DISK AND A SMALL SPOT IS ROTATING OVER THE EAST LIMB NEAR NE08 AND IS NUMBER 3252. CORONAL RAIN WAS OBSERVED OVER THE NW LIMB EARLIER TODAY, PERHAPS ASSOCIATED WITH THE DEPARTURE OF 3229.

I.B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD RETURN TO AT LEAST MODERATE LEVELS WITH ALL OF THE INGREDIENTS FOR X-LEVEL FLARES REMAINING FAIRLY CONSTANT.

I.C. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET THIS ZULU DAY. THE IMPACT FROM RECENT FLARE ACTIVITY IS EXPECTED TO BE REFLECTED IN MINOR STORM CONDITIONS ON 30 JULY.

I.II. EVENT PROBABILITIES 30 JULY - 01 AUGUST

CLASS M 25/80/75

CLASS X 35/30/25

PROTON 30/25/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 JULY 207

PREDICTED 30 JULY - 01 AUGUST 197/190/186

90-DAY MEAN 29 JULY 181

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 28 JULY 12/13

ESTIMATED AFR/AP 29 JULY 08/15

PREDICTED AFR/AP 30 JULY - 01 AUGUST 30/45 + 25/30 + 15/20

SOLTERWARN

BT