

NNNN

KBOU

HOUS 2 BOU 090200

JOINT AESU/SESC SOLAR REGION AND ACTIVITY SUMMARY ISSUED AT
09/0200Z APR 1973

I. SUNSPOT DATA FROM BOULDER AT 08/1535Z

NMBR LOCATION LO AREA Z LL NN MAG-TYPE

064	S05W86	081	0010	A	00	02	ALPHA
067	N12W47	042	0070	C	03	07	BETA
071	S09E03	352	0010	B	02	11	ALPHA
072	S12E14	341	0010	H	00	02	ALPHA
074	S06W04	359	0040	C	07	23	BETA
077	S05E32	323	0370	D	07	56	BETA
078	S14E15	340	0010	B	02	05	BETA GAMMA
079	S08E20	335	0010	B	04	03	BETA

NOTE- A. POLARITIES FROM MT WILSON WITH EXCEPTION OF RGN 067.
MT WILSON SAW ONLY THE LEADER SPOTS AND CLASSIFIED THE REGIONS AS
ALPHA.

B. MT WILSON OBSERVES A POSSIBLE WEAK DELTA IN RGN 077. *Region*

II. IMPORTANCE ONE OR GREATER FLARES AND ENERGETIC EVENTS-

RGN IMP BEGIN MAX END CLASS

077	0N	08/0713Z	0715Z	0724Z	M-1
074	0F	08/0803Z	0803Z	0809Z	S
077	0N	08/0846Z	0849Z	0915Z	S
077	0N	08/0713Z	0715Z	0724Z	S

III. AREAS OF SPECIAL INTEREST-

A. RGN 077 DUE TO VERY RAPID GROWTH IN LAST 24 HOURS.

B. RGN 078 DUE TO A COMPLEX MIXTURE OF POLARITIES.

SOLTERWARN

SPAN

BT

NNNN

NNNN

KBOU

HFUS 1 BOU 090601

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 099A

JOINT AESU/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 0600Z 09 APRIL 1973

IA. REGION 077 (S09E25) CONTINUES TO GROW. REGION 074 (S06W09) HAS
PRODUCED SEVERAL SUBFLARES DURING PAST FEW HOURS.

IB. NO CHANGE.

II. GEOMAGNETIC FIELD IS SLIGHTLY DISTURBED.

III. NO CHANGE.

IV. NO CHANGE.

V. NO CHANGE.

SOLTERWARN

SPAN

BT

HFUS 1 BOU 091300

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 099B

JOINT AESU/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1300Z 9 APRIL 1973

IA. SOLAR ACTIVITY HAS CONTINUED MODERATE DURING LAST 24 HOURS ~~WITH~~
WITH

FREQUENT SUBFLARES FROM REGIONS 074 (S06W07) AND 077 (S05E29), THE
FORMER REGION PRODUCING THE LARGEST NUMBER OF FLARES. REGION 077
CONTINUES TO GROW SLOWLY. MAGNETIC DATA FROM MT WILSON INDICATES A
POSSIBLE WEAK DELTA IN THE INTERMEDIATE SPOTS. REGION 074 HAS SHOWN
SOME SPOT GROWTH AND MODERATE SUBFLARE ACTIVITY.

IB. SOLAR ACTIVITY SHOULD CONTINUE AT A MODERATE OR GREATER LEVEL.
FREQUENT SUBFLARES ARE LIKELY FROM REGION 077 AND 074. THERE IS A GOOD
CHANCE OF A LARGER FLARE FROM REGION 077 REACHING AT LEAST A CLASS
M X-RAY CLASSIFICATION.

II. THE GEOMAGNETICK FIELD HAS BEEN QUIET DURING THE LAST 24 HOURS.
QUIET TO UNSETTLED CONDITIONS ARE FORECAST FOR NEXT 72 HOURS.

