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HFXS 1 BOU 171300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 107A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 17 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 17/1200Z: SOLAR ACTIVITY WAS MODERATE DURING THE PAST 24 HOURS. REGION 3693 (S05W87) PRODUCED AN M2/SN FLARE AT 16/2126Z. THIS EVENT COINCIDED WITH A BSL TO 0.42R, MINOR RADIO NOISE BURSTS AT CENTIMETER WAVELENGTHS, AND MODERATE SHORTWAVE FADES TO 20 MHZ. THE ONLY OTHER SOURCE OF ACTIVITY WAS REGION 3696 (S17W00) WHICH PRODUCED A C4/SB AND A C2/SN. EXCEPT FOR REGION 3696, ALL REGIONS APPEAR STABLE OR DECLINING.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE GENERALLY LOW. GROWTH IN REGION 3696 SEEMS TO BE SLOWING. THERE IS A CHANCE OF ISOLATED M-CLASS ACTIVITY FROM REGIONS 3696 AND ALSO, POSSIBLY, REGION 3688 (N16W70), WHICH IS DECAYING RAPIDLY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO MILDLY ACTIVE FOR THE PAST 24 HOURS. ALTHOUGH A 12 GAMMA SUDDEN IMPULSE WAS OBSERVED AT 16/1704Z, NO MAIN PHASE STORM HAS DEVELOPED AT MID-LATITUDES. HOWEVER, K-VALUES AS HIGH AS 8 WERE REPORTED AT ONE HIGH LATITUDE STATION OVERNIGHT! THE GEOMAGNETIC FIELD IS EXPECTED TO BE GENERALLY UNSETTLED FOR THE NEXT 72 HOURS.

III. EVENT PROBABILITIES 18 APR-20 APR

CLASS M 25/20/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 APR 147

ESTIMATED 17 APR 144

PREDICTED 18 APR-20 APR 140/138/137

90 DAY MEAN 16 APR 203

V. GEOMAGNETIC A INDICES

OBSERVED AFR 15 APR 009 AP 16 APR 011

ESTIMATED AFR 16 APR 011 AFR/AP 17 APR 014/040

PREDICTED AFR/AP 18 APR-20 APR 012/014-010/014-008/012

SOLTERWARN

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HXUS BOU 171300

PREDM 02518 02019 01520

PREDX 00118 00119 00120

PREDP 00118 00119 00120

PCAAFT 00118

TENCM 14018 13819 13720

AFRED 01218 01019 00820

AFAPP 01418 01419 01220

KKK 33233 32333 33332

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HFUS 3 BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 107B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 17 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/1200Z TO 17/2100Z: SOLAR ACTIVITY WAS QUIET DURING THIS PERIOD WITH NO SIGNIFICANT SOLAR ACTIVITY. THE AREA AND SPOT NUMBER OF REGION 3696 (S17W06) HAVE DECREASED, ALTHOUGH A SMALL DELTA MAGNETIC CONFIGURATION WAS DETECTED IN THE REGION BY MOUNT WILSON OBSERVATORY. THE OTHER 11 REGIONS ON THE DISK ARE SIMPLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT LOW LEVELS. THE BACKGROUND XRAY FLUX LEVEL IS WELL BELOW THE C1 LEVEL CURRENTLY. IF AN ISOLATED M-CLASS EVENT DOES OCCUR, IT WOULD PROBABLY BE FROM REGION 3696.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE ACTIVE GEOMAGNETIC CONDITIONS EXPERIENCED EARLIER ON 17 APR HAVE ENDED, WITH ONLY SLIGHTLY UNSETTLED LEVELS SEEN DURING THIS PERIOD. NO SIGNIFICANT ACTIVITY IS EXPECTED FOR THE NEXT 72 HOURS.

III. EVENT PROBABILITIES 18 APR-20 APR

CLASS M 20/20/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 APR 147

PREDICTED 18 APR-20 APR 140/138/137

90 DAY MEAN 17 APR 203

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 16 APR 011/011

ESTIMATED AFR/AP 17 APR 017/028

PREDICTED AFR/AP 18 APR-20 APR 012/014-010/014-008/012

SOLTERWARN

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HXUS BOU 172200

PREDM 02018 02019 01520

PREDX 00118 00119 00120

PREDP 00118 00119 00120

PCAFT 00118

TENCM 14018 13819 13720

AFRED 01218 01019 00820

AFAPF 01418 01419 01220

BT