

DIY AERIAL PHOTOGRAPHY (FOR \$100 OR LESS)

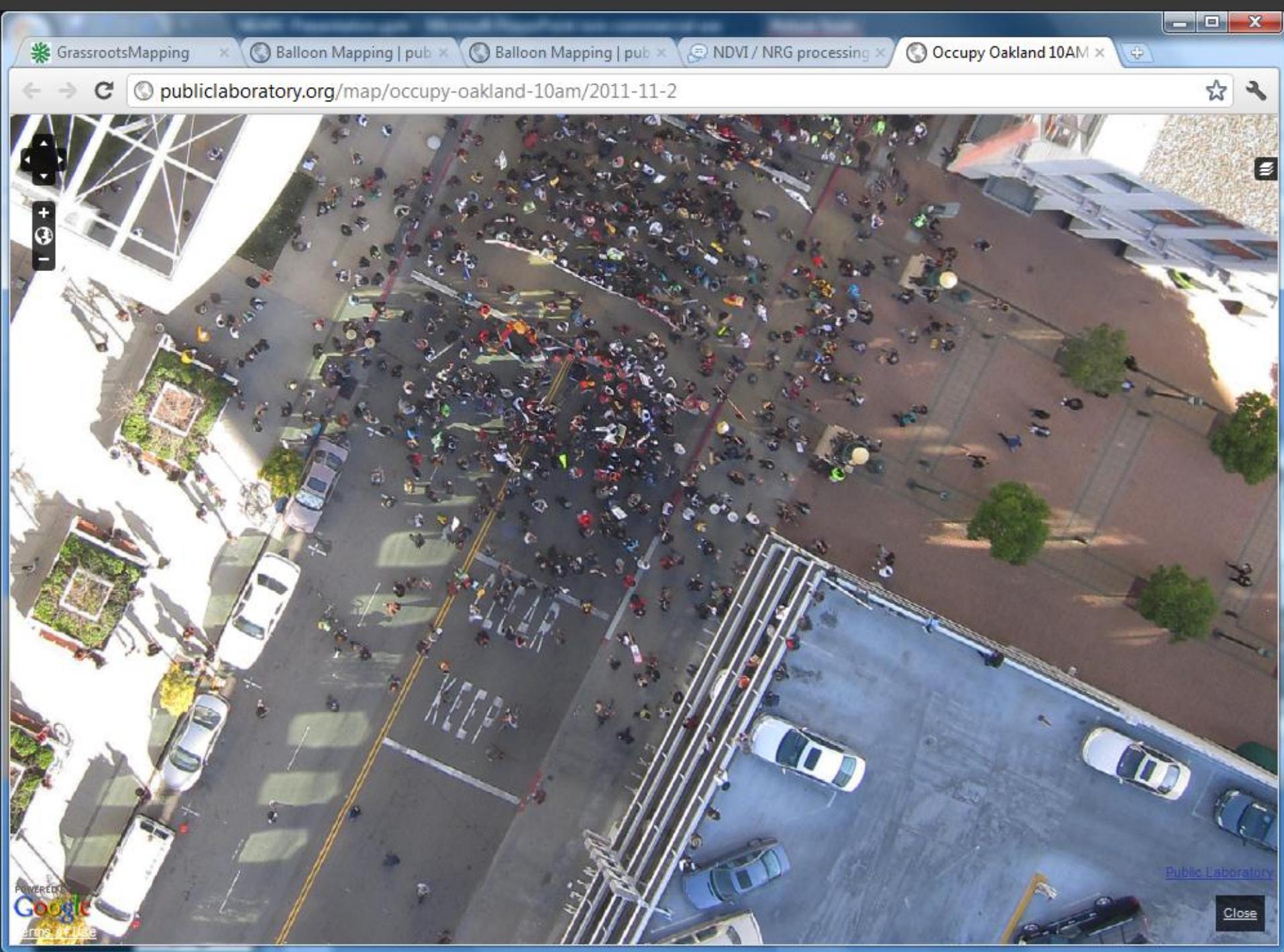
Carolin Ferwerda
Library & Technology Services

