WorldWide Telescope Introductory Overview

by WWT Ambassadors Team

WorldWide Telescope (WWT), is a "Universe Information System" that offers a truly unprecedented view of the world's store of online astronomical data. WWT has woven astronomical images at all wavelengths into an "interface" that resembles their natural context–the Sky–while simultaneously offering much deeper opportunities to learn about the *science* behind the images. The WWT program, which is free for all non-commercial use, has now had more than 2 million

downloads and has been used many more millions of times in its "web client" form.[1]

1 www.worldwidetelescope.org/webclient/

Capabilities of WWT

The WorldWide Telescope computer program was designed from its inception with personal inquiry, exploration, discovery, and explanation in mind and fosters these critical learning goals by providing the following powerful features:

Tours	In Ambassador-created Tours, interactive modules guide users through topics in astronomy, allowing them to explore and understand how an object or phenomenon works, or how an important theory came to be. Users of WWT (including learners) can also create their own Tours and share them with others electronically. If one thinks of WWT as a *Sky Browser,* analogous to a *Web Browser*, then *WWT Tours* are analogous to Web Pages, guiding users through and to particular content.
Professional Data in Context	Access to the same data professionals use, from the world's best telescopes, promotes a thrill of discovery. Imagery displayed in a "virtual sky," provides important context that helps users visualize where an object is located, and how big in the sky it is.
3-D Visualization Tools	An immersive and detailed 3-D model of the Solar System, Milky Way Galaxy, and Large Scale Structure of the Universe gives users an accurate mental map of where things are in the Universe, their relative distances, and how they move with time.
Multi-Wavelength Comparisons	Crossfading registered images at different wavelengths shows users what can be inferred from each part of the electromagnetic spectrum, why different features appear at some wavelengths and not others, and how the physical structure at each wavelength can give clues to what is happening physically.
Easy Access to Research Tools	A "Finder Scope" presents additional data on every object catalogued in WWT and provides links to sources as varied as Wikipedia and professional journal articles.

The **WorldWide Telescope Ambassadors Program** (WWTA) uses the WWT computer program as a future-leaning way to teach and learn STEM concepts by *recruiting and training astronomically-literate volunteers to be experts in using WWT as a teaching tool.* Ambassadors use WWT to create dynamic educational materials called "Tours," and they share them with a variety of learners in formal and informal education settings.