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PP KGFF

DE BOU 250500Z

HERE IS THE 0500Z FORECAST FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SPACE DISTURBANCE FORECAST NUMBER 539C ISSUED AT 0500Z

MAY 24 1967

25

MAJOR FLARES ARE POSSIBLE DURING THE NEXT 12 HRS FROM THE
REGION LOCATED AT N26 E05. A MINOR SOLAR PROTON EVENT IS
IN PROGRESS

A SECOND MINOR PROTON EVENT BEGINNING AT 24/2245Z WAS REPORTED
BY ANCHORAGE. AS OF 25/0230Z A MAX ATTENUATION EXCEEDING 20 DB
OF COSMIC RADIO NOISE WAS RECORDED ON THE BARTER ISLAND BIOMETER.
THIS PCS IS SUPERPOSED ON YESTERDAYS EVENT. NO MAJOR FLARES HAVE
BEEN REPORTED SINCE THE 24/2300Z FORECAST.

BT

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SPACE DISTURBANCE FORECAST NUMBER 540~~4~~ ISSUED AT 1700Z

MAY 25 1967

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PROTON EVENT CONTINUES. PROTON FLARES ARE EXPECTED WITHIN THE NEXT 12 HOURS.

A. MAJOR FLARES CONTINUE TO BE PRODUCED BY THE VERY LARGE REGION CONTAINING THE F/1410 SPOT GROUP AT N26 E04. THERE WAS A 2B FLARE FROM THIS REGION AT 0633Z AND ANOTHER PROBABLE IMPORTANCE TWO FLARE WHICH APPARENTLY BEGAN AT ABOUT 1040Z. THERE WERE STRONG IONOSPHERIC DISTURBANCES WITH BOTH OF THESE FLARES AND VERY STRONG RADIO EMISSION AT METRIC AND DECAMETRIC WAVELENGTHS WITH THE 1040Z FLARE. THE ENHANCED RADIO EMISSION CONTINUED PAST 1700Z AND WAS ESPECIALLY SEVERE THROUGH 1500Z. THE PROTON EVENT INCREASED IN INTENSITY STARTING AT ABOUT 0715Z. THIS MAY BE A SECOND EVENT SUPERIMPOSED ON THE EARLIER ONE. AT 1330Z AT 80000 KM ALTITUDE PROTON FLUX EXCEEDED THREE TIMES NORMAL BACKGROUND AT ENERGIES GREATER THAN 20 MEV. THE BARTER ISLAND RIOMETER SHOWED GREATER THAN 20 DB ABSORPTION AT 0930Z. THE EVENT SEEMS TO BE PREDOMINATELY COMPOSED OF LOW ENERGY PROTONS. A VERY LARGE MAGNETIC STORM BEGAN WITH SUDDEN COMMENCEMENT AT 1019Z. THERE WAS A SECOND VERY ABRUPT SUDDEN IMPULSE AT 1234Z.

B. ADDITIONAL MAJOR FLARE ACTIVITY IS EXPECTED. PRIMARILY FROM THE NORTHCENTRAL REGION. REGIONS NEAR N21 E63 AND S19 E85 ARE ALSO POTENTIAL SOURCES OF MAJOR FLARES. THE PROTON EVENTS SHOULD CONTINUE WITH ADDITIONAL ENHANCEMENTS DUE TO FUTURE FLARE ACTIVITY. THE MAGNETIC STORM SHOULD CONTINUE AND BECOME INCREASINGLY DISTURBED AFTER 0600Z.

C. THE PROBABILITIES FOR FLARES AND PROTON EVENTS FOR THE THREE DAY PERIOD MAY 26-28 ARE AS FOLLOWS /FIGURES ARE PERCENTAGES FOR EACH OF THE THREE DAYS/

IMPORTANCE ONE OR GREATER 100/100/100

IMPORTANCE TWO OR GREATER 95/95/90

IMPORTANCE THREE OR GREATER 70/70/60

PROTON EVENTS 100/95/80

D. THE OTTAWA 10.7 CM FLUX TODAY IS ESTIMATED TO BE 213. THE PREDICTED VALUES FOR MAY 26-28 ARE 220/226/230

BT

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SPACE DISTURBANCE FORECAST NUMBER 540B ISSUED 2300Z

MAY 25 1967.

PROTON EVENT IN PROGRESS. VERY LARGE MAGNETIC STORM IN PROGRESS. PROTON FLARES LIKELY DURING NEXT 12 HOURS.

A. NO MAJOR FLARES HAVE OCCURRED SINCE SDF 540A. THE LARGE REGION AT N26 W00 HAS HAD NUMEROUS SUBFLARES DURING THIS TIME CMMA MOST OF WHICH HAVE BEEN ASSOCIATED WITH FILAMENT ACTIVITY IN THE FOLLOWING PORTION OF THE REGION. A REGION APPEARING AT S18 E LIMB HAS A LEADING SPOT WHICH HAS BEEN REPORTED AS COVERING THREE TO FOUR DEGREES OF LATITUDE. MINOR LIMB ACTIVITY HAS BEEN ASSOCIATED WITH THIS REGION. THE MAGNETIC STORM AND PROTON EVENT CONTINUE AT THE LEVELS REPORTED IN SDF 540A.

B. MAJOR FLARE ACTIVITY IS STILL EXPECTED FROM THE REGION AT N26 W00. THE CONTINUED EXISTENCE OF STRONG DELTA CONFIGURATIONS IN THAT REGION INDICATES THAT SUCH ACTIVITY SHOULD PRODUCE MORE PROTONS. THE REGION AT S18 E LIMB IS LARGE BUT HAS NOT BEEN ESPECIALLY ACTIVE. THE MAGNETIC STORM IS EXPECTED TO INTENSIFY AFTER 26/0600Z.

C. THE PROBABILITIES FOR FLARES AND PROTON EVENTS FOR THE THREE DAY PERIOD MAY 26-28 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 100/95/80

D. THE OTTAWA 10.7 CM FLUX TODAY IS 205. THE PREDICTED VALUES FOR MAY 26-28 ARE 215/223/230.

E. THE FREDERICKSBURG MAGNETIC A INDEX FOR YESTERDAY WAS 11. TODAY IT WILL BE ABOUT 85. THE PREDICTED AP RANGES FOR MAY 26-28 ARE 50-70/30-50/8-15.