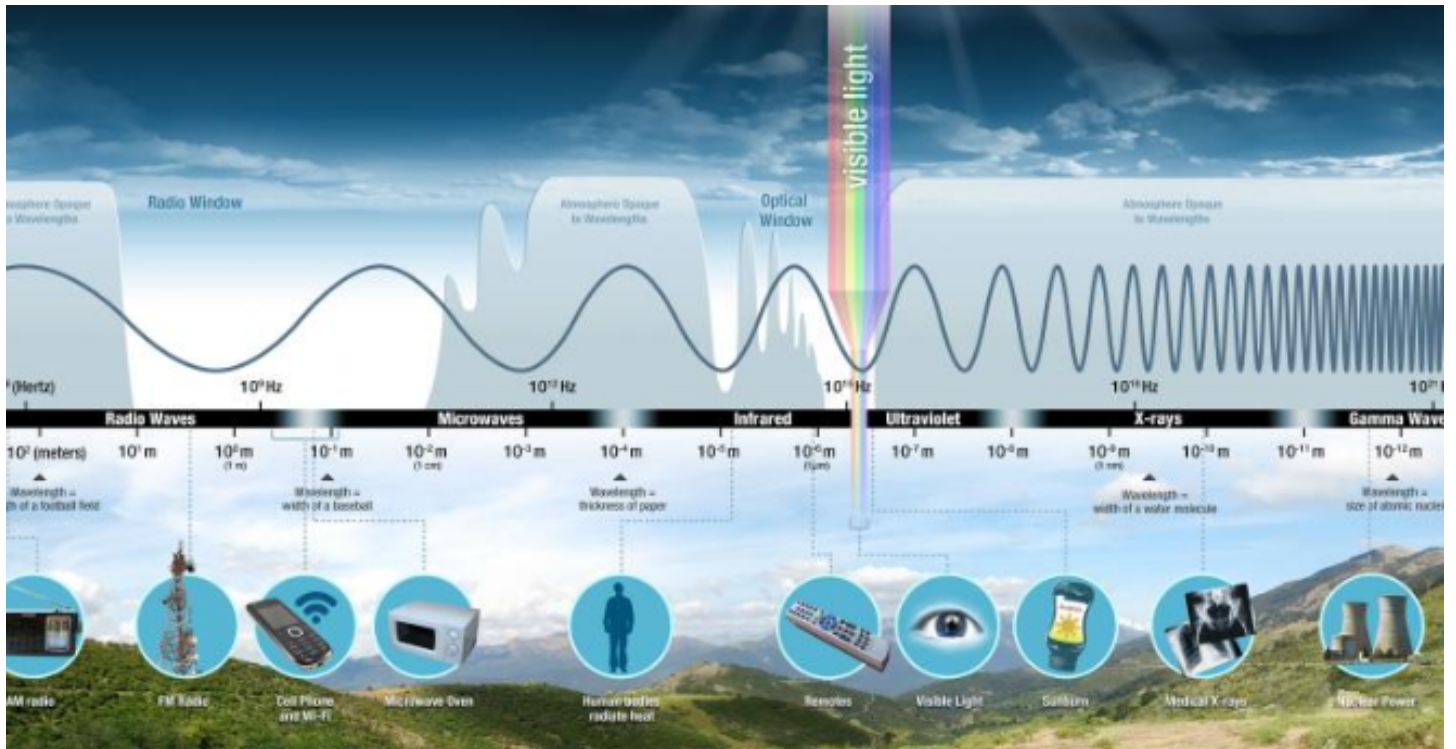


# Electromagnetic Spectrum Diagram



## THE ELECTROMAGNETIC SPECTRUM

Penetrate Earth's Atmosphere



Radiation Type	Gamma Ray	X-ray	Ultraviolet	Visible	Infrared	Microwave	Radio
Wavelength (m)	$10^{-12}$	$10^{-10}$	$10^{-8}$	$5 \times 10^{-6}$	$10^{-5}$	$10^{-1}$	$10^3$



About the Size of	Atomic Nuclei	Atoms	Molecules	Protozoans	Pinpoint	Honey Bee	Humans	Buildings
Icons								

Short wavelength  
High energy  
High frequency



Long wavelength  
Low energy  
Low frequency

The Electromagnetic Spectrum. Image Credit: NASA

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The electromagnetic spectrum is comprised of all frequencies of electromagnetic radiation that propagate energy and travel through space in the form of waves. Longer wavelengths with lower frequencies make up the radio spectrum. Shorter wavelengths with higher frequencies make up the optical spectrum. The portion of the spectrum that we can see is called the visible spectrum, however, NASA utilizes a number of tools that allow us to communicate and create images utilizing almost every single component of the electromagnetic spectrum in one way or another.

## Document Resources

- [Electromagnetic Spectrum](#)