

# BOULDER FORECAST

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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 169 ISSUED 2200Z 17 JUNE 1972

A. FLARE ACTIVITY REMAINS AT A MODERATE LEVEL. REGIONS 237, 245 AND 248 HAVE PRODUCED SEVERAL CLASS C FLARES AND A CLASS M-2 SUBFLARE OCCURRED IN REGION 248 NEAR 162000Z. REGION 237 /S11W17/ HAS BEEN RELATIVELY STABLE DURING THE PAST FEW HOURS AND ITS INFERRED MAGNETIC GRADIENTS HAVE DECLINED SLIGHTLY. THIS REGION, HOWEVER, REMAINS MAGNETICALLY COMPLEX. REGION 248 /S10E56/, THE LARGEST DISK FEATURE, IS DEVELOPING SLOWLY AND RECENT OBSERVATIONS SUGGEST THAT IT IS ALSO COMPLEX. REGION 245 /N10E46/ APPEARS TO BE A SIMPLE BIPOLAR GROUP WITH A N-S NEUTRAL LINE. THE 162000Z PROTON ENHANCEMENT INCREASED DURING THE PERIOD TO A MAXIMUM NEAR 1730Z OF OVER 1,300 PARTICLES CM<sup>2</sup> SEC-1 IN THE 5-21 MEV RANGE. COUNTING RATES HAVE RECENTLY DECLINED TO NEAR 400. ASSOCIATED ABSORPTION ON THE 30 MHZ THULE RIOMETER APPARENTLY PEAKED AT 2.6 DB AT 1815Z. A GEOMAGNETIC DISTURBANCE HAS BEEN IN PROGRESS SINCE 1315Z.

B. A FEW CLASS M FLARES ARE EXPECTED DURING THE FORECAST PERIOD AND THERE IS A SLIGHT CHANCE OF CLASS X ACTIVITY FROM REGIONS 237 AND 248. THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN DISTURBED DURING THE NEXT 18-24 HOURS. PROTON ENHANCEMENTS ARE EXPECTED AT SATELLITE ALTITUDES FOR ANOTHER 36-48 HOURS. THE POLAR CAP ABSORPTION EVENT WILL END IN ABOUT 24 HOURS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 18/0000Z ENDING 20/2400Z

CLASS M OR GREATER 75/75/75

CLASS X 10/10/10

PROTON EVENTS 10/10/10

D. OTTAWA 10.7 CM FLUXES FOR 17/1400Z, 17/1700Z AND 17/2000Z WERE 146, 145 AND 146, RESPECTIVELY. PREDICTED 10.7 CM FLUX FOR 18-20 IS 154/158/160.

E. MAGNETIC A-FREDERICKSBURG FOR 16 JUNE WAS 11. FOR 17 JUNE ABOUT 29. PREDICTED AP FOR 18-20 JUNE IS 25/18/12.

SOLTERWARN

SPAN2

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