

*Overleaf: This Old Babylonian letter details a request for money to buy a slave girl; it also includes an ingratiating inquiry into the well-being of the recipient. The tablet exemplifies the physical characteristics of the script in the first half of the second millennium. OIM A22003. Iraq, Ishchali. Clay. Old Babylonian period, 2000–1600 BC. 7.3 x 4.1 x 1.7 cm. After Christopher Woods, “59. Letter,” in Visible Language: Inventions of Writing in the Ancient Middle East and Beyond, edited by Christopher Woods, p. 94, no. 59 (Oriental Institute Museum Publications 32; Chicago: The Oriental Institute, 2010). Photo by Anna Ressman*



<http://oi.uchicago.edu/research/camel>

### Scott Branting

This past year found CAMEL in the midst of several long-term projects focused on making geospatial data of the ancient and modern Near East more widely available and easily accessible. Geospatial data like maps, satellite images, and aerial photographs are critical because through them we can see changing landscapes from ancient to modern times for this important region of the world. From its inception almost a hundred years ago, the Oriental Institute has been actively involved in the collection and analysis of these types of data. CAMEL has accelerated this research trajectory by working extensively on digitally capturing, preserving, and making more accessible maps and images from both the Oriental Institute's collections and other important collections around the world.

A primary focus of work within CAMEL this year has been the preliminary stages of collaboratively digitizing large portions of the map collection held at the W. F. Albright Institute of Archaeological Research in Jerusalem (AIAR). This initiative, made possible by a four-year United States Department of Education, Technological Innovation and Cooperation for Foreign Information Access (TICFIA) grant, will make some of these rare maps available for the first time online to researchers and interested individuals around the world. While undertaking the work of cataloging the collections and producing metadata for each of the maps, I was reminded of how Ray Tindel, the longtime registrar of the Oriental Institute Museum, said that the basement of the Institute was like an archaeological site that he continued to excavate every day. The same could be said of the AIAR map collection, preliminary estimates for which suggested that there would be 230 unique maps to digitize. This past year, in partnership with the excellent AIAR library staff, we have identified 784 map sheets. This is nearly three times what was thought to be there. Each of these 784 maps is now largely cataloged and ready for digitization later this summer. Over the next three years not only will these maps be digitized and georectified, a process by which spatial data are encoded with their real locations on the surface of the earth, but the same process will be undertaken in collaboration with the American Research Center in Egypt (ARCE), the American Institute for Maghrib Studies in Algeria (CEMA), and Chicago House. Important portions of each of these unique collections of maps will be digitally preserved and made available online through CAMEL by 2014.

While working collaboratively on these new sources of maps, CAMEL continued the long process of georectifying the over 1,100 U.S. Declassified Spy Satellite images in the CAMEL collections. As noted last year, over 300 of these images had been sent to Jesse Casana at the University of Arkansas to be georectified in a more automated fashion as part of a National

