

Announcing a workshop for those who wish to learn about open source computing technology used to evaluate spatial relationships; including archaeological sites in landscape. Today many free (or nearly free) open source software applications are available, more everyday it seems. Academic researchers, archaeological avocationalist and computer hobbyist share access to these resources.

This workshop was motivated by lively conversation at the Cortez, CO. meeting of the Society for Cultural Astronomy in the American Southwest in November of 2016. Only a small number of papers were presented on new computing technology but the questions and comments afterward revealed a great interest in learning more about these technologies.

We are going to convene a group of interested participants from November, 10th through the 12th. 2017, on the campus of Arizona State University. The plan is for participants to bring their own laptop computers pre loaded with a selection of software products. These software application downloads will be made available in advance of the meeting. No special knowledge is necessary other than a familiarity with loading and working with applications on your own equipment and a willingness to explore and participate.

Three operations will be covered at the workshop. The first day we will work through a process called Photogrammetry. Users take images with digital cameras of a three dimensional object then use software to stitch the images into a 3D model. We will be using an actual site in South Mountain Regional Park in the morning then processing the images at campus in the afternoon.

Saturday is dedicated to GIS software and processes. We will be using an open source product called QGIS. A facilitator will walk participants through the process on locating and managing spatial data and how to do important site calculations and evaluations. By the end of Saturday we expect to have a good working knowledge of QGIS, we will have learned how to make line of site and view shed calculations and we will place the 3D object that we worked with on Friday into a landscape context.

Sunday is a shorter day; we expect to be done by 3:00 pm. We will be exploring the use of free astronomy programs, especially how to place your captured or calculated landscape into a computer based planetarium program. We will be using Stellarium and (optionally) Cartes du Ciel. Additionally, solar light and shadow effects can be simulated on a 3D model. We hope to have time to use our captured Friday model to recreate and investigate light and shadow effects.

We are using facilities for the School of Earth and Space Exploration to accomplish the goals of this workshop. We are limiting participation to ~36 individuals. We welcome participants to bring their own research and their own spatial technology project to the workshop. The room we are using for the workshop is conducive to active participation and active sharing.

There is a block of rooms available at a 'walking distance hotel'. We wish to have non hosted social time on Friday evening at Mill Ave. is downtown Tempe and a hosted dinner on Saturday evening.

For further information or questions about this workshop