

FUS 3 BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 119

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 29 APR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 28/2100 TO 29/2100Z: SOLAR ACTIVITY HAS BEEN LOW WITH A DECREASE IN THE FREQUENCY AND INTENSITY OF FLARES. THE MOST SIGNIFICANT EVENT WAS A C3/3N FLARE WITH AN ERUPTIVE PROMINENCE AT 0615Z. THE FLARE OCCURRED IN NEW REION 4165 (S09E70). REGION 4154 (S14W16) HAS DECAYED SLIGHTLY WHILE REGION 4162 (S15W03) HAS CONTINUED TO GROW. THE CONTINUOUS NEUTRAL LINE RUNNING THROUGH THESE COMPANION REGIONS HAS CHANGED LITTLE DURING THE PAST 24 HOURS. REGION 4157 (S03E02) HAS HAD A SIGNIFICANT DECREASE IN STRUCTURE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE. ISOLATED CLASS M ACTIVITY IS STILL PROBABLE FROM REGIONS 4154 AND 4162.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 28/2100Z TO 29/2100Z: THE GEOMAGNETIC FIELD WAS ACTIVE UNTIL 1200Z WHEN IT WENT TO STORM LEVEL. SOURCE OF THIS STORM IS UNCERTAIN.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE CURRENT STORM LEVEL IS EXPECTED TO ABATE OVER THE NEXT NINE HOURS. THE GEOMAGNETIC FIELD IS EXPECTED TO BE GENERALLY AT ACTIVE LEVELS THROUGH THE FORECAST PERIOD. HIGH SPEED STREAM EFFECTS ARE EXPECTED TO IMPACT THE FIELD AT THE BEGINNING OF THE PERIOD AND A DISRUPTED FILAMENT IS EXPECTED TO IMPACT THE EARTH THE LATTER PORTION OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 30 APR-02 MAY

CLASS M 50/40/40

CLASS X 05/05/01

PROTON 05/05/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 APR 146

PREDICTED 30 APR-02 MAY 145/143/140

90 DAY MEAN 29 APR 121

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 28 APR 011/018

ESTIMATED AFR/AP 29 APR 026/033

PREDICTED AFR/AP 30 APR-02 MAY 015/020-014/020-020/025

SOLTERWARN

BT