

HFUS 3 BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 108

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 17 APR 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/2100

TO 17/2100Z: SOLAR ACTIVITY WAS AT A LOW TO MODERATE LEVEL

DURING THE PREVIOUS 24 HOURS. REGION 4469 (S15E37) IS THE

PRIMARY FLARE PRODUCER AND PRODUCED AN M1/1B AT 171448Z (MAX).

NO SIGNIFICANT RADIO BURSTS WERE REPORTED WITH THIS FLARE.

REGION 4469 CONTINUED TO GROW SLOWLY DURING THE PAST 24 HOURS

AS THE SPOTS INCREASED IN NUMBER. REGION 4468 (N09W22) PRODUCED

A C2/1F AT 171629Z (MAX) BUT THIS HAS BEEN ITS MOST ENERGETIC

OUTPUT TODAY. A SMALL H TYPE SPOT ROTATED OVER THE EAST LIMB

NEAR S10 AND WAS NUMBERED 4472. THE REST OF THE DISK IS QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE

LOW TO MODERATE DURING THE NEXT THREE DAYS AS 4468 AND 4469

APPEAR CAPABLE OF ISOLATED M CLASS FLARES.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 16/2100Z TO 17/2100Z:

THE GEOMAGNETIC FIELD WAS QUIET TO UNSETTLED DURING THE PAST 24

HOURS. THE FIELD EXPERIENCED A SHARP EXCURSION OF ABOUT 38

GAMMAS NEAR 171455Z. ALTHOUGH TIME RELATED TO THE M1/1B FLARE,

IT IS BELIEVED THIS EXCURSION IS A SUDDEN IMPULSE RATHER THAN A

SOLAR FLARE EFFECT.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS

EXPECTED TO BE UNSETTLED TO ACTIVE FOR THE NEXT THREE DAYS.

RECURRENT EFFECTS ARE THOUGHT TO BE THE PRIME FACTOR

INFLUENCING THE FIELD DURING THIS INTERVAL.

III. EVENT PROBABILITIES 18 APR-20 APR

CLASS M 50/50/50

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 APR 124

PREDICTED 18 APR-20 APR 126/127/129

90 DAY MEAN 17 APR 130

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 16 APR 005/009

ESTIMATED AFR/AP 17 APR 010/015

PREDICTED AFR/AP 18 APR-20 APR 015/025-015/020-015/020

SOLTERWARN

BT