

ZooTools and Ubrets.

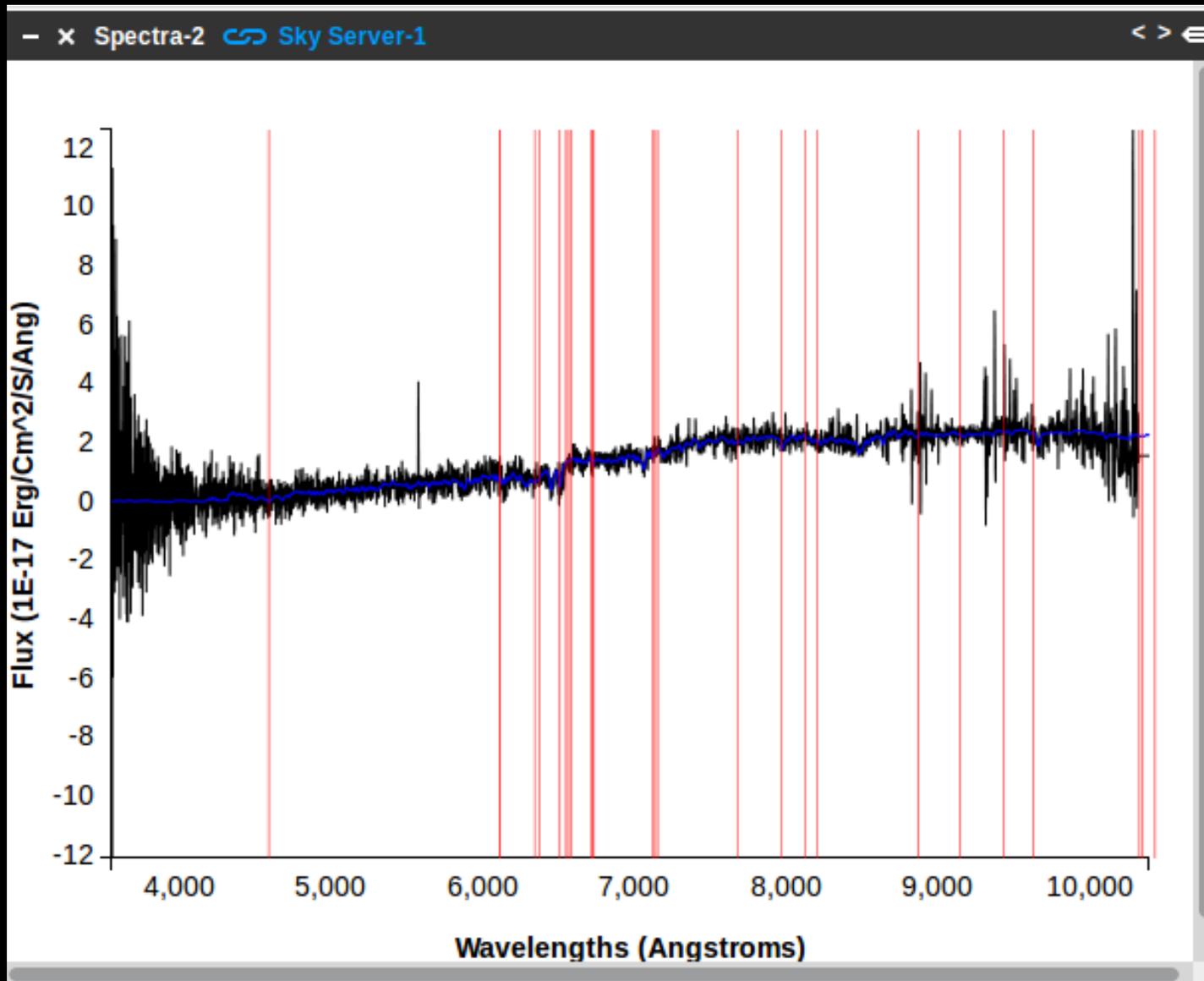
or

What the Zooniverse Users
can do for you.

