

Radio Astronomy and Estes Park Public Schools

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What is Radio Astronomy?



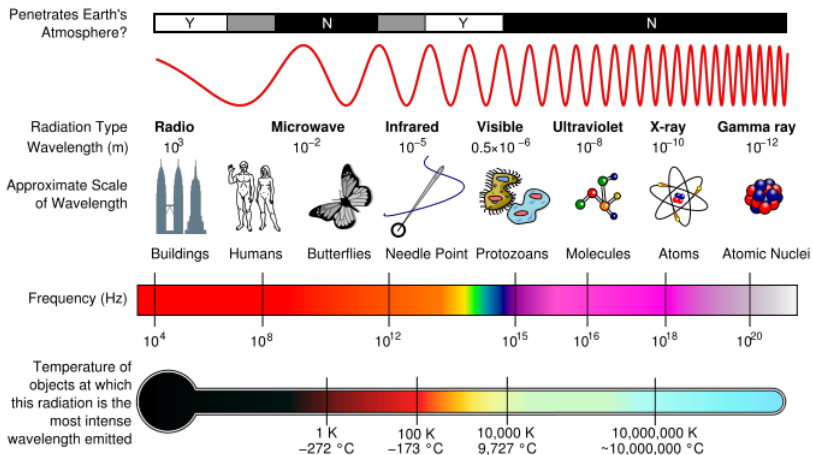
The Visible Sky, Sagittarius Region (Courtesy NRAO)



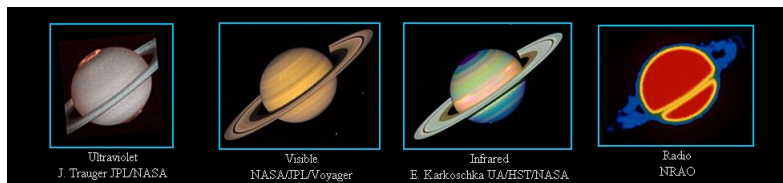
The Radio Sky, Sagittarius Region (Courtesy NRAO)



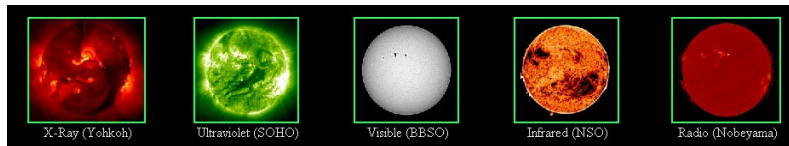
Electromagnetic Spectrum (NRAO/AUI/NSF)



Saturn and Sun in Various Wavelengths



(a) Saturn



(b) Sun

What Emits Radio Waves?



Celestial Radio Wave Sources



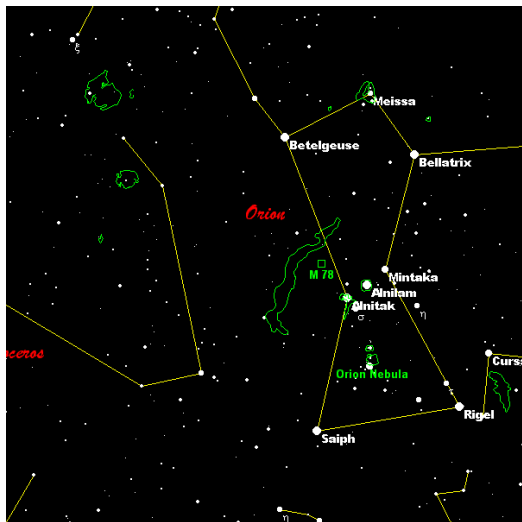
- Hot gases
- Atomic and molecular transitions (spectral lines)
- Electrons and magnetic fields

Hot Gases (NRAO/AUI/NSF)

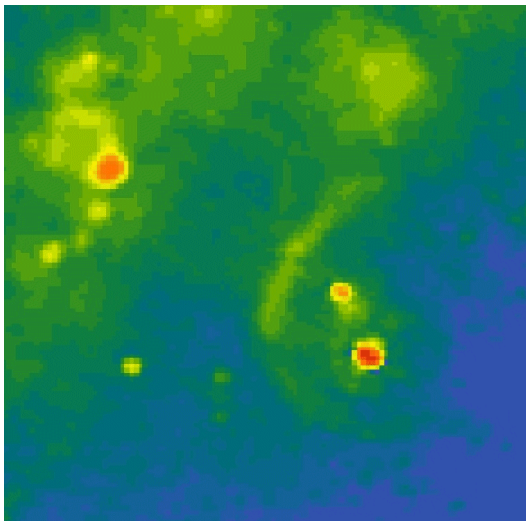


- Electron accelerates as it passes near a proton
- EM waves are released

Hot Gases (NRAO/AUI/NSF)



Hot Gases in Radio Frequencies (NRAO/AUI/NSF)



Hot Gases in the Visual (NRAO/AUI/NSF)

