

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

VIA AGIWARN

SPACE DISTURBANCE FORECAST NUMBER 373A ISSUED 1700Z

DECEMBER 09 1966

A. MAJOR FLARE POTENTIAL INCREASED STILL FURTHER TODAY WITH THE RAPID DEVELOPMENT OF THE REGION AT S22E21. THIS REGION IS NOW LARGE AND COMPLEX IN BOTH PLAGE AND SUNSPOT STRUCTURE. IT IS THE MOST IMPORTANT REGION IN THE SOUTH THUS FAR THIS CYCLE. THIS REGION IS LIKELY TO PRODUCE MAJOR FLARES WITHIN 48 HOURS. IN ADDITION, FLARE POTENTIAL REMAINS MODERATELY HIGH IN THE REGION AT N22E50 ALTHOUGH THE SPOT STRUCTURE IS NOT AS COMPLEX AS ANTICIPATED TODAY. MAJOR DEVELOPMENT HAS ALSO OCCURRED IN A SUNSPOT GROUP AT N27<sup>20</sup>E<sup>20</sup>W<sup>20</sup> WHICH HAS GROWN FROM AN AREA OF 10 YESTERDAY AT 1500Z TO AN AREA OVER 100 MILLIONTHS TODAY. ITS STRUCTURE IS SIMPLE AND IT IS NOT EXPECTED TO PRODUCE FLARES LARGER THAN IMPORTANCE ONE. THE 2800 MHZ FLUX HAS RISEN DRAMATICALLY. IMPORTANCE ONE FLARES OCCURRED YESTERDAY AT 0900Z/N28E34 1923Z/N24E65 AND 2334Z/N10W70. THE LAST WAS IN A DEVELOPING REGION NOW PASSING OFF WEST LIMB. SEVERAL SUBFLARES AND AN IMPORTANCE ONE FLARE AT 0307Z HAVE BEEN REPORTED TODAY ALL FROM THE LARGE REGION AT N22E50.

B. THE PROBABILITIES FOR FLARES AND PROTON EVENTS FOR THE THREE DAY PERIOD DECEMBER 10-12 ARE AS FOLLOWS/FIGURES ARE PERCENTAGES FOR EACH OF THE THREE DAYS/  
IMPORTANCE ONE OR GREATER 100/100/100  
IMPORTANCE TWO OR GREATER 50/60/70  
IMPORTANCE THREE OR GREATER 10/15/20  
PROTON EVENTS 10/15/15

C. THE OTTAWA 10.7 CM FLUX TODAY IS EXPECTED TO BE ABOUT 141. PREDICTED VALUES FOR THE THREE DAY PERIOD DECEMBER 10-12 ARE 145/147/149.

D. THE FREDERICKSBURG MAGNETIC INFORMATION WILL BE INCLUDED ON THE 2300Z FORECASTM

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FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
VIA AGIWARN

SPACE DISTURBANCE FORECAST NUMBER 373B ISSUED 2300Z

DECEMBER 09 1966

A. AN IMPORTANCE TWO FLARE OCCURRED TODAY AT 1758Z IN THE  
LARGE REGION AT N21E48. THE FLARE WAS ACCOMPANIED BY STRONG  
X-RAYS AND MODERATE RADIO EMISSION. THE SUNSPOTS IN THIS REGION  
CONTINUE TO GROW IN AREA AND COMPLEXITY. ITS AREA IS NOW  
APPROACHING 500 MILLIONTHS. MAJOR FLARES ARE EXPECTED TO  
CONTINUE IN THIS REGION. PROTON EMISSION FROM THIS REGION  
WILL BECOME MORE LIKELY IF THE PRESENT TREND TOWARD MORE COMPLEX  
STRUCTURE CONTINUES. SUBFLARES ARE BEGINNING TO OCCUR IN THE  
DEVELOPING REGION AT S22E17. ADDITIONAL GROWTH HAS TAKEN PLACE  
HERE SINCE 1630Z. THIS IS ALSO A LIKELY SITE FOR MAJOR FLARES  
IN THE NEXT TWO OR THREE DAYS. A SMALL SURGE AT N19 E LIMB  
INDICATES THAT A SMALL REGION WILL APPEAR TOMORROW.

B. THE PROBABILITIES FOR FLARES AND PROTON EVENTS FOR THE  
THREE DAY PERIOD DECEMBER 10-12 ARE AS FOLLOWS/FIGURES ARE  
PERCENTAGES FOR EACH OF THE THREE DAYS/

IMPORTANCE ONE OR GREATER 100/100/100

IMPORTANCE TWO OR GREATER 70/75/80

IMPORTANCE THREE OR GREATER 15/20/25

PROTON EVENTS 10/15/15

C. THE OTTAWA 10.7 CM FLUX TODAY WAS 143. PREDICTED VALUES  
FOR THE THREE DAY PERIOD DECEMBER 10-12 ARE 147/150/152.

D. THE FREDERICKSBURG MAGNETIC A INDEX YESTERDAY WAS 2. TODAY  
IT WILL BE ABOUT 2. PREDICTED VALUES FOR THE THREE DAY PERIOD  
DECEMBER 10-12 ARE 4/7/7.

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