

HFUS 1 BOU 181300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 322A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 18 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/1200Z TO 18/1200Z: SOLAR ACTIVITY INCREASED ABRUPTLY TO THE MODERATE LEVEL WITH THE OCCURRENCE OF AN M2/1B FLARE IN REGION 3467 (S17W29) AT 0416Z MAXIMUM. MODERATE DISCRETE FREQUENCY RADIO BURSTS WERE RECORDED THROUGHOUT THE SPECTRUM. THIS REGION HAS DEVELOPED VERY RAPIDLY FROM A SMALL B-TYPE GROUP YESTERDAY TO A D-TYPE BETA GAMMA CONFIGURATION TODAY. IT DEVELOPED NEAR PREVIOUSLY ACTIVE LONGITUDES LAST ROTATION. REGION 3465 (S4W72), A SOMEWHAT DORMANT REGION WHEN IT FIRST APPEARED, HAS NOW SHOWN RAPID GROWTH ALONG WITH SUBFLARE PRODUCTION. REGION 3461 (S04E07), A PRODUCTIVE REGION SINCE ITS ARRIVAL AT EAST LIMB, IS NOW SHOWING SIGNS OF SLOW DECAY ALONG WITH DECREASED FLARE PRODUCTION. THE EASTERN HALF OF THE SUN IS NOW LOOKING PLAIN COMPARED TO THE DEVELOPING WESTERN HALF.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN GENERALLY LOW. REGION 3467'S GROWTH SHOULD STABILIZE SOON AND THUS BE A THREAT FOR ONLY ISOLATED M-CLASS EVENTS. WITH THE LOSS OF REGION 3451 (NOW AT N20, WEST LIMB) AND NO SIGNIFICANT RETURNING REGIONS, SOLAR ACTIVITY AND INDICES SHOULD APPROACH THE MINIMUM OF THE 27 DAY CYCLE DURING THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS REMAINED ACTIVE DURING THE PAST 24 HOURS. ACTIVE CONDITIONS ARE EXPECTED TO CONTINUE THROUGH THE REMAINDER OF TODAY, FOLLOWED BY GRADUALLY SETTLING LEVELS.

III. EVENT PROBABILITIES 19 NOV-21 NOV

CLASS M 10/40/40

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 NOV 177

ESTIMATED 18 NOV 172

PREDICTED 19 NOV-21 NOV 167/165/163

90 DAY MEAN 17 NOV 228

V. GEOMAGNETIC A INDICES

OBSERVED AFR 16 NOV 016 AP 17 NOV 027

ESTIMATED AFR 17 NOV 024 AFR/AP 18 NOV 020/025

PREDICTED AFR/AP 19 NOV-21 NOV 012/015-007/014-010/012

SOLTERWARN

BT

HFXUS 3 BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 322B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 18 NOV 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/1200Z TO 18/2100Z: SOLAR ACTIVITY HAS BEEN QUIET FOR THE PAST 12 HOURS. ONLY REGION 3467 (S17W35) HAS PRODUCED SIGNIFICANT ACTIVITY AND THAT HAS BEEN LIMITED TO SUBFLARES. ITS SMALL SPOT GROUP HAS MAGNETIC COMPLEXITY RESULTING FROM INTERACTION WITH FIELDS TO ITS WEST.

IB. SOLAR ACTIVITY FORECAST: SOLAR FLARE ACTIVITY IS EXPECTED TO BE LOW WITH A DECREASING CHANCE OF CLASS M EVENTS AS REGION 3467 BEGINS TO DECLINE TOMORROW.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE FOR THE PAST 12 HOURS. UNSETTLED CONDITIONS ARE EXPECTED THROUGHOUT THIS FORECAST PERIOD.

III. EVENT PROBABILITIES 19 NOV-21 NOV

CLASS M 40/30/20

CLASS X 05/02/01

PROTON 05/02/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 NOV 167

PREDICTED 19 NOV-21 NOV 158/150/140

90 DAY MEAN 18 NOV 227

V. GEOMAGNETIC A INDICES 28

OBSERVED AFR/AP 17 NOV 016/026

ESTIMATED AFR/AP 18 NOV 020/025

PREDICTED AFR/AP 19 NOV-21 NOV 012/015-007/014-010/012

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HXUS BOU 182200

PREDM 04019 03020 02021

PREDX 00519 00220 00121

PREDP 00519 00220 00121

PCAF 00119

TENCM 15819 15020 14021

AFRED 01219 00720 01021

AFAPF 01519 01420 01221

BT