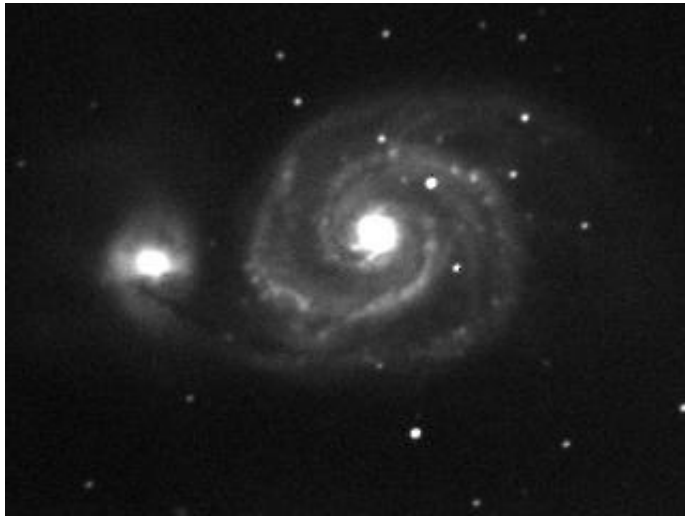


## Red and Infrared Sensitivity

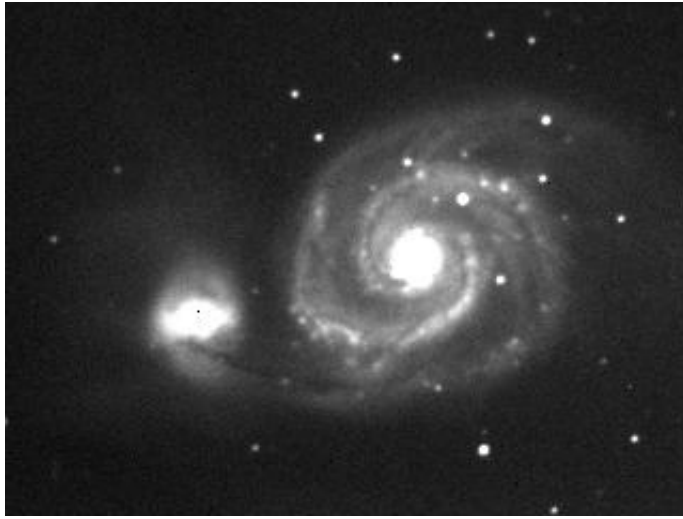
Both the Kodak and TI CCDs used in the SBIG cameras have sensitivity in the near IR (700 to 1000 nm). This can be seen in their [Quantum Efficiencies](#). This "extra" sensitivity increases the signal in your images as can be shown graphically below with sample images from the ST-5C.

The ST-5C camera is very sensitive in the red and infrared portion of the spectrum. The Quantum Efficiency of the ST-5C at 650 nm is about 60%. This extra red sensitivity helps greatly when imaging faint emission nebula, particularly those objects with high H-alpha emission. Planetary nebula and other emission nebula generally have quite strong emission in the red and infrared. Galaxies also emit a great deal of infrared light as can be seen in the examples below made with and without an IR blocking filter.



**M51.** Five minute image taken with an ST-5C through a 10" SCT at f/3.3 **MINUS IR** by using an infrared blocking filter.

**M51.** Five minute image taken with an ST-



5C through a 10" SCT at f/3.3

**INCLUDING IR.** The signal measured at the spiral arms of the galaxy is 60% greater than the image with no IR.

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