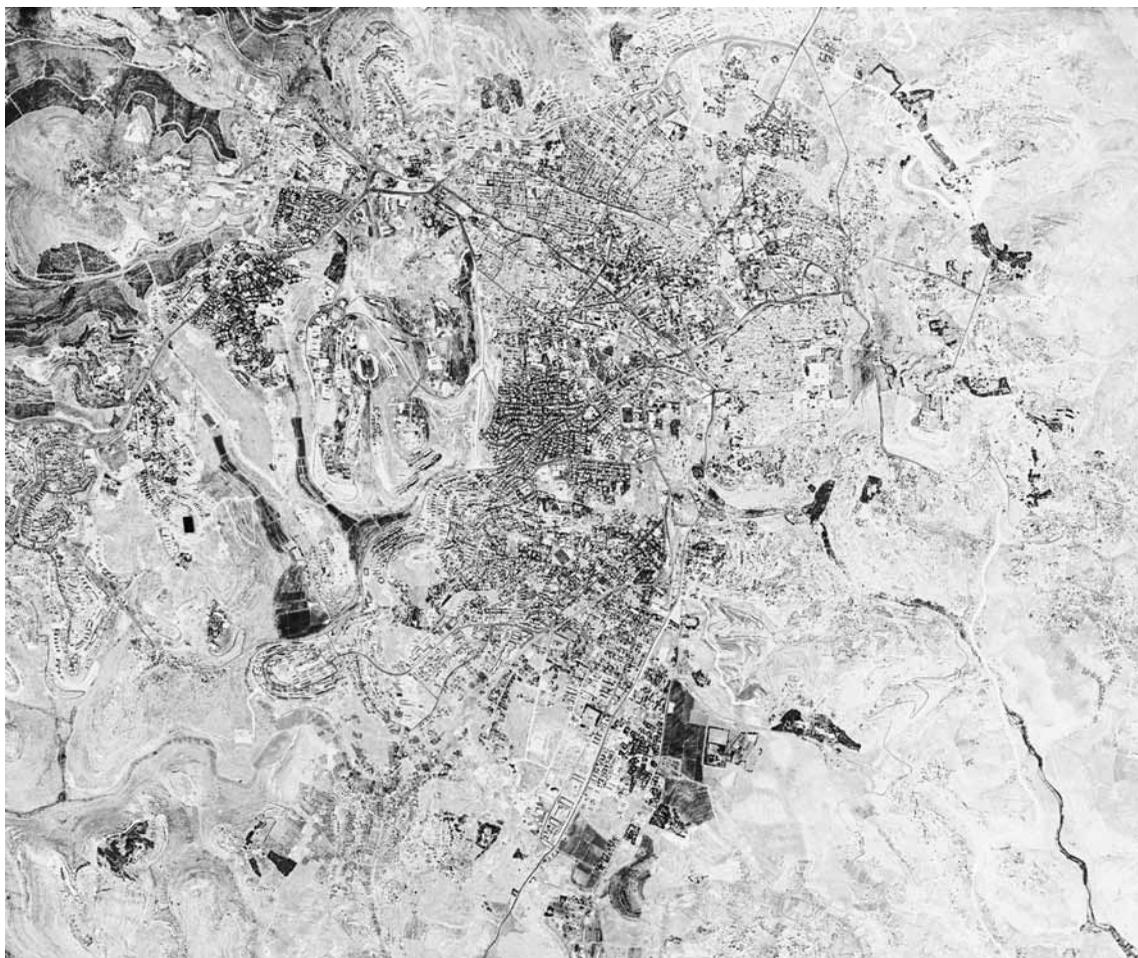
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Endowment for the Humanities grant. The additional images we have set out to rectify ourselves, one at a time and at a fraction of the cost, while we await the outcome of Jesse's project. Over this past year 156 additional strips of these images were carefully georectified by CAMEL, bringing the total for two years to 261 images. These images, once georectified, are extremely useful to researchers interested in finding traces of ancient Near Eastern settlements and landscapes that existed into the twentieth century. They also provide important information on how the modern Middle East has changed over the past fifty years.

In addition to these long-term projects, CAMEL continued to serve the research community both within the Oriental Institute and around the world. Data searches were conducted and data made available to researchers from across the United States, Europe, and the Middle East. These requests encompassed a wide range of geospatial data from countries all over the Middle East. The CAMEL laboratory has been busy facilitating research by those at the Institute and also printing out a number of large-format illustrations for the Museum's ongoing program of special exhibits. Finally, CAMEL has also been hosting Arne Wossink, a post-doctoral scholar who graduated from Leiden University. His work at CAMEL, focusing on site detection and preservation in Iraqi Kurdistan, has been funded by a prestigious Rubicon Grant from the Netherlands Organisation for Scientific Research (NWO).

CAMEL continued to partner throughout the year with Wendy Ennes in the Oriental Institute's Public Education Department in order to expand our outreach program among Chicago's public schools. Last year a grant was received from the Chicago Public Schools' Museum Connection Program that allowed us to develop a cross-disciplinary program for sixth-grade students at Claremont Academy. It combined hands-on archaeological excavations in the Kipper Family Archaeology Discovery Center at the Oriental Institute with skills in using Geographic Information Systems (GIS) computer software to analyze spatial distributions of artifacts. The success of this program was recognized this year by the Lloyd A. Fry Foundation, which chose to generously fund a two-year follow-on project. The new project, ArcGIS Cross-Curricular Education for Sixth Grade Students Program (ACCESS), will train a group of sixth-grade teachers across three Chicago public schools in these same concepts. We will then work collaboratively with the teachers to design a suite of educational modules that fit their cross-curricular needs while making use of these tools and a variety of geospatial data.

