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HFUS 1 BOU 211300
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 172A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 21 JUN 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/1200UT TO 21/1200UT:

SOLAR ACTIVITY HAS BEEN LOW SINCE 20/1200UT. THE LARGEST X-RAY EVENT THIS PERIOD WAS A C3 AT 21/0053UT. NUMEROUS SUBFLARES OCCURRED, MOSTLY IN REGION 3170 (N14355). THIS REGION HAS GROWN VERY RAPIDLY INTO THE MOST ERUPTIVE REGION ON THE DISK. MINOR REVITALIZATION HAS BEEN OBSERVED IN REGION 3161 (S20W43) AND WILL PROBABLY CONTINUE ERUPTIVE. A NEW REGION HAS BEEN NUMBERED, 3173 (S13E41).

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW. HOWEVER, IF GROWTH AND A TIGHTENING OF THE MAGNETIC GRADIENT CONTINUES IN REGION 3170, AN ISOLATED M-CLASS FLARE MAY OCCUR BEFORE THE END OF THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED FOR THE PAST 24 HOURS AND IS EXPECTED TO REMAIN UNCHANGED FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 22-24 JUN

CLASS M 35/35/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 JUN 155

ESTIMATED 21 JUN 155

PREDICTED 22-24 JUN 155/153/150

90-DAY MEAN 20 JUN 196

V. GEOMAGNETIC A INDICES

OBSERVED AFR 19 JUN 10 AP 20 JUN 13

ESTIMATED AFR 20 JUN 12 AFR/AP 21 JUN 12/15

PREDICTED AFR/AP 22-24 JUN 12/15 - 12/15 - 12/10

SOLTERWARN

BT

HFUS 3 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO
SDF NUMBER 172B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200 UT 21 JUNE 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/1200 UT
TO 21/2200 UT: SOLAR ACTIVITY HAS REMAINED LOW DURING THE PAST
12 HOURS. FREQUENT C-CLASS SUBFLARES HAVE OCCURRED IN REGIONS
3161 (S20W48) AND 3170 (N15E50), BUT THE LARGEST WAS ONLY A
C2/SN FROM 3161 AT 1444 UT MAXIMUM. THE RAPID DEVELOPMENT IN
REGION 3170 HAS CONTINUED TODAY WITH PENUMBRA NOW ENCOMPASSING
ALMOST THE ENTIRE SPOT GROUP AND A DELTA MAGNETIC CONFIGURATION
VISIBLE WITH STRONG GRADIENTS. NEW REGION 3173 (S12E36) IS GROWING
RAPIDLY WITH STRONG AFS VISIBLE.

IB. SOLAR ACTIVITY FORECAST: SOME INCREASE IN ACTIVITY IS
EXPECTED FOR THE FORECAST PERIOD DUE PRIMARILY TO THE
DEVELOPMENT IN REGION 3170. GENERALLY LOW ACTIVITY IS STILL
EXPECTED, BUT AN ISOLATED M-CLASS EVENT FROM 3170 IS POSSIBLE
DURING THE NEXT 24 HOURS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD
CONTINUES ITS FIFTH DAY AT THE UNSETTLED LEVEL. NO SIGNIFICANT
CHANGE IS FORECAST.

III. EVENT PROBABILITIES 22 JUNE - 24 JUNE

CLASS M 35/45/55

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 JUNE 149

PREDICTED 22-24 JUNE 150/150/150

90-DAY MEAN 21 JUNE 195

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 JUNE 10/13

ESTIMATED AFR/AP 21 JUNE 09/15

PREDICTED AFR/AP 22-24 JUNE 12/15 - 12/15 - 12/10

SOLTERWARN

BT