The Zooniverse

Robert Simpson - University of Oxford

Goggle Boxes

Hours spent...

David McCandless // July 10 // source: Cognitive Surplus by Clay Chirky // InformationIsBeautiful.net

16

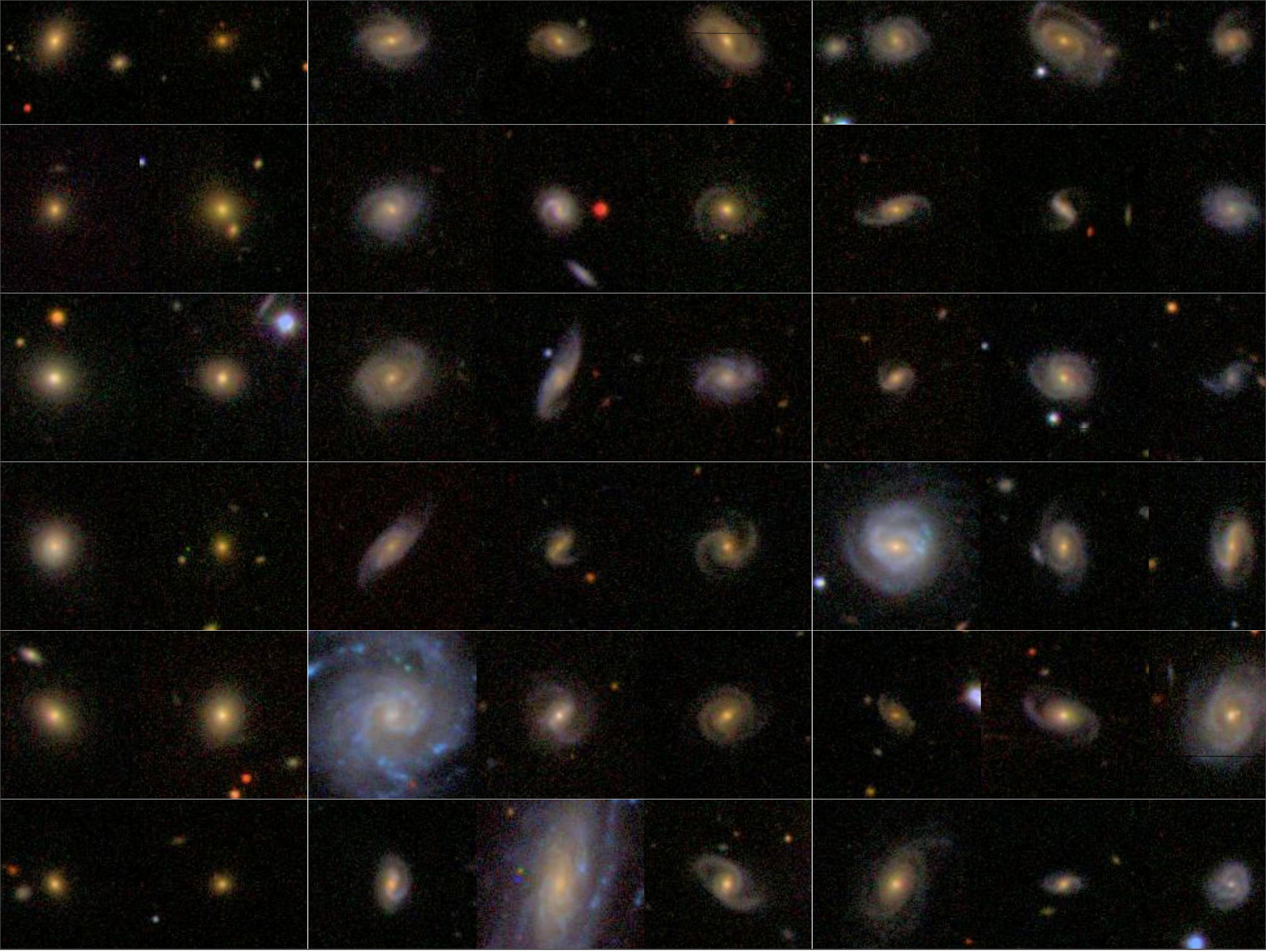
years

16

years

Every

Day



GALAXY ZOO .org

Welcome | Home | The Science | How to Take Part | Galaxy Analysis | Forum | Press & News | FAQ | Links | Contact Us

Login | Register

- Galaxy Tutorial
- Galaxy Analysis

Galaxy Analysis

Welcome to Galaxy Zoo's view of the Universe. If you're here you should already have seen the Tutorial, but feel free to go and remind yourself. There's no need to agonise for too long over any one image, just make your best guess in each case.

Show Grid Overlay on the next Image

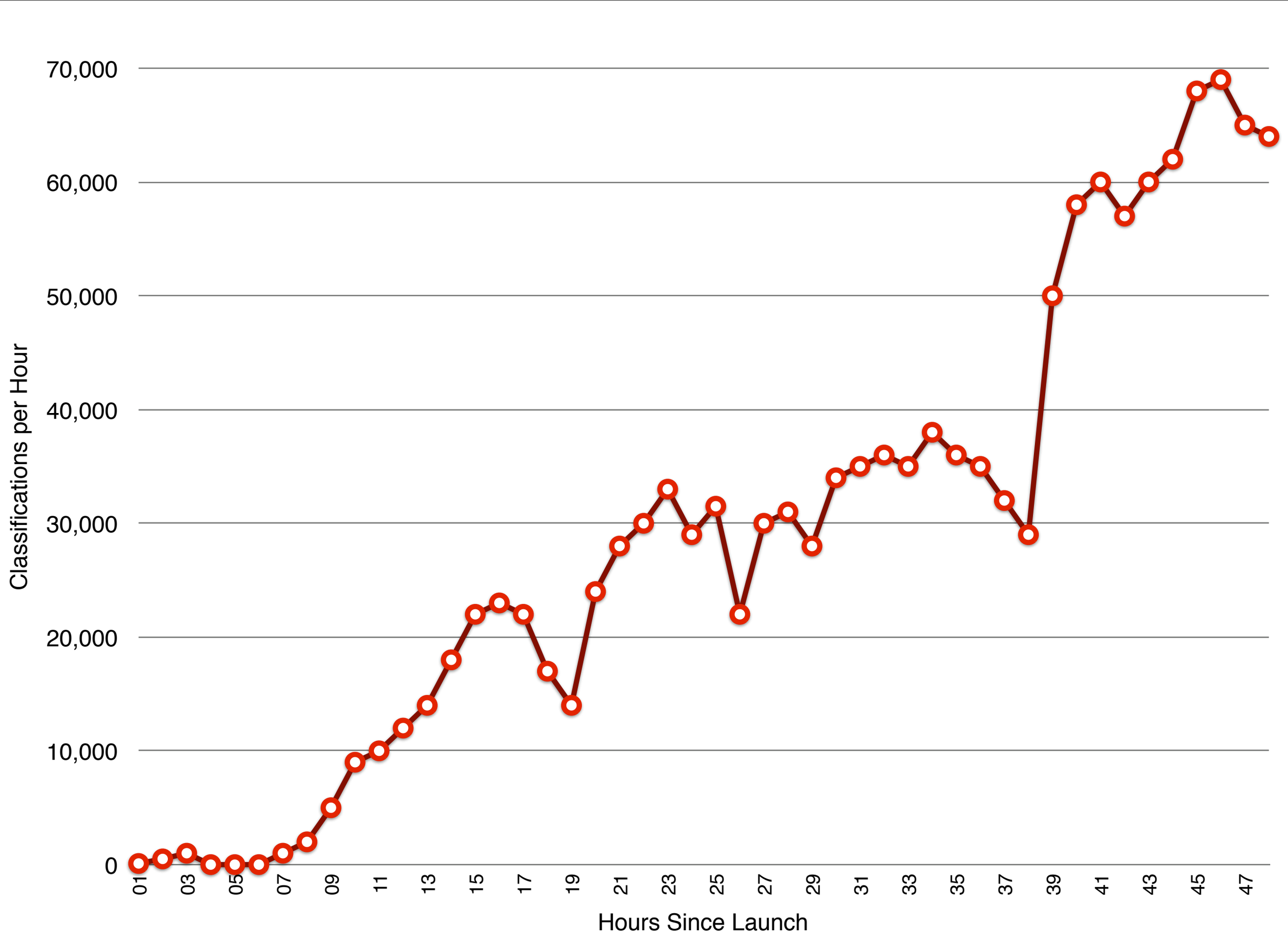
Galaxy Ref:
588010880371851294

Choose the Galaxy Profile by clicking the buttons below

CLOCK | ANTI | EDGE ON/ UNCLEAR
SPIRAL GALAXY

ELLIPTICAL GALAXY

STAR / DON'T KNOW | MERGERS

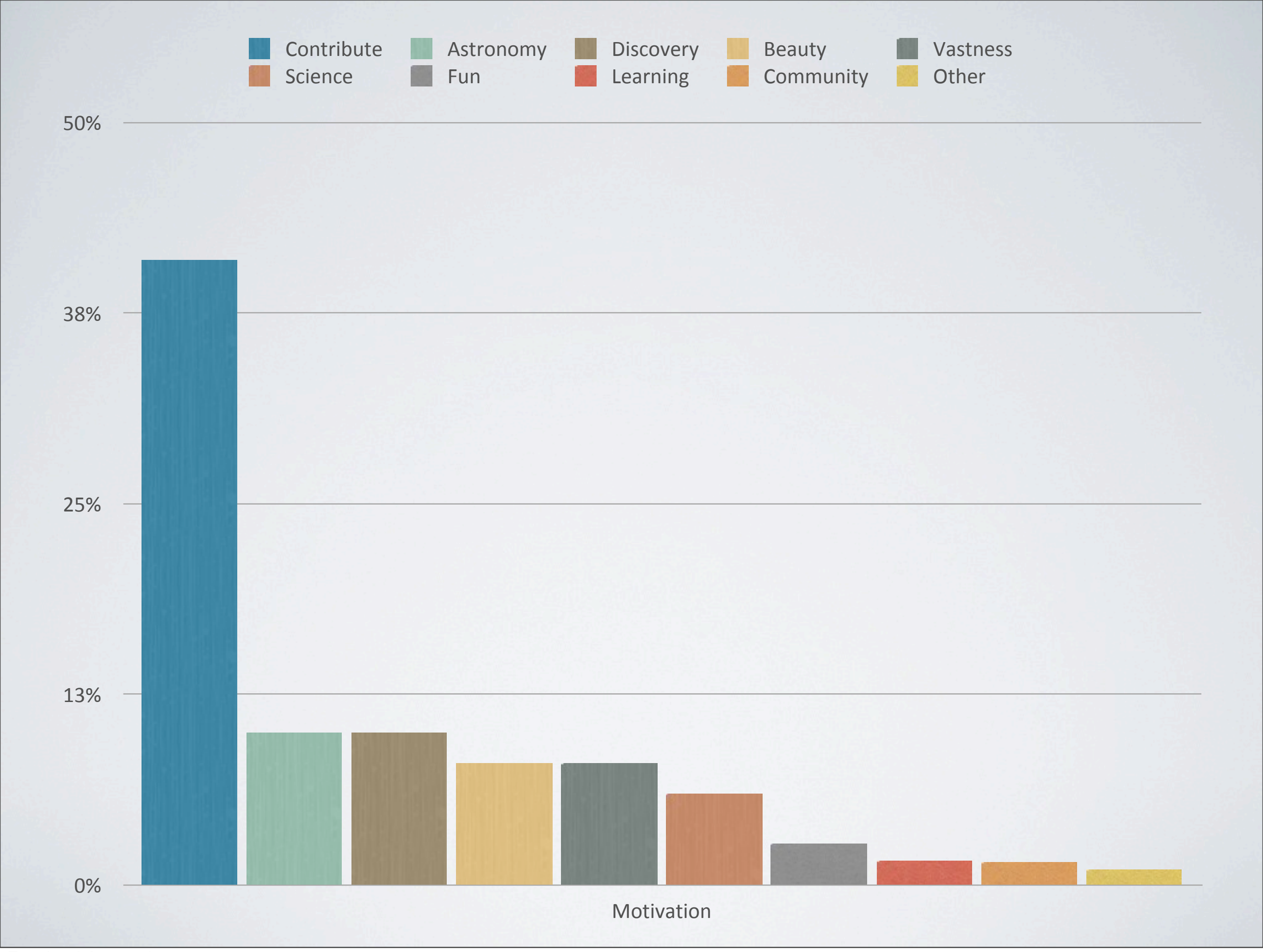

70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Classifications per Hour
01
03
05
07
09
11
13
15
17
19
21
23
25
27
29
31
33
35
37
39
41
43
45
47
Hours Since Launch

Science!

