

HFUS 1 BOU 251300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 145A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 25 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

24/1200UT TO 25/1200UT:

SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3121 (N03E39) PRODUCED A M1/SB FLARE AT 25/0733UT AND THREE SMALLER SUBFLARES IN THE PAST 24 HOURS. THIS REGION IS GROWING WITH A SPOT GROUP OF CLASS/AREA D/200 AND A COMPACT PLAGE. REGION 3128 (S22W91) CONTINUED TO PRODUCE SUBFLARE AND SURGE ACTIVITY THROUGHOUT THE DAY. THE FILAMENT ALONG THE NEUTRAL LINE BETWEEN REGIONS 3128 AND 3113 (S24W70) DISAPPEARED LATE ON 23 MAY. A SMALL ERUPTIVE PROMINENCE AT N08 EAST LIMB WAS OBSERVED AT 25/0910UT INDICATING A NEW REGION SHOULD BE VISIBLE LATER TODAY.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE WITH REGION 3121 AND THE RETURN OF PREVIOUSLY ACTIVE LONGITUDES CAUSING AN INCREASE IN ACTIVITY OVER THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN ACTIVE THE PAST 24 HOURS. A CORONAL HOLE WHICH PAST CENTRAL MERIDIAN ON 20 MAY OR A FILAMENT DISAPPEARANCE ON 20-21 MAY HAVE BEEN THE SOURCES OF THIS ACTIVITY. UNSETTLED CONDITIONS ARE EXPECTED FOR THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 26 -28 MAY

CLASS M 35/40/45

CLASS X 02/02/02

PROTON 02/02/02

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 24 MAY 166

ESTIMATED 25 MAY 170

PREDICTED 26-28 MAY 175/180/183

90 DAY MEAN 24 MAY 213

V. GEOMAGNETIC A INDICES

OBSERVED AFR 23 MAY 18 AP 24 MAY 24

ESTIMATED AFR 24 MAY 18 AFR/AP 25 MAY 18/33

PREDICTED AFR/AP 26-28 MAY 10/20 12/10 12/10

SOLTERWARN

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HFUS 3 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 145E

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200 UT 25 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 25/1200 UT TO 25/2200 UT: SOLAR ACTIVITY WAS LOW DURING THIS PERIOD, WITH THE GOES-2 X-RAY FLUX REMAINING AT THE C1 TO C2 LEVEL ALL DAY. WITH THE WEST LIMB PASSAGE OF REGION 3128 (S22), THE MOST ACTIVE REMAINING REGION WAS 3121 (N04E21). THIS REGION HAS SHOWN SOME GROWTH BUT HAS NO MAJOR FLARE POTENTIAL.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW FOR THE NEXT 24 HOURS. ACTIVITY WILL BE INCREASING OVER THE NEXT 2 TO 3 DAYS, HOWEVER, AS ACTIVE LONGITUDES RETURN AT THE SOLAR EAST LIMB. THIS FORECAST IS SUPPORTED BY TODAY'S 2695 MHZ EAST-WEST SCAN FROM OTTAWA.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS MOSTLY ACTIVE TODAY. SLIGHTLY LESS ACTIVITY IS FORECAST FOR THE NEXT 3 DAYS.

III. EVENT PROBABILITIES 26 MAY - 28 MAY

CLASS M 35/40/45

CLASS X 02/02/02

PROTON 02/02/02

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 MAY 173

PREDICTED 26-28 MAY 180/185/190

90-DAY MEAN 25 MAY 212

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 24 MAY 20/24

ESTIMATED AFR/AP 25 MAY 20/33

PREDICTED AFR/AP 26-28 MAY 15/20 - 12/10 - 12/10

SOLTERWARN

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