

HFUS 1 BOU 201300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 171A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 20 JUNE 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

19/1200UT TO 20/1200UT:

SOLAR ACTIVITY HAS BEEN LOW SINCE 19/1200UT. ONLY SMALL CLASS C X-RAY FLARES HAVE OCCURRED. REGIONS 3159 (S25W47) AND 3161 (S20W31) HAVE DECAYED INTO SIMPLE, MATURE REGIONS WITH LOW MAGNETIC GRADIENTS, ALTHOUGH REGION 3159 IS REVERSE POLARITY. REGION 3170 (N15E64) IS REPORTEDLY GROWING RAPIDLY AND HAS ALREADY PRODUCED TWO SUBFAINT FLARES.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED FOR THE PAST 24 HOURS. UNSETTLED CONDITIONS ARE EXPECTED TO PERSIST THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 21 - 23 JUN

CLASS M 25/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 19 JUN 161

ESTIMATED 20 JUN 157

PREDICTED 21-23 JUN 151/148/145

90 DAY MEAN 19 JUN 196

V. GEOMAGNETIC A INDICES

OBSERVED AFR 18 JUN 10 AP 19 JUN 14

ESTIMATED AFR 19 JUN 11 AFR/AP 20 JUN 12/12

PREDICTED AFR/AP 21-23 JUN 12/15 12/15 12/15

SOLTERWARN

BT

HFUS 3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 171B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 20 JUNE 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/1200UT
TO 20/2200UT:

SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. REGION 3170
(N14E63) HAS PRODUCED ALL THE ACTIVITY OBSERVED. ALL HAVE BEEN
C-CLASS SUBFLARES, WITH THE LARGEST A C1/SF AT 1653Z MAXIMUM
PRODUCING MINOR RADIO RESPONSE THROUGH THE SPECTRUM. THIS REGION'S
GROWTH HAS BEEN IMPRESSIVE, INCREASING FROM A SPOT AREA OF 20
MILLIONTHS YESTERDAY, TO 460 MILLIONTHS TODAY. A REPORT OF EAST-
WEST PENUMBRA GROWTH COULD INDICATE A POSSIBLE DELTA CONFIGURATION
BY TOMORROW.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW. IF THE PRESENT GROWTH
IN REGION 3170 CONTINUES HOWEVER, AN ISOLATED M-CLASS EVENT IS POSSIBLE
ONLY MINOR ACTIVITY FROM THE REMAINING DISK REGIONS IS EXPECTED.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD CONTINUES AT ITS UNSETTLED LEVEL WITH MID-
LATITUDE K INDICES VARYING BETWEEN 2 AND 3. NO SIGNIFICANT CHANGE
IS EXPECTED FOR THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 21 JUNE - 23 JUNE

CLASS M 25/30/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 20 JUNE 155

PREDICTED 21 - 23 JUNE 155/155/153

90 DAY MEAN 20 JUNE 196

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 JUNE 10/14

ESTIMATED AFR/AP 20 JUNE 11/13

PREDICTED AFR/AP 21 - 23 JUNE 12/15 12/15 12/15

SOLTERWARN

BT