Science!

37

papers


Contribute
Science
Astronomy
Fun
Discovery
Learning
Beauty
Community
Vastness
Other
50%
38%
25%
13%
0%
Motivation

ZOONIVERSE
REAL SCIENCE ONLINE

Take part in
Science Projects

Experiment in
Laboratory

All Space Climate Humanities Nature Biology

Space

Sort by Category

How do galaxies form?

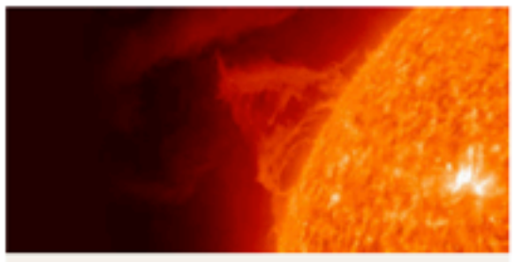
NASA's Hubble Space Telescope archive provides hundreds of thousands of galaxy images.

GALAXY ZOO

Explore the surface of the Moon

We hope to study the lunar surface in unprecedented detail.

MOON ZOO



Study explosions on the Sun

Explore interactive diagrams to learn out about the Sun and the spacecraft monitoring it.

SOLAR STORMWATCH

Find planets around stars

Lightcurve changes from the Kepler spacecraft can indicate transiting planets.

planethunters.org

Model Earth's climate using wartime ship logs

Help scientists recover worldwide weather observations made by Royal Navy ships.

oldWeather

Classify over 30 years of tropical cyclone data.

Scientists at NOAA's National Climatic Data Center need your help.

CycloneCenter

Study the lives of ancient Greeks

The data gathered by Ancient Lives helps scholars study the Oxyrhynchus collection.

ANCIENT LIVES

Nature

Hear Whales communicate

You can help marine researchers understand what whales are saying

WHALEFM

Help explore the ocean floor

The HabCam team and the Woods Hole Oceanographic Institution need your help!

SEAFLOOR EXPLORER

You're hot on the trail of bats!

Help scientists characterise bat calls recorded by citizen scientists.

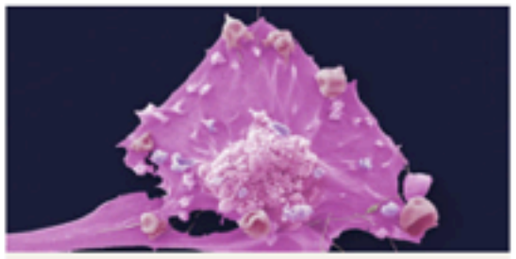
BAT DETECTIVE

Go wild in the Serengeti!

We need your help to classify all the different animals caught in millions of camera trap images.

SNAPSHOT SERENGETI

Biology



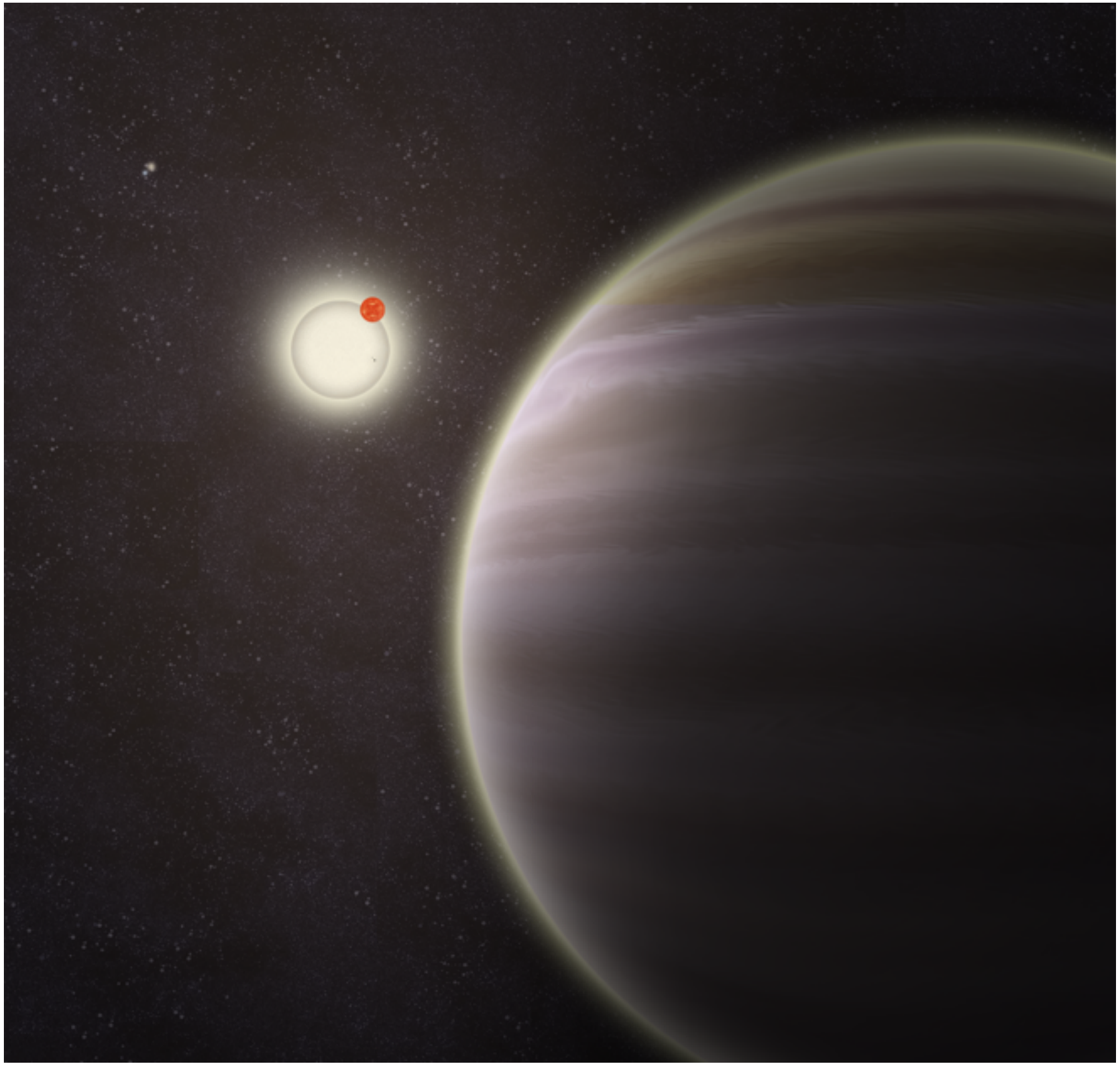
Analyse real life cancer data.

You can help scientists from the world's largest cancer research institution find cures for cancer.

Cell Slider

The Zooniverse

Some of our projects...

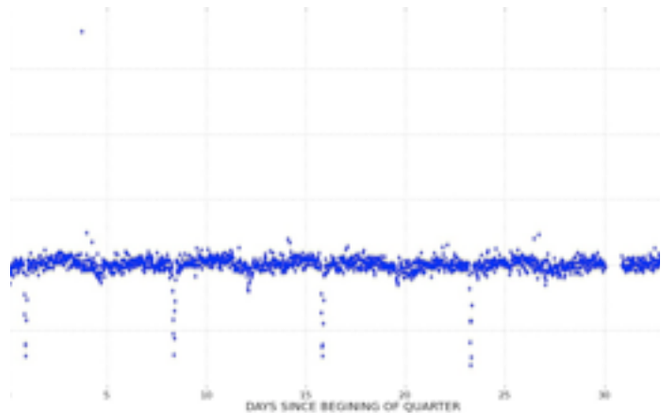


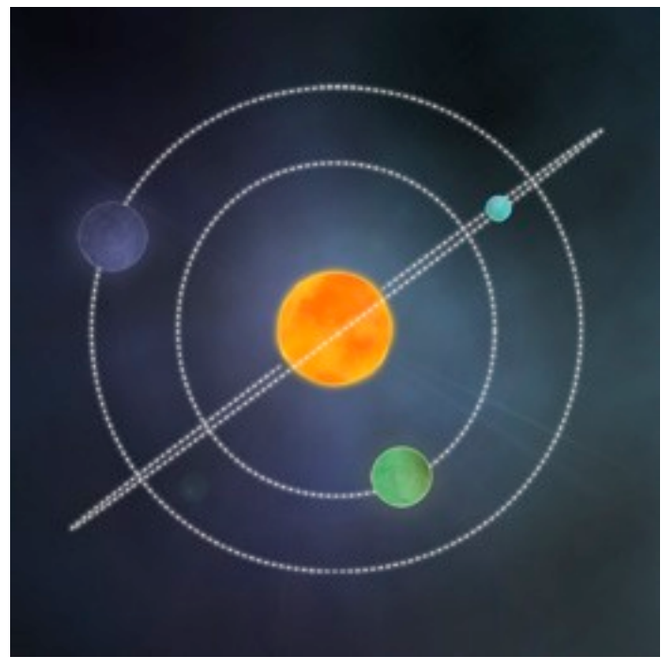
200,000

volunteers

classifications

17m





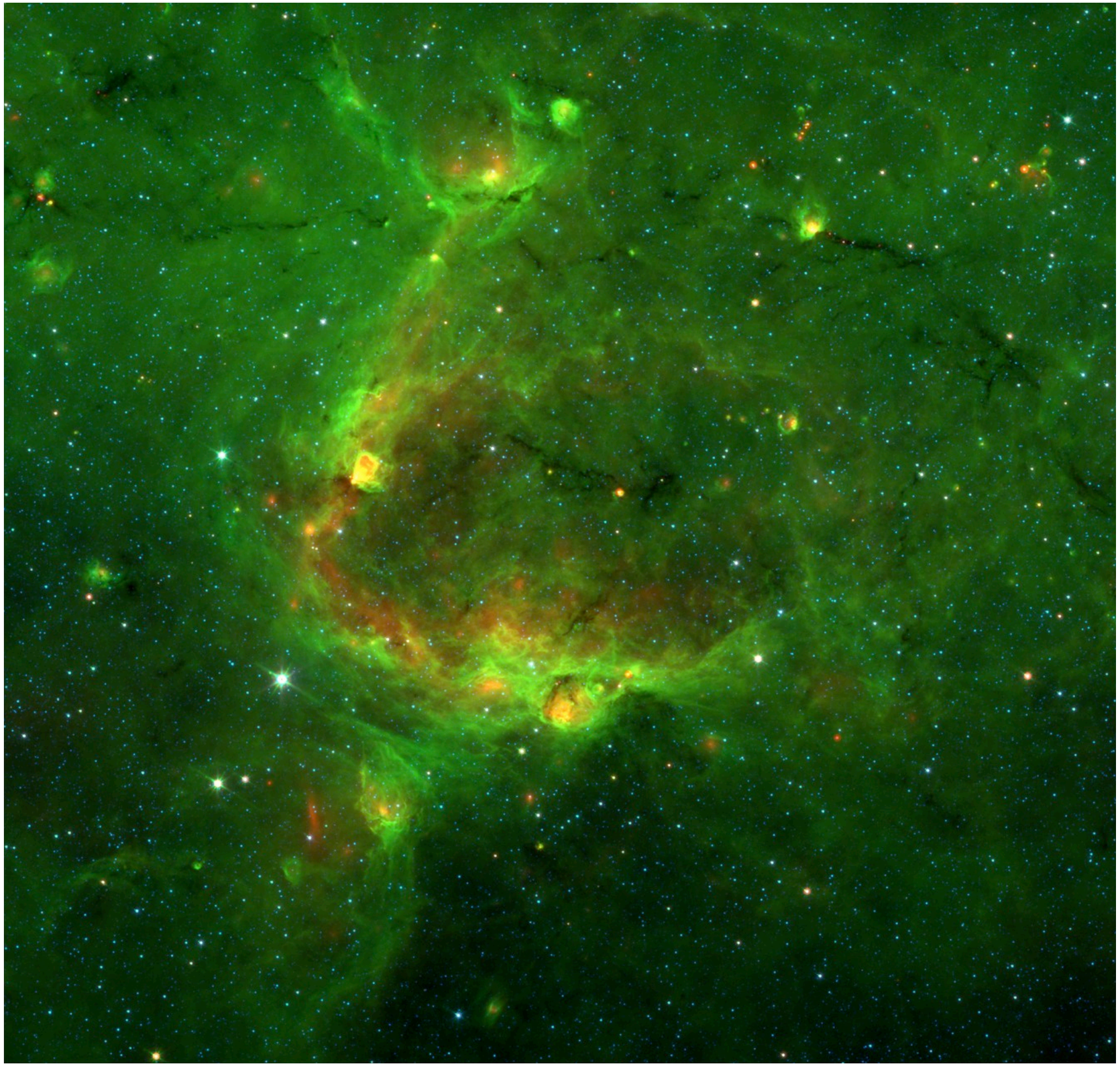
Planet Hunters: find and mark planets

planethunters.org


HELP
RESTART
Is the star
?
1.0020
1.0015
1.0010
1.0005
1.0000
0.9995
0.9990
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0
5
10
15
20
25
DAYS FROM BEGINNING OF THE QUARTER
Type of star: Dwarf
Apparent visual magnitude: 14
Temperature 5691 (K)
Radius 0.8x Sol
MARK AS FAVORITE

