

KBOU

HFUS BOU 220500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 203A ISSUED 0500Z 22 JULY 1971

OCCASIONAL CLASS C FLARES ARE EXPECTED DURING THE NEXT 24 HOURS.

A. SOLAR ACTIVITY HAS DROPPED TO A LOW LEVEL DURING THE PAST SEVEN HOURS, AND NO ENERGETIC FLARES HAVE BEEN REPORTED. REGION 176 /N14W11/ IS GROWING SLOWLY AND CONTAINS ARCH FILAMENTS AND BRIGHT LINES IN THE PLAGE EAST OF THE LEADING SPOT. SOME DECAY HAS OCCURRED IN THE TRAILER SECTION OF REGION 164 /N06W47/, BUT BRIGHTENINGS HAVE BEEN OBSERVED RECENTLY IN THE PLAGE BETWEEN THE TRAILER OF REGION 164 AND THE LEADER OF REGION 177 /N09W39/. A SMALL NEW BIPOLAR REGION, NUMBER 187, HAS APPEARED AT S14E03. REGION 187 CONTAINS ARCH FILAMENTS AND A RUDIMENTARY D-TYPE SPOT GROUP. THE GEOMAGNETIC FIELD HAS BECOME ACTIVE DURING THE PAST FOUR HOURS. THE CURRENT PATTERN OF SUBSTORM ACTIVITY BEGAN ABRUPTLY AT 21/0524Z WITH A SMALL DISTURBANCE OBSERVED AT SEVERAL OBSERVATORIES. RELATIVELY LITTLE DISTURBANCE OCCURRED UNTIL ABOUT 21/1300Z, WHEN UNSETTLED CONDITIONS DEVELOPED AT MIDDLE-LATITUDE STATIONS. K-INDICES OF UP TO 6 WERE REPORTED BY OBSERVATORIES AT HIGH GEOMAGNETIC LATITUDES FROM 21/1300-22/0300Z. AT ABOUT 22/0100Z THE GEOMAGNETIC FIELD BECAME ACTIVE, AND A K-INDEX OF 4 WAS OBSERVED AT BOULDER DURING THE INTERVAL 22/0000-0300Z. ACTIVE CONDITIONS EXIST AT THE TIME OF THIS REPORT.

B. DURING THE THREE-DAY FORECAST PERIOD, SOLAR ACTIVITY PROBABLY WILL REMAIN AT A RELATIVELY LOW LEVEL. NON-ENERGETIC SUBFLARES AND ONE OR TWO SMALL CLASS M EVENTS PROBABLY WILL BE PRODUCED IN REGION 176 AND IN THE ZONE OF INTERACTION BETWEEN REGIONS 164 AND 177. ACTIVE GEOMAGNETIC CONDITIONS ARE LIKELY DURING THE NEXT 12 HOURS, AND UNSETTLED CONDITIONS PROBABLY WILL CONTINUE AN ADDITIONAL 24-36 HOURS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 22 JULY/0000Z ENDING 24 JULY/2400Z.

CLASS M OR GREATER 35/35/35

CLASS X 01/01/01

PROTON EVENTS 01/01/01

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HFUS BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 203B ISSUED 2200Z 22 JULY 1971

ONLY CLASS C ACTIVITY IS EXPECTED DURING THE NEXT 24 HOURS.

A. SOLAR ACTIVITY HAS BEEN AT A LOW LEVEL DURING THE PAST 24 HOURS. ONLY A FEW SCATTERED NON-ENERGETIC FLARES HAVE BEEN OBSERVED. THE MINOR WEST LIMB ACTIVITY WHICH WAS OBSERVED WITH THE PASSING OF REGION 167 HAS NOW SUBSIDED.

A NEW BIPOLE IS EMERGING IN REGION 189 /S16W19/. REGION 187 /S13W03/ CONTINUES ITS SLOW GROWTH AND AN EW ARCH FILAMENT IS PRESENT. REGION 176 /N14W16/ IS NOW STABLE AND THE ARCH FILAMENTS ARE NOT ACTIVE. THE GEOMAGNETIC FIELD IS QUIET.

B. SOLAR ACTIVITY WILL CONTINUE AT PRESENT LEVEL. THE GEOMAGNETIC FIELD WILL REMAIN QUIET WITH SHORT PERIODS OF MINOR DISTURBANCE.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 23 JULY/0000Z ENDING 25 JULY/2400Z.

CLASS M OR GREATER 30/30/30

CLASS X 01/01/01

PROTON EVENTS 01/01/01

D. OTTAWA 10.7CM FLUXES FOR 22/1400Z, 22/1700Z AND 22/2000Z WERE 113, 112 AND 110 RESPECTIVELY. PREDICTED 10.7CM FLUX FOR 23-25 JULY IS 110/110/108.

E. MAGNETIC A-FREDERICKSBURG FOR 21 JULY WAS 16. FOR 22 JULY ABOUT 08. PREDICTED AP FOR 23-25 JULY IS 08/08/10.

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