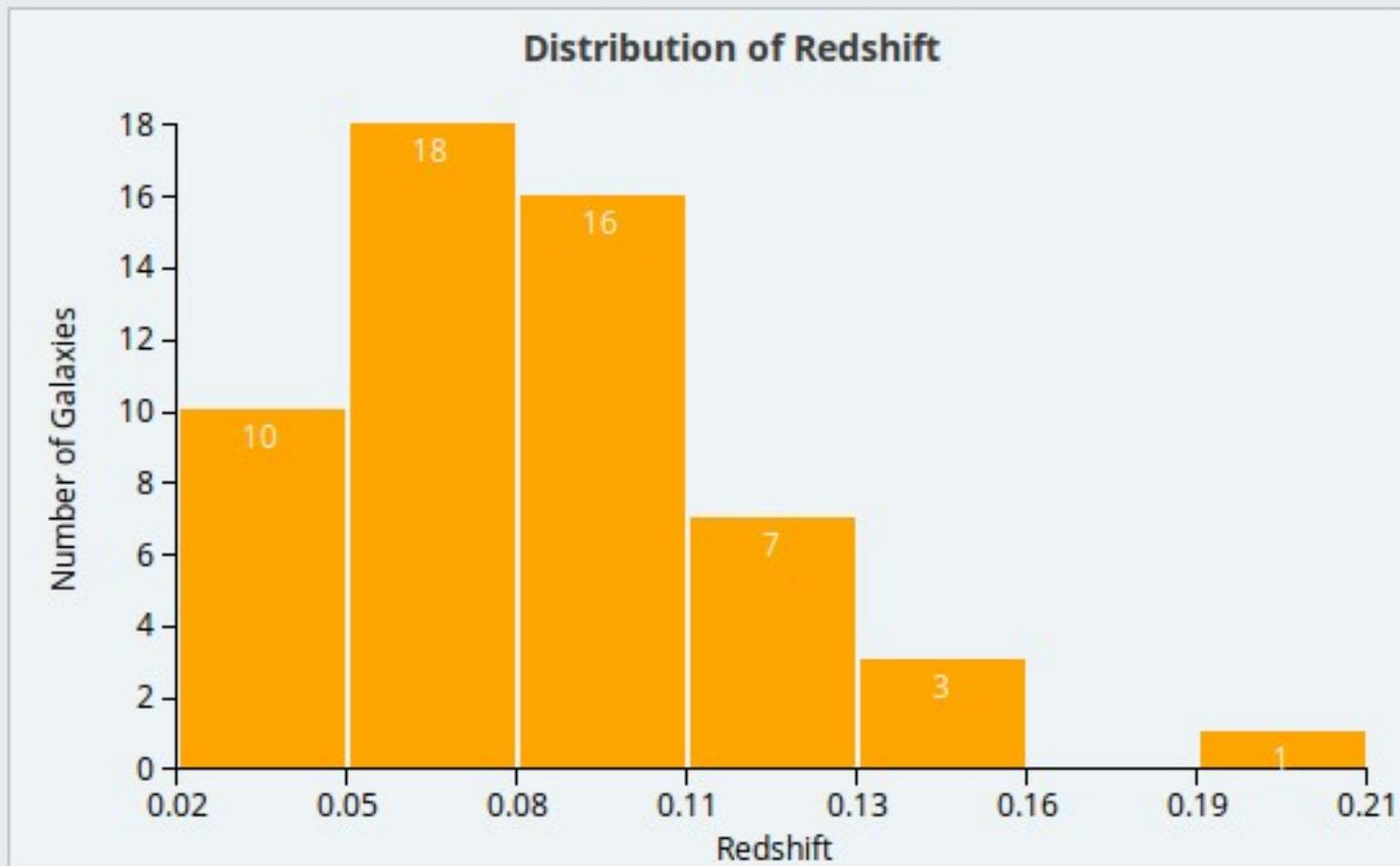
What's an Ubret?

Tools for Visualizing Zooniverse Data

What's an Ubret



What's an Ubret?