PH1b (Oct 2012)

PH2b (Jan 2013)

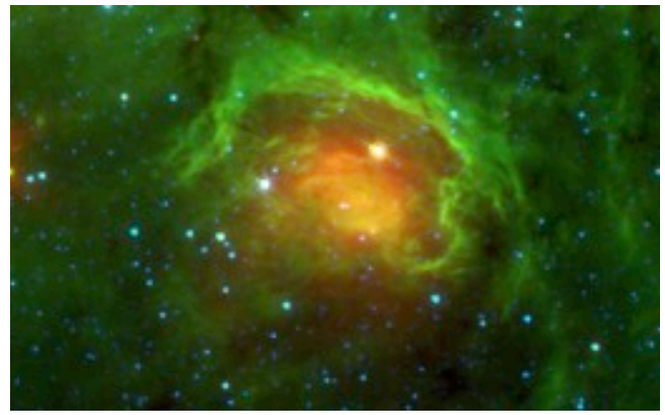


40,000

volunteers

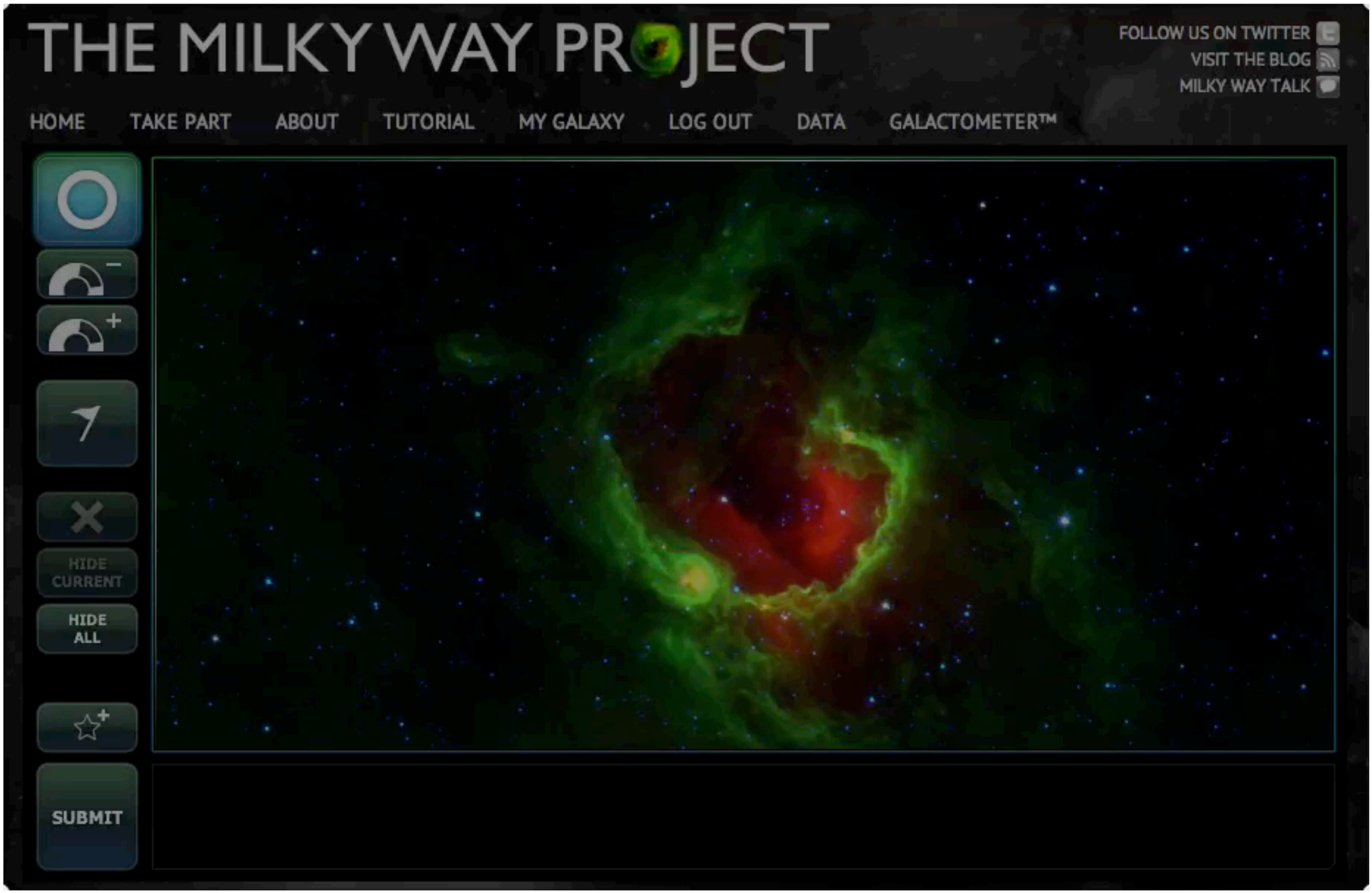
drawings

3,000,000



The Milky Way Project: measure and map our galaxy in infrared

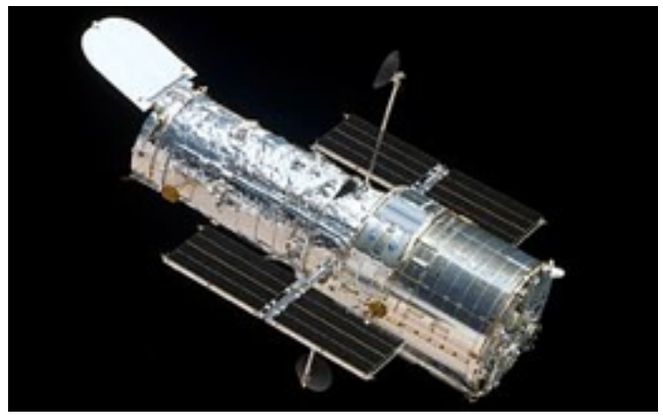
milkywayproject.org


THE MILKY WAY PROJECT
FOLLOW US ON TWITTER
VISIT THE BLOG
MILKY WAY TALK
HOME
TAKE PART
ABOUT
TUTORIAL
MY GALAXY
LOG OUT
DATA
GALACTOMETER™
HIDE CURRENT
HIDE ALL
SUBMIT

22
days

classifications

1,000,000+



The Andromeda Project: Explore high-resolution Hubble data to find star clusters in M31, and galaxies beyond it.

andromedaproject.org

H.M.S. "Pegasus II", Thursday 2nd day of

From Archangel *, To* Dundee *or At*

Time	Patent Log	Distance Run: Miles	Distance Run: Tenths	True Course	Revolutions per minute	Wind: Direction	Wind: Force	Weather	State of the Sea	Height of Barometer and attached Thermometer	Temperature: Air	Temperature: Wet Bulb	Temperature: Sea	Position 0800 / 2000
0100	1399	10	8	S 51 W	161									
0200	1410·1	11	1	—"—	"									2·30 ex Se
0300	1422·5	12	4	—"—	"									
0400	1433·2	10	7	—"—	"	S×E	8	Occ	b	29·81 / 56	52	50	42	4·0
0500	1445·6	12	4	—"—	"									
0600	1456·0	10	4	—"—	"									6·0 Hands
0700	1466·2	10	2	—"—	"									
0800	1479	12	8	—"—	"	SxE	8	Occ	b	29·66 / 58	52	50	41	8·0
														9·0 Sighted Felt
0900	1490·3	11	3	S 28 W	"									9·15 qc S 25 W
		2	6											10·22 Steering
1000	1500·9	8	0	—"—	"									

25,000 volunteers

pages 1,000,000

Old Weather: transcribe the logs of WW1 vessels as they travel the globe, collecting valuable climate data

oldweather.org

15,000

volunteers

classifications

200,000

Whale FM: Listen to whale calls to decode their language

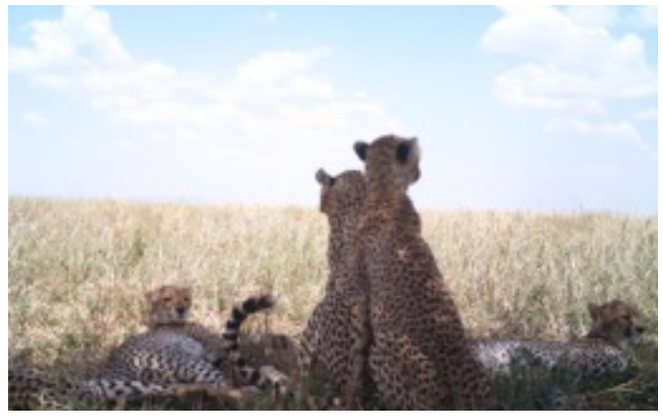
whale.fm

20,000

volunteers

classifications

7,000,000



Snapshot Serengeti: identify and describe animals in Serengeti National Park

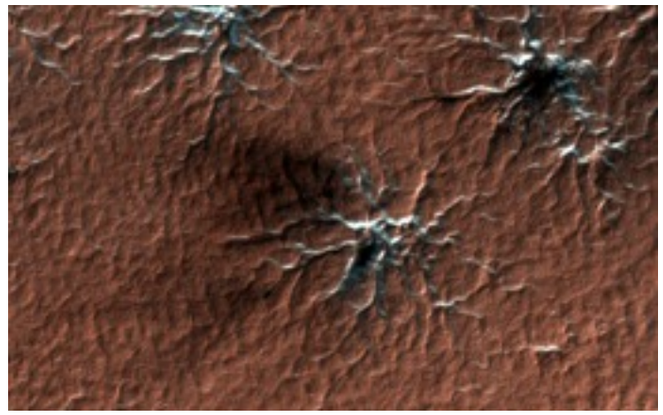
snapshotserengeti.org

75,000

volunteers

classifications

3,800,000



Planet Four: locate seasonal ‘fans’ on the surface of the red planet.