GIS Day | 11.18.11

MAPPING LIMA, PERU

January 2010





GrassrootsMapping

Balloon Mapping | pub

Balloon Mapping | pub

NDVI / NRG processing

Occupy Oakland 10AM

publiclaboratory.org/map/occupy-oakland-10am/2011-11-2



Public Laboratory

Close

POWERED BY
Google
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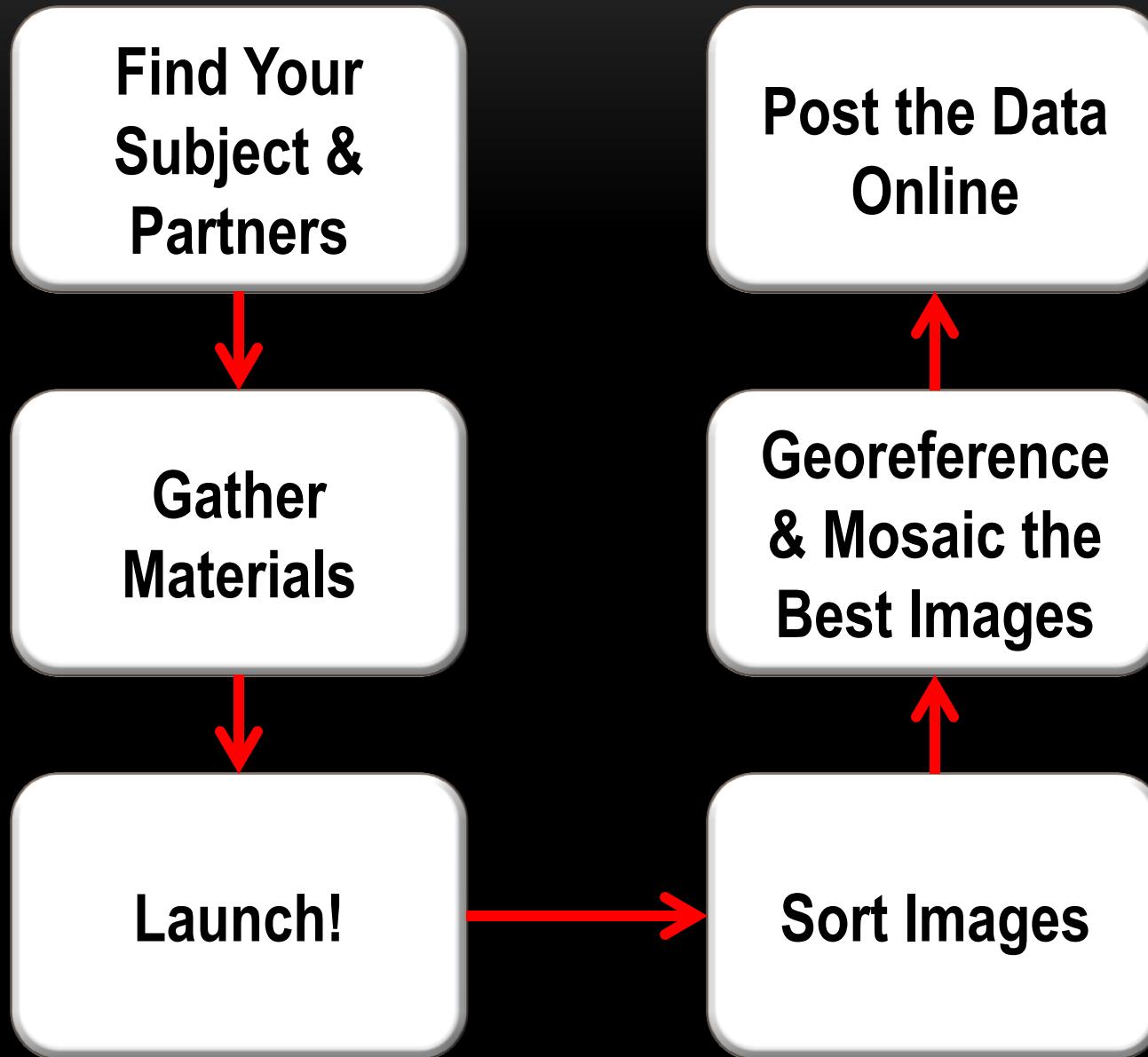
GULF OIL SPILL MAPPING

