

HFUS 1 BOU 151300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 258A

JOINT USAF/NOAA REPORT OF SOLAR ACTIVE REGIONS AND ACTIVITY
FROM 14/1200Z TO 15/1200Z:

SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3317 (N10W69) PRODUCED AN M1/SF EVENT AT 15/0103UT, ONLY MINOR RADIO RECORDED. A M2/, NO OPTICAL, OCCURRED AT 15/0114UT WITH MINOR RADIO BURSTS. REGION 3332 (N16E11) HAS EXHIBITED RAPID GROWTH THIS PERIOD, CONTAINS A STRONG ARCH FILAMENT SYSTEM. MAGNETIC INFORMATION SHOWS A SIMPLE BETA CONFIGURATION WITH STRONG GRADIENTS, IF GROWTH CONTINUES A DELTA MAY FORM IN THE CENTRAL PORTIONS OF THE REGION.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. REGIONS 3317 AND 3332 HAVE THE POTENTIAL FOR M-CLASS ACTIVITY WITH REGION 3317 CAPABLE OF AN ISOLATED X-CLASS EVENT. CONTINUED GROWTH IN 3332 AND OLD RETURNING REGIONS SHOULD KEEP ACTIVITY AT MODERATE LEVELS DURING FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED EXCEPT FOR THE PERIOD 15/0600UT TO 15/0900UT WHEN A K-VALUE OF 5 WAS OBSERVED AT BOULDER. THE FIELD IS EXPECTED TO BE ACTIVE ON 16 SEPT THEN UNSETTLED THE REST OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 16-18 SEPT

CLASS M 75/80/80

CLASS X 10/10/10

PROTON 10/10/05

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 14 SEPT 239

ESTIMATED 15 SEPT 227

PREDICTED 16-18 SEPT 232/235/235

90 DAY MEAN 14 SEPT 205

V. GEOMAGNETIC A INDICES

OBSERVED AFR 13 SEPT 08 AP 14 SEPT 11

ESTIMATED AFR 14 SEPT 09 AFR/AP 15 SEPT 16/17

PREDICTED AFR/AP 16-18 SEPT 18/18 12/12 10/10

SOLTERWARN

BT

HFUS 3 BOU 152200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO
SDF NUMBER 258B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 15 SEPTEMBER 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200Z
TO 15/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3332
(N15E05) PRODUCED AN M1/SB THAT MAXED AT 1350Z AND REGION 3334
(S04E33) PRODUCED A SLOW RISE M1/2B THAT MAXED AT 1913Z. REGION
3332 IS A GROWING D CLASS SPOT GROUP WHILE 3334 IS A FLUCTUATING
A CLASS SPOT GROUP. REGION 3329 (N19E09) HAS NOT CHANGED MUCH
BUT THE NEGATIVE TRAILER OF 3332 IS CROWDING THE POSITIVE POLARITY
SPOTS IN THE CENTRAL PORTION OF 3329 AND THE RESULTING STRESS
HAS CAUSED A SEGMENT OF PLAGE IN THAT AREA TO FLUCTUATE MOST OF
THE DAY. NUMEROUS SMALL SPOTS ARE EMERGING IN THE SOUTHEAST
QUADRANT BUT APPARENTLY SOON DIE. A SMALL SPOT WITH ASSOCIATED
SURGE ACTIVITY IS ROTATING ONTO THE DISK NEAR NE10. REGION 3317
(N10W75) IS NEARING WEST LIMB TRANSIT.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN
MODERATE AS A RESULT OF THE INTERACTION OF 3329 AND 3332.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN GENERALLY UNSETTLED THE PAST 10 HOURS. NO MAJOR CHANGE IS
EXPECTED DURING THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 16 SEPTEMBER - 18 SEPTEMBER

CLASS M 75/80/80

CLASS X 10/10/10

PROTON 10/10/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 SEPTEMBER 228

PREDICTED 16-18 SEPTEMBER 224/220/220

90-DAY MEAN 15 SEPTEMBER 206

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 14 SEPTEMBER 09/11

ESTIMATED AFR/AP 15 SEPTEMBER 10/13

PREDICTED AFR/AP 16-18 SEPTEMBER 12/15 - 12/12 - 10/10

SOLTERWARN

BT