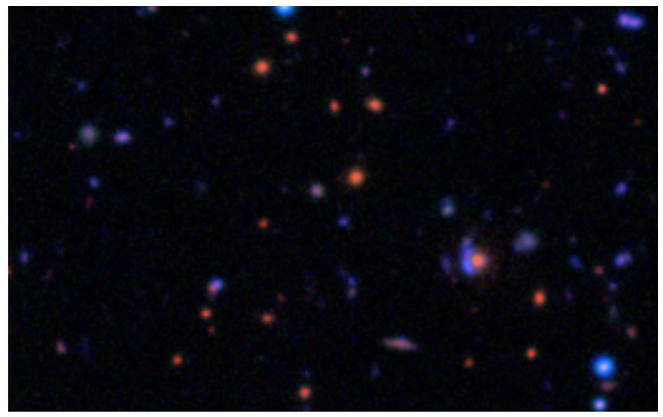
planetfour.org

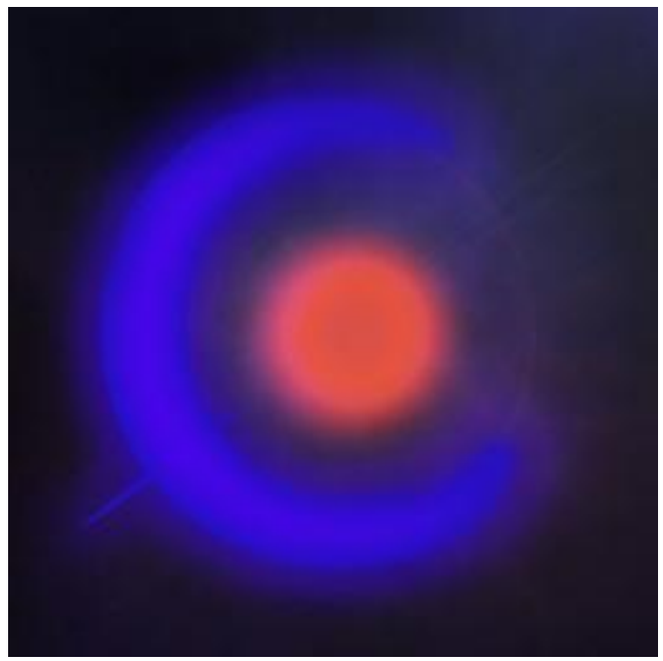
20,000

volunteers

classifications

5,500,000





Space Warps: hunting out gravitational lenses in the Universe

spacewarps.org

400,000

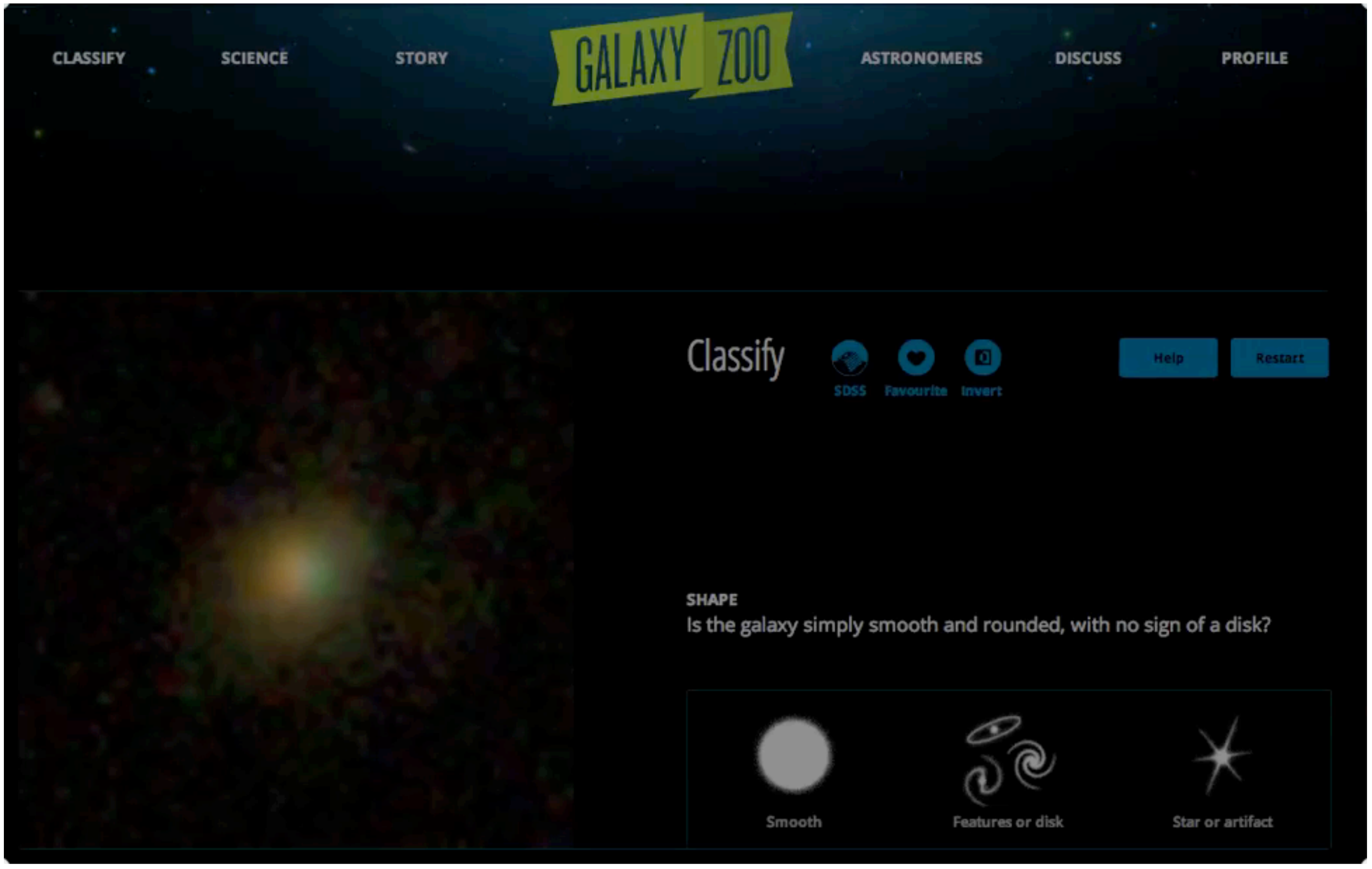
volunteers

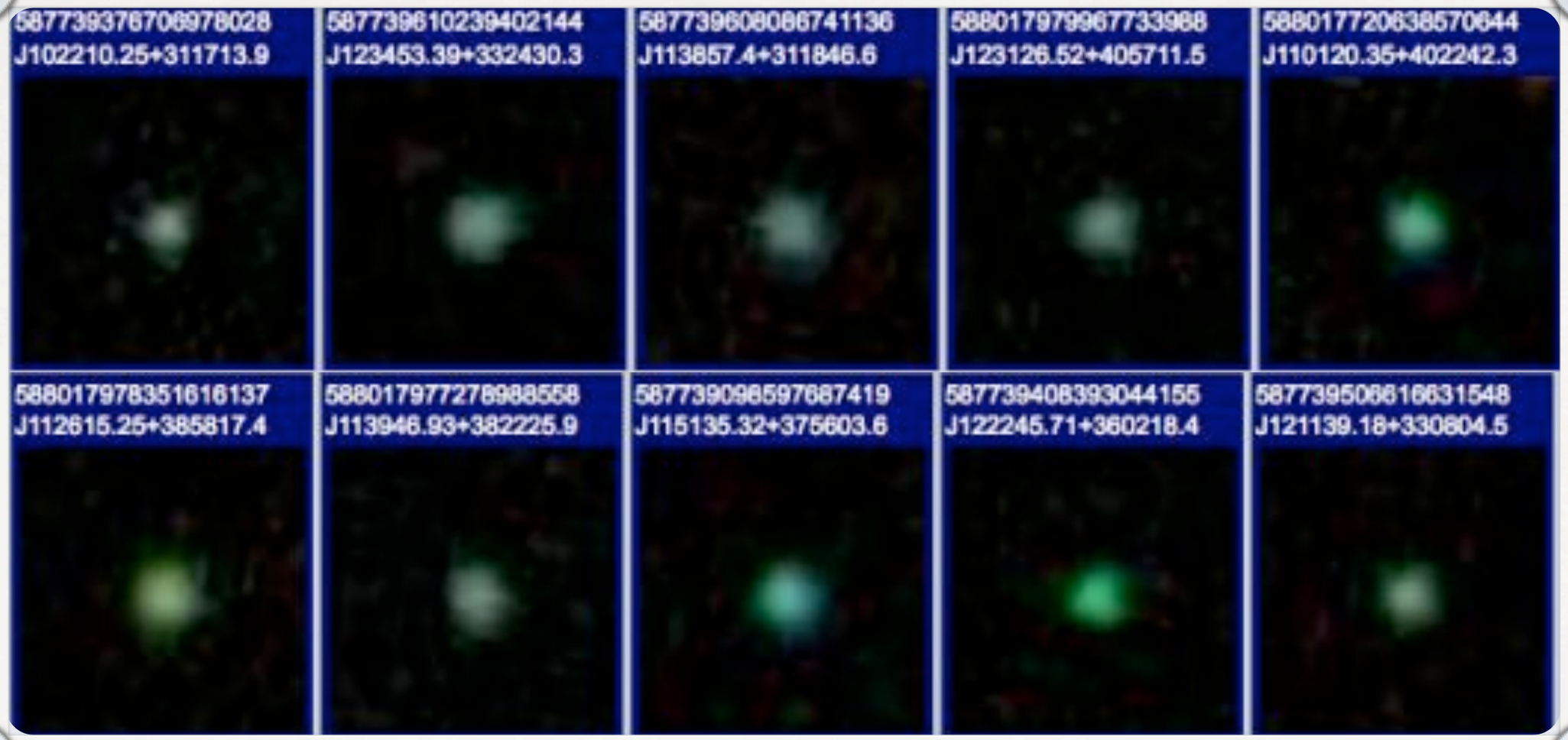
classifications

200m

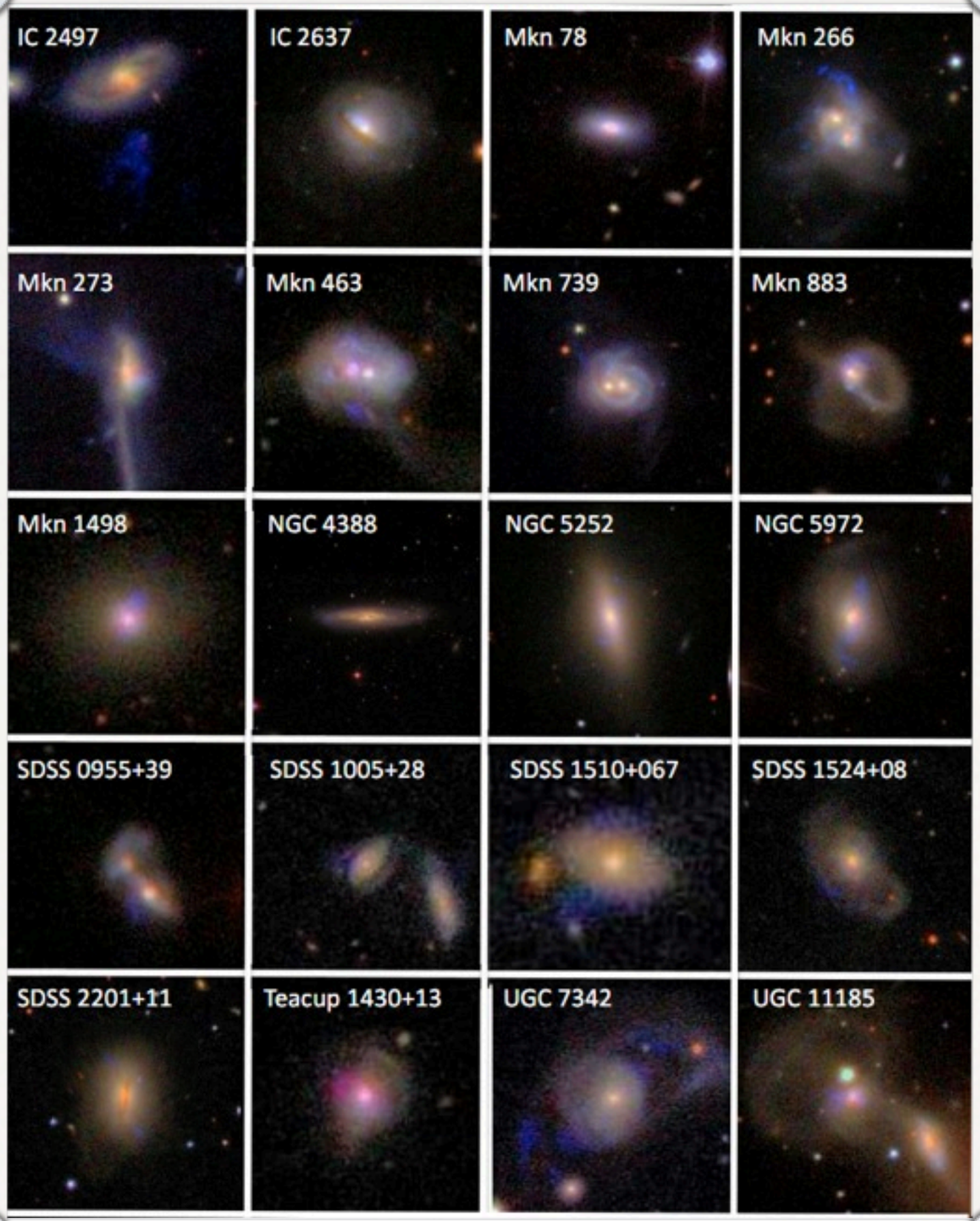
Galaxy Zoo: help astronomers classify galaxies

galaxyzoo.org


CLASSIFY
SCIENCE
STORY
GALAXY ZOO
ASTRONOMERS
DISCUSS
PROFILE
Classify
SDSS
Favourite
Invert
Help
Restart
SHAPE
Is the galaxy simply smooth and rounded, with no sign of a disk?
Smooth
Features or disk
Star or artifact

