

HFUS3 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 201

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 19 JUL 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/2100 TO 19/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4544 (N10W72) PRODUCED A FEW SUB-FLARES: LARGEST AT 19/1552Z WITH B1.5 X-RAY CORRELATION. THIS REGION ALSO HAD AN ACTIVE DARK FILAMENT. IT REMAINED A SIMPLE ALPHA-TYPE WITH ONE SPOT IN WHITE-LIGHT. REGION 4537 (S08W100) CONTINUED ACTIVE SURGES AND PROMINENCES AS IT ROTATED AROUND LIMB. ONE NEW REGION ASSIGNED: REGION 4547 (N20W37) WAS AN ALPHA-TYPE WITH TWO SPOTS IN WHITE-LIGHT. IT HAD ARCHED FILAMENT SYSTEMS. REGION 4545 (S07E19) GREW SLIGHTLY AND DEVELOPED PENUMBRA LATE IN THE PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. NO SIGNIFICANT RETURNING REGIONS ARE EXPECTED.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 18/2100Z TO 19/2100Z: GEOMAGNETIC ACTIVITY WAS AT ACTIVE TO MINOR STORM LEVELS. THE HIGH LATITUDES MINOR STORM ENDED AT 19/1200Z, WITH ONLY BRIEF MINOR LEVELS REPORTED UNTIL 19/1800Z. THE LOW AND MID-LATITUDINAL ACTIVITY CONTINUED ITS SLOW DECREASE FROM THE UPPER-ACTIVE TO LOWER-ACTIVE LEVEL.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE UNSETTLED/ACTIVE. BRIEF MINOR LEVELS ARE EXPECTED AT HIGH LATITUDES DURING NIGHT-TIME PERIODS.

III. EVENT PROBABILITIES 20 JUL-22 JUL

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 JUL 077

PREDICTED 20 JUL-22 JUL 078/079/081

90 DAY MEAN 19 JUL 115

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 JUL 018/023

ESTIMATED AFR/AP 19 JUL 017/020

PREDICTED AFR/AP 20 JUL-22 JUL 012/015-012/020-013/020

SOLTERWARN

BT