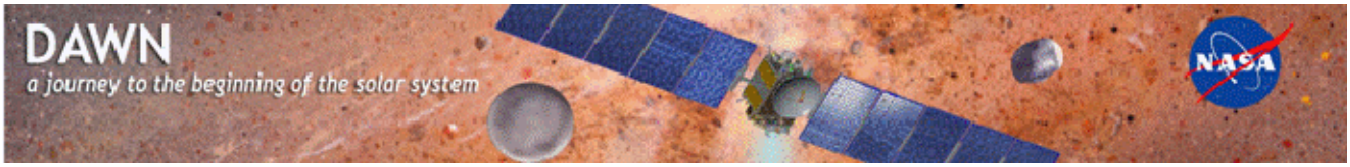

Wavelength Conversion Factors

The wavelengths of the different regions of Electromagnetic Radiation (EMR) Spectrum are shown in **meters** in the graphic that is a part of the following Dawn Content Module 3: Instrumentation Powerpoint Presentations—Framing Cameras, VIR, and GRaND.

In various places in the Dawn Content Module 3: Instrumentation materials, different metric units are used to indicate wavelengths of EMR. The following conversion table is designed to help the user of these materials move more easily between the standard metric unit of length—the meter—and the various units that are a part of the information in the Dawn Content Module 3: Instrumentation.

Wavelength in various units for different regions of the Electromagnetic Spectrum							
Ranges	Radio	Micro wave	Infrared	Visible	Ultra violet	X-ray	Gamma
Meters (m)	10^{3} to 1	10^{-2} to10^{-3}	10^{-4} to 10^{-6}	0.38 to 0.75 x10^{-6}	10^{-7} to 10^{-8}	10^{-8} to10^{-10}	10^{-10} to10^{-13}
Milli meters (mm) 10^{-3} m	10^{6} to 10^{3}	10^{1} to 10^{0}	10^{-1} to 10^{-3}	0.38 to 0.75 x10^{-3}	10^{-4} to 10^{-5}	10^{-5} to 10^{-7}	10^{-7} to10^{-10}
Micro meters (microns) (µm) 10^{-6} m	10^{9} to 10^{6}	10^{4} to 10^{3}	10^{2} to 10^{0}	0.38 to 0.75 x10^{0}	10^{-1} to 10^{-2}	10^{-2} to 10^{-4}	10^{-4} to 10^{-7}
Nano meters (nm) 10^{-9} m	10^{12} to 10^{9}	10^{7} to 10^{6}	10^{5} to 10^{3}	0.38 to 0.75 x10^{3} (380 to 750)	10^{2} to 10^{1}	10^{1} to 10^{-1}	10^{-1} to 10^{-2}
Angstroms (Å)10^{-10} m	10^{13} to 10^{10}	10^{8} to 10^{7}	10^{6} to 10^{4}	0.38 to 0.75 x10^{4}	10^{3} to 10^{2}	10^{2} to 10^{0}	10^{0} to 10^{-1}