Electromagnetic Spectral Regions and Their Names

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Names of spectral regions to serve as the official list for GEOG 622.01 boundary layer climatology and 622.02 microclimatological instrumentation. Below, microns (μm), one millionth of a meter (10^{-6} m), are the selected unit of wavelength. The list features wavelengths significant to the Earth's energy budget, climate system, and remote sensing.

Gamma Rays (<0.0001 microns)

X-Rays (0.0001 microns – 0.01 microns)

Ultraviolet (0.01 microns – 0.4 microns) (790 THz - 3 PHz)

UVC	0.10 – 0.29 microns
UVB	0.29 – 0.32 microns
UVA	0.32 – 0.380 microns

Visible/Optical (0.42 microns – 0.75 microns) (790-405 THz)

Violet	0.380 – 0.440 microns
Indigo (Dark Blue)	0.440 – 0.485 microns
Blue (Cyan)	0.485 – 0.500 microns
Green	0.500 – 0.565 microns
Yellow	0.565 – 0.590 microns
Orange	0.590 – 0.625 microns
Red	0.625 – 0.740 microns

Infrared (0.74 microns – 150 microns) (405 Thz – 2 THz)

Near IR (NIR)	0.740 – 1.4 microns
Shortwave IR (SWIR)	1.4–3 microns
Thermal IR (TIR)	3 - 150 microns

Microwave (150 microns – 0.5 m)

L band 0.39 - 1.55 GHz
C band 4 - 6 GHz
X band 8.0 - 12.0 GHz
K band 12 - 93 GHz
    Ka (above) band 18–40 GHz
    Ku (under) band 12–18 GHz
V band 50 to 75 GHz