The
Public
Laboratory
for Open Technology and Science



2010/July/22 ~ 11:30
Bay Jimmy & Wilkinson Bayou
By LA Bucket Brigade : labucketbrigade.org
For Oil Spill Map : oilspill.labucketbrigade.org
With Grassroot Mapping : grassrootsmapping.org
Map assembled by Cesar Harada : cesarharada.com

BALLOON MAPPING FROM START TO FINISH



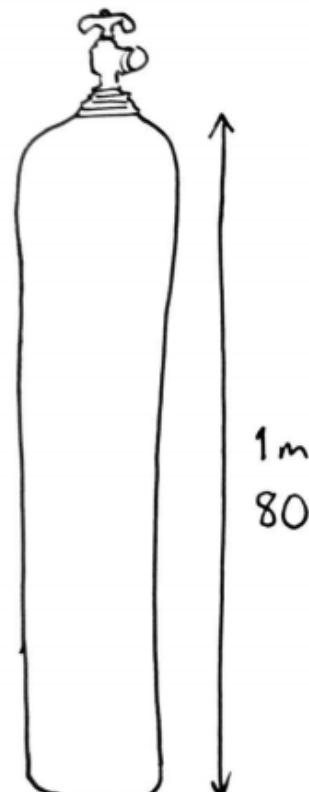
An Illustrated Guide to

Grassroots Mapping with Balloons and Kites

To learn more, visit <http://grassrootsmapping.org>

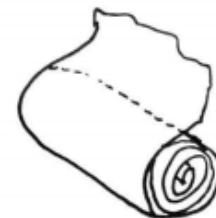
Do you want to make maps? Do you need satellite images but can't afford them? Do you want to see your home from above?

Follow these instructions and you can, for as little as \$100!

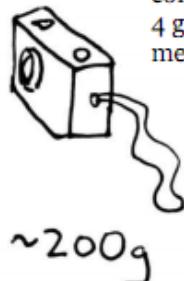


80 cubic feet or 1.5 cu. meters of helium

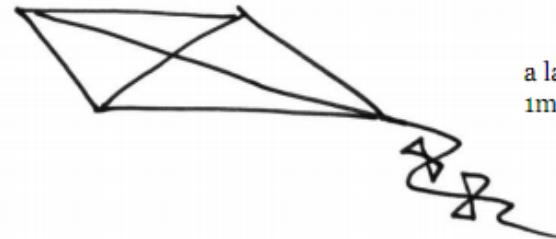
One 2 meter-wide weather balloon



or 2 mylar sleeping bags

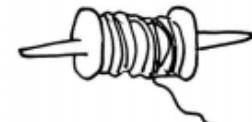
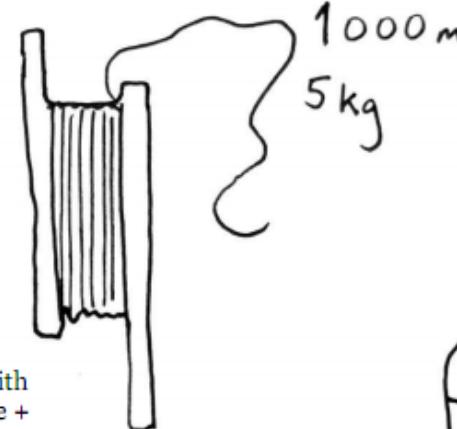


