

NNNNUUV

PP KGFF

DE BOU 220500Z

THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SPACE DISTURBANCE FORECAST NUMBER 536C ISSUED AT 0500Z

MAY 22 1967

PROTONS STILL POSSIBLE FROM THE 3B FLARE AT 21/1921Z BUT NONE
REPORTED AS OF 22/0500Z. MAJOR FLARES EXPECTED DURING NEXT
12 HOURS.

BT

PPKGFF

DE BOU 221100Z

THIS IS THE MSG FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SPACE DISTURBANCE FORECAST NUMBER 536D ISSUED AT 1100Z

MAY 22 1967

MAJOR FLARES EXPECTED DURING THE NEXT 12 HOURS.

BT

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SPACE DISTURBANCE FORECAST NUMBER 537A ISSUED AT 1700Z
MAY 22 1967

MAJOR FLARE ACTIVITY IS EXPECTED DURING THE NEXT
12 HOURS. SOLAR PROTONS ARE POSSIBLE.

A. NUMEROUS LESSER FLARES HAVE OCCURRED IN THE
NORTHEAST REGION FOLLOWING THE 21/1921Z IMPORTANCE 3B
FLARE DISCUSSED IN SDF 536B. AT ABOUT 0007Z A PROBABLE
IMPORTANCE 2 FLARE OCCURRED NEAR THE SPOT GROUP NOW
AT ABOUT N25 E44. IT WAS ACCCOMPANIED BY ANOTHER
PROBABLE IMPORTANCE TWO FLARE WHICH WAS INTIMATELY
ASSOCIATED WITH A FILAMENT AT THE NORTHEAST
LIMB. THE SPOT GROUPS IN THE NORTHEAST ACTIVE REGION HAVE
CONTINUED TO GROW AND A STRONG DELTA CONFIGURATION
EXISTS WITHIN THE GROUP AT N25 E44. ALL OTHER VISIBLE
REGIONS APPEAR TO BE INACTIVE.

B. CONTINUED MAJOR FLARE ACTIVITY IS EXPECTED FROM THE
NORTHEAST REGION. IT IS HIGHLY PROBABLE THAT THESE
MAJOR FLARES WILL PRODUCE PROTONS.

C. THE PROBABILITIES FOR FLARES AND PROTON EVENTS FOR THE
THREE DAY PERIOD MAY 23-25 ARE AS FOLLOWS /FIGURES ARE
PERCENTAGES FOR EACH OF THE THREE DAYS/
IMPORTANCE ONE OR GREATER 100/100/100
IMPORTANCE TWO OR GREATER 90/90/90
IMPORTANCE THREE OR GREATER 60/60/60
PROTON EVENTS 60/60/60

THE OTTAWA 10.7 CM FLUX TODAY IS ESTIMATED TO BE 175.
THE PREDICTED VALUES FOR MAY 23-25 ARE 182/186/190

BT

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SPACE DISTURBANCE FORECAST NUMBER 537B ISSUED AT 2300Z
MAY 22 1967

A PROTON FLARE IS LIKELY DURING THE NEXT 12 HOURS. AN EXPECTED MAGNETIC STORM MAY BEGIN WITHIN THIS PERIOD.

- A. THE SUN HAS BEEN RELATIVELY QUIET FOR THE PAST 22 HOURS FOLLOWING THE FLARE ACTIVITY OF YESTERDAY AND EARLY TODAY. FINE STRUCTURE FEATURES OF THE NORTHEAST REGION IN HYDROGEN CALCIUM AND WHITE LIGHT INDICATE THAT IT IS CONTINUING TO DEVELOP. THE REGION IS ALSO VERY BRIGHT AT 9.1 CM AND 3.2 MM RADIO WAVELENGTHS AND BOTH WAVELENGTHS SHOW AN EXTREMELY STEEP INTENSITY GRADIENT NEAR THE SPOT GROUP CONTAINING THE DELTA CONFIGURATION.
- B. MAJOR FLARES FROM THE NORTHEAST REGION ARE VERY PROBABLE. ANY SUCH FLARES WHICH OCCUR INTIMATELY ASSOCIATED WITH THE PORTION OF THE SPOT GROUP CONTAINING THE MAGNETIC DELTA CONFIGURATION ARE ALMOST CERTAIN TO PRODUCE PROTONS. A MAGNETIC STORM IS EXPECTED TO RESULT FROM THE FLARE OF 21/1921Z. MOST PROBABLE TIMES FOR MAGNETIC STORM BEGINNING ARE BETWEEN 23/0600Z AND 24/0600Z.
- C. THE PROBABILITIES FOR FLARES AND PROTON EVENTS FOR THE THREE DAY PERIOD MAY 23-25 ARE AS FOLLOWS /FIGURES ARE PERCENTAGES FOR EACH OF THE THREE DAYS/
IMPORTANCE ONE OR GREATER 100/100/100
IMPORTANCE TWO OR GREATER 90/90/90
IMPORTANCE THREE OR GREATER 60/60/60
PROTON EVENTS 60/60/60
- D. THE OTTAWA 10.7 CM FLUX TODAY IS 175. THE PREDICTED VALUES FOR MAY 23-25 ARE 182/186/190
- E. THE FREDERICKSBURG MAGNETIC A INDEX FOR YESTERDAY WAS 7. TODAY IT WILL BE ABOUT 4. THE PREDICTED AP RANGES FOR MAY 23-25 ARE 40-60/25-35/12-18.

BT