

HFUS 1 BOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 182

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 01 JULY 1979

IA. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE WITH NUMEROUS C-CLASS SUBFLARES REPORTED. REGION 1840 (N18E29) HAS EXPERIENCED GROWTH IN ITS TRAILER SPOT PENUMBRA; PLAGE FLUCTUATIONS AND PRESENTLY DISPLAYS AN UNSTABLE E-W NEUTRAL LINE. THIS REGION CONTAINS AN E-TYPE SPOT GROUP AND HAS PRODUCED A B FLARE AT 2101Z. NEW REGION 1847 (S15E48) PRESENTLY CONTAINS AN ARCH FILAMENT SYSTEM AND HAS EXPERIENCED POINT BRIGHTENINGS AND PLAGE FLUCTUATIONS. IT ALSO HAS AN ASSOCIATED ACTIVE DARK FILAMENT AND A D-TYPE SPOT GROUP. REGION 1828 (N15W12) IS THE MOST MAGNETICALLY COMPLEX REGION (BETA-GAMMA) ON THE SOLAR DISK AND DID PRODUCE A SUBFLARE AT 0417Z. REGION 1837 (N04E25) REMAINS A REVERSE POLARITY REGION WITH A D-TYPE SPOT GROUP BUT STILL HAS NOT PRODUCED ANY SIGNIFICANT ACTIVITY. NEW REGION 1849 (N09E78) PRESENTLY DISPLAYS A LARGE H-TYPE LEADER POLARITY SPOT AND WILL PROBABLY DISPLAY TRAILER SPOTS AFTER IT HAS ROTATED ON TO THE DISK. IT HAS PRODUCED A B FLARE. REGION 1845 (S28E52) PRESENTLY HAS PRODUCED B AND ON FLARES DURING THE PAST 3 HOURS. TWO OTHER NEW REGIONS HAVE BEEN NUMBERED TODAY: REGION 1846 (N09E09) AND REGION 1848 (N21E73) BUT NEITHER HAVE PRODUCED ANY ACTIVITY. ALL OTHER DISK AND LIMB FEATURES APPEAR QUIET AND STABLE.

IB. SOLAR ACTIVITY IS EXPECTED TO INCREASE WITH THE RETURN OF MORE ACTIVE LONGITUDES THAT PRODUCED MANY SOLAR EVENTS DURING THE LAST SOLAR ROTATION.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED AND IS EXPECTED TO BE UNSETTLED TO ACTIVE AS THE CORONAL HOLE AT CENTRAL MERIDIAN ROTATES FURTHER TO THE WEST. ACTIVE TO MINOR MAGNETIC STORM CONDITIONS ARE EXPECTED DURING THE SECOND AND THIRD DAYS OF THIS FORECAST PERIOD.

III. EVENT PROBABILITIES 02 JULY - 04 JULY

CLASS M 50/50/60

CLASS X 05/05/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 JULY 180

PREDICTED 02-04 JULY 185/189/191

30-DAY MEAN 01 JULY 173

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 30 JUNE 11

ESTIMATED AFR/AP 01 JULY 13/12

PREDICTED AFR/AP 02-04 JULY 12/15 - 17/25 - 18/20

SOLTERWARN

BT