digital camera with continuous mode + 4 gb or larger memory



a large kite - 1m² or more

1000m 5kg nylon string for balloons

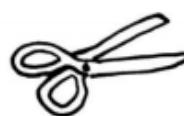


30kg+ strength nylon string for kites

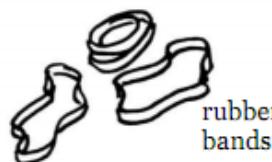


2 L plastic soda bottle

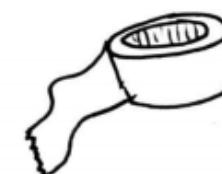
heavy work gloves



scissors



rubber bands

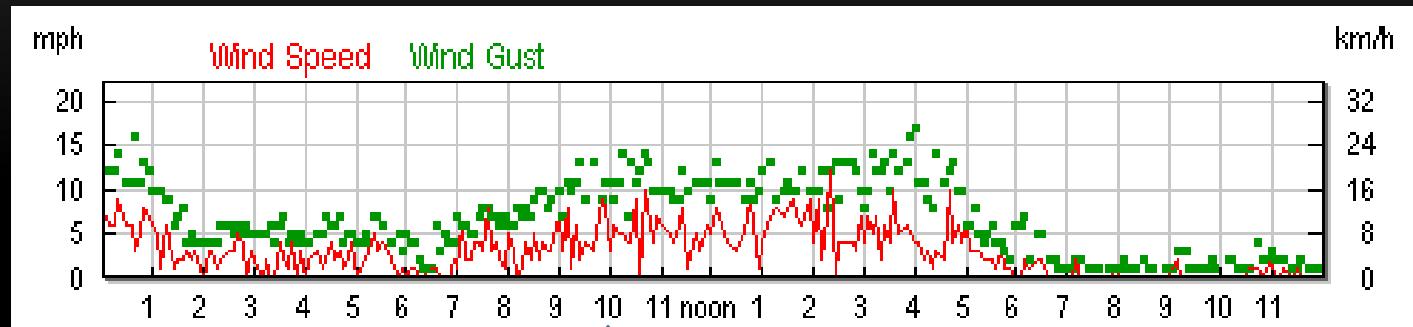


duct tape, gaffa tape is best



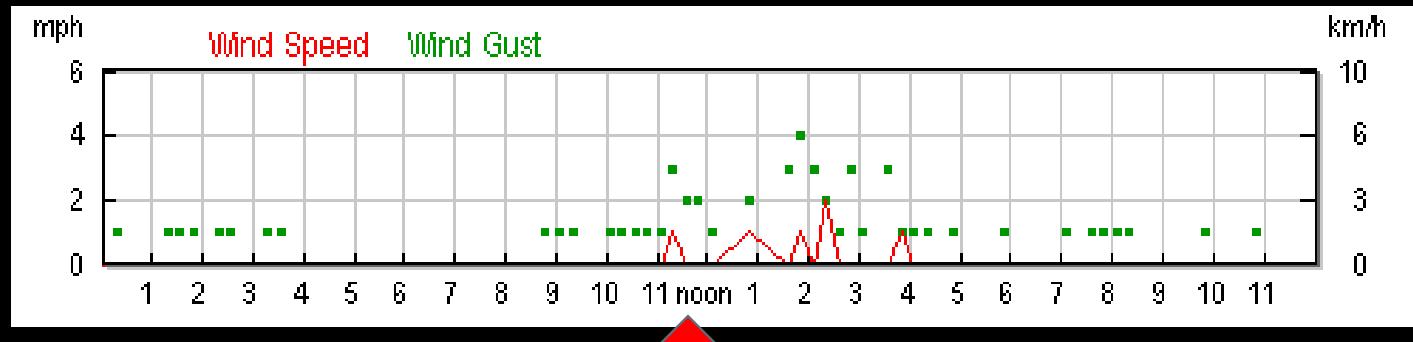
LAUNCH 1

OCT 28, 2011



LAUNCH 2: 'TEST OF CONCEPT'

