

HFUS 1 BOU 221300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 142A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1200UT 22 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
21/1200UT TO 22/1200UT:

SOLAR ACTIVITY REACHED THE MODERATE LEVEL WITH AN M1 XRAY EVENT
AND ASSOCIATED 2695 MHZ RADIO BURST OF 140FU AT 22/0623UT. OPTI-
CAL OBSERVATIONS WERE NOT POSSIBLE UNTIL AFTER 0645UT BUT THEN
REGION 3112 (N16W59) APPEARED THE MOST LIKELY SOURCE. THIS
REGION CONTINUES TO DECLINE SLOWLY AND WAS NOT ACTIVE THE REMAIN-
DER OF THE DAY. REGIONS 3106 (N12W73) AND 3113 (S25W26) PRODUCED
SEVERAL SMALL CLASS C FLARES IN THE PAST 24 HOURS BUT ARE DE-
CAYING IN WHITE LIGHT AND H ALPHA. THE SMALL BUT RAPIDLY
GROWING REGION 3123 (N17E39) HAS DEVELOPED A B TYPE SPOT GROUP.
ALL OTHER REGIONS ARE QUIET.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE LOW DURING THE FORECAST PERIOD
BUT CLASS M EVENTS ARE STILL POSSIBLE FROM REGIONS 3106, 3112
AND 3113.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED AND IS EXPECTED TO RE-
MAIN UNSETTLED FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES: 23-25 MAY

CLASS M 45/40/20

CLASS X 05/05/02

PROTON 05/05/02

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 21 MAY 176

ESTIMATED 22 MAY 174

PREDICTED 23-25 MAY 172/170/170

90 DAY MEAN 21 MAY 214

V. GEOMAGNETIC A INDICES

OBSERVED AFR 20 MAY 37 AP 21 MAY 18

ESTIMATED AFR 21 MAY 13 AFR/AP 22 MAY 08/10

PREDICTED AFR/AP 23-25 MAY 15/20 15/15 10/15

SOLTERWARN

BT

HFUS 3 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 142B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 22 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
22/1200UT TO 22/2200UT:

SOLAR ACTIVITY WAS AT LOW LEVELS DURING THIS PERIOD, WITH
THE XRAY FLUX NEVER GOING HIGHER THAN THE C1 LEVEL. THE
REGION 3106/3112 COMPLEX (N15) IS ABOUT TO ROTATE OFF THE
DISK, WHICH WILL LEAVE ONLY SIMPLE REGIONS ON OUR SIDE OF THE
SUN.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN AT LOW LEVELS.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD SHOULD REMAIN AT UNSETTLED OR QUIET LEVELS,
AS IT HAS FOR THE PAST 12 HOURS.

III. EVENT PROBABILITIES: 23-25 MAY

CLASS M 40/40/20

CLASS X 05/05/02

PROTON 05/05/02

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 22 MAY 168

PREDICTED 23-25 MAY 165/162/165

90 DAY MEAN 22 MAY 214

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 21 MAY 20/18

ESTIMATED AFR/AP 22 MAY 07/10

PREDICTED AFR/AP 23-25 MAY 15/12 15/15 10/15

SOLTERWARN

BT