

HFXS 1 BOU 161300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 047A
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 16 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200Z TO 16/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3607(N04E17) HAS BEEN THE PRINCIPAL SOURCE OF ACTIVITY THIS PERIOD. EVENTS FROM THIS REGION INCLUDE: C1/0B WITH CENTIMETRIC BURSTS INCLUDING 420 AND 330 F. U. AT 245 AND 2695 MHZ RESPECTIVELY AT 15/1319Z, C1/0N AT 15/1443Z, C2/0N AT 15/1725Z, AND C3/0F AT 16/0752Z. OTHER REGIONS CONTRIBUTING VERY MODESTLY TO ACTIVITY INCLUDE 3603(S09W67), 3594(S09W86), AND 3600(S08W54). ANALYSIS HAS BEEN LIMITED BY OBSERVING CONDITIONS. REGION 3594 IS LEAVING THE DISK BUT MAY ALSO BE DECLINING RAPIDLY AS WELL. WITH THE EXCEPTION OF 3610(N12E61), ALL OTHER REGIONS ARE STABLE OR DECLINING. REGION 3610 IS NEW ON THE DISK AND APPEARS TO BE GROWING RAPIDLY, SHOWING EMERGING FLUX, ARCH FILAMENTS, BUT WITH A SIMPLE MAGNETIC STRUCTURE TO THE CURRENT TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE MODERATE TO LOW. REGIONS 3607, 3610, AND 3594 WILL BE THE MOST LIKELY SOURCES OF ACTIVITY. REGION 3594 IS PERHAPS STILL CAPABLE OF A MAJOR FLARE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS DECLINED FROM NEAR ACTIVE TO NEAR QUIET LEVELS IN RECENT HOURS. GEOMAGNETIC ACTIVITY IS EXPECTED TO BE LOW TO UNSETTLED UNTIL 17 FEB. AT WHICH TIME FLARE ACTIVITY FROM 14 FEB. MAY PRODUCE ACTIVE LEVELS. ACTIVE LEVELS MAY BE EXPECTED TO PERSIST THROUGH 18 AND MUCH OF 19 FEB. AS WELL, DUE TO THE INFLUENCE OF THE CORONAL HOLE NOW JUST PAST CENTRAL MERIDIAN.

III. EVENT PROBABILITIES 17 FEB-19 FEB

CLASS M 80/70/70

CLASS X 10/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 FEB 185

ESTIMATED 16 FEB 170

PREDICTED 17 FEB-19 FEB 162/156/152

90 DAY MEAN 15 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR 14 FEB 037 AP 15 FEB 019

ESTIMATED AFR 15 FEB 020 AFR/AP 16 FEB 010/010

PREDICTED AFR/AP 17 FEB-19 FEB 019/020-028/025-028/025

SOLTERWARN

BT

HXUS BOU 161300

PREDM 08017 07018 07019

PREDX 01017 00518 00519

PREDP 00517 00518 00519

PCAFT 00117

TENCM 16217 15618 15219

AFRED 01917 02818 02819

AFAPF 02017 02518 02519

KKK 22244 32333 45543

BT

HFXUS 3 BOU 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 047B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 16 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 16/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3594 (S09W87) PRODUCED AN M2 XRAY EVENT WITH SURGING ON THE LIMB AT 16/1902Z. THIS REGION APPEARS TO BE DECLINING AS IT ROTATES BEYOND THE LIMB. REGION 3607 (N05E14) CONTRIBUTED MINOR ACTIVITY WITH A LONG C1/SB FLARE FROM 1506Z TO 1634Z AND AN ASSOCIATED MODERATE RADIO BURST. THE NEUTRAL LINE COMPLEXITY AND SPOT GROUP CHANGES IN 3607 INDICATE FURTHER MODERATE LEVEL ACTIVITY IS POSSIBLE. ALL OTHER REGIONS HAVE BEEN INACTIVE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE, WITH M-CLASS XRAY EVENTS POSSIBLE FROM SEVERAL REGIONS INCLUDING 3594, 3607 AND 3610.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED THE PAST 24 HOURS. UNSETTLED TO ACTIVE CONDITIONS ARE EXPECTED DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 17 FEB-19 FEB

CLASS M 80/70/70

CLASS X 10/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 FEB 175

PREDICTED 17 FEB-19 FEB 167/162/160

90 DAY MEAN 16 FEB 200

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 FEB 017/019

ESTIMATED AFR/AP 16 FEB 007/010

PREDICTED AFR/AP 17 FEB-19 FEB 019/020-028/025-028/025

SOLTERWARN

BT

HFXUS BOU 162200

PREDM 08017 07018 07019

PREDX 01017 00518 00519

PREDP 00517 00518 00519

PCAFIT 00117

TFNCM 16717 16218 16019

AFRED 01917 02818 02819

AFAPP 02017 02518 02519

BT