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« [A quick look at NGA LiDAR from Haiti—from OpenTopography.org](#)
[New Haiti earthquake links](#) »

[Balloon Aerial Photography update](#)

Some of you might know of (or suffered from) my obsession with balloon and kite aerial photography. Here is some of our old pictures and descriptions:

<http://activetronics.la.asu.edu/kites/index.html>

JD Godchaux over at [NiLeL \(Community Impact Through Mapping\)](#) pointed out some nice stuff being done by the folks at [Grassroots mapping](#), including a really nice [Wiki on Balloon Aerial Photography](#)

Here is a nice video from them: <http://www.youtube.com/watch?v=CYhMV5QleY8>

Here is a bit on our system and below a few examples of recent products:

We have been playing around with this as a method of collecting very high resolution imagery of our sites where we can cover an area of ~100m on a side at a resolution of a few cm with a relatively inexpensive system:

- 7' Balloon from <http://www.arizonaballoon.com/> (~\$300)
- Helium from Chem Stores at ASU or a welding shop (~\$100 for a couple flights)

or

- Kite from <http://www.intothewind.com/> (Flowform ~\$200)

and

- Reel, string, Picavet mount for camera, accessories from <http://www.intothewind.com/>
- Good compact digital camera (~\$300)
- Remote control unit with transmitter, receiver, and microserves (Hobby shop; Futaba; ~\$200)

[David Haddad](#) and I used it in summer 2009 to document the trench excavations at the Bidart site along the San Andreas Fault in the Carrizo Plain. We made some videos of the basic set up and you can see them here:

- [Balloon aerial photography demonstration 1](#). Don't worry that it is rotated at the beginning, it is normally oriented about halfway through.
- [Balloon aerial photography 2nd part of demonstration](#): balloon filling.
- [Balloon aerial photography 3d part of demonstration](#): picavet mount.
- [Balloon aerial photography 4th part of demonstration](#): remotely triggered servo on picavet.





Overview of the main components (excluding camera, which was used to take this picture).







Here is the balloon standing by for launch.

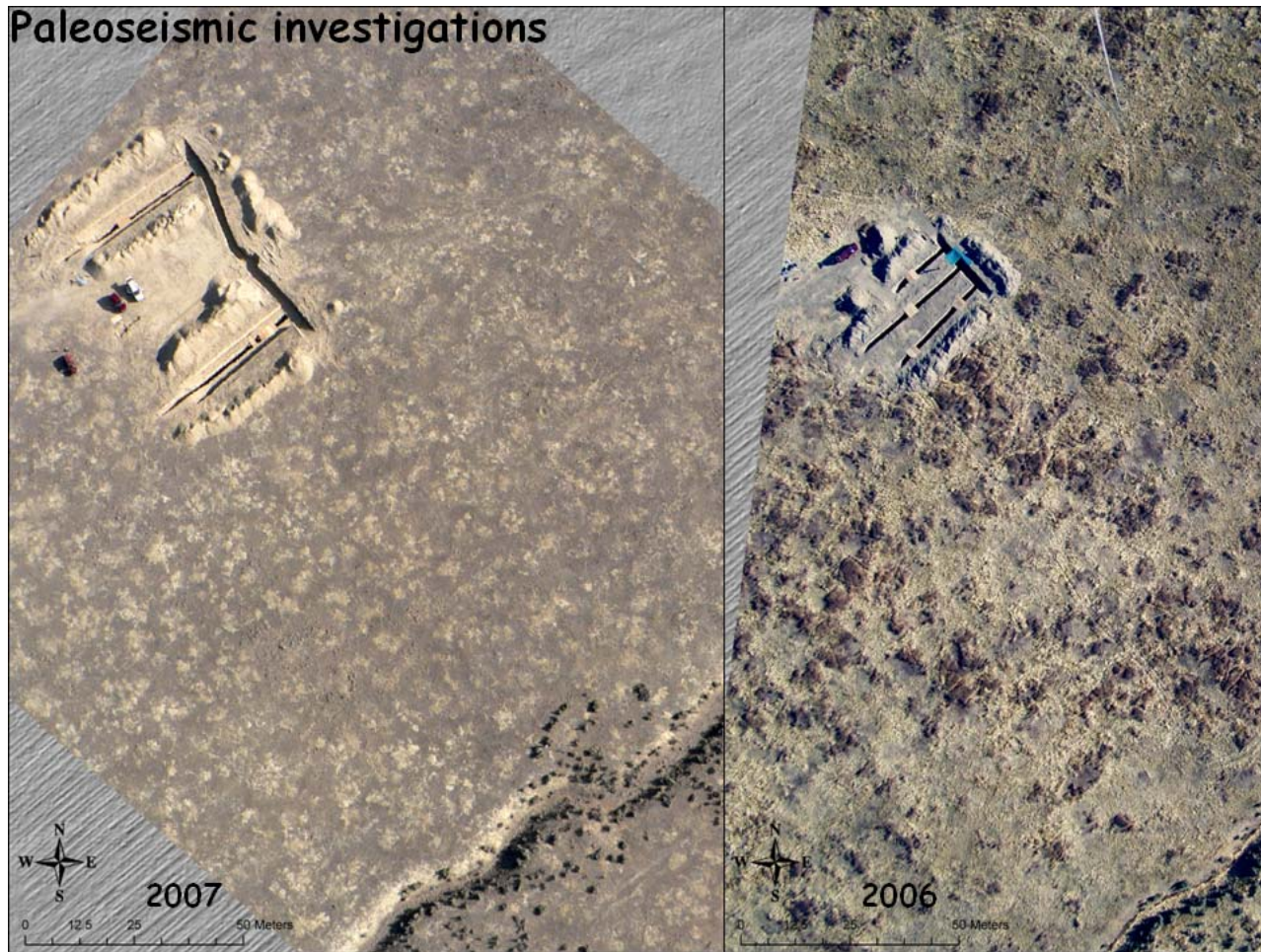
Here are actual balloon photos of the site in 2005, 2006, and 2009: http://activetectonics.asu.edu/bidart/Balloon_Photos/





A nice image of an offset channel with fault parallel trenches

Paleoseismic investigations



Here are balloon aerial

photographs which I warped (rectified) to the high resolution lidar topography ([B4](#)) available at opentopography.org.

This entry was posted on Friday, February 12th, 2010 at 8:00 am and is filed under [General commentary](#), [Active tectonics group](#). You can follow any responses to this entry through the [RSS 2.0](#) feed. You can [leave a response](#), or [trackback](#) from your own site.

3 Responses to “Balloon Aerial Photography update”

1. [Max Wilkinson](#) Says:

[February 26th, 2010 at 6:18 am e](#)

Neat setup Ramon, how many fills do you get from a big bottle like that? Still waiting for Spring here in the UK..
The 1906 George Lawrence rig is immense!

2. [Ramon](#) Says:

[February 26th, 2010 at 12:34 pm e](#)

We can fill 2-3 times from such a big He bottle. thanks for the comment!

3. [info@xsightn.com](#) Says:

[January 9th, 2011 at 3:23 am e](#)

How high did you guys go on this balloon ?

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