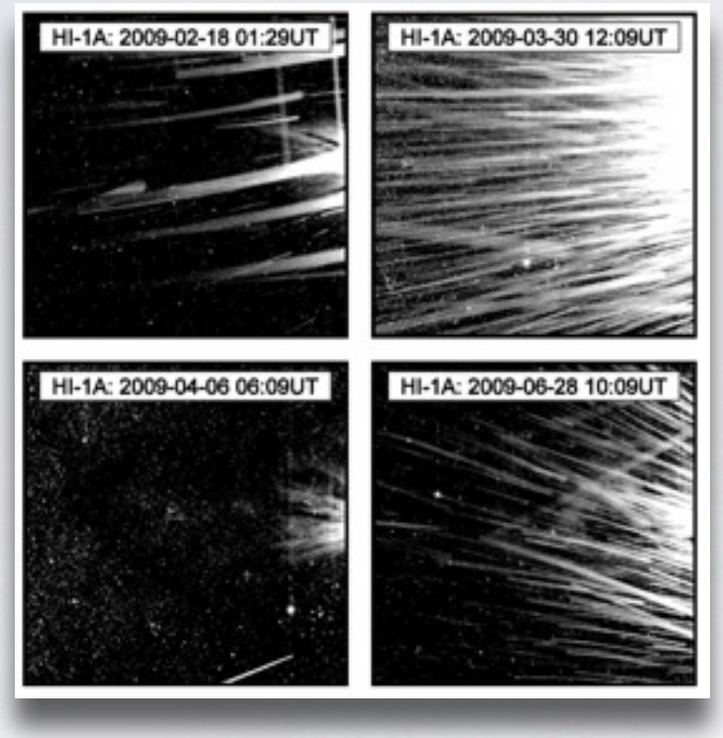

587739376706978028
J102210.25+311713.9
587739610239402144
J123453.39+332430.3
587739608086741136
J113857.4+311846.6
588017979967733988
J123126.52+405711.5
588017720638570644
J110120.35+402242.3
588017978351616137
J112615.25+385817.4
588017977276988558
J113946.93+382225.9
587739096597687419
J115135.32+375603.6
587739408393044155
J122245.71+360218.4
587739506616631548
J121139.18+330804.5


Hanny's Voorwerp
HST ACS/WFC, WFC3/UVIS/IR
WIYN
WFC3/IR F160W *H*
WFC3/UVIS F814W *I*
ACS/WFC FR716N Hα
ACS/WFC FR505N [O III]
WIYN *B*
50,000 light-years
15,300 parsecs
30″
N
E

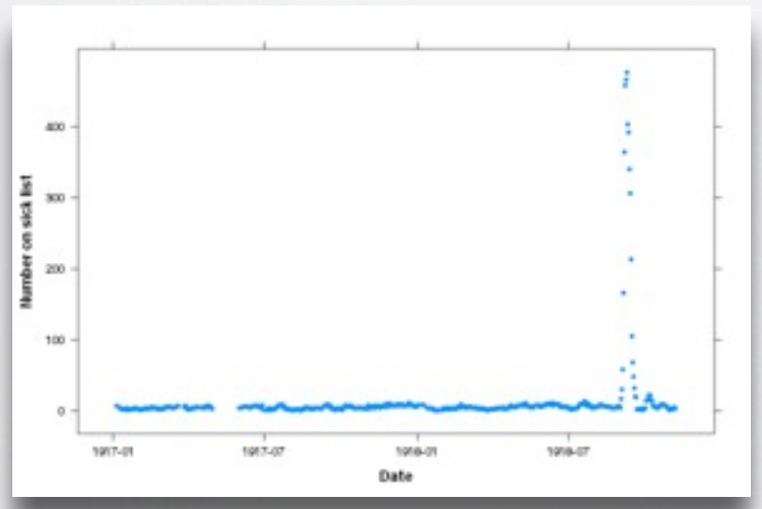

IC 2497
IC 2637
Mkn 78
Mkn 266
Mkn 273
Mkn 463
Mkn 739
Mkn 883
Mkn 1498
NGC 4388
NGC 5252
NGC 5972
SDSS 0955+39
SDSS 1005+28
SDSS 1510+067
SDSS 1524+08
SDSS 2201+11
Teacup 1430+13
UGC 7342
UGC 11185

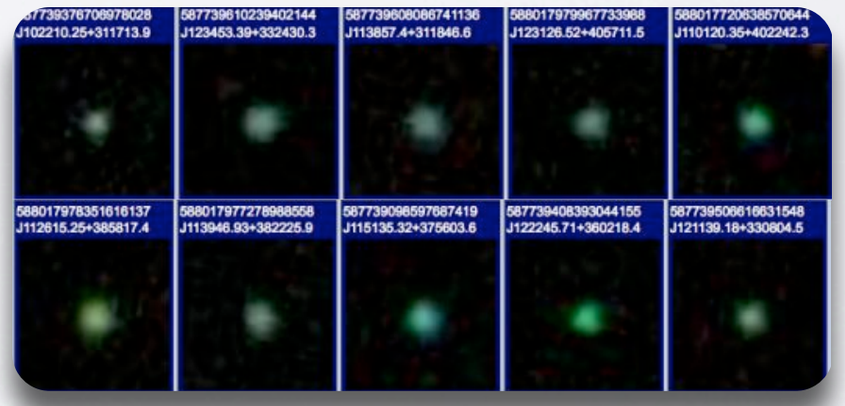
Future of Citizen Science

Keeping it real and raising the bar


HI-1A: 2009-02-18 01:29UT
HI-1A: 2009-03-30 12:09UT
HI-1A: 2009-04-06 06:09UT
HI-1A: 2009-06-28 10:09UT


Hanny's Voorwerp
HST ACS/WFC, WFC3/UVIS/IR
WIYN
50,000 light-years
15,300 parsecs
30"
N
E


Number on sick list
Date
1917-01
1917-07
1918-01
1918-07


J102210.25+311713.9
J123453.39+332430.3
J113857.4+311846.6
J123126.52+405711.5
J110120.35+402242.3
J112615.25+385817.4
J113946.93+382225.9
J115135.32+375603.6
J122245.71+360218.4
J121139.18+330804.5

kianjin

3 months ago

Once you have a CSV file with 2 columns, Time and Flux, it's very easy to fold this light curve. The secret is just one formula: MOD(((A2-start)/period),1)

Open the CSV file in Excel (or some other spreadsheet if you have ideological differences with Microsoft).

Insert a column in between Time and Flux and call it Phase.

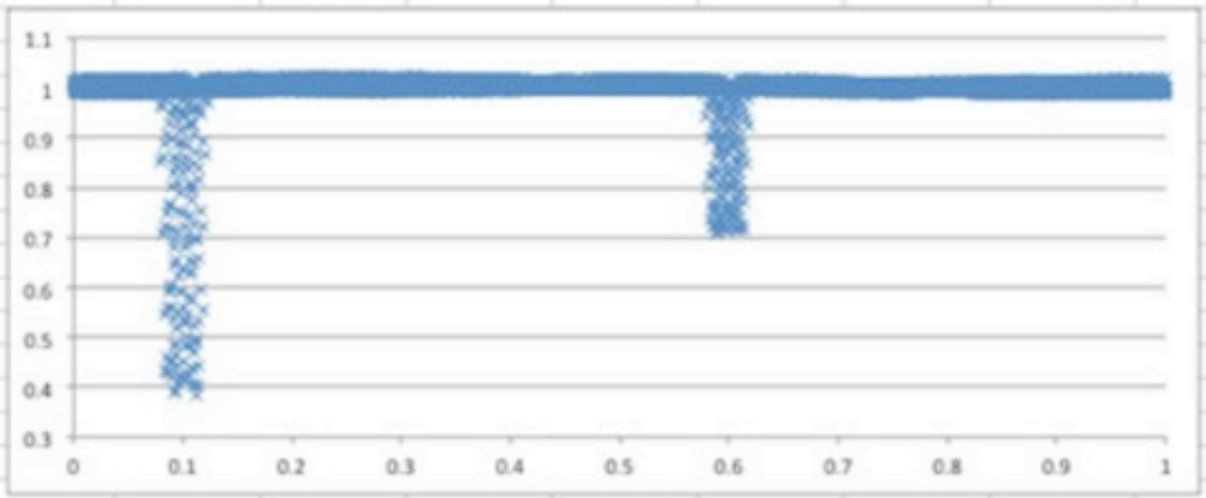
Copy the 1st value of Time (in cell A2) and paste it in cell E1. You can also name this cell, 'start'. In cell F1, paste the period you want to refine. If you used the NEA service, the Plavchan approximation for the period is 15.255. Name this cell, 'period'.

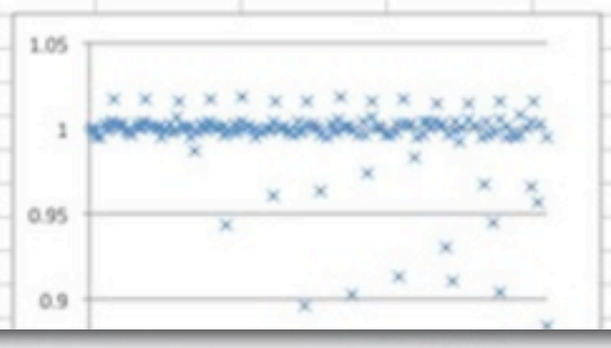
In cell B2, the first cell of the Phase column, enter the formula, =MOD(((A2-E1)/F1),1). Now select this entire column from B2 right to the end and fill down, populating the entire column with this formula.

Now select the Phase and Flux columns and Insert a chart (marked scatter) with Phase in the X column and Flux in the Y column. Then duplicate this chart twice, and change the scales so that these two charts focus on the primary and secondary eclipses. This screen shot is what you should have.