The time and effort of CAMEL's dedicated staff and volunteers are what make CAMEL a success. During most of this year Robert Tate served as associate director. In April, Robert left us to pursue a wonderful opportunity for employment. We certainly wish him the best and thank him for his years of dedicated service. Following his departure, Susan Penacho and Elise MacArthur were elevated from their previous rank of assistant directors to associate directors. Matt Cuda and Meg Swaney served as senior supervisors. Bryan Kraemer continued to serve as database administrator for our growing collections while also working with us as a student assistant. Hannah Loftus, Sami Sweis, Sadie Samuels, and Courtney Jacobson were all student assistants. Xander Piper and Tiana Pyer-Pereira worked with us on the ACCESS project as interns in Public Education, while Haeden Stewart worked on ACCESS as a volunteer. CAMEL volunteers for this year were Alexander Elwyn, Larry Lissak, Craig Tews, and Peter Fiske. Without their patience and hard work little could be accomplished. In the same way, I would like to thank all those this year who donated financially or in contributions of geospatial data to CAMEL's collections.



*Figure 1. A portion of one of the just over 1,100 U.S. Declassified Spy Satellite images, also called Corona images, from CAMEL's holdings. These images form an important part of the CAMEL archive and offer researchers important clues to now vanished ancient and modern landscapes. This image of Jerusalem was taken in 1970*

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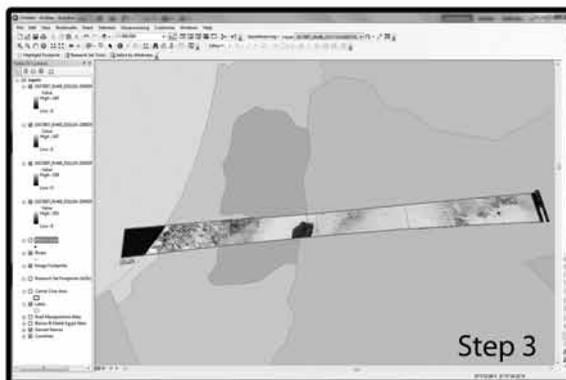
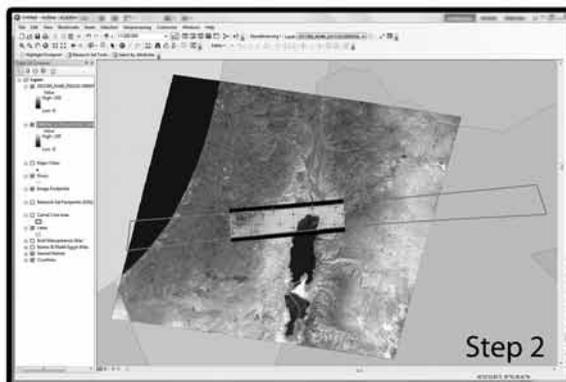
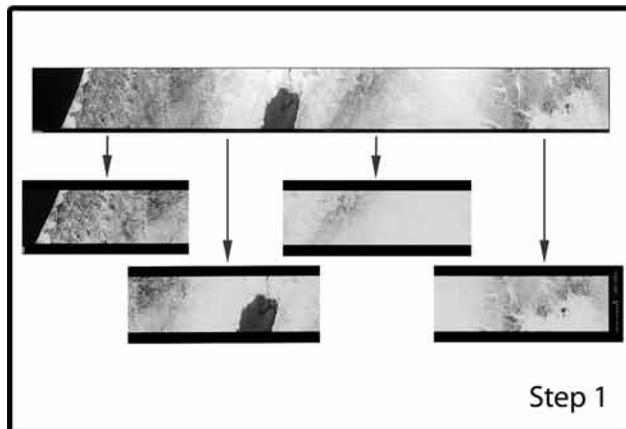


Figure 2. Georectification of the Declassified Spy Satellite images is a three-step process. The digital images are first digitally cut into four separate images so as to minimize distortion along the long image during the rectification process (Step 1). The locations of common points, things like building corners or more permanent landscape features, are then input for both the first image being rectified and an already georectified second image such as this Landsat satellite image. The computer shifts the images so that the points from the first image match the locations found in the second image (Step 2). With each segment in its proper location on the surface of the earth, a footprint for the entire image and each constituent segment is added into the CAMEL database along with the georectified images (Step 3)

