

NNNNULV

PP KGFF

DE BOU 230500Z

THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SPACE DISTURBANCE FORECAST NUMBER 598C ISSUED AT 0500Z

JULY 23 1967

MAJOR FLARES POSSIBLE DURING THE NEXT 12 HOURS.

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PP KGFF

DE BOU 231100Z

HERE IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SPACE DISTURBANCE FORECAST NUMBER 598D ISSUED AT 1100Z \

JULY 23, 1967

MAJOR FLARES ARE POSSIBLE DURING THE NEXT 12 HOURS.

BT

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SPACE DISTURBANCE FORECAST NUMBER 599A ISSUED AT 1700Z
JULY 23. 1967.

MAJOR FLARES ARE EXPECTED DURING THE NEXT 12 HOURS

A. AN IMPORTANCE ONE OR POSSIBLY IMPORTANCE TWO FLARE WAS
REPORTED AT 0443Z TODAY IN A LARGE BRIGHT REGION AT N12E30.
A COMPLEX EVENT CLASSIFIED AS IMPORTANCE ONE BRIGHT ALSO
OCCURRED THERE AT 1257Z. ADDITIONAL SUBFLARES WITH STRONG RADIO
BURSTS HAVE OCCURRED FREQUENTLY SINCE THEN. THIS REGION CONTAINS
A LARGE SYMMETRICAL LEADER SUNSPOT ATTENDED BY SMALL FOLLOWERS.
THE SPOT GROUP AT N25E62 HAS GROWN TO OVER 1000 MILLIONTHS AND
APPEARS EVEN MORE COMPLEX THAN YESTERDAY. VERY LITTLE ACTIVITY
HAS BEEN REPORTED AT THIS LOCATION.

B. THE FREQUENCY OF FLARE AND SURGE ACTIVITY IN THE N12E30 REGION
AND THE CHARACTER OF THE RADIO EMISSION ACCOMPANYING THIS ACTIVITY
SUGGESTS THAT THE REGION IS BUILDING RAPIDLY TO MAJOR FLARE
ACTIVITY. ALTHOUGH FLARES HAVE BEEN SPARSE FROM THE VERY LARGE
SPOT GROUP AT N25E62, ITS POTENTIAL FOR MAJOR FLARES IS ALSO
INCREASING. BOTH REGIONS POSSESS SOME OF THE CHARACTERISTICS
OF PROTON FLARE REGIONS.

C. THE PROBABILITIES FOR FLARES AND PROTON EVENTS FOR THE THREE
DAY PERIOD JULY 24-26 ARE AS FOLLOWS /FIGURES ARE
PERCENTAGES FOR EACH OF THE THREE DAYS/

IMPORTANCE ONE OR GREATER 100/100/100

IMPORTANCE TWO OR GREATER 60/80/80

IMPORTANCE THREE OR GREATER 20/30/40

PROTON EVENTS 20/30/35

D. THE OTTAWA 10.7 CM FLUX TODAY IS ESTIMATED TO BE 151.

THE PREDICTED VALUES FOR JULY 24-26 ARE 162/166/170.

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SPACE DISTURBANCE FORECAST NUMBER 599B ISSUED AT 2300Z
JULY 23 1967

MAJOR FLARES ARE EXPECTED DURING THE NEXT 12 HOURS.

A. AN IMPORTANCE ONE BRIGHT FLARE WAS REPORTED AT 1809Z ACCOMPANIED BY MODERATE RADIO BURSTS. ANOTHER RADIO EVENT AT 2113Z DID NOT HAVE AN ASSOCIATED OPTICAL REPORT DUE TO WEATHER BUT THE SIZE OF THE EVENT WAS SIMILAR TO THE 1809Z EVENT. THESE EVENTS OCCURRED IN THE LARGE BRIGHT REGION NOW AT N12 E78 WHICH NOW CONTAINS A TYPE E SPOT GROUP OF ABOUT 500 MILLIONTHS AREA. ANOTHER TYPE E SPOT GROUP OF NEARLY 1000 MILLIONTHS IS LOCATED NOW AT N25 E58. NO SIGNIFICANT EVENTS HAVE BEEN REPORTED FROM IT TODAY.

B. THE FREQUENCY OF RADIO EVENTS AND THE GROWTH AND STRUCTURE OF THESE TWO REGIONS INDICATES A RAPID INCREASE OF MAJOR FLARE POTENTIAL. MAJOR FLARES WILL SURELY OCCUR DURING THE FORECAST PERIOD. INDEED THEY MAY BE IMMINENT WITHIN THE NEXT FEW HOURS. THERE IS INSUFFICIENT DATA TO ASSESS POTENTIAL FOR PROTON EMISSION BUT SUCH EMISSION IS CONSIDERED POSSIBLE.

C. THE PROBABILITIES FOR FLARES AND PROTON EVENTS FOR THE THREE DAY PERIOD JULY 24-26 ARE AS FOLLOWS/FIGURES ARE PERCENTAGES FOR EACH OF THE THREE DAYS/

IMPORTANCE ONE OR GREATER 100/100/100

IMPORTANCE TWO OR GREATER 70/80/80

IMPORTANCE THREE OR GREATER 30/30/40

PROTON EVENTS 20/20/30

D. THE OTTAWA 10.7 CM FLUX TODAY IS 149. THE PREDICTED VALUES FOR JULY 24-26 ARE 158/162/166.

E. THE FREDERICKSBURG MAGNETIC A INDEX FOR YESTERDAY WAS 4. TODAY IT WILL BE ABOUT 14. THE PREDICTED AP RANGES FOR JULY 24-26 ARE 10-20/5-15/UNDER 10.