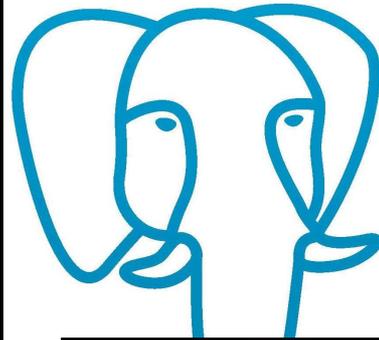


● Feature/Disk ● Smooth # of Galaxies: 56

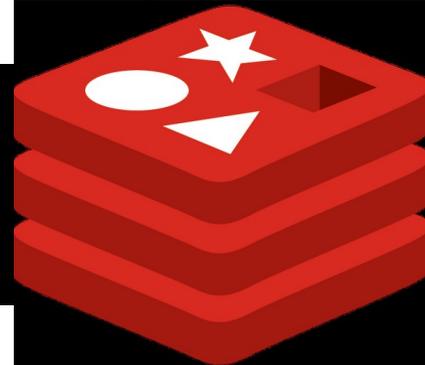
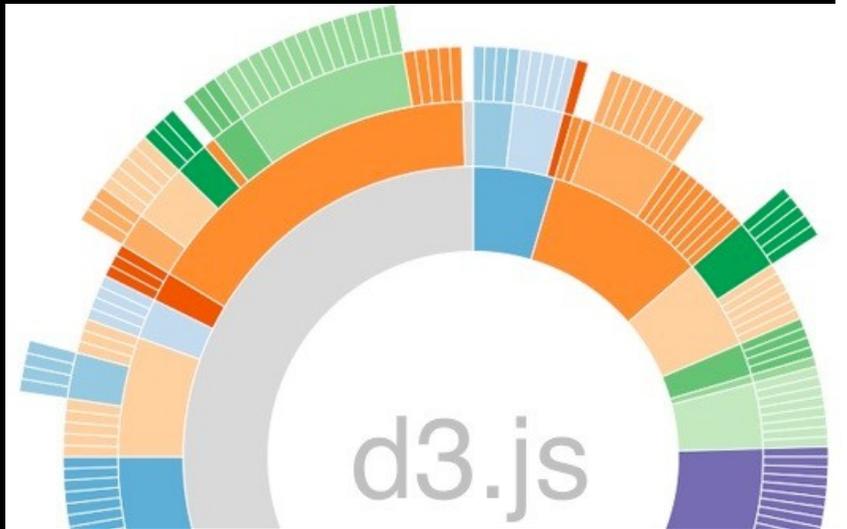
Take Snapshot

Download Data

How they work: Technologies



PostgreSQL



redis



BACKBONE.JS



How they work: Architecture

Data Sources – Shared

Zooniverse
Talk, User Groups

Zoo-Data

External
(eg Sky Server)

Implementations

ZooTools

Galaxy Zoo
Navigator

Your Project?

Tools - Shared

Graphs, Tables, Querying,
Spectra Viewers, Maps, Annotations

New Tools?

Galaxy Zoo Navigator

How Do Galaxies Form?

Roughly one hundred billion galaxies are scattered throughout our observable Universe, each a glorious system that might contain billions of stars. Many are remarkably beautiful, and the aim of Galaxy Zoo is to study them, assisting astronomers in attempting to understand how the galaxies we see around us formed, and what their stories can tell us about the past, present and future of our Universe as a whole. [MORE](#)

History of Galaxy Zoo

The launch of this new version of Galaxy Zoo, the 4th, comes just a few weeks after the site's 5th birthday. It all started back in July 2007, with a data set made up of a million galaxies imaged by the Sloan Digital Sky Survey, who still provide some of the images in the site today. With so many galaxies, we'd assumed it would take years for visitors to the site to work through them all, but within 24 hours of launch we were stunned to be receiving almost 70,000 classifications an hour. In the end, more than 50 million classifications were received by the project during its first year, contributed by more than 150,000 people. [MORE](#)

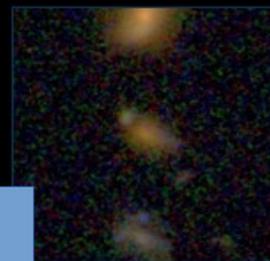
Galaxy Zoo in the Classroom

Are you an educator? Would you like to use Galaxy Zoo with a group of students? The [NAVIGATOR](#) is an interactive tool that allows groups to classify galaxies together and then investigate galaxy characteristics. [ZOO TEACH](#) is where educators can share lessons, resources and that compliment the citizen science projects that are part of the Zooniverse.

[Navigator](#)

All the Way Down Here!

Recent Images



Galaxy Zoo Navigator

CLASSIFY

SCIENCE

STORY



ASTRONOMERS

DISCUSS

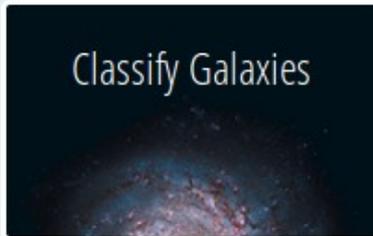
PROFILE

Navigator

Select Group ▼

Welcome to the Galaxy Zoo Navigator, where you can investigate the galaxy classifications you have made as part of a group. To get started you will need to select the group you'd like to work with.

