

HFXS 1 BOU 261300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 299A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 26 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 25/1200Z TO 26/1200Z: SOLAR ACTIVITY HAS REMAINED MODERATE THIS PERIOD WITH A SINGLE M CLASS EVENT, AN M2/1B FLARE FROM REGION 3960(N12E14) AT 25/2248Z. THIS REGION REMAINS MAGNETICALLY COMPLEX WITH DELTA STILL PRESENT. REGION 3955(S10W17) HAS DECLINED, GRADIENTS HAVE RELAXED SOMEWHAT BUT ONE DELTA IS STILL REPORTED. REGION 3961(S06E23) HAS CONTINUED TO GROW RAPIDLY AND IS NOW AN E CLASS SIMPLE BETA GROUP. SPOT MOTION AND CONTINUOUS STRONG AFS APPARENTLY ASSOCIATED WITH LARGE SCALE RESTRUCTURING IN THAT AREA OF THE DISK MAKES THIS REGION WORTH CLOSE ATTENTION. REMAINING REGIONS ARE SIMPLE AND RELATIVELY SMALL.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN MODERATE WITH SOME REDUCTION IN POTENTIAL IN DECLINING REGION 3955 BALANCED AGAINST RECENT DEVELOPMENT IN REGION 3961.

II. GEOPHYSICAL SUMMARY AND FORECAST: A SUDDEN COMMENCEMENT AT 26/0031Z HAS BEEN FOLLOWED BY MINOR STORM CONDITIONS UP TO ISSUE TIME. ACTIVE CONDITIONS ARE EXPECTED UNTIL LATE ON 28 TO EARLY ON 29 OCT AT WHICH TIME EFFECTS OF FILAMENT DISAPPEARANCES BEFORE 25/1715Z MAY DEVELOP. ACTIVE TO MINOR STORM CONDITIONS ARE EXPECTED TO RESUME AND CONTINUE THROUGH THE END OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 27 OCT-29 OCT

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 OCT 202

ESTIMATED 26 OCT 206

PREDICTED 27 OCT-29 OCT 205/204/197

90 DAY MEAN 25 OCT 162

V. GEOMAGNETIC A INDICES

OBSERVED AFR 24 OCT 006 AP 25 OCT 018

ESTIMATED AFR 25 OCT 016 AFR/AP 26 OCT 026/020

PREDICTED AFR/AP 27 OCT-29 OCT 018/020-015/025-018/025

SOLTERWARN

BT

HXUS BOU 261300

PREDM 07027 07028 07029

PREDX 00527 00528 00529

PREDP 00527 00528 00529

PCAFT 00127

TENCM 20527 20428 19729

AFRED 01827 01528 01829

AFAPF 02027 02528 02529

KKK 33344 33333 34332

BT

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RENSPENBBUM862R00FOR TAPE

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 299B.

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 26 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 26/1200Z TO 26/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THIS PERIOD. REGION 3961 (S06E16) PRODUCED THE LARGEST EVENT OBSERVED THIS PERIOD A C2/SN AT 1630UT. REGIONS 3961, 3955 (S10W24) AND 3967 (N10W02) ALL HAVE ARCH-FILAMENT SYSTEMS. HOWEVER ONLY REGION 3961 IS REPORTED TO HAVE SHOWN RAPID GROWTH AND IS NOW ALMOST 500 MILLIONTHS WITH A BETA-GAMMA MAGNETIC CONFIGURATION. REGION 3955 HAS SHOWN LITTLE CHANGE THIS PERIOD BUT STILL HAS A BETA-GAMMA-DELTA. NEW REGION 3967 IS A SIMPLE "C" TYPE GROUP BUT IT HAS EXHIBITED GROWTH THIS PERIOD. ALL OTHER REGIONS STABLE OR SLIGHTLY DECAYED THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE AT OR NEAR MODERATE LEVELS DURING THIS FORECAST PERIOD. REGIONS 3960 (N12E08), 3961 AND 3955 HAVE BOTH THE SIZE AND MAGNETIC COMPLEXITY TO PRODUCE AN ISOLATED "M" CLASS EVENT EACH DAY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE LEVELS THIS PERIOD. THE FIELD IS EXPECTED TO BE ACTIVE DURING THE FORECAST PERIOD WITH PERIODS AT MINOR STORM LEVELS ON 29 OCT DUE TO THE EFFECTS OF THE FILAMENT WHICH DISAPPEARED SOME TIME ON 25 OCT.

III. EVENT PROBABILITIES 27 OCT-29 OCT

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 26 OCT 196

PREDICTED 27 OCT-29 OCT 195/193/188

90 DAY MEAN 26 OCT 163

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 25 OCT 013/018

ESTIMATED AFR/AP 26 OCT 028/028

PREDICTED AFR/AP 27 OCT-29 OCT 018/020-020/025-025/025

SOLTERWARN

BT