

HFUS3 BOU 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 229

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 16 AUG 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/2100Z TO 16/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW FOR THE PAST 24 HOURS. NO OPTICAL FLARES HAVE BEEN REPORTED ALTHOUGH REGION ~~4553~~ (N08W89) EXHIBITED POINT BRIGHTENINGS AND SURGING AS IT APPROACHED WEST LIMB PASSAGE. TWO NEW REGIONS WERE NUMBERED. REGION 4563 (N04W68) EMERGED ON THE DISK AS A SMALL BIPOLAR GROUP. NEW REGION 4564 (S09E74), AN H-TYPE SPOT, ROTATED OVER THE EAST LIMB. IT IS NOT A RETURNING REGION. THE MOST SIGNIFICANT ACTIVITY WAS THE DISAPPEARANCE OF A DARK FILAMENT WHICH WAS LOCATED AT S14W04 TO S18W10 AT 15/2200 UT. THE DISAPPEARANCE IS ASSUMED TO BE ASSOCIATED WITH A LONG-DELAY X-RAY ENHANCEMENT (4-HOUR DURATION) WHICH BEGAN NEAR 1100 UT. PARALLEL RIBBONS WERE STILL VISIBLE IN H-ALPHA AT 1447 UT ALONG THE EXTENDED INVERSION LINE. THE LARGE-SCALE HELIOMAGNETIC FIELDS APPEAR TO BE RESTRUCTURING IN THIS LOCALITY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE VERY LOW FOR THE NEXT THREE DAYS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 15/2100Z TO 16/2100Z: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DURING THE PAST 24 HOURS. THIS ACTIVITY IS ATTRIBUTED TO EFFECTS ASSOCIATED WITH A FILAMENT DISAPPEARANCE ON 11 AUGUST.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO QUIET DURING THE NEXT THREE DAYS. HOWEVER, STORM COMMENCEMENT IS EXPECTED MIDDAY ON 20 AUGUST IN RESPONSE TO A POSSIBLE CORONAL MASS EJECTION ASSOCIATED WITH TODAY'S FILAMENT DISAPPEARANCE. MINOR STORM CONDITIONS SHOULD PREVAIL ON 21 AND 22 AUGUST.

III. EVENT PROBABILITIES 17 AUG-19 AUG

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 AUG 081

PREDICTED 17 AUG-19 AUG 075/080/080

90 DAY MEAN 16 AUG 097

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 AUG 024/026

ESTIMATED AFR/AP 16 AUG 017/021

PREDICTED AFR/AP 17 AUG-19 AUG 015/015-010/015-010/010

SOLTERWARN

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