

HYUS 1 BOU 131300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 317A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 13 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 12/1200Z TO 13/1200Z: SOLAR ACTIVITY REMAINS HIGH WITH NUMEROUS M CLASS XRAY EVENTS OCCURRING SINCE THE X1/1B FLARE AT 12/1606Z MAX IN REGION 3451 (N18W26). OPTICAL ASSOCIATIONS WITH THESE EVENTS WERE AS GREAT AS 1B AND SIGNIFICANT RADIO EMISSION AT ALL FREQUENCIES ACCCOMPANIED MOST OF THE EVENTS. REGION 3451 WAS THE PREDOMINANT SOURCE OF THIS ACTIVITY. AN M1/1B EVENT OCCURRED IN REGION 3456(N07E16) AT 12/1816Z MAX. REGION 3451 IS STILL GROWING, REMAINS MAGNETICALLY COMPLEX AND IS CONTINUOUSLY RESTRUCTURING IN WHITE LIGHT. REGION 3450(S19W36) IS STABLE AND MAY BECOME MORE ACTIVE IF IT ENTERS DECAY PHASE. REGION 3456 IS DEVELOPING AND MAY YET BECOME A SIGNIFICANT SOURCE OF LARGE FLARES.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE HIGH. MAJOR ACTIVITY IS MOST LIKELY IN REGION 3451. REGIONS 3450, 3454(N02W29), AND 3456 MAY ALSO CONTRIBUTE SIGNIFICANTLY TO ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET SO FAR ON 13 NOV FOLLOWING ACTIVE TO MINOR STORM LEVELS OF 11-12 NOV. A TREND BACK TOWARD ACTIVE LEVELS MAY BEGIN BY LATE 13 NOV. AND SHOULD PEAK TOWARD EARLY 15 NOV.

III. EVENT PROBABILITIES 14 NOV-16 NOV

CLASS M 95/95/95

CLASS X 30/30/30

PROTON 30/30/30

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 NOV 228

ESTIMATED 13 NOV 224

PREDICTED 14 NOV-16 NOV 222/213/214

90 DAY MEAN 12 NOV 230

V. GEOMAGNETIC A INDICES

OBSERVED AFR 11 NOV 030 AP 12 NOV 035

ESTIMATED AFR 12 NOV 028 AFR/AP 13 NOV 007/010

PREDICTED AFR/AP 14 NOV-16 NOV 014/020-018/025-018/020

SOLTERWARN

BT

HYUS BOU 131300

PREDM 09514 09515 09516

PREDX 03014 03015 03016

PREDP 03014 03015 03016

PCAF1 00214

TENCM 22214 21815 21416

AFLRD 01414 01815 01816

AFAPP 02014 02515 02016

KKK 22343 33213 34433

BT

HXUS 3 BOU 132200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 317B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 13 NOV 1981

I A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/1200Z TO 13/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3451 (N18W31) CONTINUES TO BE THE MAJOR SOURCE OF ACTIVITY. IT PRODUCED AN M3/SR FLARE AT 1654UT AND A C9/SB FLARE AT 1824UT; BOTH EVENTS WERE ACCCOMPANIED BY WEAK RADIO BURSTS AND STRONG SHORT WAVE FADES. THIS REGION REMAINS COMPLEX IN SPOT CONFIGURATION AND PLAGUE STRUCTURE. REGION 3450 (S19W45), 3454 (N23W35) AND 3456 (N18E12) HAVE PRODUCED SMALL SUBFLARES BUT HAVE NOT SHOWN SIGNIFICANT CHANGE OR GROWTH TODAY. REGION 3451 (S04E71) WAS NUMBERED LATE YESTERDAY AS IT ROTATED AROUND EAST LIMB. IT CONTAINS A LARGE SPOT GROUP AND HAS PRODUCED SEVERAL SMALL FLARES TODAY.

I B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT A MODERATE TO HIGH LEVEL WITH MAJOR FLARES LIKELY FROM REGION 3451 AND CLASS M EVENTS POSSIBLE FROM REGIONS 3450, 3456 AND 3451.

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

III. EVENT PROBABILITIES 14 NOV-15 NOV

CLASS M 95/95/95

CLASS X 30/30/30

PROTON 30/30/30

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 NOV 221

PREDICTED 14 NOV-16 NOV 219/213/211

90 DAY MEAN 13 NOV 230

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 NOV 026/035

ESTIMATED AFR/AP 13 NOV 005/010

PREDICTED AFR/AP 14 NOV-16 NOV 014/020-018/025-018/028

SOLTERWARN

BT

HXUS BOU 132200

PREDY 09514 09515 09516

PREDX 03014 03015 03016

PREDP 03014 03015 03016

PCAFY 00214

TENCM 21914 21315 21116

AFRED 01414 01815 01816

AFAPF 02014 02515 02016

BT