

HFUS 1 BOU 171300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 137A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 17 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 17/1200Z: SOLAR ACTIVITY HAS BEEN LOW. SEVERAL UNASSOCIATED SMALL C CLASS XRAY EVENTS WERE OBSERVED DURING THE REPORT PERIOD. THE LARGEST OF THESE WAS A C2 EVENT AT 17/1026Z. REGION 3733(S14W04) PRODUCED THREE SMALL EVENTS. THE LARGEST OF THESE WAS A C2/0B FLARE ACCOMPANIED BY ONLY A TRACE OF DISCRETE RADIO EMISSION. REGION 3733 IS REPORTED TO EXHIBIT PROPER MOTION AMONG ITS SPOTS AND BOTH REGIONS 3733 AND 3727(N03W11) ARE REPORTED TO BE GROWING MODESTLY IN WHITE LIGHT. REGION 3740(N24E70) HAS SPOTS STILL APPEARING DUE TO ROTATION ONTO THE DISK. ALL OBSERVATIONS HAVE BEEN LIMITED IN RECENT HOURS BY WEATHER.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW PENDING SIGNIFICANT DEVELOPMENT IN REGIONS ON THE VISIBLE DISK. REGION 3740 HAS YET TO DISCLOSE ITS POTENTIAL DUE TO POSITION AND TO OBSERVING CONDITIONS. OTHER REGIONS APPEAR CAPABLE OF ONLY MODEST ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED IN RECENT HOURS. THE ACTIVE LEVELS FORECAST EARLIER HAVE NOT YET MATERIALIZED, BUT ACTIVE CONDITIONS DUE TO CORONAL HOLE INFLUENCE ARE STILL EXPECTED.

III. EVENT PROBABILITIES 18 MAY-20 MAY

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 MAY 136

ESTIMATED 17 MAY 140

PREDICTED 18 MAY-20 MAY 142/145/148

90 DAY MEAN 16 MAY 179

V. GEOMAGNETIC A INDICES

OBSERVED AFR 15 MAY 014 AP 16 MAY 012

ESTIMATED AFR 16 MAY 015 AFR/AP 17 MAY 017/021

PREDICTED AFR/AP 18 MAY-20 MAY 028/020-022/018-014/010

SOLTERWARN

BT

HFUS 3 BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 137B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 17 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/1200Z TO 17/2100Z: SOLAR ACTIVITY CONTINUES LOW. ONLY LOW-LEVEL C-CLASS X-RAY EVENTS HAVE BEEN OBSERVED DURING THE PERIOD. THE LARGEST, A C2 AT 1638Z MAXIMUM, COULD NOT BE ASSOCIATED WITH AN OPTICAL FLARE, INDICATING THE POSSIBILITY OF A BEHIND THE LIMB EVENT. REGION 3740 (N23E65) IS APPARENTLY THE MOST IMPRESSIVE REGION IN H-ALPHA WITH A BETA-GAMMA MAGNETIC CONFIGURATION, BUT HAS BEEN QUIET THIS PERIOD. A NEW REGION IS EVIDENTLY DEVELOPING JUST SOUTH OF REGION 3733 (S13W11). THE PROXIMITY OF THIS EMERGING REGION IS CREATING SOME INTERACTION WITH BOTH 3733 AND 3738 (S18W06). IF THIS REGION CAN BE DISTINCTLY SEPARATED TOMORROW, IT WILL THEN BE NUMBERED. NEW REGIONS 3741 (N24E78) AND 3742 (S12E69) WERE NUMBERED TODAY. BOTH ARE SIMPLE MAGNETICALLY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST NINE HOURS. ACTIVE CONDITIONS ARE EXPECTED ON THE 18TH AND 19TH IN RESPONSE TO A FAVORABLY LOCATED CORONAL HOLE.

III. EVENT PROBABILITIES 18 MAY-20 MAY

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 MAY 142

PREDICTED 18 MAY-20 MAY 145/148/154

90 DAY MEAN 17 MAY 178

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 16 MAY 014/012

ESTIMATED AFR/AP 17 MAY 014/018

PREDICTED AFR/AP 18 MAY-20 MAY 028/020-022/018-014/010

SOLTERWARN

BT

HXUS BOU 172200

PREDM 02018 02019 02020

PREDX 00118 00119 00120

PREDP 00118 00119 00120

PCAFT 00118

TENCM 14518 14819 15420

AFRED 02818 02219 01420

AFAPF 02018 01819 01020

BT