B3 =MOD(((A3-start)/period),1)

	A	B	C	D	E	F	G	H	I	J	K	L
1	TIME	Phase	PDCSAP_FLUX		131.511369	15.255104						
2	131.511369	0	1.01096515									
3	131.531804	0.00133953	1.01077157									
4	131.552238	0.00267906	1.01253814									
5	131.572673	0.00401858	1.01289933									
6	131.593108	0.0053581	1.01111724									
7	131.613542	0.00669764	1.0119677									
8	131.633977	0.00803716	1.01309631									
9	131.654411	0.00937668	1.01276033									
10	131.674846	0.01071621	1.01301849									
11	131.695281	0.01205574	1.01218286									
12	131.715715	0.01339526	1.01106493									
13	131.73615	0.01473479	1.0129041									
14	131.756585	0.01607432	1.0146282									
15	131.777019	0.01741384	1.0121151									
16	131.797454	0.01875336	1.01365963									
17	131.817888	0.0200929	1.01150083									
18	131.838323	0.02143242	1.01082752									
19	131.858757	0.02277194	1.01144678									
20	131.879192	0.02411147	1.01265185									
21	131.899627	0.02545099	1.01177678									
22	131.920061	0.02679052	1.01168268									
23	131.940496	0.02813005	1.0124501									
24	131.960931	0.02946957	1.01170562									
25	131.981365	0.0308091	1.01355841									
26	132.0018	0.03214862	1.01166935									
27	132.022234	0.03348814	1.01204099									





Talk Planet Four

Following | Trending | Discussion boards | Search | Profile | Moderation | Return to classifying

Sign out

Featured discussions

Hello everyone!
Posted in Introduce yourself

169 posts / **142** participant

Popular hashtags

frost	boulders	fans
boulder	spiders	fanfield
blotches	ice	blotchfield
spider	fan	blue
tramlines	interesting	blotch
cracks	green	ridges
yardangs	bluefans	

Currently Online

3 users

Shona Anne
ttfnrob
parttimework

People are Observing...

16 Comments, 2 Discussions

Is the blue bob an error on the image collected...

by Neha_pk

22 Comments, 1 Discussions

Do you mean this one (inverted)? > Its the image in

by JellyMonster

19 Comments, 3 Discussions

No not figured it out yet, need to find a couple that fit together

by wassock

12 Comments, 2 Discussions

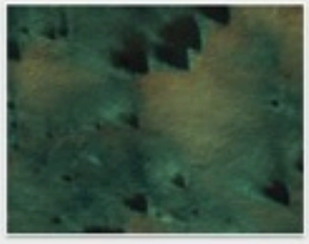
#fans adjacent along #fault lines or cracks. Note smaller brown

by angi60

11 Comments, 2 Discussions

Iv also come across more images of the same patterns

by rowbumby



6 Comments, 1 Discussions

#fan black fans overlying green copper coloured fans on light

by JohnRon

6 Comments, 2 Discussions

#fan area underlying frost

by JohnRon

9 Comments, 2 Discussions

I use Paint Shop Pro 7 mostly. I also like IrfanView (freeware).

by JellyMonster

Load more

People are Discussing...

Welcome to Letters

Letters is a new tool from Zooniverse for communicating your research results to the wider community.

EXPLORE

COLLABORATE

CONTRIBUTE

Filter by NEWEST VIEWS COMMENTS AUTHOR

GALAXY ZOO

SIX SDSS 0.30 <

GALAXY ZOO

THE HYPER-

GALAXY ZOO

DISCOVERY OF

A Brief Overview of PyKE & Kepler Target Pixel Files

nighthawk_black

Summary

This letter offers a basic overview of several Pyke bundle tasks that may be used for pixel by pixel examination of Kepler light curves, and assumes first the user has obtained and correctly installed the software as described at Kepler Guest Observer Home. http://keplergo.arc.nasa.gov/ContributedSoftwarePyKEP.shtml

Many areas of the Kepler FOV contain crowded fields of faint stars and are thus prone to light curves that possess blended flux and aperture confusion. When this leads to questions about the true intrinsic nature of individual KIC targets, basic analysis using the PyKE data reduction tools can address these conflicts and identify background sources. This is especially beneficial to PlanetHunters efforts to identify new exoplanets and false positives.

PyKE is based on Python, a freeware scripting language available in several iterations for Unix, Linux, Mac OS and Windows platforms. Python modules **IRAF** and **PyRAF** are mandatory prerequisites.

zootools

Current Dashboard | My Dashboards | My Data

Fork Dashboard | Create Dashboard

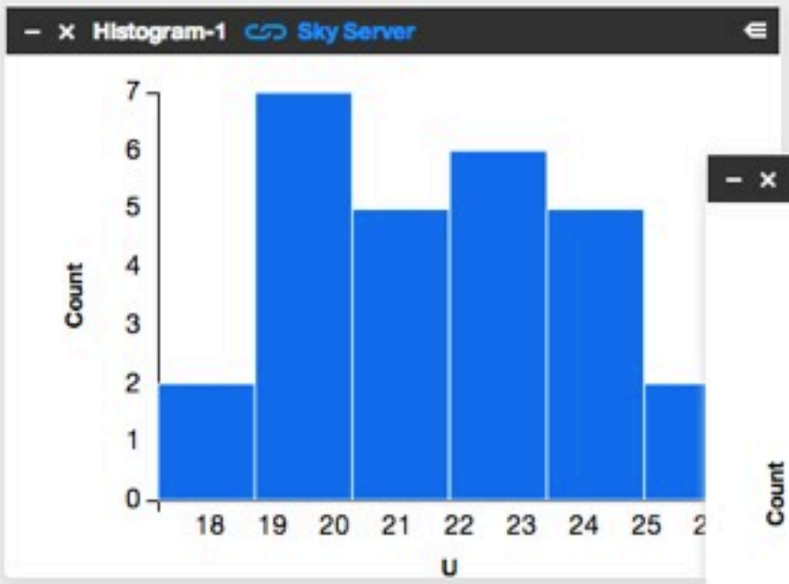
Hello ttfnrobl Sign out

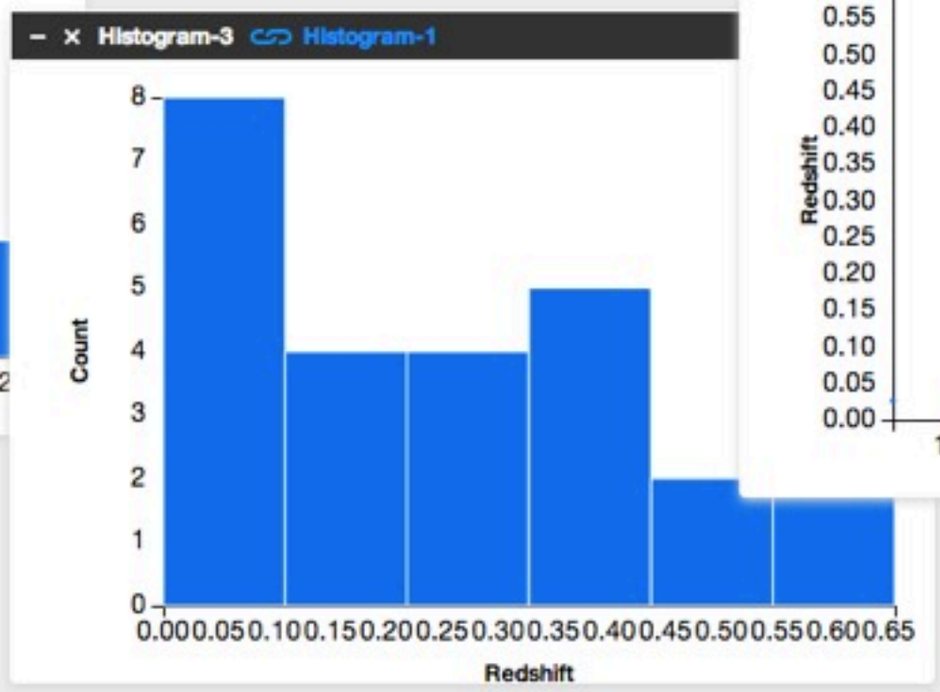
Select the tools you need:

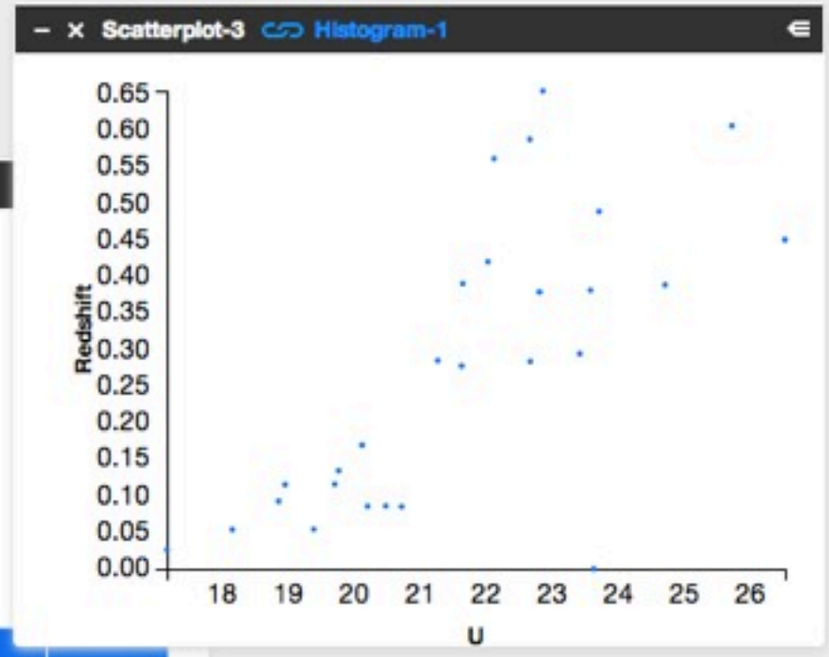
Histogram | Scatterplot | Map | Spectra | Statistics | Subject Viewer | Table