III. EVENT PROBABILITIES 09 APR - 11 APR

CLASS M 80/80/80

CLASS X 10/10/10

PROTON 05/07/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 APR 121

PREDICTED 09-11 APR 122/122/120

90-DAY MEAN 08 APR 102

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 07 APR 03

ESTIMATED 08 APR 06

PREDICTED 09-11 APR 08/08/08

SOLTERWARN

SPAN

BT

NNNN

KBOU

HFUS 1 BOU 091300

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 099B

JOINT AESU/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1300Z 9 APRIL 1973

IA. SOLAR ACTIVITY HAS CONTINUED MODERATE DURING LAST 24 HOURS WITH
FREQUENT SUBFLARES FROM REGIONS 074 (S06W07) AND 077 (S05E29), THE
FORMER REGION PRODUCING THE LARGEST NUMBER OF FLARES. REGION 077
CONTINUES TO GROW SLOWLY. MAGNETIC DATA FROM MT WILSON INDICATES A
POSSIBLE WEAK DELTA IN THE INTERMEDIATE SPOTS. REGION 074 HAS SHOWN
SOME SPOT GROWTH AND MODERATE SUBFLARE ACTIVITY.

IB. SOLAR ACTIVITY SHOULD CONTINUE AT A MODERATE OR GREATER LEVEL.
FREQUENT SUBFLARES ARE LIKELY FROM REGION 077 AND 074. THERE IS A GOOD
CHANCE OF A LARGER FLARE FROM REGION 077 REACHING AT LEAST A CLASS
M X-RAY CLASSIFICATION.

II. THE GEOMAGNETICK FIELD HAS BEEN QUIET DURING THE LAST 24 HOURS.
QUIET TO UNSETTLED CONDITIONS ARE FORECAST FOR NEXT 72 HOURS.

III. EVENT PROBABILITIES 09 APR - 11 APR

CLASS M 80/80/80

CLASS X 10/10/10

PROTON 05/07/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 APR 121

PREDICTED 09-11 APR 122/122/120

90-DAY MEAN 08 APR 102

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 07 APR 03

ESTIMATED 08 APR 06

PREDICTED 09-11 APR 08/08/08

SOLTERWARN

SPAN

BT

#A

Sent out before it could be
proof read

NNNN

KBOU

HFUS 2 BOU 091800

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

JOINT AESU/SESC EXTENDED PERIOD REPORT ISSUED AT 1800Z 09 APRIL 1973

THIS MESSAGE IN THREE PARTS.

PART I. THIS FORECAST ISSUED AT 1800Z EACH MONDAY IS VALID FOR
A 27 DAY PERIOD. A 27-DAY MEAN VALUE OF 2800 MHZ FLUX DENSITY
IS GIVEN WITH THE INCLUSIVE DATES OF EXPECTED SIGNIFICANT
DEVIATIONS FROM THE MEAN. SEE 02 APRIL FORECAST FOR DEFINITIONS.

PART II. 27-DAY 2800 MHZ FLUX DENSITY FORECAST:

A. MEAN 111

B. SIGNIFICANT DEVIATIONS:

BELOW MEAN: 21 APR-22 APR

ABOVE MEAN: 02 ~~MAR~~ 05 MAY

MAY

PART III. 27-DAY SOLAR EVENT FORECAST:

A. CLASS M SOLAR EVENTS 3 TO 6

CLASS X SOLAR EVENTS 1 OR NONE

B. EXPECT MOST ACTIVITY:

09 APR-17 APR

02 MAY-05 MAY

SPAN

NNNN

KBOU

HFUS BOU 092200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 099

JOINT AESU/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 09 APRIL 1973

IA. SOLAR ACTIVITY HAS BEEN MODERATE WITH AN INCREASE IN SUBFLARE ACTIVITY FROM REGION 077 (S06E15), WITH AT LEAST 1 SUBFLARE PER HOUR FROM THIS REGION. DURING THE LAST 10 HOURS, MANY OF THESE SUBFLARES HAVE BEEN ACCOMPANIED BY RADIO BURSTS, MOSTLY AT FREQUENCIES OF 1445 MHZ AND BELOW. A 0N FLARE FROM 077 AT 1224Z PRODUCED A 13000 FLUX UNIT BURST AT 210 MHZ AND 120 FLUX UNITS AT 2695 MHZ. SEVERAL OTHER SMALLER BURSTS IN EXCESS OF 1000 FLUX UNITS AT 210 MHZ HAVE BEEN OBSERVED SINCE THEN. A 0B FLARE FROM REGION 77 AT 1746Z REACHED AN X-RAY CLASSIFICATION OF M2 AS MEASURED BY VELA AND WAS ACCOMPANIED BY SHORT WAVE FADES. THE REGION CONTINUES TO SHOW SLOW GROWTH AND REMAINS MAGNETICALLY COMPLEX WITH A POSSIBLE DELTA CONFIGURATION. REGION 074 (S06W19) PRODUCED SEVERAL SUBFLARES PRIOR TO 08Z TODAY, BUT NOW APPEARS RELATIVELY QUIET. SOME SLIGHT SPOT GROWTH HAS OCCURED IN THIS REGION. OTHER REGIONS APPEAR STABLE.