Classify Galaxies



Visit the Galaxy Zoo website to classify galaxies as part your group.

My Galaxies



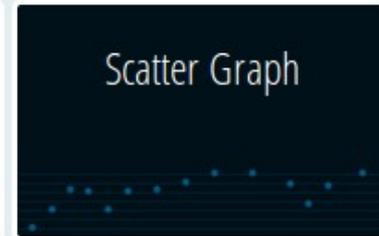
Compare your classification choices with those made by other volunteers.

Histogram



Investigate the characteristics of different galaxy types.

Scatter Graph



Compare the characteristics of different galaxy types.

Galaxy Zoo Navigator

Ed's Great Group

Group Info

Classify in Group

Delete Group

Download Stats

edpaget

16

edwardothegreat

0

Invitations

Invite users with a current Zooniverse account by entering their emails seperated with a comma (e.g. ed@example.com, cs@example.com, whyte@example.com)

Send Invites

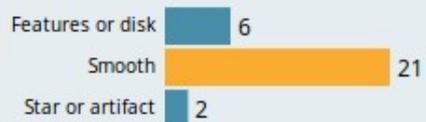
Share this URL to allow anyone to join the group: http://galaxyzoo.org/#/user_groups/icy_alliens_0

Galaxy Zoo Navigator

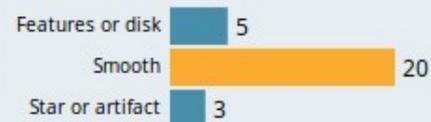
My Galaxies

My choice

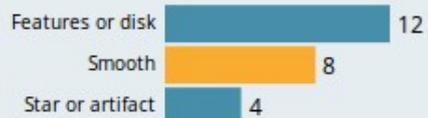
AGZ0005px8



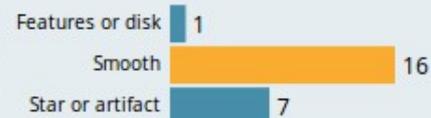
AGZ000317w



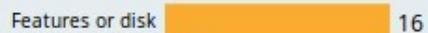
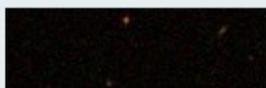
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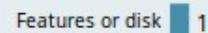
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AGZ0005zt9



AGZ0003xdv



Galaxy Zoo Navigator

Navigator

Test Group

My Galaxies

Graph Data

Construct Your Question

Histogram

Scatter Graph

I'd like to see how...

Redshift

relates to...

Color

in the following galaxy type...

Smooth

Feature/Disk

I'd like to use data from...

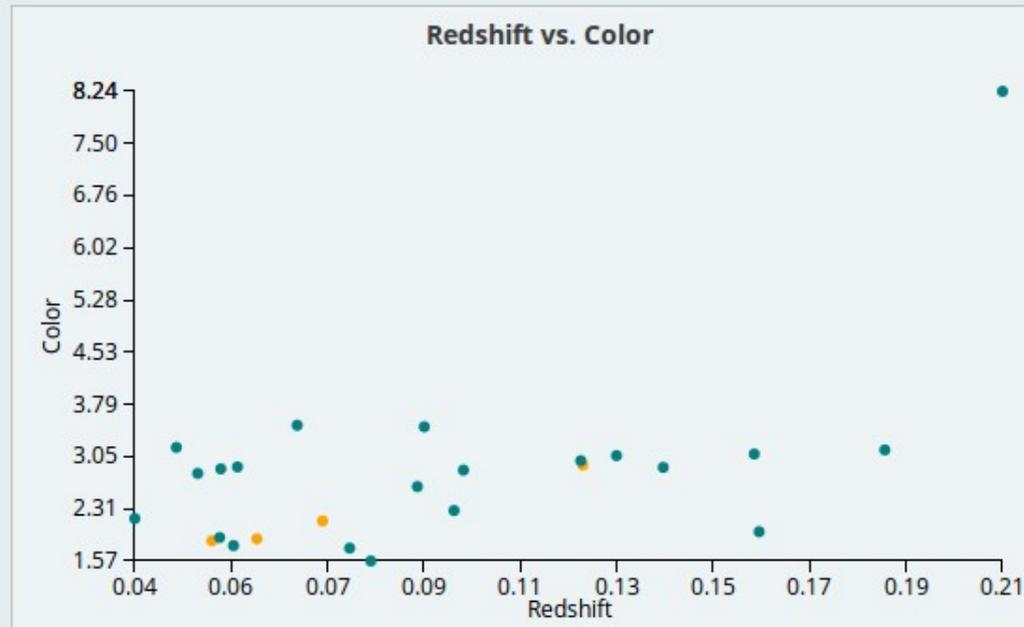
My Group

Galaxy Zoo

with a sample size of...

