

# Geospatial Modeling & Visualization

A Method Store for Advanced Survey and Modeling Technologies

GMV Geophysics GPS Modeling Digital Photogrammetry 3D Scanning Equipment Data and Projects by Region

## Tiwanaku, Bolivia

The Center was been involved in a multi-year project in collaboration with Dr. Alexei Vranich at the University of Pennsylvania to scan and document the Pre-Incan site of [Tiwanaku, Bolivia](#). As part of that documentation, historic aerial photographs from 1972 were purchased and processed to created several GIS data layers. These images are low altitude and there fairly high resolution. They can be processed using LPS or PhotoScan (PhotoScan Pro if control is to be used).

Read a short synopsis of the project at [Tiwanaku Project Details](#) and for full details on the entire survey, refer to [Geophysics and Geomatics at Tiwanaku](#).



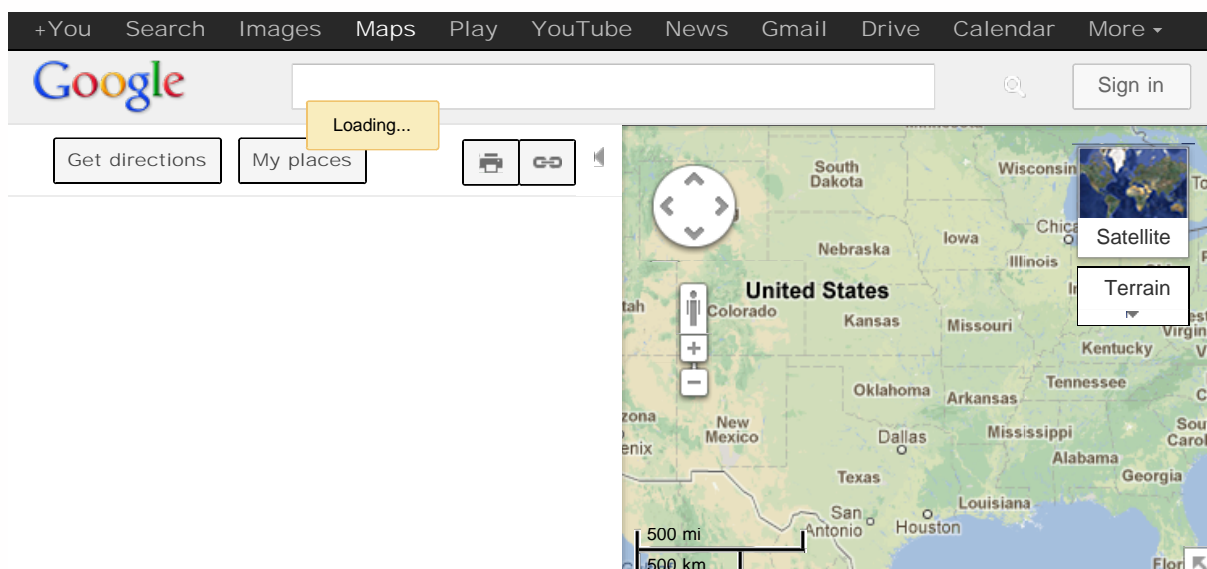
### Historic 1972 aerial photos

- Download: [Tiwanaku.zip](#) (File size – 875 mb)  
These historic vertical aerial photographs from 1972 cover the monumental core and surrounding areas of the UNESCO World Heritage Site, Tiwanaku.
- 9" x 9" negatives scanned at 2000 dpi (12.7 $\mu$ )
  - 6" focal length (ca. 153mm)
  - Scale 1:5100
  - Ground sample distance: 6.5 cm
  - Average flying height: 780 m above surface



Tiwanaku ca. 1972 in anaglyph 3D

### Mapview of the datasets.



View [this](#) in a larger map

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**Credit:** [Museum of Archeology and Anthropology](#) and [General Robotics, Automation, Sensing and Perception \(GRASP\) Lab](#), (University of Pennsylvania) and [Center for Advanced Spatial Technologies](#), (University of Arkansas)

**Longer version:** Data acquired, processed and distributed by the Center for Advanced Spatial Technologies, the Museum of Archaeology and Anthropology and GRASP, University of Pennsylvania.

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