Community Science with Public Lab

Jeff Warren
Public Lab is a community and a non-profit, democratizing science to address environmental issues that affect people.
Build a Coquí: A Simple Water Conductivity Sensor

by akshaya with kanarinka | 17 Sep 23:21

This is a beginner’s guide to assembling the Coquí
Typical workflow

Image Sequencer workflow
Why Do It Yourself?

Why go beyond “public understanding of & involvement in science”?
DIY means changing how we produce knowledge
PublicLab.org

**Q&A**
How do I do this? Can someone help me test this out?

**Topics/Methods**
- Agriculture
- Drinking water
- Fracking
- Indoor air
- Chemical processing
- Land use & change
- Mining
- Oil & gas
- Transportation
- Urban planning

**Blog**
Stories and people

- People and discussions to support your work
- People and discussions to support your work
- Method or topic w/ Activities + Q&A
- Method or topic w/ Activities + Q&A
- Method or topic w/ Activities + Q&A
- Blog post
- Blog post
Methods

developed by Public Lab contributors

Public Lab’s community collaboratively develops many different techniques and methods for DIY environmental monitoring. Browse many of them here and learn how to get involved.

Potentiostat

last edit by dwheeler about 7 hours ago | 26,798 views | ★ 13

0 activities  0 upgrades

Choosing advocacy pathways

last edit by stevie 26 days ago | 448 views | ★ 1

0 activities  0 upgrades

Host an event

last edit by stevie 26 days ago | 41 views | ★ 1

2 activities  0 upgrades

Read more

Site Survey

last edit by stevie 26 days ago | 58 views | ★ 1

0 activities  0 upgrades

Read more

Stormwater Monitoring

last edit by stevie 26 days ago | 126 views | ★

4 activities  0 upgrades

Photo Monitoring

last edit by warren about 1 month ago | 518 views | ★ 2

9 activities  0 upgrades

Riffle: an Open Source Water Monitoring Approach

last edit by liz about 1 month ago | 34,642 views | ★ 15

0 activities  0 upgrades

KAPtery Aerial Rigs

last edit by cfastie about 1 month ago | 4,602 views | ★

0 activities  0 upgrades
We support communities in applying science to local problems.
Data and its interpretation increasingly drives decision making in our society.
Challenges:

Limited ability to evaluate or test

Processes too big to see feedback loop in individual actions
Environmental issues “affect someone else”

Trust issues with industry -- and the science they produce
Local expertise
Dashboard

Welcome, warren! 60 notes and 111 wiki edits posted in the past week. You’ve shared 523 research notes.

Enforcing Stormwater Permits with Google Street View along the Mystic River

From the Public Lab Blog

Activity

Selected updates from other community scientists in the past week | Your work

OpenHour

Join Public Lab community members for a monthly call

Wiki
Discussion lists

A shared knowledge base for community science

Search for...

New edit by liz about 5 hours ago - changes

OpenHour

New edit by pablo about 6 hours ago - changes

Desktop Spectrometry Kit 3.0

New edit by stevie 3 days ago - changes

Coqui

New edit by stevie 3 days ago - changes

Mapping the Waste Stream of Southern California
Questions and Answers Public Lab's growing knowledge base

Ask a question to the Public Lab community to help you in your environmental exploration.

New to Public Lab? Learn how this works »

Recently Asked  Recently Answered  Popular  ★ Liked

1. Error on calibrating uploaded spectrum
   asked by sarahom about 3 hours ago | 1 | 33 | 0
   spectralworkbench  spectral-workbench  expert  question:spectrometry
   Post an answer

2. Can anyone help me troubleshoot my NDVI imagery?
   asked by abdul 3 days ago | 2 | 64 | 0
   ndvi  calibration  infrared  question
   Post an answer

3. How does bio-waste move within the waste stream?
   asked by sarasage 3 days ago | 0 | 114 | 1
   waste-management  waste  open-water  groundwater
   Post an answer

4. Progress? Options...
   asked by biran 3 days ago | 0 | 0 | 70
   research  environment  audio  question:generalarduino
   Post an answer

5. How to process images using a mobius with an IR lens?
   asked by miguel_rosas 6 days ago | 0 | 145 | 1
   ndvi  ir  lens  mobius
   Post an answer

6. Is it possible to generate lightweight air quality
   Post an answer

7. MobiusActionCam vs S100
   Post an answer
atmosphere over pfizer, brooklyn

Comments (2)

2 months ago, warren wrote:
https://en.wikipedia.org/wiki/Fraunhofer_lines
Fantastic O2 lines at ~900nm, 760nm and 685nm! 760 especially. The double line at 717 and 725 that we were wondering about seems to be H2O according to the graph on Wikipedia: https://en.wikipedia.org/wiki/File:Spectrum_of_blue_sky.svg I think that if it weren’t as overexposed in the blue-green region we’d have gotten some of those lines as well.

Delete

about 1 month ago, Fernando wrote:
By the way, the spectrum you took looks really interesting! You can see the Oxygen absorption around 760nm quite well. Although there is a whole world of information in the IR which is not present, where you can see CO2, water vapour and other greenhouse gases: http://www.stellarnet-inc.com/images/solar%20image%202020-2400nm.gif

Delete
Local groups can acquire expertise more readily today.
They can organize and build knowledge in parallel.
Which is why we need to build bridges.