

HFUS3 BUU 102200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 010

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 10 JAN 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 09/2100 TO 10/2100Z: SOLAR ACTIVITY WAS VERY LOW. NO SPOTTED REGIONS WERE OBSERVED DURING THE PERIOD. NO NEW REGION WAS ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. RETURNING REGION 4609 (S13, CAR-059) CROSSED THE WEST LIMB AS A SPOTLESS, FAINT PLAGE REGION NINE DAYS AFTER LOSING ITS SINGLE SPOT. NO ACTIVITY IS EXPECTED FROM ITS RETURNING LOCATION PREDICTED AT 13/0600Z.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 09/2100Z TO 10/2100Z: GEOMAGNETIC ACTIVITY WAS AT MINOR STORM TO ACTIVE LEVELS. THE INITIAL GRADUAL STORM COMMENCEMENT WAS AT 8/1815Z. THIS STORM PEAKED AT 9/0900Z AND DECREASED TO ACTIVE LEVELS AT 10/1200Z AND 2100Z AT MID AND HIGH LATITUDES RESPECTIVELY. THE HIGHEST RUNNING 24 HOUR A-INDEX OCCURRED ON 9 JAN AT 1800Z AND WAS A 35 AT MID LATITUDES AND 50 AT HIGH LATITUDES. THIS DISTURBANCE WAS ATTRIBUTED TO DISAPPEARING FILAMENTS OF 1 THROUGH 6 JAN. THE NUMBER OF FILAMENT ERUPTIONS DISALLOWS ANY SPECIFIC ACCREDITATION? *BETTER CHECK IT!*

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE ACTIVE-TO-UNSETTLED FOR THE FIRST AND SECOND DAYS (11-12 JAN). BRIEF MINOR STORM CONDITIONS ARE STILL POSSIBLE AT HIGH LATITUDES ON THE FIRST DAY. UNSETTLED LEVELS ARE EXPECTED AT MID LATITUDES DURING ALL DAYLIGHT PERIODS. THE THIRD DAY (13 JAN) IS EXPECTED TO BE AN ACTIVE-TO-MINOR-STORM LEVELS DUE TO A POSITIVE RECURRENT CORONAL HOLE'S HIGH SPEED STREAM. THIS CORONAL HOLE HAD UNDERGONE SEGMENTATION AND SHRINKAGE THE LAST ROTATION AND THE SUBSEQUENT GEOMAGNETIC EFFECT WAS APPARENTLY DISCONTINUOUS. NO RECENT HIGH-QUALITY DATA IS AVAILABLE TO ALTER THE SCENARIO. BRIEF MAJOR STORM LEVELS AT HIGH LATITUDES WITH MINOR LEVELS AT MID LATITUDES ARE POSSIBLE ON THIS LAST DAY.

III. EVENT PROBABILITIES 11 JAN-13 JAN

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 JAN 070

PREDICTED 11 JAN-13 JAN 070/070/070

90 DAY MEAN 10 JAN 075

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 09 JAN 031/044

ESTIMATED AFR/AP 10 JAN 022/025

PREDICTED AFR/AP 11 JAN-13 JAN 014/020-014/020-020/030

SOLTERWARN

BT