This plot shows the extent and position of aurora borealis (Northern Lights) activity at a specific time, as determined from a pass over the north pole by a Polar-orbiting Operational Environmental Satellite (POES). POES’ Total Energy Detector instrument measures the fluctuations in power (in electron volts) carried into the Earth’s atmosphere by charged particles from the Sun. The auroral activity is thus estimated and classified into 10 levels, as represented by the colors on the legend. The POES are built by NASA and operated by the National Oceanic and Atmospheric Administration (NOAA).

GOES Project Homepage
http://goes.gsfc.nasa.gov