IB. SOLAR ACTIVITY SHOULD CONTINUE AT A MODERATE OR GREATER LEVEL. FREQUENT SUBFLARES, ACCOMPANIED BY X-RAY EVENTS UP THROUGH SMALL M CLASS, ARE EXPECTED TO CONTINUE, PRIMARILY FROM REGION 077. BECAUSE OF THE SIZE AND MAGNETIC COMPLEXITY OF REGION 077, THERE IS A FAIR CHANCE OF LARGER, MORE ENERGETIC FLARES FROM THIS REGION.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET DURING THE LAST 24 HOURS AND IS EXPECTED TO REMAIN QUIET THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 10 APR - 12 APR.

CLASS M 85/85/85

CLASS X 20/20/20

PROTON 10/15/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX.

OBSERVED 09 APR 120

PREDICTED 10 APR - 12 APR 120/120/118

90-DAY MEAN 09 APR 102

V. GEOMAGNETIC A INDICES.

OBSERVED FREDERICKSBURG 08 APR 06

ESTIMATED 09 APR 05

PREDICTED 10 APR - 12 APR 05/05/05

SOLTERWARN

SPAN

BT

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 099

JOINT AESU/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 09 APRIL 1973

IA. SOLAR ACTIVITY HAS BEEN MODERATE WITH AN INCREASE IN SUBFLARE ACTIVITY FROM REGION 077 (S06E15), WITH AT LEAST 1 SUBFLARE PER HOUR FROM THIS REGION. DURING THE LAST 10 HOURS, MANY OF THESE SUBFLARES HAVE BEEN ACCOMPANIED BY RADIO BURSTS, MOSTLY AT FREQUENCIES OF 1445 MHZ AND BELOW. A ON FLARE FROM 077 AT 1224Z PRODUCED A 13000 FLUX UNIT BURST AT 210 MHZ AND 120 FLUX UNITS AT 2695 MHZ. SEVERAL OTHER SMALLER BURSTS IN EXCESS OF 1000 FLUX UNITS AT 210 MHZ HAVE BEEN OBSERVED SINCE THEN. A OB FLARE FROM REGION 77 AT 1746Z REACHED AN X-RAY CLASSIFICATION OF M2 AS MEASURED BY VELA AND WAS ACCOMPANIED BY SHORT WAVE FADES. THE REGION CONTINUES TO SHOW SLOW GROWTH AND REMAINS MAGNETICALLY COMPLEX WITH A POSSIBLE DELTA CONFIGURATION. REGION 074 (S06W19) PRODUCED SEVERAL SUBFLARES PRIOR TO 08Z TODAY, BUT NOW APPEARS RELATIVELY QUIET. SOME SLIGHT SPOT GROWTH HAS OCCURED IN THIS REGION. OTHER REGIONS APPEAR STABLE.

IB. SOLAR ACTIVITY SHOULD CONTINUE AT A MODERATE OR GREATER LEVEL. FREQUENT SUBFLARES, ACCOMPANIED BY X-RAY EVENTS UP THROUGH SMALL M CLASS, ARE EXPECTED TO CONTINUE, PRIMARILY FROM REGION 077. BECAUSE OF THE SIZE AND MAGNETIC COMPLEXITY OF REGION 077, THERE IS A FAIR CHANCE OF LARGER, MORE ENERGETIC FLARES FROM THIS REGION.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET DURING THE LAST 24 HOURS AND IS EXPECTED TO REMAIN QUIET THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 10 APR - 12 APR.

CLASS M 85/85/85

CLASS X 20/20/20

PROTON 10/15/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX.

OBSERVED 09 APR 120

PREDICTED 10 APR - 12 APR 120/120/118

90-DAY MEAN 09 APR 102

V. GEOMAGNETIC A INDICES.

OBSERVED FREDERICKSBURG 08 APR 06

ESTIMATED 09 APR 05

PREDICTED 10 APR - 12 APR 05/05/05

SOLTERWARN

SPAN

BT