

HFUS 1 BOU 251300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 084A
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 25 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/1200Z TO 25/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3659 (N11E47) PRODUCED AN M1/1B AT 24/2149UT AND AN M1/SB AT 25/0144UT. NEITHER FLARE PRODUCED SIGNIFICANT RADIO BURSTS. THIS REGION EXHIBITS MULTIPLE DELTA CONFIGURATIONS AND A COMPLEX NEUTRAL LINE. SUNSPOT AREAS BEING REPORTED FOR THIS GROUP ARE INCREASING AND SINCE FORESHORTENING IS LESS A PROBLEM TODAY, 3659 IS APPARENTLY GROWING. REGION 3662 (S24E80) WAS NUMBERED TODAY AFTER A MULTIUMBRAED LEADER BECAME VISIBLE. SEVERAL LIMB FLARES HAVE BEEN OBSERVED FROM THIS REGION WHICH IS EXHIBITING ACTIVE SURGING AND BRIGHT PLAGE. A LARGE PLAGE AREA VISIBLE IN CA K AND GREATER THAN 17 DEGREES IN LATITUDINAL EXTENT IS CROSSING THE LIMB AT NE21. NO SPOTS HAVE YET BEEN OBSERVED IN THIS AREA.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE MODERATE FOR THE FORECAST PERIOD. REGION 3659 SHOULD PRODUCE AT LEAST ONE CLASS M FLARE/DAY WITH MORE ENERGETIC FLARES BECOMING INCREASINGLY POSSIBLE. NEW REGIONS TRaversing THE EAST LIMB COULD ADD TO FULL DISK ACTIVITY LEVELS. FLARE POTENTIALS WILL BE BETTER JUDGED ONCE MORE DATA ARE RECEIVED ON THESE REGIONS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TRENDING TOWARD ACTIVE. SOLAR WIND DATA INDICATE THE EARTH IS IN A HIGH SPEED CORONAL HOLE WIND STREAM. GENERALLY UNSETTLED CONDITIONS ARE FORECAST FOR THE NEXT THREE DAYS WITH PERIODS AT ACTIVE LEVELS POSSIBLE DURING LOCAL NIGHT ON 26 MARCH.

III. EVENT PROBABILITIES 26 MAR-28 MAR

CLASS M 80/80/80

CLASS X 15/20/20

PROTON 01/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 MAR 190

ESTIMATED 25 MAR 195

PREDICTED 26 MAR-28 MAR 200/210/220

90 DAY MEAN 24 MAR 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR 23 MAR 008 AP 24 MAR 010

ESTIMATED AFR 24 MAR 009 AFR/AP 25 MAR 016/018

PREDICTED AFR/AP 26 MAR-28 MAR 012/012-010/012-012/012

SOLTERWARN

BT

HXUS BOU 251300
PREDM 08026 08027 08028
PREDX 01526 02027 02028
PREDP 00126 00527 00528
PCAFT 00126
TFNCM 20026 21027 22028
AFRED 01226 01027 01228
AFAPF 01226 01227 01228
KKK 33333 32223 33332
BT

HFUS 3 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 084B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 25 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 25/1200Z TO 25/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3659 (N12E40) PRODUCED AN M2/1B FLARE AT 25/1623Z WITH VERY MODEST DISCRETE RADIO EMISSION AT ALL OBSERVED FREQUENCIES. THIS EVENT WAS THE ONLY SIGNIFICANT ACTIVITY THIS PERIOD. NEW REGIONS 3663 (S06E43) AND 3664 (S12E79) WERE NUMBERED TODAY. REGION 3662 (S19E73) APPEARS SIMPLE WITH A N/S NEUTRAL LINE AND APPEARS UNLIKELY TO PRODUCE MAJOR ACTIVITY. REGION 3659 HAS VERY TIGHT MAGNETIC GRADIENTS, MULTIPLE DELTAS AND IS A PROBABLE SOURCE OF MAJOR ACTIVITY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN MODERATE WITH ACTIVITY EXPECTED MOSTLY FROM REGION 3659.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO ACTIVE, DUE TO HIGH SPEED STREAM INFLUENCE. THE EFFECT IS SUBSIDING SLOWLY AND THE FIELD IS EXPECTED TO BE UNSETLED DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 26 MAR-28 MAR

CLASS M 80/80/80

CLASS X 15/20/20

PROTON 01/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 MAR 191

PREDICTED 26 MAR-28 MAR 195/200/204

90 DAY MEAN 25 MAR 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 24 MAR 014/010

ESTIMATED AFR/AP 25 MAR 014/018

PREDICTED AFR/AP 26 MAR-28 MAR 012/012-010/012-012/012

SOLTERWARN

BT

HXUS BOU 252200

PREDM 08026 08027 08028

PREDX 01526 02027 02028

PREDP 00126 00527 00528

PCAFF 00126

TENCM 19526 20027 20428

AFRED 01226 01027 01228

AFAPF 01226 01227 01228

BT