

HFUS 1 80U 062200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 157

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 06 JUNE 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE LAST 24 HOURS.
NEW REGION 1796 (N15E66) PRODUCED AN M3/2N AT 2109Z (X-RAY MAX)
WITH 230 FU AT 2695 MHZ. THIS SMALL COMPACT C-GROUP HAS BEEN
BRIGHT IN HYDROGEN ALPHA SINCE ITS LIMB PASSAGE. LIMB PROXIMITY
PRECLUDES DETAILED ANALYSIS. REGION 1781 (N21W08) MAINTAINS ITS
COMPLICATED SUNSPOT AND MAGNETIC STRUCTURE BUT HAS ONLY PRODUCED
OPTICAL SUBFLARES AND SMALL C-CLASS X-RAY EVENTS. REGION 1793
(N17W14) HAS ALSO PRODUCED A FEW SUBFLARES AND SHARES THE
COMPLICATED MAGNETIC NEUTRAL LINE OF REGION 1781.

IB. SOLAR ACTIVITY IS EXPECTED TO BE AT MODERATE LEVELS FOR
THE NEXT 24 HOURS. REGION 1781 REMAINS THE MOST LIKELY CANDIDATE
FOR M-CLASS X-RAY EVENTS. REGION 1796 MAY PROVE TO BE A MORE
INTERESTING REGION THAN WAS FIRST SUSPECTED AND REQUIRES FURTHER
ANALYSIS OVER THE NEXT 24 HOURS.

II. THE GEOMAGNETIC FIELD WAS AT UNSETTLED LEVELS UNTIL 06/1930 UT
WHEN A SSC OF 110 GAMMAS WAS OBSERVED ON THE BOULDER MAGNETOMETER.
MINOR GEOMAGNETIC STORM CONDITIONS ARE EXPECTED TO CONTINUE THROUGH
THE NEXT 24 HOURS WITH THE FIELD RETURNING TO UNSETTLED LEVELS BY
THE END OF THIS FORECAST PERIOD. A LOW ENERGY PROTON EVENT
OCCURRED IN ASSOCIATION WITH THIS SSC AT ABOUT 06/1850 UT (START
TIME) AND IS EXPECTED TO CONTINUE INTO THE NEXT UT DAY. A MINOR
POLAR CAP ABSORPTION IS PRESENTLY IN PROGRESS; MAXIMUM ABSORPTION
THUS FAR WAS 1.5 DB ON THE THULE 30 MHZ RIOMETER (2015 UT
START TIME).

III. EVENT PROBABILITIES 07 JUNE - 09 JUNE

CLASS M 70/70/70

CLASS X 20/20/20

PROTON 20/20/20

PCAF IN PROGRESS

IV. OTTAWA 10.7 CM FLUX

OBSERVED 06 JUNE 229

PREDICTED 07-09 JUNE 225/220/213

30-DAY MEAN 06 JUNE 179

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 05 JUNE 03

ESTIMATED AFR/AP 06 JUNE 18/20

PREDICTED AFR/AP 07-09 JUNE 40/50 - 25/30 - 10/20

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