OCT 31, 2011





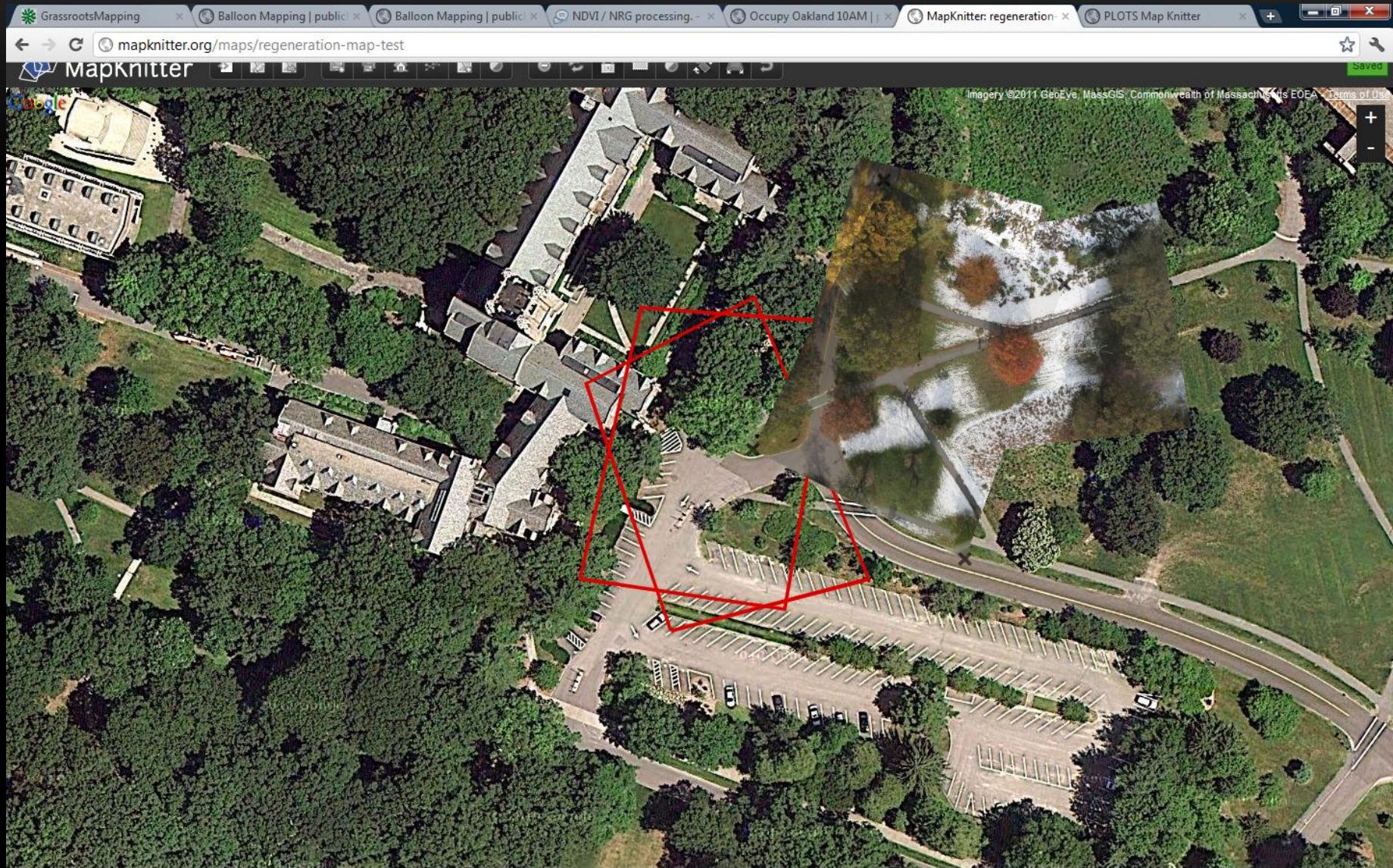








GEOREFERENCE & MOSAIC









Auto-Select: Group

Show Transform Controls

Workspace



History

Actions

Navigator X Histogram Info



9%

Color Swatches X Styles

Layers X Channels Paths

Normal Opacity: 100%

Lock: Fill: 100%

	15-3 lens
	18
	16-3
	12-3
	11

9%

Doc: 180.2M/318.7M



COST BREAKDOWN

Fishing swivel clips (Dick's Sporting Goods)	\$3.50
4 emergency blankets (Walmart)	\$11.52
2 emergency blankets (Kmart)	\$9.58
2 800' mason line spools + reel (Home Depot)	\$20.95
Helium tank regulator (Taylor Rentals)	\$10.63
Leather gardening gloves (Home Depot)	\$3.97
Gaffer tape (Calumet)	\$13.80
Total Cost of New Materials	\$73.95

Mylar Balloon Construction: 1.5 hr/balloon * 6 balloons	9 hours
Research and Preparation	5 hours
Balloon Launch: 2-3 hr/launch * 2 launches	5 hours
Image Processing	10 hours
Total Time Investment	29 hours

WANT TO TRY IT?

- grassrootsmapping.org
- Google Group:
[grassrootsmapping](https://groups.google.com/forum/#!forum/grassrootsmapping)
- Or contact me!

