

HFUS 1 BOU 161300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDE NUMBER 320A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 16 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200Z TO 16/1200Z: SOLAR ACTIVITY HAS BEEN LOW TO MODERATE DURING THIS PERIOD. A PECULIAR EVENT AT 151421Z WAS VARIOUSLY CALLED A 1B AND A 2B OPTICALLY WITH CLASS M3 XRAY EMISSION, EJECTA OUT TO .31 RADII AND ASSIGNED TO A REGION THAT ONLY CONTAINED AN A TYPE SPOT GROUP; REGION 3454 (S05E47). SHORTWAVE FADES TO 15 MHZ AND 10 CM BURST OF 260 FLUX UNITS WERE ALSO OBSERVED WITH THIS EVENT. SINCE THAT TIME, FLARE ACTIVITY HAS BECOME LESS FREQUENT. REGIONS 3461 (S04E35) AND 3465 (S15W45) ARE SHOWING SLOW GROWTH WHILE THE REST OF THE DISK FEATURES SHOW NO CHANGE OR SLOW DECAY. REGION 3451 (N19W34) REMAINS SUFFICIENTLY LARGE AND COMPLEX FOR SIGNIFICANT FLARE PRODUCTION BUT INDICATIONS ARE THAT IT IS RELAXING AND SPREADING IN WHITE LIGHT.

IB. SOLAR ACTIVITY FORECAST: ALTHOUGH THE POSSIBILITY FOR M CLASS FLARES REMAINS, INDICATORS ARE POINTING TOWARD A DECLINE IN ACTIVITY. CAUTION IS EXERCISED WITH REGARDS TO REGIONS 3451 AND 3461.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE. UNSETTLED TO ACTIVE CONDITIONS SHOULD CONTINUE.

III. EVENT PROBABILITIES 17 NOV-19 NOV

CLASS M 75/30/50

CLASS X 20/10/05

PROTON 30/15/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 NOV 196

ESTIMATED 16 NOV 185

PREDICTED 17 NOV-19 NOV 175/170/165

90 DAY MEAN 15 NOV 229

V. GEOMAGNETIC A INDICES

OBSERVED AFR 14 NOV 019 AP 15 NOV 021

ESTIMATED AFR 15 NOV 016 AFR/AP 16 NOV 011/020

PREDICTED AFR/AP 17 NOV-19 NOV 012/013-018/025-012/015

SOLTERWARN

BT

HXUS BOU 161300

PREDM 07517 06013 05019

PREDX 02017 01013 00519

PREDP 03017 01513 00519

PCAF 00217

TENCM 17517 17013 16519

AFRED 01217 01313 01219

AFAPF 01317 02519 01519

KKK 22233 32223 34433

BT

HFUS 3 BOU 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 320B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 16 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 16/2100Z: SOLAR ACTIVITY HAS BEEN LOW. THE ACTIVE REGIONS ON THE SUN HAVE REMAINED STABLE AND QUIET WITH THE EXCEPTION OF 3458(N12W49) WHICH HAS UNDERGONE RAPID GROWTH AND CONTAINS A STRONG ACTIVE FILAMENT SYSTEM. REGION 3461(S04E29) IS THE MOST INTERESTING REGION TODAY ALTHOUGH IT APPEARS TO BE RELATIVELY SIMPLE. THE DELTA CONFIGURATION IS NO LONGER OBSERVED, BUT THE REGION SHOWS MIXED MAGNETIC POLARITIES. REGION 3451(N18W72) HAS DECAYED. NEW REGION 3466(S18E35) IS A B TYPE GROUP.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW, BUT WITH THE POSSIBILITY OF ISOLATED M CLASS ACTIVITY FROM REGIONS 3451 AND 3461.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED FOR THE PAST 9 HOURS. A SUDDEN IMPULSE WAS OBSERVED AT BOULDER AT 2030Z WHICH INDICATES THAT UNSETTLED TO ACTIVE CONDITIONS WILL PERSIST.

III. EVENT PROBABILITIES 17 NOV-19 NOV

CLASS M 75/60/50

CLASS X 20/10/05

PROTON 30/15/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 NOV 185

PREDICTED 17 NOV-19 NOV 172/165/160

90 DAY MEAN 16 NOV 229

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 NOV 015/021

ESTIMATED AFR/AP 16 NOV 015/016

PREDICTED AFR/AP 17 NOV-19 NOV 018/018-018/025-012/015

SOLTERWARN

BT

HXUS BOU 162200

PRDM 07517 06018 05019

PRDX 02017 01018 00519

PRDP 03017 01518 00519

PCFT 00217

TENCM 17217 16518 16019

AFRED 01817 01818 01219

AFAPF 01817 02518 01519

BT