My Great Dashboard

Clear Tools



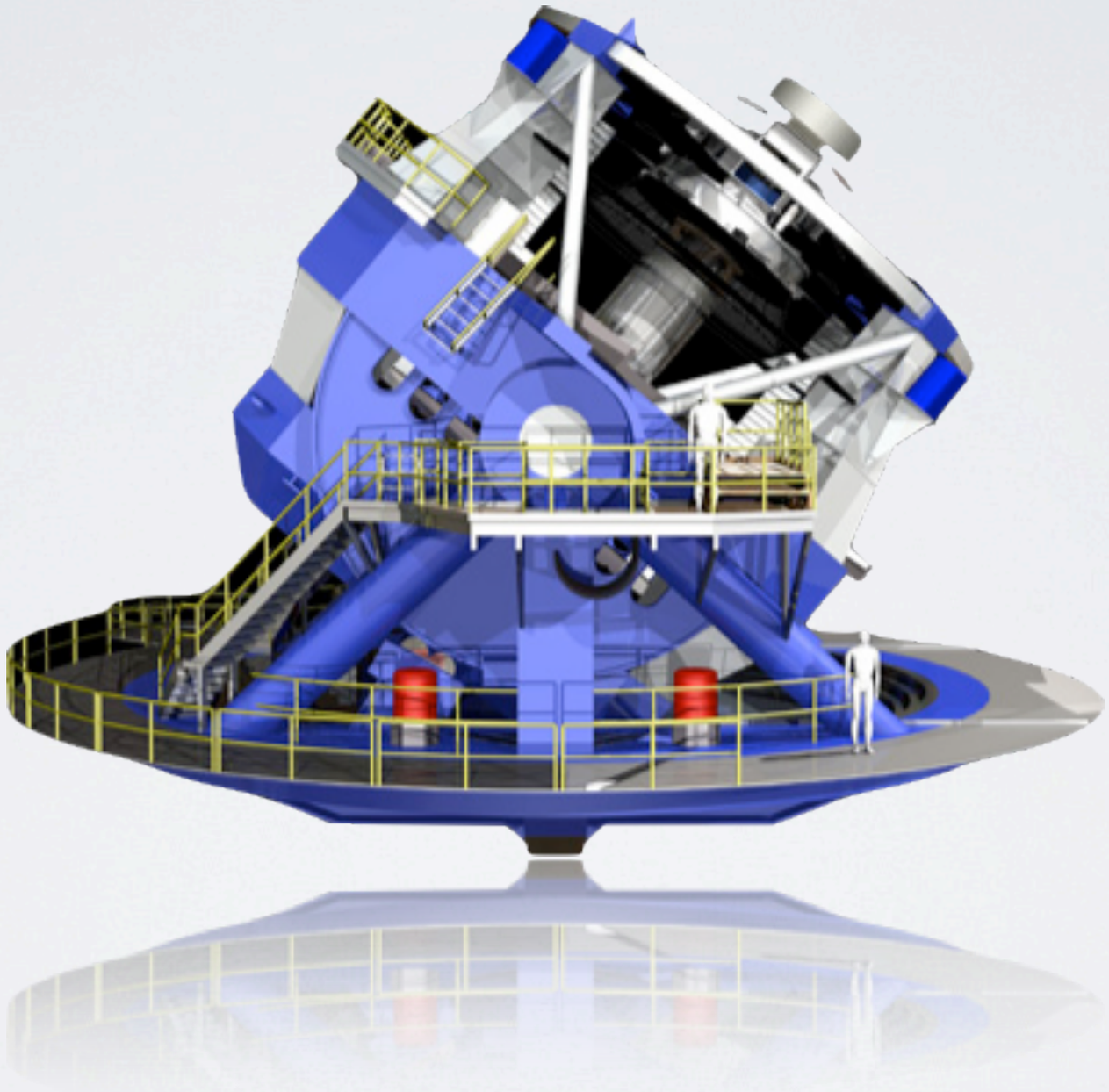


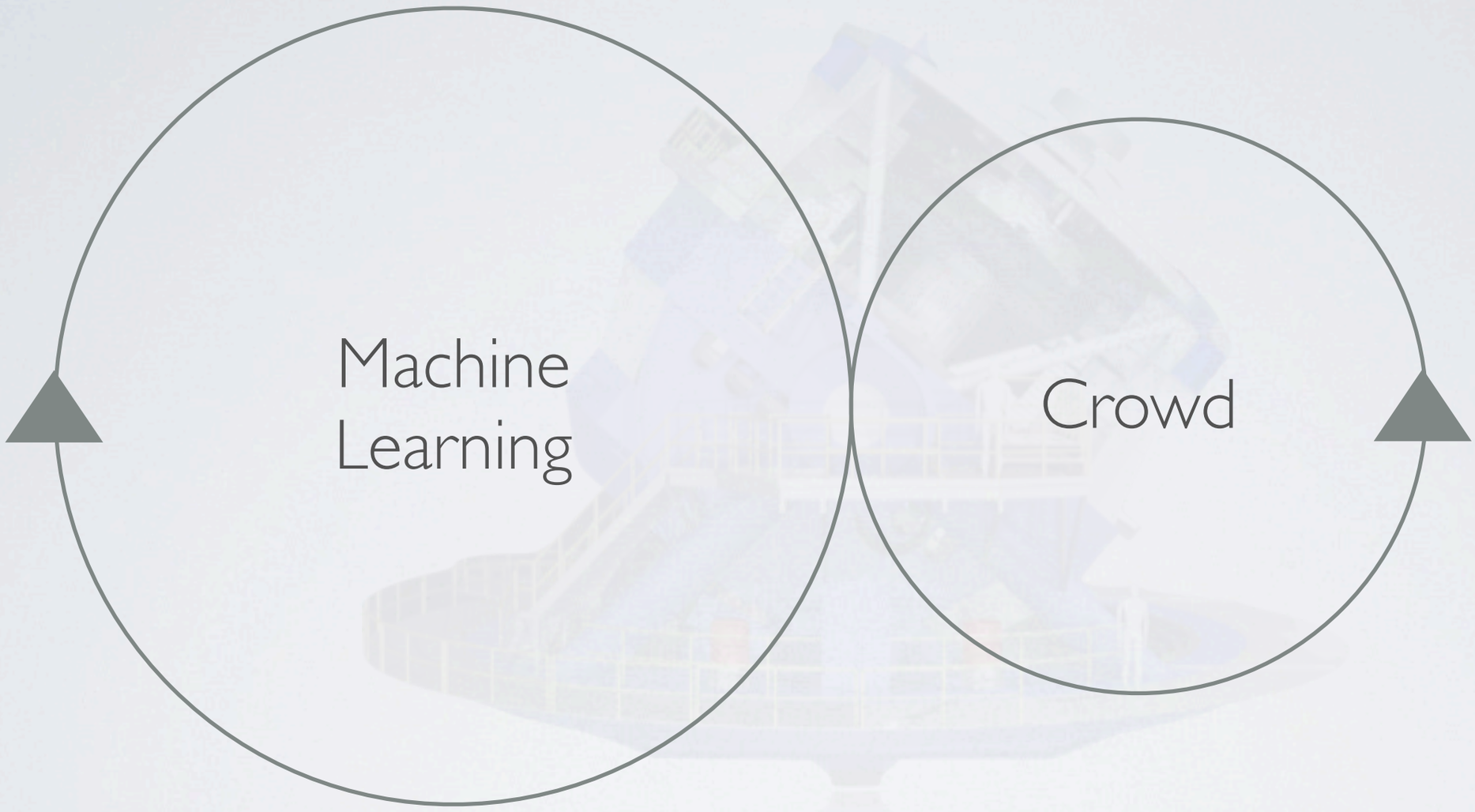


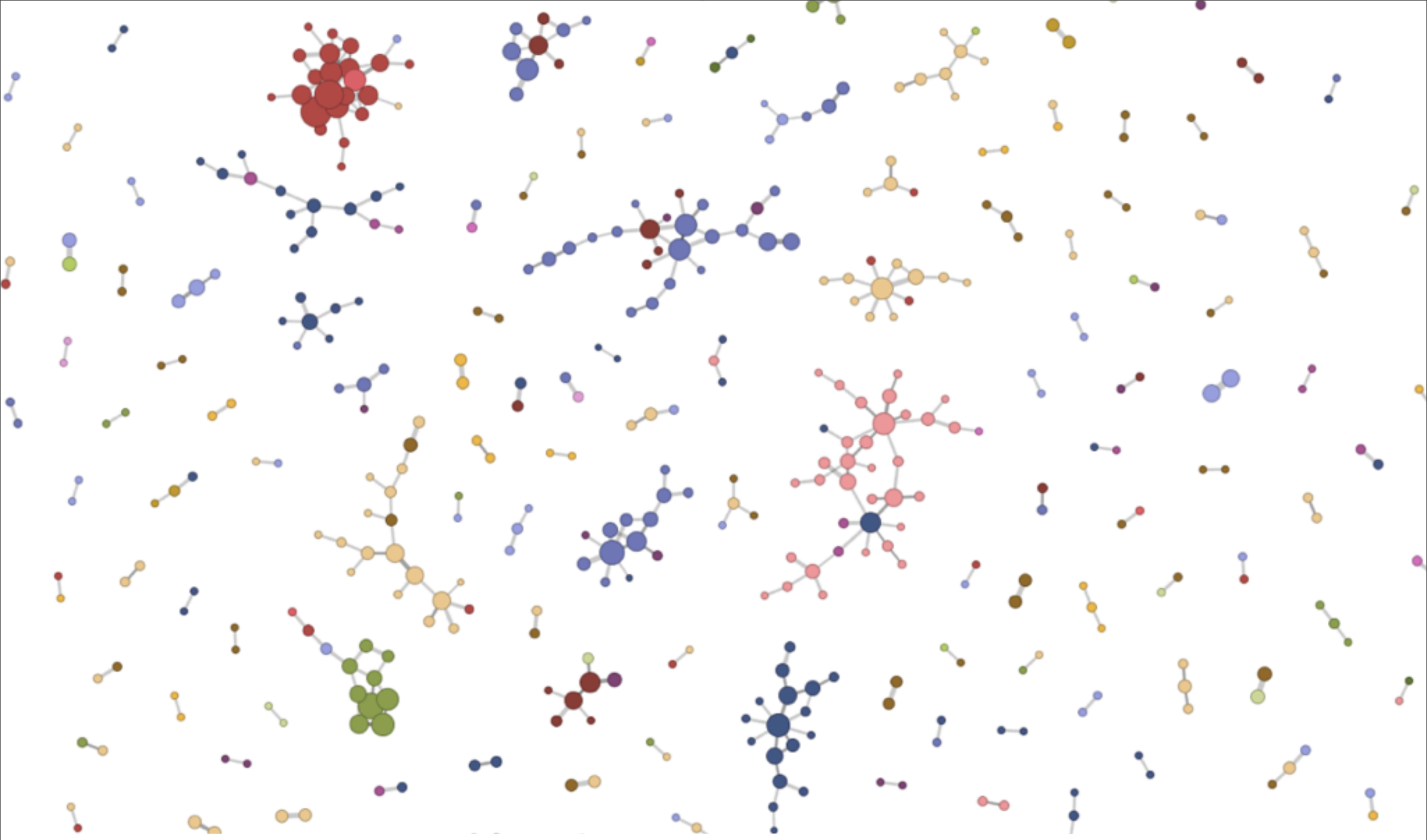
Dashboard is a place for volunteers to observe, collect, and analyze data from Zooniverse citizen science projects.

Intelligent Websites

Rise of the machines!

