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HOUS 2 BOU 200200

JOINT AESU/SESC SOLAR REGION AND ACTIVITY SUMMARY ISSUED AT
20/0200Z MAY 1973

I. SUNSPOT DATA FROM BOULDER AT 19/1335Z

NMBR LOCATION LO AREA Z LL NN MAG-TYPE

0103 N10E25 148 0310 D 07 37 GAMMA DELTA

0105 N12E21 152 0020 C 03 03 BETA

MAGNETIC CLASSIFICATIONS INFERRED AT BOULDER.

II. IMPORTANCE ONE OR GREATER FLARES AND ENERGETIC EVENTS-

RGN IMP BEGIN MAX END CLASS

103 1B 19/2234Z 2244Z 2255Z X-3S

III. AREAS OF SPECIAL INTEREST-

REGIONS 103 & 105.

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HFUS 1 BOU 200600

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 140A

JOINT AESU/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 0600Z 20 MAY 1973

IA. A ONE BRIGHT FLARE WAS OBSERVED 19/2234Z FROM REGION 103
(N10E18). THE FLARE PRODUCED A 10CM RADIO BURST OF 1800 FLUX
UNITS AT BOULDER. THE FLARE WAS A POSSIBLE X FLARE. THE REGION
HAS BEEN QUIET SINCE THAT TIME.

IB. NO CHANGE.

II. GEOMAGNETIC FIELD REMAINS DISTURBED AT MINOR STORM LEVEL.

III. NO CHANGE.

IV. NO CHANGE.

V. NO CHANGE.

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HFUS 1 BOU
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO
SDF NUMBER 140B

JOINT AESU/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1300Z 20 MAY 1973

IA. SOLAR ACTIVITY HAS INCREASED SINCE 19/2200Z, WITH REGION 103(N10E13) RESPONSIBLE FOR THE MAJORITY. A ONE BRIGHT FLARE, AT 19/2234Z, PRODUCED A 10 CM RADIO BURST OF 1800 FLUX UNITS. LATER, ANOTHER ONE BRIGHT AT 20/0452Z PRODUCED MAJOR SHORT-WAVE FADES. AT 20/0601Z, A ZERO BRIGHT FLARE WAS OBSERVED, CLASSIFIED AS M-4 BY VELA. THIS FLARE PRODUCED MAJOR SHORT-WAVE FADES TO 22 MHZ, AND RADIO BURSTS OF 140 FLUX UNITS AT 2695 MHZ, AND 210 FLUX UNITS AT 4995 MHZ. A FEW OTHER SUBFLARES HAVE ALSO BEEN REPORTED FROM THIS REGION, AND ALL REPORTS INDICATE THE ACTIVITY BASED NEAR THE WESTERN EDGE OF THE LEADER SPOT. SLIGHT COUNTER-CLOCKWISE SPOT MOTION HAS BEEN REPORTED IN THIS REGION ALSO. REGION 104(S10W37), WITH NO SPOTS VISIBLE, PRODUCED A SMALL SUBFLARE AT 20/0530Z. THE LIMBS AND THE REMAINDER OF THE DISK HAVE BEEN QUIET.

IB. M CLASS EVENTS ARE EXPECTED, AS REGION 103 CONTINUES TO EXHIBIT ENERGETIC POTENTIAL.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO ACTIVE, AND IS EXPECTED TO FAVOR THE FORMER DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 20-22 MAY

CLASS M 80/80/70

CLASS X 15/15/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 MAY 97

PREDICTED 20-22 MAY 100/102/104

90-DAY MEAN 19 MAY 102

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 18 MAY 26

ESTIMATED 19 MAY 21

PREDICTED 20-22 MAY 20/18/12

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HFUS BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 140

JOINT AESU/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 20 MAY 1973.

IA. SOLAR ACTIVITY HAS BEEN HIGH. REGION 103 (N09E08) PRODUCED A CLASS M3 FLARE AT 20/0448Z AND A CLASS X4 AT 19/2234Z. THE 19/2234Z FLARE APPEARED HOMOLOGOUS IN X-RAY AND RADIO EMISSION TO THE 18/2156Z CLASS M9 FLARE. BOTH EVENTS WERE IMPULSIVE AND SHORT-LIVED. REGION 103 HAS REMAINED STABLE IN MOST STRUCTURAL DETAILS. NON-ENERGETIC SUBFLARES HAVE BEEN RECORDED IN REGIONS 104 (S11W41) AND 107 (S10E67).

IB. THE ABSENCE OF MAJOR CHANGE IN REGION 103 COUPLED WITH ITS ABILITY TO PRODUCE FREQUENT SUBFLARES AND IMPULSIVE CLASS M AND X EVENTS INDICATE A GOOD CHANCE OF 1 TO 2 CLASS X FLARES IN THE NEXT FIVE DAYS WITH AN EVEN CHANCE THAT ONE OF THESE WILL BE A MAJOR EVENT WITH LONG-LASTING X-RAY AND RADIO EMISSION PRODUCING MODERATE TERRESTRIAL EFFECTS.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. DISTURBANCE LEVELS ARE EXPECTED TO REACH A MINIMUM IN THE NEXT 24-36 HOURS AND THEN INCREASE FOR THE NEXT 3 DAYS AFTER THAT. AS DISCUSSED IN PART IB, THERE IS AN EVEN CHANCE OF A SMALL-TO-MODERATE PROTON EVENT, PCA AND MAGNETIC STORM OVER THE NEXT FIVE DAYS.

III. EVENT PROBABILITIES 21 MAY - 23 MAY.

CLASS M 80/80/80

CLASS X 20/20/20

PROTON 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX.

OBSERVED 20 MAY 102

PREDICTED 21 MAY - 23 MAY 105/107/109

90-DAY MEAN 20 MAY 102

V. GEOMAGNETIC A INDICES.

OBSERVED FREDERICKSBURG 19 MAY 20

ESTIMATED 20 MAY 14

PREDICTED 21 MAY - 23 MAY 12/15/18

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