

HFUS 1 BOU 011300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 274A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 01 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
30/1200Z TO 01/1200Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST
24 HOURS. REGION 3922 (N15W18) PRODUCED 7 C-CLASS X-RAY FLARES
BUT THE LARGEST WAS ONLY A C5/1B ON 30 SEPTEMBER AT 1356Z.
HOWEVER, 3922 IS CONTINUING SIGNIFICANT GROWTH ESPECIALLY IN
ITS TRAILER PORTION WHERE A MAGNETIC DELTA IS REPORTED. REGION
3919 (S12W33) IS THE NEXT MOST INTERESTING SPOT GROUP. IT IS
GROWING IN ITS LEADER PORTION AND HAS PRODUCED SEVERAL SMALL
FLARES AND DARK SURGES IN RECENT HOURS. REGION 3917 (N16W30) IS
UNDERGOING OVERALL DECAY ALTHOUGH IT STILL HAS A GOOD MAGNETIC
GRADIENT. REGION 3921 (S19W07) HAS GROWN RAPIDLY IN ITS CENTER
SECTION AND MAY HAVE A SMALL DELTA IN ONE OF ITS INTERIOR
SPOTS. THERE IS AN ACTIVE DARK FILAMENT NEAR N10E30. NO
ACTIVITY HAS BEEN OBSERVED ON EITHER SOLAR LIMB.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
MODERATE WITH A GOOD PROBABILITY OF ANOTHER SIGNIFICANT FLARE
FROM 3922. ISOLATED M-CLASS FLARES ARE POSSIBLE FROM REGION
3919, AND ERUPTIVE (C-CLASS) EVENTS ARE EXPECTED FROM 3917 AND
3921.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN UNSETTLED FOR THE PAST 24 HOURS. GENERALLY UNSETTLED
CONDITIONS ARE EXPECTED TO GIVE WAY TO A MINOR GEOMAGNETIC
STORM WITHIN THE NEXT 12 HOURS IN RESPONSE TO A SIGNIFICANT
FLARE NEAR THE SOLAR CENTER DISK ON 30 SEPTEMBER. THE STORM
SHOULD SUBSIDE BY 03 OCTOBER BUT THE FIELD IS EXPECTED TO
REMAIN AT ACTIVE LEVELS THROUGH 04 OCTOBER.

III. EVENT PROBABILITIES 02 OCT-04 OCT

CLASS M 55/55/55

CLASS X 10/10/10

PROTON 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 30 SEP 202

ESTIMATED 01 OCT 202

PREDICTED 02 OCT-04 OCT 200/198/195

90 DAY MEAN 30 SEP 167

V. GEOMAGNETIC A INDICES

OBSERVED AFR 29 SEP 009 AP 30 SEP 015

ESTIMATED AFR 30 SEP 012 AFR/AP 01 OCT 017/015

PREDICTED AFR/AP 02 OCT-04 OCT 040/030-025/030-020/025

SOLTERWARN

BT

NNNNZCVZG VZLVZO UU

KBOU

HFUS 3 BOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 274B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 01 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
01/1200Z TO 01/2100Z: SOLAR ACTIVITY HAS BEEN LOW. REGION 3922
(N15W23) APPEARS TO HAVE NEARLY CEASED ITS GROWTH TREND AND IS
MUCH QUIETER IN MOST PARAMETERS TODAY. THE DELTA CONFIGURATION
REMAINS IN THE TRAILER AND MAGNETIC GRADIENTS THERE ARE NEARLY
EQUAL TO THOSE MEASURED YESTERDAY. A LARGE AMOUNT OF LEADER
GROWTH HAS OCCURRED IN 3919 (S19W39) AND BRIGHT PLAGE HAS BEEN
EVIDENT ALL DAY. A SMALL DELTA MAY BE FORMING IN THE TRAILER OF
REGION 3921 (S19W16). TWO SMALL REGIONS ARE EMERGING NEAR 3922
AND HAVE BEEN NUMBERED 3929 (N24W19) AND 3930 (N12W12) - 3930
APPEARS TO BE EMERGING RAPIDLY. ANOTHER SMALL REGION APPEARED
AT N17E04 AND WAS NUMBERED 3931.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BECOME
MODERATE WITH INFREQUENT CLASS M FLARES EXPECTED FROM 3922 AND
POSSIBLY 3919. THE EMERGENCE OF 3929 AND 3930 COULD RESULT IN
INCREASED FLARE ACTIVITY IN NEARBY 3922 BUT CONTINUED GROWTH IN
THESE TWO REGIONS SEEMS REQUIRED. NO SIGNIFICANT ACTIVE REGIONS
ARE EXPECTED TO RETURN TO THE EAST LIMB DURING THE FORECAST
PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE BUT SOLAR WIND AND MAGNETOMETER DATA DO NOT
INDICATE THIS DISTURBANCE TO BE RELATED TO THE M3 FLARE EARLY
ON 30 SEP. THE GEOMAGNETIC FIELD IS STILL EXPECTED TO BE AT
MINOR STORM LEVELS TOMORROW, RETURNING TO ACTIVE FOR 03-04 OCT.

III. EVENT PROBABILITIES 02 OCT-04 OCT

CLASS M 55/55/55

CLASS X 10/10/10

PROTON 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 OCT 205

PREDICTED 02 OCT-04 OCT 203/206/202

90 DAY MEAN 01 OCT 168

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 30 SEP 013/015

ESTIMATED AFR/AP 01 OCT 020/015

PREDICTED AFR/AP 02 OCT-04 OCT 035/030-025/030-020/025

SOLTERWAR N

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