

HFUS3 BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 241

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 28 AUG 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 27/2100 TO 28/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW THIS PERIOD.

REGIONS 4565 (S13W63) AND 4567 (S06E25) CONTINUE TO BE THE MOST ACTIVE REGIONS ON THE DISK. OF THESE TWO REGIONS, 4567 IS THE MOST DYNAMIC. REGION 4565 DECAYED IN AREA AND NUMBER OF SPOTS AND REMAINS A C-TYPE SPOT GROUP. REGION 4567 GREW IN AREA AND NUMBER OF SPOTS AND IS NOW CLASSIFIED AS A D-TYPE GROUP. REGION 4567 PRODUCED FIVE OPTICAL SUBFLARES AND 4565 PRODUCED THREE. THERE WERE NO NEW REGIONS NUMBERED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW. REGION 4567 SHOULD CONTINUE TO GROW, OR AT LEAST REMAIN STABLE, IF ARCH FILAMENT SYSTEMS CONTINUE IN THE SPOT GROUP. THERE IS STILL A SLIGHT POSSIBILITY OF AN M-LEVEL EVENT OCCURRING OUT OF THIS REGION BECAUSE OF ITS DYNAMICS. REGION 4565 MAY DECAY SLIGHTLY BUT SHOULD REMAIN FAIRLY STABLE, IF ARCH FILAMENT SYSTEMS CONTINUE TO BE PART OF ITS STRUCTURE.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 27/2100Z TO 28/2100Z:

~~THE GEOMAGNETIC FIELD WAS AT MINOR STORM LEVELS AT ALL~~ LATITUDES, WITH INTERMITTENT PERIODS AT MAJOR STORM LEVELS AT HIGH LATITUDES UNTIL 1500UT. AT THAT TIME MID-LATITUDE STATIONS DROPPED TO GENERALLY ACTIVE LEVELS, WHEREAS HIGH LATITUDE STATIONS CONTINUED TO EXPERIENCE STORM CONDITIONS. THIS ACTIVITY IS THOUGHT TO BE ASSOCIATED WITH A FILAMENT THAT DISAPPEARED ON THE 23RD OF AUGUST.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO CONTINUE AT ACTIVE TO MINOR STORM LEVELS THROUGH THE 29TH OF AUGUST, THEN DECLINE TO ACTIVE LEVELS ON THE 30TH, AND FINALLY TO ACTIVE TO UNSETTLED LEVELS ON THE 31ST. THE ACTIVITY ON THE 29TH IS EXPECTED DUE TO A HIGH SPEED CORONAL STREAM WHICH CROSSED CENTRAL MERIDIAN ON THE 26TH OF AUGUST.

III. EVENT PROBABILITIES 29 AUG-31 AUG

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 AUG 087

PREDICTED 29 AUG-31 AUG 089/090/088

90 DAY MEAN 28 AUG 091

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 27 AUG 028/034

ESTIMATED AFR/AP 28 AUG 026/040

PREDICTED AFR/AP 29 AUG-31 AUG 020/025-015/020-010/015

SOLTERWARN

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