

HFXUS 1 BOU 111300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 315A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 11 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
10/1200Z TO 11/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. THE
ONLY M CLASS XRAY EVENT IN THE PERIOD HAS BEEN AN M1 AT
11/0847Z WHICH COULD BELONG TO EITHER OF THE SIMULTANEOUS
SUBNORMAL FLARES OCCURRING IN REGIONS 3454(N03W02), AND
3456(N18E42) AT THAT TIME. REGION 3451(N18W01) IS CURRENTLY
THE MOST NOTEWORTHY, HAVING DOUBLED IN AREA AND INCREASED IN
COMPLEXITY IN RECENT HOURS. THE FLARE POTENTIAL OF THIS REGION
APPEARS TO AT LEAST MATCH THAT OF REGIONS 3450(S20W09), AND
3452(S19E02).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN
MODERATE WITH MOST OF THE ACTIVITY COMING FROM REGIONS 3450 AND
3451. NEITHER OF THESE REGIONS APPEARS PARTICULARLY LIKELY TO
PRODUCE MAJOR FLARES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN UNSETTLED. IT IS EXPECTED TO REMAIN AT UNSETTLED TO NEAR
ACTIVE CONDITIONS.

III. EVENT PROBABILITIES 12 NOV-14 NOV

CLASS M 70/70/80

CLASS X 10/10/10

PROTON 05/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 NOV 226

ESTIMATED 11 NOV 222

PREDICTED 12 NOV-14 NOV 220/220/220

90 DAY MEAN 10 NOV 229

V. GEOMAGNETIC A INDICES

OBSERVED AFR 09 NOV 006 AP 10 NOV 015

ESTIMATED AFR 10 NOV 014 AFR/AP 11 NOV 015/020

PREDICTED AFR/AP 12 NOV-14 NOV 012/020-012/014-015/014

SOLTERWARN

BT

HFXUS BOU 111300

PREDM 07012 07013 08014

PREDX 01012 01013 01014

PREDP 00512 01013 01014

PCAFT 00112

TENCM 22012 22013 22014

AFRED 01212 01213 01514

AFAPF 02012 01413 01414

KKK 33233 32223 33332

BT

HFUS 3 BOUL 112200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDE NUMBER 315B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 11 NOV 1981

I A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
11/1200Z TO 11/2100Z: SOLAR ACTIVITY HAS BEEN NEAR MODERATE
LEVELS. REGION 3450 (S19W14) PRODUCED A C9/SB FLARE AT 1728UT.
THIS REGION IS GROWING IN SPOT COMPLEXITY AND CONTAINS A DELTA
CONFIGURATION TODAY. REGION 3451 (N18W07) HAS INCREASED SIG-
NIFICANTLY IN SPOT COUNT AND COMPLEXITY. STRONG GRADIENTS ARE
DEVELOPING IN THE SPOT GROUP WITH A DELTA CONFIGURATION REPORTED.
A C7/1B FLARE WAS OBSERVED AT 1453UT IN THIS REGION. REGIONS
3454 (N03W09), 3456 (N18E34) AND 3457 (S11E40) HAVE ALSO SHOWN
MINOR GROWTH AND PRODUCED SUBFLARES IN THE PAST 9 HOURS.

I B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY TO REMAIN AT A
MODERATE LEVEL WITH INCREASING ACTIVITY FROM REGIONS 3450 AND
3451 IN THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: A MINOR GEOMAGNETIC
STORM BEGAN WITH A SUDDEN COMMENCEMENT AT 1238UT OF 70 GAMMAS
IN BOULDER. IT APPEARS TO BE ASSOCIATED WITH THE M6/1B FLARE
IN REGION 3432 ON 07/0357UT. ACTIVE CONDITIONS ARE EXPECTED FOR
THE NEXT 12 HOURS AND THEN UNSETLED CONDITIONS SHOULD CONTINUE
THRU THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 12 - 14 NOV

CLASS M 70/70/80

CLASS X 10/10/10

PROTON 05/10/10

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 11 NOV 221

PREDICTED 12-14 NOV 218/215/212

90 DAY MEAN 11 NOV 229

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 10 NOV 15/15

ESTIMATED AFR/AP 11 NOV 30/30

PREDICTED AFR/AP 12-14 NOV 18/20/12/14/12/14

SOLAR FLARE WARN

PT