

The Friends of PlanetQuest

Newsletter

Vol. 1, No. 2

The PlanetQuest Mission:

To inspire the people of the world with the thrill of individual discovery, a better understanding of our uniquely precious planet, and a wider perspective on our place in the universe.

Dear Friends,

First, we would like to say welcome to our many new subscribers! We are very encouraged by the great number of you who signed up for our newsletter during March. No doubt many of you first heard about us in the recent wired.com article—see <http://www.wired.com/news/space> for the complete text. In the fast-paced world of the news media, information about scientific discoveries and projects, which are by their very nature, quite complex, can often be misstated; the wired.com article was overall a bright exception. We do wish to acknowledge the heroic efforts of all planet discoverers to date—it is not easy to find another world!

We are making progress daily, and as you will see by the reports below, PlanetQuest is continuously moving along multiple fronts. None of this could be happening without the superb and dedicated efforts of individuals who are specialists and experts in their fields.

Many thanks to Dr. David Carico, our Education Director, for his update on the education front!

Our Education Project

One of our most important goals here at PlanetQuest is that you, the “PlanetQuester,” be able to learn more about astronomy while you search for new worlds. We are glad to report that our “educational front” is moving forward with steady progress. We have a detailed task list, an overall timeframe, and quite a good idea of what “learning astronomy with PlanetQuest” will be like.

When everything is up and running you will find numerous links throughout the Collaboratory and our website, each of which will give you a chance to learn. Some links will provide simple glossary definitions; others will open up brief illustrated essays; still others will lead to animations that let you participate. Eventually, we will have educational games—“Here Comes Andromeda,” for instance!

Our first category will be “The History of Astronomy.” From this link you will be able to learn about any of 24 initial topics, including Chaco Canyon, Chichén Itzá, Stonehenge, ancient Chinese astronomy, Polynesian star navigators, the oldest written astronomical record—and many more!

Look for this first educational link soon!

The Collaboratory Project

Collaboratory software development is blazing ahead. We continue to make improvements to the core algorithms that will do all the processing work in the Collaboratory. Aside from additions to the core Transit Detection Algorithm (TDA), we're putting together the pieces for the first-ever automated stellar classification engine that will compare targets against known stellar types. This will not only help optimize TDA searches, it will also help you classify stars more completely and share that important data with the larger scientific community.

We're continuing to donate our time and code to the BOINC project (<http://boinc.berkeley.edu>), which provides our distributed computing management layer. PlanetQuest team members are collaborating with BOINC programmers and the larger open source community to make BOINC the best, most robust distributed computing platform ever devised.

We're also putting the finishing touches on a Macromedia Flash-based preview Collaboratory demo that we hope to post to the site soon. Stay tuned!

Astronomy and Observing

We have arrived at that most exciting time of year—requests for time at observatories and the beginning of our observing season! The Milky Way is rising to be in the optimal position for our telescopes to gather the maximum amount of data on a huge number of stars. Soon we will begin observing at the Crossley telescope at Lick Observatory (<http://mthamilton.ucolick.org>) on Mt. Hamilton, above the city of San Jose, California. Our observing season there will run from the beginning of June through September—long nights of taking images of stars in the most densely crowded region of Sagittarius. Our astronomers will be working a minimum of 12-hour days, beginning around 7 pm, and straight through the night until after dawn every night that is clear enough for observing. (You can see how our weather is by checking <http://mthamilton.ucolick.org/hamcam>.) Because we use the photometric transit (light measuring) method, weather conditions (clouds, fog) and the atmosphere over the observatory have a large impact on our ability to take good images (also called taking data). A historical note: the Crossley is a Victorian-era telescope using state-of-the-art equipment for a cutting-edge science/distributed-computing project! An incredible contrast and a tribute to the Crossley—quite a story in itself. Incidentally, the Crossley was the world's first modern reflector, and Lick Observatory the world's first professional mountain-top observatory.

We are manufacturing a new prime focus spider mount to accommodate a corrector that will increase the field of view of the Crossley to a much wider angle (40×40 arcminutes) in order to record hundreds of thousands of stars. We are collaborating with the Rochester Institute of Technology in New York and using a state-of-the-art Kodak back-lit, blue-sensitive CCD (charge couple device).

We are currently awaiting word on an observing proposal at a telescope in the Southern Hemisphere, also for observing time during June.

Our Fundraising Efforts

Fundraising efforts are also proceeding on multiple fronts, as we work to educate potential donors about exactly who we are, why this project is world-class, worthwhile, and important to the global community from both the educational and scientific standpoints. If you are someone or know of

someone who would relish the opportunity to make a difference and bring positive change to our world, please consider a contribution (we've made this easy right on our website (<http://www.planetquest.org/support/>), or tell someone else about us. For the price of two lattes per month, you can help us build PlanetQuest into the world-changing organization it can be! For those thinking of contributing on a large scale, we are happy to meet with you and explain our project in more detail. We are a registered 501(c)(3) US nonprofit organization, so your donations are completely tax-deductible. As always, thank you for your interest, enthusiasm and support!

Quote of the Month

“Mortal though I be, yea ephemeral, if but a moment I gaze up at the night’s starry domain of heaven, Then no longer on earth I stand; I touch the Creator, And my lively spirit drinketh immortality.”

Claudius Ptolemy (140 AD, Astronomer)

Best Wishes,

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