

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
VIA AGIWARN

SPACE DISTURBANCE FORECAST NUMBER 453A ISSUED AT 1700Z  
FEBRUARY 27 1967

A. A PROBABLE PROTON FLARE OCCURRED AT ABOUT 1641Z TODAY  
IN THE REGION NEAR N23W05. THE FLARE WAS ACCOMPANIED BY  
STRONG TYPE FOUR RADIO EMISSION AND SPECTACULAR IONOSPHERIC  
XRAY EFFECTS. THE FLARE HAS BEEN VISUALLY CLASSED AS IMPORTANCE  
TWO BRIGHT AND WAS ACCOMPANIED BY A VERY LARGE DARK SURGE.  
THE SPOT GROUP ASSOCIATED WITH THE FLARE REMAINS VERY LARGE  
AT ABOUT 1600 MILLIONTHS AREA WITH 132 SPOTS. THE UNBRAE  
AND PENUMBRA HAVE DARKENED SINCE YESTERDAY CMMA ESPECIALLY  
IN THE VICINTIY OF A DELTA CONFIGURATION IN THE CENTER OF  
THE GROUP. ADDITIONAL MAJOR FLARES SHOULD BE EXPECTED FROM  
THIS REGION FOR THE NEXT 8 DAYS. THERE ARE FIFTEEN SPOT  
GROUPS VISIBLE TODAY. THE SUNSPOT R NUMBER IS 370 THE HIGHEST  
SINCE IGY. ALL EXCEPT THE FLARING REGION ARE SMALL BUT AT  
LEAST SIX OF THE GROUPS ARE GROWING. THE LARGEST OF THESE  
IS A SMALL TYPE E AT S23E73.

B. THE PROBABILITIES FOR FLARES AND PROTON EVENTS FOR THE  
THREE DAY PERIOD FEBRUARY 28-MARCH 02 ARE AS FOLLOWS/  
FIGURES ARE PERCENTAGES FOR EACH OF THE THREE DAYS/  
IMPORTANCE ONE OR GREATER 100/100/100  
IMPORTANCE TWO OR GREATER 80/80/80  
IMPORTANCE THREE OR GREATER 40/40/40  
PROTON EVENTS 90/80/60

C. THE OTTAWA 10.7 CM FLUX TODAY IS ESTIMATED TO BE 178.  
THE PREDICTED VALUES FOR FEBRUARY 28-MARCH 02 ARE 185/190/190.

D. THE FREDERICKSBURG MAGNETIC A INDEX INFORMATION WILL  
BE INCLUDED ON THE 2300Z FORECAST.

BT

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

VIA AGIWARN

ADVBO ALCONS 27230

SPACE DISTURBANCE FORECAST NUMBER 453B ISSUED AT 2300Z

FEBRUARY 27 1967

A. THE FLARE AT 1640Z TODAY WHICH WAS DISCUSSED IN SDF 453A SEEMS TO HAVE PRODUCED PROTONS WHICH WERE DETECTED BY MONITORS ABOARD SPACE VEHICLES. INFORMATION REGARDING PROTON ENERGY RANGES OR FLUXES HAS NOT YET BEEN RECEIVED. ANCHORAGE REPORTED A VERY SMALL EVENT BEGINNING POSSIBLY AS EARLY AS 1700Z. AT PRESENT IT CAN NOT BE POSITIVELY ATTRIBUTED TO PROTONS. LATER INFORMATION REGARDING THE FLARE INDICATES THAT IT OCCURRED NORTHEAST OF THE SPOT GROUP AND PROBABLY DID NOT OVERLAY IMPORTANT UMBRA. THIS DETRACTS FROM THE SIGNIFICANCE OF THE EVENT AS A PROTON PRODUCER. ANOTHER IMPORTANCE TWO BRIGHT FLARE OCCURRED AT 2115Z PRODUCING STRONG IONOSPHERIC EFFECTS HOWEVER IT DID NOT HAVE THE WIDE FREQUENCY RANGE RADIO EMISSION WHICH CHARACTERIZED THE EARLIER FLARE. BOTH FLARES OCCURRED IN THE VERY LARGE SPOT GROUP NEAR N23W05. BRIGHT GREEN CORONA WAS OBSERVED TODAY ON THE NORTHEAST LIMB. NO FLARES HAVE BEEN REPORTED AS YET FROM THE REGION AT S23E73 HOWEVER THE SPOT GROUP IS INTERESTING AND BEARS WATCHING.

B. THE PROBABILITIES FOR FLARES AND PROTON EVENTS FOR THE THREE DAY PERIOD FEBRUARY 28-MARCH 02 ARE AS FOLLOWS/  
FIGURES ARE PERCENTAGES FOR EACH OF THE THREE DAYS/  
IMPORTANCE ONE OR GREATER 100/100/100  
IMPORTANCE TWO OR GREATER 80/80/80  
IMPORTANCE THREE OR GREATER 35/35/35  
PROTON EVENTS 50/40/40

C. THE OTTAWA 10.7 CM FLUX TODAY IS 191. THE PREDICTED VALUES FOR FEBRUARY 28-MARCH 02 ARE 185/190/190

D. THE FREDERICKSBURG MAGNETIC A INDEX YESTERDAY WAS 9. TODAY IT WILL BE ABOUT 5. PREDICTED VALUES FOR FEBRUARY 28-MARCH 02 ARE 25/60/25.