

HFUS 1 BOU 141300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 045A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 14 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/1200Z TO 14/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3607(N05E48) GAVE AN M1/SB FLARE AT 13/2052Z, AND 3594(S11W58) AN M1/1B AT 14/0341Z. AT 14/0812Z REGION 3603(S10W39) GAVE A C9/1B WITH 1800 F.U. AT 245MHZ AND SIGNIFICANT OUTPUT AT THE OTHER OBSERVED DISCRETE FREQUENCIES. ONCE AGAIN AT 14/0940Z REGION 3603 FLARED. AN M2/1B WITH 4800 F.U. AT 245 MHZ AND TYPE II EMISSION WAS OBSERVED. REGION 3594 CONTINUES A SLOW DECAY, WHILE RETAINING MAGNETIC COMPLEXITY, DISPLAYING ACTIVE FILAMENTS AND ENHANCED PLAGE. THE FOLLOWING SPOTS IN THIS REGION APPEAR TO BE OVERTAKING THE REGION AS A WHOLE. REGION 3603 HAS STABILIZED IN WHITE LIGHT AND SHOWS LITTLE CHARACTER ON WHICH TO BASE RECENT RADIO RICH ACTIVITY OBSERVED. REGION 3607 IS GROWING, IS LARGE AT ABOUT 1000 MILLIONTHS AND SO FAR APPEARS TO BE A FAIRLY SIMPLE REGION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE MODERATE WITH OCCASIONAL MAJOR FLARES POSSIBLE IN REGION 3594. M CLASS XRAY FLARES ARE LIKELY FROM ONE OR MORE OF THE THREE SIGNIFICANT REGIONS DISCUSSED.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD CONTINUES AT MINOR STORM LEVELS. IT SHOULD SUBSIDE RATHER RAPIDLY THROUGH ACTIVE TO HIGH UNSETTLED LEVELS BY 17 FEB. AT THAT TIME ACTIVITY MAY INCREASE SHARPLY AGAIN FOR SEVERAL HOURS FROM THE FLARE OF 0940Z TODAY.

III. EVENT PROBABILITIES 15 FEB-17 FEB

CLASS M 95/95/90

CLASS X 20/20/15

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 FEB 213

ESTIMATED 14 FEB 200

PREDICTED 15 FEB-17 FEB 188/176/162

90 DAY MEAN 13 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR 12 FEB 027 AP 13 FEB 043

ESTIMATED AFR 13 FEB 035 AFR/AP 14 FEB 035/035

PREDICTED AFR/AP 15 FEB-17 FEB 020/020-015/015-020/020

SOLTERWARN

BT

HXUS BOU 141300

PREDM 09515 09516 09017

PREDX 02015 02016 01517

PREDP 01015 01016 01017

PCAFT 00215

TENCM 18815 17616 16217

AFRED 02015 01516 02017

AFAPF 02015 01516 02017

KKK 44344 33333 44332

HFUS 3 BOU 142200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 045B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 14 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
14/1200Z TO 14/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION
3594 (S10W63) PRODUCED A M1/1B FLARE AT 14/2031Z. THIS REGION
HAS NOT GROWN OR CHANGED SIGNIFICANTLY. REGION 3607 (N05E50)
REMAINS LARGE BUT IT HAS A SIMPLE STRUCTURE. IT HAS PRODUCED
ONLY SMALL SUBFLARES TODAY. REGION 3603 (S10W44) IS BEGINNING
TO DECLINE IN SPOT SIZE AND COMPLEXITY AND HAS NOT BEEN ACTIVE
SINCE 1200Z.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
CONTINUE AT A MODERATE LEVEL WITH M-CLASS FLARES LIKELY FROM
REGION 3594 AND POSSIBLE FROM REGIONS 3603 AND 3607.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD
REMAINS AT MINOR STORM LEVELS BUT SHOULD DECREASE TO UNSETTLED
CONDITIONS IN THE NEXT 12 HOURS. UNSETTLED CONDITIONS ARE
EXPECTED THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 15 FEB-17 FEB

CLASS M 95/95/90

CLASS X 20/20/15

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 FEB 190

PREDICTED 15 FEB-17 FEB 180/165/160

90 DAY MEAN 14 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 FEB 035/043

ESTIMATED AFR/AP 14 FEB 042/040

PREDICTED AFR/AP 15 FEB-17 FEB 020/020-015/015-020/020

SOLTERWARN

BT

HXUS BOU 142200

PREDM 09515 09516 09017

PREDX 02015 02016 01517

PREDP 01015 01016 01017

PCAFT 00215

TFCNM 18015 16516 16017

AFRED 02015 01516 02017

AFAPF 02015 01516 02017

BT