

HFUS3 BOU 032200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 247

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 03 SEP 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 02/2100 TO 03/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4567 (S06W54) PRODUCED ONLY SMALL B-LEVEL X-RAYS WITH ASSOCIATED SUB-FLARES. IT CONTINUED ITS DECAY IN WHITE-LIGHT AREA AND SPOT NUMBER, AND SIMPLIFIED TO A SIMPLE BETA-TYPE MAGNETICALLY. A DARK, FOUR DEGREE WIDE FILAMENT SECTION FROM N33, CAR-073 TO N27, CAR-101 HAD THINNED AND/OR PARTIALLY DISAPPEARED DURING THE LAST 36 HOURS. THIS FILAMENT SECTION IS WITHIN THE SAME SECTOR (CAR 150 TO 360) THAT HAD UNDERGONE MAJOR RECONFIGURATION THROUGHOUT THE PAST FOUR ROTATIONS WITH CONSEQUENT FREQUENT FILAMENT DISAPPEARANCES AND SUBSEQUENT GEOMAGNETIC ACTIVITY. REGION 4567 HAD APPEARED TO THE IMMEDIATE SOUTH OF THE EQUATOR IN THE MIDDLE OF THIS SECTION. NO NEW REGION WAS ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. REGION 4567 CONTINUES TO PROVIDE A VERY SLIGHT CHANCE OF M-LEVEL X-RAYS, BUT APPEARS TO HAVE PEAKED-OUT IN ACTIVITY ON 2 SEP. REGION 4572 (S12W17) IS THE OTHER REGION PROMISING ANY CHANCE OF ACTIVITY WITH CONTINUED GROWTH AND FULFILLMENT OF POTENTIAL SHOWN BY ITS ARCHED FILAMENT SYSTEM.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 02/2100Z TO 03/2100Z: GEOMAGNETIC ACTIVITY WAS ACTIVE. MINOR STORM LEVELS WERE REPORTED AT HIGH LATITUDES 3/0600-0900Z. THIS SLIGHT DISTURBANCE WAS ATTRIBUTED TO MINOR FILAMENT DISAPPEARANCES ENHANCING THE RECURRENT UNSETTLED LEVEL.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE TO MINOR STORM LEVELS. INCREASING ACTIVITY IS BASED ON IRREGULARLY TIMED DISAPPEARING FILAMENTS FROM 29 AUG THROUGH 3 SEP. MINOR STORM LEVELS ARE EXPECTED AT MID-LATITUDES ON THE SECOND AND THIRD DAYS (5-6 SEP) DURING MID-NIGHT HOURS WITH CORRESPONDING OCCASIONAL MAJOR LEVELS AT HIGH LATITUDES DURING NIGHT-TIME PERIODS. THE PAST FOUR ROTATIONS HAVE DENOTED THIS SECTOR AS GEOMAGNETIC EFFECTIVE WITH A LESSER DISTURBANCE LAST CYCLE.

III. EVENT PROBABILITIES 04 SEP-06 SEP

CLASS M - 05/05/05

CLASS X - 01/01/01

PROTON - 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 03 SEP 093

PREDICTED 04 SEP-06 SEP 092/091/090

90 DAY MEAN 03 SEP 090

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 02 SEP 014/019

ESTIMATED AFR/AP 03 SEP 015/015

PREDICTED AFR/AP 04 SEP-06 SEP 015/015-020/020-025/030

SOLTERWARN

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