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HFUS 1 BOU 201400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 079A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 20 MARCH 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
19/1200UT TO 20/1200UT:

SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. SEVERAL
C-CLASS EVENTS HAVE BEEN RECORDED, THE LARGEST WERE TWO C9 EVENTS,
NO OPTICAL, AT 19/1332UT AND 19/2241UT. REGION 2984(N08W08)
HAS PRODUCED THE MAJOR PORTION OF THE EVENTS, AND
IS REPORTED TO BE GROWING AND BECOMING MORE COMPLEX MAGNETICALLY.
CLOCKWISE ROTATION, OF THE SPOT GROUP, AROUND THE LEADER SPOT HAS
ALSO BEEN REPORTED. REGION 2993 (N13E54) IS GROWING RAPIDLY,
HOWEVER IT IS MAGNETICALLY SIMPLE AT THIS TIME.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DURING THE FORECAST PERIOD.
M-CLASS EVENTS FROM REGION 2984 ARE EXPECTED AS CHANGES IN THE REGION
CONTINUE. REGION 2993 IS CAPABLE OF AN ISOLATED M-CLASS EVENT.
HOWEVER IF ITS RATE OF GROWTH CONTINUES THEN THE POSSIBILITY OF
AN X-CLASS EVENTS BECOMES MORE LIKELY.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24 HOURS.
THE FIELD IS EXPECTED TO CONTINUE AT UNSETTLED LEVELS DURING THE
FORECAST PERIOD.

III. EVENT PROBABILITIES: 21 - 23 MARCH 1981

CLASS M 50/55/60

CLASS X 05/10/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 19 MAR 169

ESTIMATED 20 MAR 185

PREDICTED 21-23 MAR 192/200/208

90 DAY MEAN 19 MAR 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR 18 MAR 16 AP 19 MAR 10

ESTIMATED AFR 19 MAR 10 AFR/AP 20 MAR 10/12

PREDICTED AFR/AP 21-23 MAR 10/10 10/10 10/10

SOLTERWARN

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HFUS 3 BOU 202113
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDE NUMBER 079B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200UT 20 MARCH 1981

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

SOLAR ACTIVITY REMAINS LOW BUT AN INCREASING FREQUENCY OF SMALL
RADIO AND X-RAY BURSTS AS WELL AS SUBFLARE ACTIVITY MAY BE
PRESAGEFUL. REGION 2984 (N09W15) RETAINS ITS COMPLEXITY AND
CONTINUES TO GROW WHICH COULD RESULT IN THE PRODUCTION
OF "M" CLASS ACTIVITY OR GREATER. REGION 2993 (N13E49) HAS
PROVEN TO BE A SIZABLE GROUP AND ADDITIONAL GROWTH IS EXPECTED.
TWO NEW REGIONS WERE NUMBERED TODAY: 2995 (S06E05) AND 2996
(S19E54). REGION 2995 IS A SIMPLE A TYPE GROUP WHILE 2996
IS A SMALL D GROUP.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY MAY INCREASE SIGNIFICANTLY IF EXPECTED TRENDS
IN REGIONS 2984 AND 2993 MATERIALIZE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD IS UNSETTLED. UNSETTLED CONDITIONS SHOULD
PERSIST FOR THE NEXT 36 TO 48 HOURS.

III. EVENT PROBABILITIES: 21 MARCH - 23 MARCH

CLASS M 50/55/60

CLASS C 05/10/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 20 MARCH 177

PREDICTED 21-23 MARCH 181/185/188

90 DAY MEAN 21 MARCH 198

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 MARCH 09/10

ESTIMATED AFR/AP 20 MARCH 10/12

PREDICTED AFR/AP 21-23 MARCH 10/10 10/10 10/10

SOLTERWARN

BT