

HFUS 1 BOU 152200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 105

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 15 APRIL 1979

I A. SOLAR ACTIVITY HAS BEEN GENERALLY LOW DURING THE PAST 24 HOURS. OF A DOZEN SMALL FLARES REPORTED, ONLY ONE WAS THE LEAST BIT IMPRESSIVE IN X-RAYS OR H-ALPHA. THIS WAS A C8/1B WITH A MAXIMUM AT 15/2013Z IN REGION 1684 (N04W03). THIS FLARE OCCURRED WELL TO THE EAST OF THE LARGE SPOT THAT COMPRIMES MOST OF REGION 1684. SUDDEN IONOSPHERIC DISTURBANCES WERE NOTED WITH THE SHORT-LIVED BUT IMPULSIVE X-RAY BURST ASSOCIATED WITH THE FLARE. SAGAMORE HILL RADIO OBSERVATORY REPORTED AN UNUSUAL TRIPLE TYPE II BURST WITH NO TYPE IV BURST FOLLOWING. REGION 1684 PRODUCED THREE OTHER C-CLASS SUBFLARES DURING THE DAY. REGIONS 1689 (N30E12) AND 1692 (S24E10) WERE THE ONLY OTHER REGIONS THAT POSSESSED ENERGETIC FLARE POTENTIAL. THEY BOTH WERE STRENGTHENING, AS EVIDENCED BY CONTINUOUS FLARE BRIGHT POINTS OF PLAGE AND ARCH FILAMENTS OBSERVED IN THEM. REGION 1692 WAS QUIET, BUT THREE C-CLASS SUBFLARES WERE OBSERVED IN REGION 1689. TWO NEW REGIONS WERE NOTED DURING THE DAY: REGION 1694 (N06E16) AND REGION 1695 (N33W33). THE LIMBS WERE QUIET, ALTHOUGH A SPECTACULAR TREE-LIKE PROMINENCE WAS OBSERVED AT (NW36).

I B. SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW TO MODERATE. THERE SEEMS TO BE SOME OVERALL WEAKENING OF THE H-ALPHA PLAGE ON THE DISK. CONTINUED DEVELOPMENT IN REGION 1689 PROMISES INCREASED FLARE ACTIVITY IN A FEW DAYS. INCREASED COMPLEXITY IN REGION 1692 COULD ALSO INCREASE THE LIKELIHOOD OF ENERGETIC ACTIVITY. REGION 1684 SEEMS TO BE DECLINING NOW.

II. THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED DURING THE PAST 24 HOURS. THE LEVEL OF GEOMAGNETIC ACTIVITY IS EXPECTED TO INCREASE SOMEWHAT OVER THE NEXT 72 HOURS.

III. EVENT PROBABILITIES 16 - 18 APRIL 1979

CLASS M 50/50/50

CLASS X 05/05/05

PROMPT 10/15/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 APRIL 167

PREDICTED 16-18 APRIL 168/170/170

50-DAY MEAN 15 APRIL 196

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 14 APRIL 11

ESTIMATED AFR/AP 15 APRIL 13/20

PREDICTED AFR/AP 16-18 APRIL 17/20 22/25 18/21

SOLTERWARN

BT