

HFUS 1 BOU 151300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 046A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 15 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 14/1200Z TO 15/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3594(S10W73) FLARED TO M1/1B AT 14/2008Z. AN UNASSOCIATED M1 FLARE OCCURRED AT 15/0319Z. REGION 3601(S14W30) GAVE A C6/1B FLARE AT 15/0717Z. REGIONS 3603(S10W54), AND 3607(N05E31) PRODUCED ONLY SUBFLARE ACTIVITY. REGION 3603, AFTER A BRIEF PERIOD OF ACTIVITY, IS REPORTED IN DECLINE. REGIONS 3594, AND 3607 APPEAR CAPABLE OF ADDITIONAL MAJOR ACTIVITY, BUT HAVE BEEN QUIESCENT IN RECENT HOURS. A SINGLE REPORT OF A NEW REGION, ON THE EAST LIMB AT N12, INDICATES A C CLASS GROUP WITH THREE OR MORE SPOTS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN MODERATE. MAJOR FLARE POTENTIAL FOR THE WHOLE DISK SHOULD DECREASE SIGNIFICANTLY WHEN REGION 3594 LEAVES ON 17 FEB.

III. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS DECLINED TO ACTIVE FROM MINOR STORM LEVELS IN RECENT HOURS. IT IS EXPECTED TO FALL TO NEAR UNSETTLED LEVELS UNTIL 17 FEB. FLARE INDUCED ACTIVITY IS EXPECTED AT THAT TIME. ON 18 FEB., CORONAL HOLE INFLUENCE SHOULD TAKE OVER AND THE FIELD SHOULD BE AT ACTIVE TO MINOR STORM LEVELS AS A RESULT.

III. EVENT PROBABILITIES 16 FEB-18 FEB

CLASS M 90/90/80

CLASS X 20/20/10

PROTON 10/10/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 FEB 190

ESTIMATED 15 FEB 180

PREDICTED 16 FEB-18 FEB 172/165/160

90 DAY MEAN 14 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR 13 FEB 035 AP 14 FEB 041

ESTIMATED AFR 14 FEB 042 AFR/AP 15 FEB 019/025

PREDICTED AFR/AP 16 FEB-18 FEB 012/015-019/020-028/025

SOLTERWARN

BT

HXUS BOU 151300

PREDM 09016 09017 08018

PREDX 02016 02017 01018

PREDP 01016 01017 00518

PCAF 00216

TENCM 17216 16517 16018

AFRED 01216 01917 02818

ATAPP 01516 02017 02518

KKK 33343 32233 34433

BT

HFUS 3 BOU 152200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 046B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 15 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200Z TO 15/2100Z: SOLAR ACTIVITY HAS BEEN LOW THE PAST 12 HOURS WITH ONLY SUBFLARES REPORTED IN REGIONS 3607 (N04E28), 3603 (S09W56) AND NEW REGION 3610 (N12E72). REGION 3607 IS THE MOST INTERESTING REGION BECAUSE IT CONTAINS AN ACTIVE DARK FILAMENT WHICH TRIGGERED SEVERAL SMALL FLARES AND BRIGHT POINTS. REGION 3603 IS STABLE. NEW REGION 3610 ROTATED ONTO THE DISK WITH A D-TYPE SPOT GROUP AND THERE APPEARS TO BE ANOTHER REGION BEHIND IT BUT STILL BEYOND THE LIMB. LARGE REGION 3594 (S09S75) HAS BEEN INACTIVE AS IT ROTATES BEYOND THE WEST LIMB. SMALL NEW REGION 3609 (N12E22) HAS DEVELOPED JUST NORTH OF LARGE REGION 3607.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DURING THE FORECAST PERIOD. M-CLASS EVENTS ARE POSSIBLE FROM REGIONS 3594 AS IT ROTATES BEYOND THE LIMB, AS WELL AS REGIONS 3607 AND 3603.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS DECLINED FROM ACTIVE TO UNSETTLED CONDITIONS IN THE PAST 12 HOURS. UNSETTLED CONDITIONS ARE EXPECTED UNTIL 17-18 FEB WHEN RECENT FLARE AND CORONAL HOLE EFFECTS MAY BEGIN.

III. EVENT PROBABILITIES 16 FEB-18 FEB

CLASS M 90/90/80

CLASS X 20/20/10

PROTON 10/10/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 FEB 185

PREDICTED 16 FEB-18 FEB 177/170/165

90 DAY MEAN 15 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 14 FEB 037/041

ESTIMATED AFR/AP 15 FEB 020/020

PREDICTED AFR/AP 16 FEB-18 FEB 012/015-019/020-028/025

SOLTERWARN

BT

HXUS BOU 152200

PREDM 09016 09017 08018

PREDX 02016 02017 01018

PREDP 01016 01017 00518

PCAF 00216

TENCM 17716 17017 16518

AFRED 01216 01917 02818

AFAPF 01516 02017 02518

BT