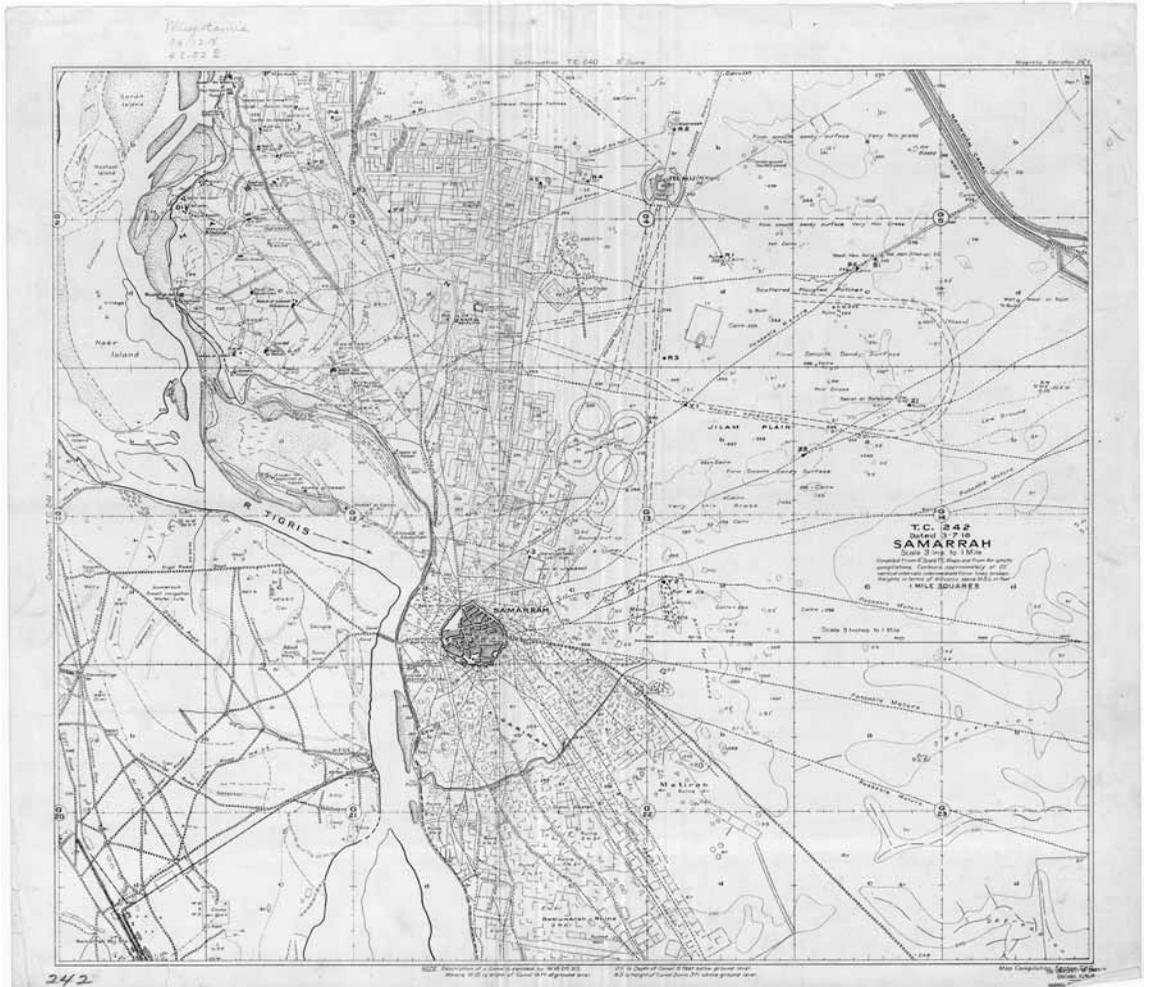


Figure 3. This British Survey map of the city of Samarra in Iraq was produced in 1918. It shows parts of this important Islamic capital and UNESCO World Heritage Site that have since been obscured or even destroyed. Thanks to a donation of the map for digitization by Dr. McGuire Gibson, this early map is now part of CAMEL's digital archive. This will facilitate access to this map by researchers, students, and everyone interested in what was visible at Samarra in the early twentieth century. Donations of paper maps and aerial photographs pertaining to the Near East are always welcome at CAMEL