TRUE-COLOR SOLAR SPECTRUM
AS SEEN FROM ABOVE THE ATMOSPHERE

The solar spectrum is observed from X-ray to the far infrared. This image shows the part from 392 to 692 nm that is visible to the eye. The Sun was observed through the atmosphere with the Fourier Transform Spectrograph at Kitt Peak National Observatory (now National Solar Observatory) in 1981 using a defocussed image to obtain the spectrum of the whole disk. It was published as an atlas in 1984 by Kurucz, Furenlid, Brault, and Testerman. In 2005 Kurucz re-reduced the data and removed the telluric (atmospheric) spectrum that masked part of the solar spectrum and he produced a new atlas of the solar irradiance, the solar flux spectrum as seen from above the atmosphere. This is the spectrum that illuminates the planets and all the other bodies in the solar system. It is the spectrum of the Sun seen as a star. It is similar to stellar spectra that are searched for signatures of extrasolar planets. The spectrum is displayed in CCD format to show the whole visible range in one image.