

HFUS 1 BOU 011300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 121A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1200UT 01 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
30/1200UT TO 01/1200UT:

SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 24 HOURS. ONLY SUB-
FLARES HAVE OCCURRED, PRIMARILY FROM REGION 3079 (N07E45),
AND 3080 (N16E52). REGION 3067 (N03W17) DECAYED SIGNIFI-
CANTLY, ELONGATING, SIMPLIFYING, AND FURTHER RELAXING ITS
MAGNETIC GRADIENT. REGION 3078 (S08E31), ALTHOUGH IT DID NOT
FLARE, DISPLAYS FEATURES CHARACTERISTIC OF AN ERUPTIVE
NATURE AND IS GROWING.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE LOW FOR THE NEXT THREE DAYS.
CONTINUED GROWTH IN REGION 3080 COULD PRODUCE A SMALL M-CLASS
X-RAY EVENT BEFORE THE END OF THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN MILDLY UNSETTLED FOR THE PAST
24 HOURS. UNSETTLED CONDITIONS WITH BRIEF PERIODS OF ACTIVE
CONDITIONS LATE IN THE FORECAST PERIOD ARE EXPECTED. THE EFFECTS
OF A CORONAL HOLE ARE EXPECTED TO PUSH THE FIELD NEAR ACTIVE
CONDITIONS ON 4 MAY. PCA ENDED AT 2200UT ON 30 APR AND IS
CURRENTLY 0.3DB. THE SATELLITE PROTON EVENT DROPPED BELOW THRES-
HOLD AT 0700UT ON 01 MAY AND IS NOW 6 PARTICLES/SQUARE CENTI-
METER/SECOND/STERADIAN.

III. EVENT PROBABILITIES: 02 MAY - 04 MAY

CLASS M 30/30/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 30-APR 173

ESTIMATED 01 MAY 176

PREDICTED 02-04 MAY 179/180/180

90 DAY MEAN 30 APR 212

V. GEOMAGNETIC A INDICES

OBSERVED AFR 29 APR 17 AP 30 APR 10

ESTIMATED AFR 30 APR 08 AFR/AP 01 MAY 15/20

PREDICTED AFR/AP 02-04 MAY 12/15 15/15 15/15

SOLTERWARN

BT

HFUS 3 BOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 21B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 01 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
01/1200UT TO 01/2200UT:

SOLAR ACTIVITY HAS BEEN LOW. POLAR CAP ABSORPTION EVENT AND
SOLAR PROTON EVENT FOR PARTICLES GREATER THAN 10 MEV HAVE ENDED
SIX NEW REGIONS WERE NUMBERED TODAY, REGION 3083 (S10W35), 3084
(N12W03), 3085 (S22E18), 3086 (S12E69), 3087 (N08E13), 3088
(N16E70). RAPID DEVELOPMENT HAS BEEN OBSERVED IN REGION 3083.
ARCH FILAMENTS SYSTEMS WERE OBSERVED IN REGION 3078 (S08E26),
3079 (N08E40), 3083, 3084. A C3/1N FLARE OCCURRED IN 3084 AT
2142Z MAX.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY MAY BE EXPECTED TO REMAIN AT OR NEAR LOW LEVELS.
SLIGHT INCREASES IN ACTIVITY ARE POSSIBLE, DUE TO THE INCREASED
NUMBER OF ACTIVE REGIONS PRESENT.

II. GEOPHYSICAL SUMMARY AND FORECAST:

GEOMAGNETIC ACTIVITY HAS BEEN AT UNSETTLED LEVELS AND SHOULD
REMAIN MOSTLY UNSETTLED THROUGH THE FORECAST PERIOD

III. EVENT PROBABILITIES: 02-04 MAY

CLASS M 30/30/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 01 MAY 185

PREDICTED 02-04 MAY 190/195/199

90 DAY MEAN 01 MAY 211

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 30 APRIL 08/10

ESTIMATED AFR/AP 01 MAY 12/20

PREDICTED AFR/AP 02-04 MAY 12/15 15/15 15/15

SOLTERWARN

BT