

HFUS 1 BOU 042200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLO

SDF NUMBER 125

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 24 MAY 1980

I. SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 24 HOURS. THE LARGEST EVENT RECORDED WAS A C9 X-RAY EVENT (NO OPTICAL REPORT) WHICH MAXED AT 2318 ON 3 MAY. HUNTSVILLE REPORTED WEAK DELTA MAGNETIC CONFIGURATIONS IN REGION 2418 (S20E14) AND 2411 (S18W49). THE LEADER SPOT IN REGION 2418 IS BREAKING UP, BUT OTHERWISE THESE TWO LARGE REGIONS REMAINED MOSTLY STABLE. REGION 2413 (N08W62) REFORMED SPOTS TODAY, 2427 (S32W12) AND 2429 (N28E46) GREW SIGNIFICANTLY, AND REGION 2431 (S19W72) FORMED ON THE DISK. ALL OTHER REGIONS WERE STABLE OR DECAYED.

II. SOLAR ACTIVITY IS EXPECTED TO BE PREDOMINATELY LOW TOMORROW, BUT WITH THE POSSIBILITY OF ISOLATED M-CLASS EVENTS FROM 2411 AND 2418. AN ABRUPT RISE IN BACKGROUND SOLAR RADIO NOISE AT 2.695 MHZ IS ATTRIBUTED TO THE EAST LIMB AND THE POTENTIAL RETURN OF REGIONS 2377 AND 2375, BOTH OF WHICH PRODUCED M-CLASS ACTIVITY LAST ROTATION. THEREFORE, THE PROBABILITIES OF SIGNIFICANT FLARES HAVE BEEN INCREASED FOR THE THIRD DAY OF THE FORECAST.

III. THE GEOMAGNETIC FIELD HAS BEEN QUIET FOR THE PAST 24 HOURS. A SMALL GEOMAGNETIC DISTURBANCE EXPECTED TO RESULT FROM A MAJOR FLARE ON 1 MAY HAS NOT MATERIALIZED. UNSETTLED CONDITIONS ARE LIKELY TOMORROW IN RESPONSE TO AN ACTIVE SECTOR BOUNDARY PASSAGE AND LOW LEVEL EMISSIONS FROM REGION 2411, BUT THE GEOMAGNETIC FIELD SHOULD RETURN TO PREDOMINATELY QUIET LEVELS BY THE THIRD DAY.

III. EVENT PROBABILITIES 05 MAY - 07 MAY

CLASS M - 50/50/60

CLASS X - 01/01/01

PROMON - 01/01/01

PCAF - GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 MAY : 222

PREDICTED 05 - 07 MAY : 224/225/225

90-DAY MEAN 04 MAY : 192

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 03 MAY : 03

ESTIMATED AFR/AP 04 MAY : 05/08

PREDICTED AFR/AP 05 - 07 MAY : 15/15 10/12 07/10

SOLTERWARN

BT