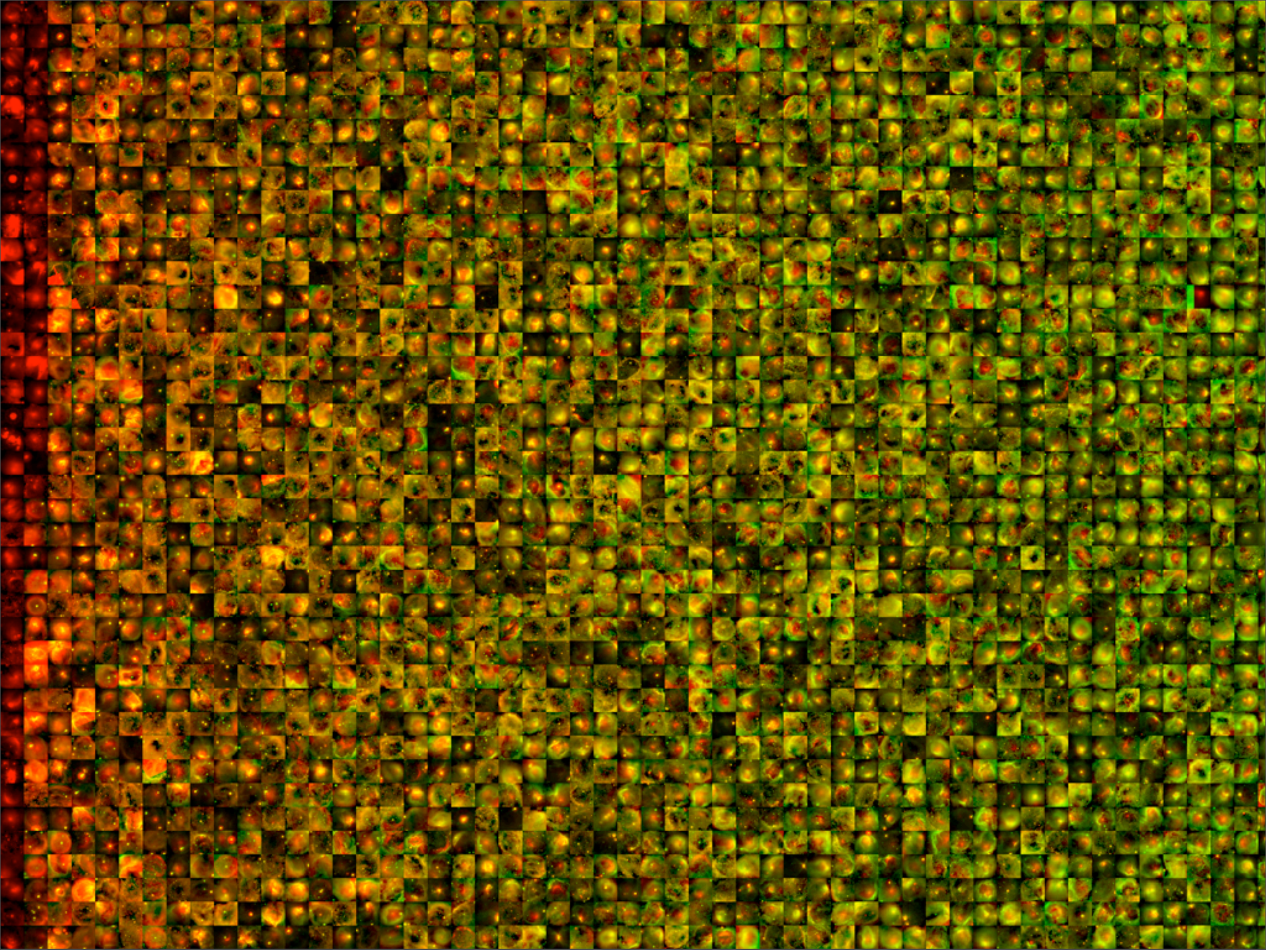


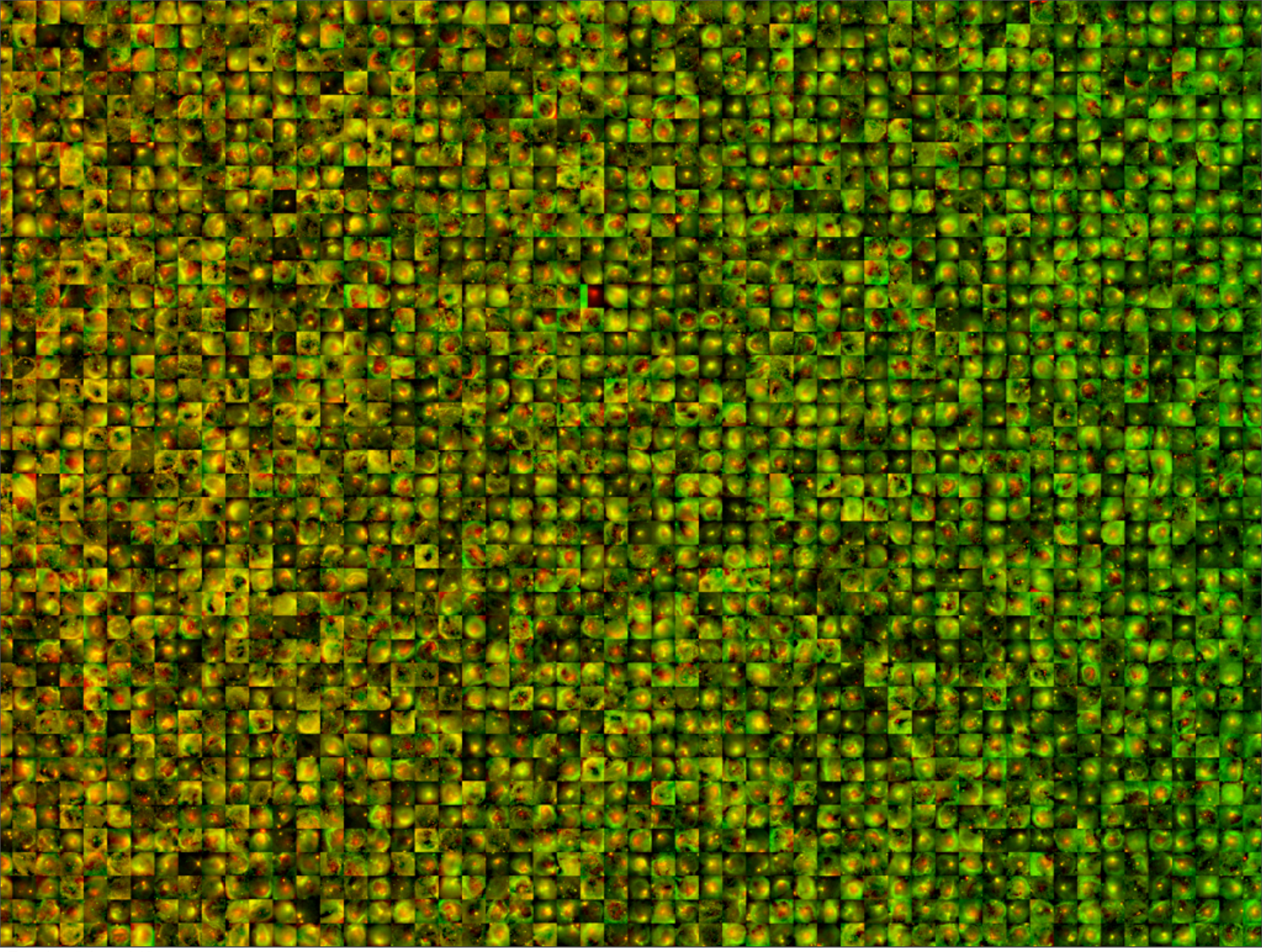

Machine
Learning
Crowd



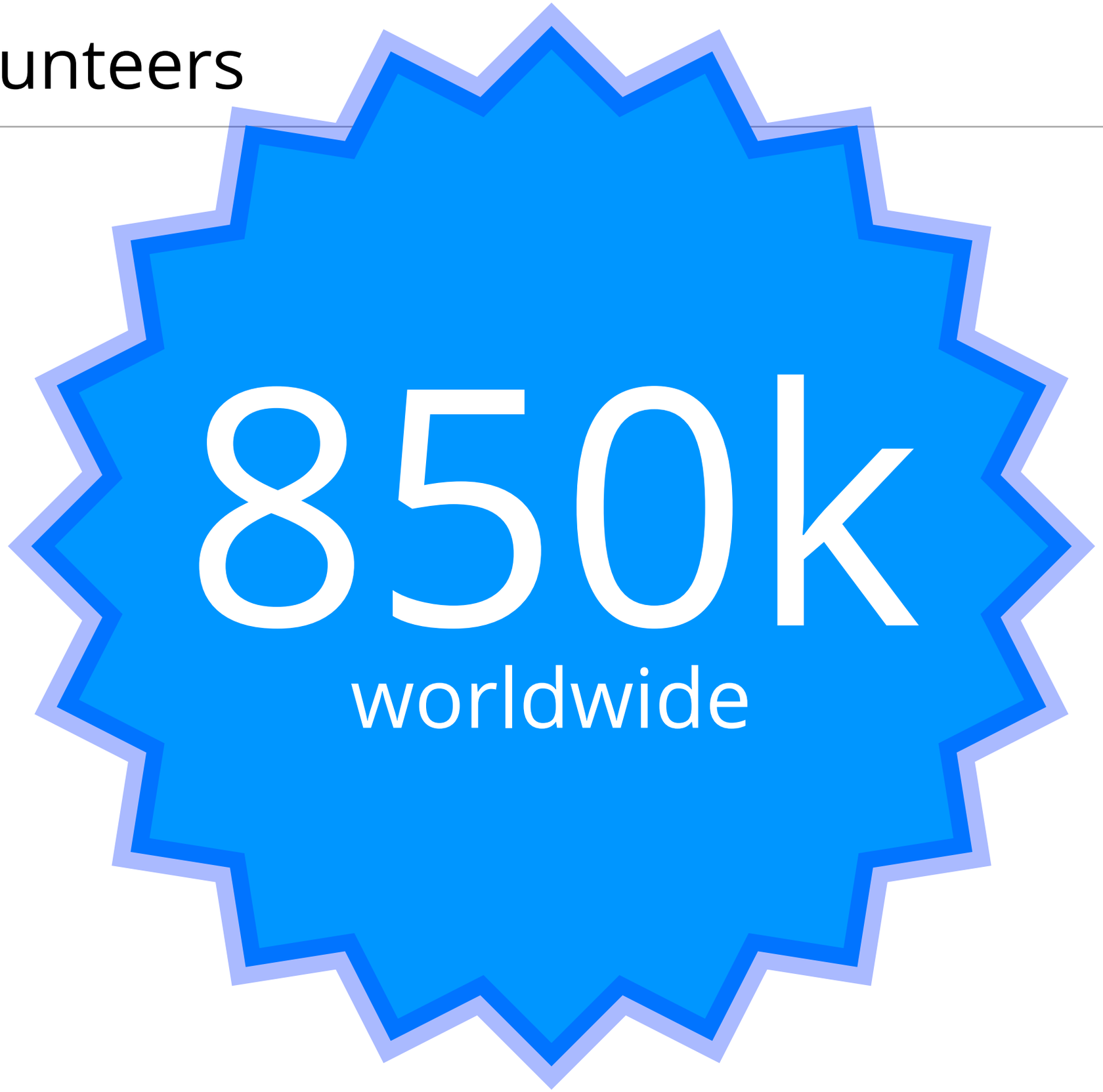
Whale FM

Teaching computers to hear whale voices





Volunteers



Volunteers

Science!

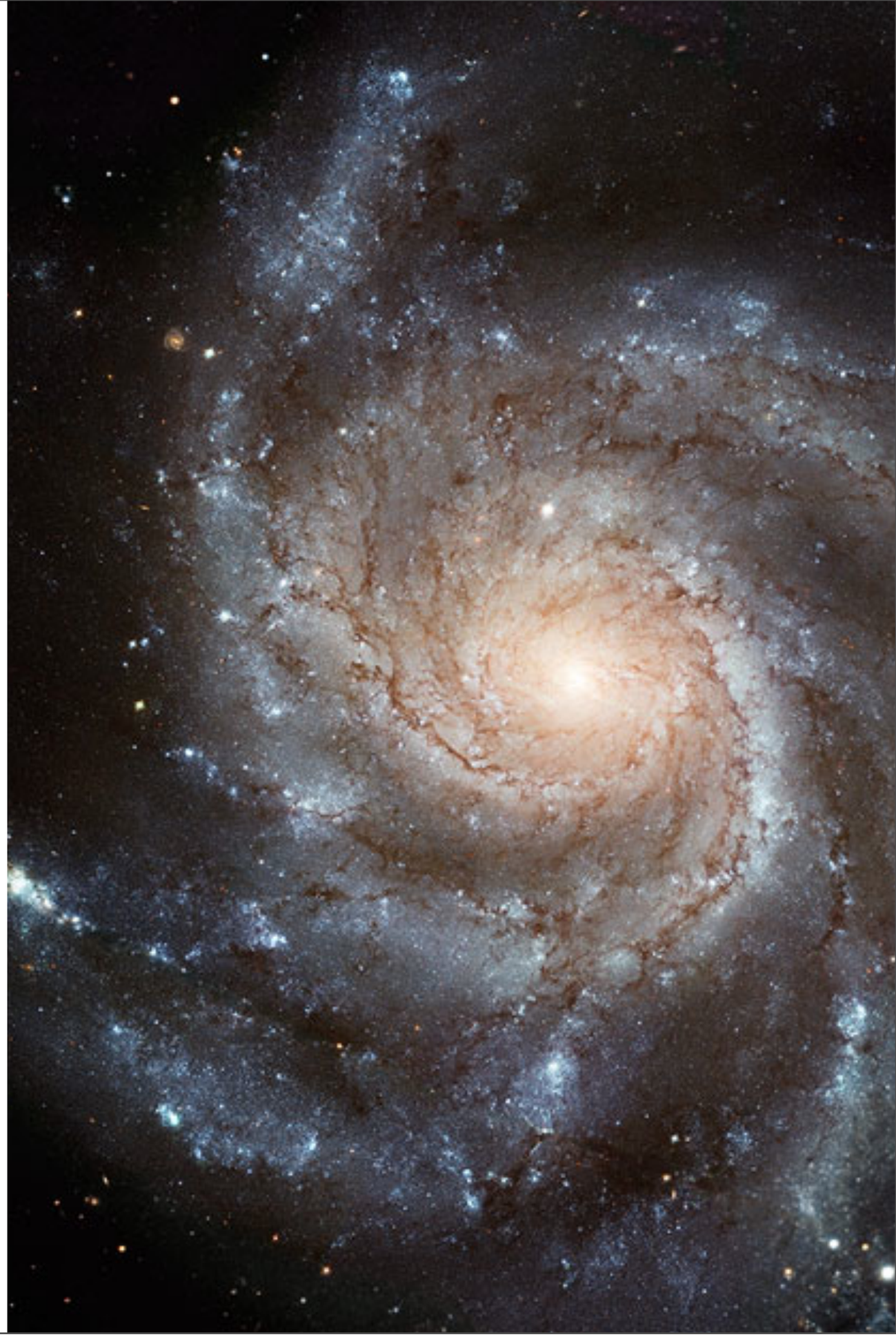
54

papers

Last Month

Conclusions

- There is brain power out there
- People want to contribute to science
- Crowd and machines should together
- Public exploration leads to discovery
- The sky’s the limit!



zooniverse.org

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