

*RUN*SDF

CO

HFUS 3 BOU 042200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 063

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 04 MAR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 03/2100
TO 04/2100Z: SOLAR ACTIVITY HAS BEEN LOW. THE MOST SIGNIFICANT
EVENT OF THE PERIOD WAS A C5/1N FLARE REPORTED IN REGION

4098(S17W38)AT 0701Z. THIS EVENT WAS ASSOCIATED WITH IT TYPE
II/IV RADIO SWEEP EMISSION, UNCHARACTERISTIC OF SUCH A SMALL
FLARE. WE MAY HAVE EXPERIENCED AN IMPACT FLARE ASSOCIATED WITH
A FILAMENT ERUPTION FROM NEAR THAT REGION. OPTICAL
OBSERVATIONS HAVE BEEN SEVERELY LIMITED DUE TO WEATHER SO THAT
THE FACTS OF THE MATTER ARE NOT CLEAR. A OF FLARE WAS REPORTED
FROM (S17E50). NO REGION HAS BEEN NUMBERED THERE. NO SPOT
REPORTS INDICATE A REGION THERE. NEW REGIONS TODAY ARE
4103(S13W50), 4107(S07W18), 4108(S15E10), AND 4109(S11E21).
ALL ARE SMALL MAGNETIC BIPOLAR REGIONS IN EARLY DEVELOPMENT
STAGES. REGION COMPLEX 4102(S15E03)/4104(S18E12)/4105(S09W08)
HAS STABILIZED AND CONTAINS ONLY MODEST GRADIENTS AND FAIRLY
SIMPLE MAGNETIC STRUCTURE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
CONTINUE LOW WITH ONLY A SMALL PROBABILITY FOR AN ISOLATED
M-CLASS FLARE FROM THE REGION COMPLEX.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 03/2100Z TO 04/2100Z:
THE GEOMAGNETIC FIELD HAS BEEN ACTIVE AND GENERALLY DECLINING
DURING THE REPORT PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS
EXPECTED TO REMAIN UNSETTLED TO ACTIVE DURING 5 MARCH.
CONDITIONS ARE EXPECTED TO INCREASE TOWARD ACTIVE TO MINOR
STORM LEVEL LATE ON 5 MARCH DUE TO THE FILAMENT DISAPPEARANCE
EARLY ON 2 MARCH.

III. EVENT PROBABILITIES 05 MAR-07 MAR

CLASS M 40/40/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 MAR 146

PREDICTED 05 MAR-07 MAR 140/136/132

90 DAY MEAN 04 MAR 154

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 03 MAR 029/036

ESTIMATED AFR/AP 04 MAR 016/020

PREDICTED AFR/AP 05 MAR-07 MAR 015/020-020/020-020/015

SOLTERWARN

BT

*Didn't get regions in shop
until after forecast
76
4103(S13W50)
regained spots.*