

KBOU

HAUS BOU 160500

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 136A ISSUED 0500Z 16 MAY 1971

CLASS C FLARES ARE EXPECTED DURING THE NEXT 24 HOURS.

A. SOLAR ACTIVITY HAS REMAINED LOW AND ONLY A FEW NON-ENERGETIC SUB-FLARES HAVE BEEN OBSERVED. MOST OF THE ACTIVITY HAS BEEN OBSERVED FROM REGION N04E15. THERE HAS BEEN VERY LITTLE CHANGE IN ANY OF THE DISK REGIONS. THE GEOMAGNETIC FIELD IS QUIET.

B. SOLAR ACTIVITY WILL CONTINUE AT PRESENT LEVEL WITH CLASS C FLARES AND ONE OR TWO CLASS M FLARES DURING THE NEXT 72 HOURS. THE REGION N04E15 (078) IS THE MOST LIKELY REGION FOR CLASS M ACTIVITY. THE GEOMAGNETIC FIELD WILL HAVE PERIODS OF DISTURBANCE.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 16 MAY/0000Z ENDING 18 MAY/2400Z

CLASS M OR GREATER 70/75/75

CLASS X 10/10/10

PROTON EVENTS 10/10/10

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HAUS BOU 162200

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 136B ISSUED 2200Z 16 MAY 1971

SPORADIC, NON-ENERGETIC SUBFLARES ARE EXPECTED DURING THE NEXT 24 HOURS.

A. ONLY CLASS C FLARES HAVE BEEN OBSERVED TODAY PRIMARILY WITHIN THE D TYPE BETA-GAMMA REGION NEAR N05E05. ALTHOUGH THE OVERALL ACTIVITY REMAINS LOW, THE NUMBER OF SPOT GROUPS APPEARS TO BE INCREASING SUBSTANTIALLY. THREE OR FOUR NEW PORE LIKE FEATURES PLUS A GROUP JUST HAVING ROTATED INTO VIEW NEAR N16E79 HAVE BECOME EVIDENT SINCE YESTERDAY. THE N05E05 REGION CONTAINS THE BRIGHTEST PLAGE ON THE DISK, A PORTION OF THE CHROMOSPHERIC FACULAE THERE IS ENCHROACHING UPON THE LEADER'S PENUMBRAL STRUCTURE. A WELL DEFINED BUT UNINTERESTING NEUTRAL LINE CHARACTERIZES THE REGION. SINCE SHORTLY BEFORE 16/1352Z THE 21-70 MEV CHANNEL ON BOARD ATS-1 HAS DETECTED A PROTON STREAM. THE 5-21 MEV SENSOR RESPONDED ABOUT AN HOUR LATER. PARTICLE FLUXES HAVE INCREASED MONOTONICALLY UP TO THE VALUES BEING REGISTERED AT MESSAGE TIME, NAMELY ABOUT 300 PART/CM<sup>2</sup>/SEC ON THE LOW AND ROUGHLY 20 ON THE HIGH. THE SOURCE IS BELIEVED TO BE THE DECAYING FEATURE NEAR N04W20 /REGION NUMBER 075/. IT MAY BE RECALLED THAT 075 WAS THE SCENE OF A 2B/1B FLARE ON THE 14TH AT 1411Z. MOREOVER, PIONEERS 6 AND 7 SOLAR COSMIC RAY DETECTORS RESPONDED MORE THAN 5 AND 11 DAYS AGO RESPECTIVELY TO THIS PARTICULAR CARRINGTON LONGITUDE IMPLYING SOME KIND OF COROTATING STREAM HAS BEEN IN EXISTANCE THERE FOR A NUMBER OF DAYS PRIOR TO THE 14/1411Z FLARE. THE GEOMAGNETIC FIELD IS QUIET.

B. SOLAR ACTIVITY IS NOT EXPECTED TO CHANGE SIGNIFICANTLY DURING THE FORECAST PERIOD. ENERGETIC FLARES NEAR THE M1 LEVEL SHOULD MARK AN UPPER LIMIT ON FLARES ACROSS THE DISK. THE OBSERVED PROTON FLUXES ARE EXPECTED TO PRODUCE ONLY A FEW TENTHS OF A DB ABSORPTION AT MOST ON GROUND-BASED 30 MHZ RIOMETERS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 17 MAY/0000Z ENDING 19 MAY 2400Z.

CLASS M OR GREATER 45/55/45

CLASS X 05/05/05

PROTON EVENTS 05/05/05

D. OTTAWA 10.7 CM FLUXES FOR 16/1400, 1700, AND 2000Z WERE 114, 114, AND XXX RESPECTIVELY.

PREDICTED 10.7 CM FLUX FOR 17-19 MAY IS 114/112/111.

E. MAGNETIC A-FREDERICKSBURG FOR 16 MAY WAS 12. FOR 17 MAY ABOUT 05. PREDICTED AP FOR 17-19 MAY, 05/13/09.

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