Medium Sample of Galaxies

Reset Graph



Feature/Disk

Smooth

of Galaxies: 17

Take Snapshot

Download Data

ZooTools



ZOOtools - Quench

Current Dashboard Dashboards Data

Copy Dashboard

Create Dashboard

Tools

Data

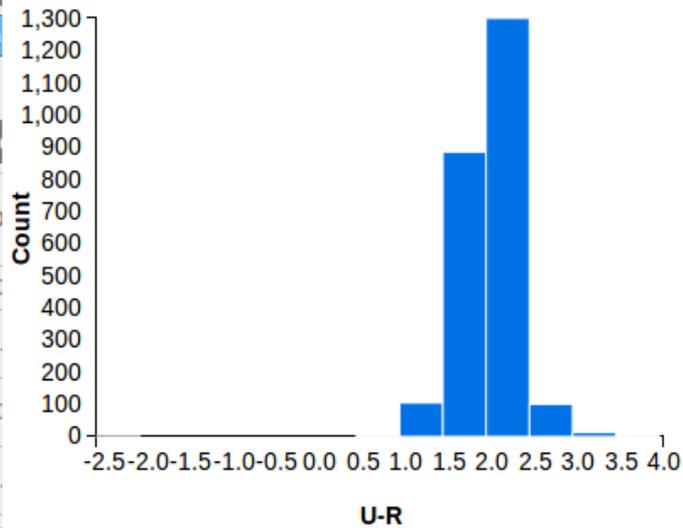
Layout

Clear

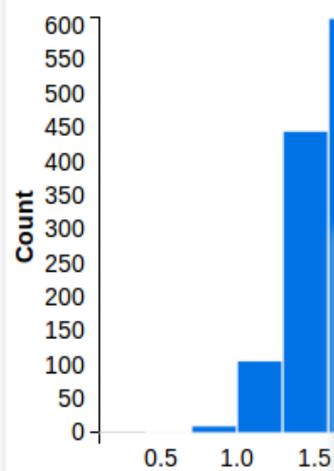
colour

Hello edpaget! Sign out

Histogram-11 quench table non-merger



Histogram-12 control table non-mergers



control table non-mergers control data

RA (deg)	Dec (deg)	u (mag)	g (mag)	r (mag)	i (mag)	z (mag)
228.9919	19.727058	18.914	15.8714	15.2108	14.8706	14.725
119.20870	41.565651	17.115	16.1022	15.6150	15.2020	15.006

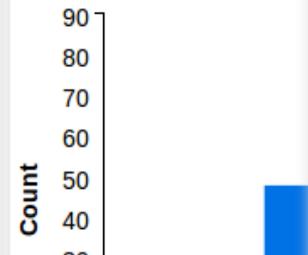
control merging control data

RA (deg)	Dec (deg)	u (mag)	g (mag)	r (mag)	i (mag)	z (mag)
156.58063	38.08979	18.3448	16.6007	15.8458	15.483	15.20
234.89038	16.02408	17.7512	16.4996	15.9884	15.8158	15.5581
21.260239	13.48503	17.6051	16.1784	15.3601	14.9969	14.66
191.01065	7.5856256	17.6433	16.5875	16.1837	15.9862	15.72
163.94946	17.308943	17.8589	16.3236	15.7152	15.4809	15.18
247.69757	46.415627	18.2968	17.1141	16.5338	16.2374	15.9293
184.94919	14.286131	17.0554	15.9469	15.3999	15.1637	14.9602

Histogram-14 quench table merger



Histogram-13 control table merger



ZooTools: GZ Quench

Radical Experiment

262 Users Making 444
Dashboards

Using Dashboard
Analysis to write a
paper



ZooTools

Demo

ZooTools: What's Next

New Version

Simplified Interface

Better Performance

Always looking for Suggestions