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HOUS 2 BOU 210200

JOINT AFGWC/SESC SOLAR REGION AND ACTIVITY SUMMARY
ISSUED AT 210200 DEC 1973.

I. REGIONS WITH SUNSPOTS. SUNSPOT DATA FROM BOULDER TAKEN AT 201800.
LOCATIONS VALID AT 21 DEC 0000Z.

NMBR LOCATION LO AREA Z LL NN MAG TYPE

0299 N08E08 201 0025 H 02 01 ALPHA

0300 S18E19 190 0180 E 11 21 BETA GAMMA DELTA

0303 S14W07 216 0010 A 01 01 ALPHA

NOTE - MAGNETIC CLASSIFICATIONS FROM MT. WILSON

IA. H-ALPHA PLAGES WITHOUT SPOTS. LOCATIONS VALID AT 21 DEC 0000Z.

NMBR LOCATION LO

0297 S15W38 247

0301 S10E17 192

0302 S13E52 157

0304 S16W04 213

II. NONE

III. AREAS OF SPECIAL INTEREST -

REGION 300 WHICH CONTAINS A COMPLEX MAGNETIC CONFIGURATION.

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HFUS 1 BOU 210600

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 355A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0600Z 21 DEC 1973

IA. ALTHOUGH SOLAR ACTIVITY REMAINS LOW, THE POTENTIAL FOR ENERGETIC ACTIVITY IS HIGH. REGION 300(S18E17) ALREADY CONTAINS AN E TYPE SPOT GROUP WITH A BETA GAMMA DELTA MAGNETIC CONFIGURATION, AND GROWTH APPEARS TO BE CONTINUING. AN EXTENSIVE ARCH FILAMENT SYSTEM HAS BEEN OBSERVED IN THE CENTRAL PORTION WHERE MOST OF THE GROWTH APPEARS TO BE OCCURRING. THE H ALPHA PLAGE REMAINS BRIGHT WITH FREQUENT FLUCTUATIONS AND TWO FLARES OBSERVED IN THE LAST 8 HOURS. THE LARGER FLARE WAS A ONE NORMAL AT 21/0423Z WHICH WAS MEASURED BY VELA AS AN X RAY CLASS C8. NO SIGNIFICANT ACTIVITY HAS BEEN OBSERVED ON THE REST OF THE DISK.

IB. THE PROBABILITY OF AN ENERGETIC EVENT FROM REGION 300 REMAINS RELATIVELY HIGH THROUGH THE FORECAST PERIOD.

II. THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DURING THE LAST 24 HOURS, AND MINOR STORM CONDITIONS ARE EXPECTED DURING THE NEXT 24 HOURS. THE GEOMAGNETIC FIELD SHOULD GRADUALLY BECOME QUIETER DURING THE LATTER PORTIONS OF THE FORECAST PERIOD.

III. NO CHANGE

IV. NO CHANGE

V. NO CHANGE

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III. NO CHANGE

IV. NO CHANGE

V. NO CHANGE

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HFUS 1 BOU 211300

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 355B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1300Z 21 DECEMBER 1973

IA. SOLAR ACTIVITY HAS BEEN MODERATE WITH EIGHT FLARES REPORTED
DURING THE PAST 24 HOURS, ALL FROM REGION 300 (S18E13). ALL FLARES
WERE C-CLASS SUBFLARES EXCEPT A ONE NORMAL FLARE WITH A MAXIMUM AT
21/0423Z (X-RAY CLASS C8 ACCORDING TO VELA). REGION 300 GROWTH APPEARS
SLOWING AS REGION REACHES MATURITY. WHILE SOME MAGNETIC SIMPLIFICATION
MAY HAVE OCCURRED WITH CONSOLIDATION OF SCATTERED LEADER POLARITY
SPOTS, THE REGION REMAINS QUITE COMPLEX. ALL OTHER REGIONS APPEAR
STABLE.

IB. REGION 300 POSSESSES ENERGETIC FLARE POTENTIAL AND IS QUITE CAPABLE
OF PRODUCING AN M-CLASS FLARE AT ANY TIME.

II. THE GEOMAGNETIC FIELD CONTINUES TO BE ACTIVE. THE FIELD IS
EXPECTED TO BECOME GRADUALLY LESS ACTIVE THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 21 DEC - 23 DEC

CLASS M 60/60/60

CLASS X 10/10/10

PROTON 03/03/03

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 DEC 93

PREDICTED 21 DEC - 23 DEC 96/98/98

90-DAY MEAN 20 DEC 87

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 19 DEC 08

ESTIMATED AFR/AP 20 DEC 20/24

PREDICTED AFR/AP 21 DEC - 23 DEC 30/42 - 20/24 - 13/14

SOLTERWARN

SPAN

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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO
SDF NUMBER 355

JOINT AFGWC/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 21 DECEMBER 1973.

IA. SOLAR ACTIVITY HAS BEEN LOW TODAY. REGION 300 (S16E04) MAINTAINS A DELTA CONFIGURATION AND HAS PRODUCED ALL OF THE ACTIVITY INCLUDING A ONE NORMAL CLASS C6 X-RAY FLARE AT 0423Z WITH A SMALL CENTIMETRIC RADIO BURST. CONSIDERABLE PENUMBRAL GROWTH HAS BEEN OBSERVED IN REGION 303 SINCE YESTERDAY. THE REMAINING REGIONS ON THE DISK HAVE SHOWN NO POTENTIAL FOR ACTIVITY.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO LOW, WITH REGION 300 REMAINING A POSSIBLE SOURCE OF ENERGETIC FLARES. NO OLD ACTIVE REGIONS ARE DUE AT EAST LIMB DURING THIS FORECAST PERIOD.

II. THE GEOMAGNETIC FIELD HAS BEEN STRONGLY ACTIVE TODAY IN AGREEMENT WITH A RECURRENT DISTURBANCE WHICH IS NOW FOUR SOLAR ROTATIONS OLD. A QUIETING TREND IS EXPECTED TO BEGIN TOMORROW, RESULTING IN A QUIET FIELD ON 24 DECEMBER.

III. EVENT PROBABILITIES 22 DEC - 24 DEC.

CLASS M 60/60/60

CLASS X 10/10/10

PROTON 03/04/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX.

OBSERVED 21 DEC 101

PREDICTED 22 DEC - 24 DEC 102/100/98

90-DAY MEAN 21 DEC 86

V. GEOMAGNETIC A INDICES.

OBSERVED FREDERICKSBURG 20 DEC 20

ESTIMATED AFR/AP 21 DEC 29/40

PREDICTED AFR/AP 22 DEC - 24 DEC 22/28 - 11/12 - 05/06

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DE KAWN 212311Z
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