

HFUS3 BOU 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 136

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 16 MAY 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/2100 TO 16/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW FOR THE PAST 24 HOURS. REGION 4652 (S13W43) IS CURRENTLY A CHU TYPE SPOT GROUP WITH A BETA-GAMMA MAGNETIC CLASSIFICATION. TODAY IT HAS PRODUCED A B3/0B EVENT AT 16/0154Z AND A C1/1N EVENT AT 16/0641Z. REGION 4655 (S07E58) IS STILL AN ALPHA-TYPE WITH PENUMBRAE. SURGING HAS BEEN OBSERVED ON THE EAST LIMB (N03) AND SOME PLAGE IS SLOWLY BECOMING VISIBLE ON THE DISK. THIS ACTIVITY IS POSSIBLY THE EMERGENCE OF RETURNING REGION 4647. NO NEW REGIONS WERE NUMBERED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN VERY LOW THROUGHOUT THE FORECAST PERIOD. LOW LEVEL ENERGETIC EVENT POTENTIAL CONTINUES WITH THE PRESENCE OF REGION 4652. ALSO AN INCREASE IN ACTIVITY IS POSSIBLE WITH THE RETURN OF REGION 4647.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 15/2100Z TO 16/2100Z: THE GEOMAGNETIC FIELD FOR THE PAST 24 HOURS WAS GENERALLY AT UNSETTLED TO ACTIVE CONDITIONS. MINOR STORM CONDITIONS AT HIGH LATITUDES WERE OBSERVED AT 15/2400Z AND AFTER 16/1500Z.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE LEVELS FOR 17 MAY, ACTIVE TO MINOR STORM LEVELS FOR 18 MAY AND UNSETTLED TO ACTIVE LEVELS ARE EXPECTED ON 19 MAY. MAJOR STORM CONDITIONS ARE PROBABLE AT HIGH LATITUDES DURING LOCAL MIDNIGHT PERIODS ON 18 MAY. THIS ACTIVITY IS FORECAST BASED ON THE DISAPPEARING FILAMENT OF 12 MAY AND THE M-LEVEL X-RAY EVENT OF 13 MAY IMPACTING THE MAGNETOSPHERE.

III. EVENT PROBABILITIES 17 MAY-19 MAY

CLASS M 03/05/05

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 MAY 093

PREDICTED 17 MAY-19 MAY 093/094/095

90 DAY MEAN 16 MAY 075

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 MAY 016/023

ESTIMATED AFR/AP 16 MAY 012/018

PREDICTED AFR/AP 17 MAY-19 MAY 020/025-025/030-019/025

SOLTERWARN

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