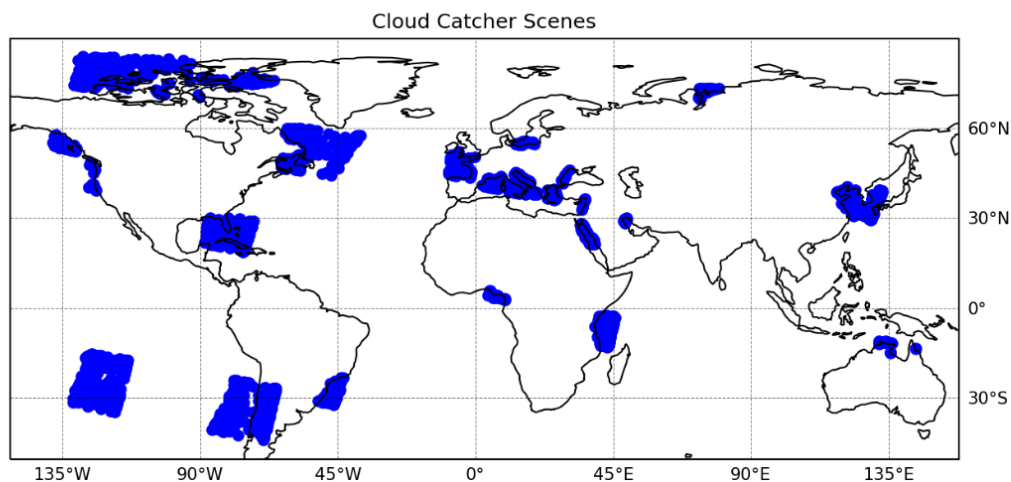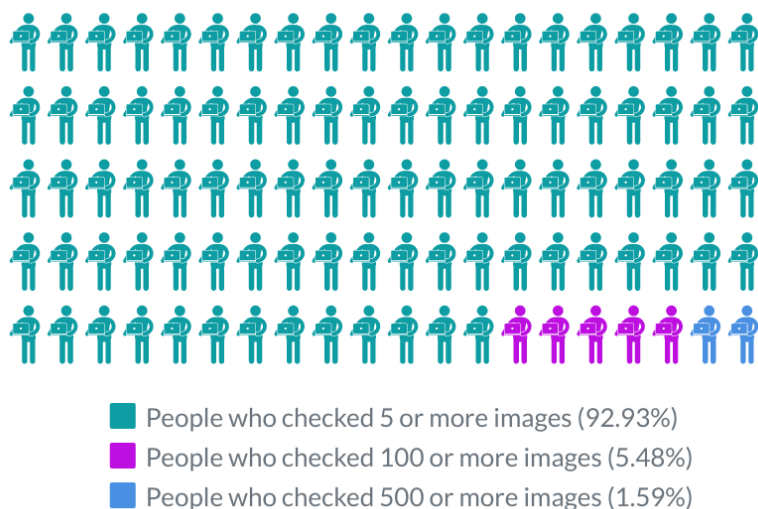We wanted a way to validate how well cloud was being identified in satellite images by our automated 'cloud mask' so we set up **CloudCatcher**, a new beta-Zooniverse project, and the first workflow was 'Catch That Cloud'

We showed you 1,970 scenes from around the world

Cloud Catcher Scenes



778 Citizen Scientists took part



- People who checked 5 or more images (92.93%)
- People who checked 100 or more images (5.48%)
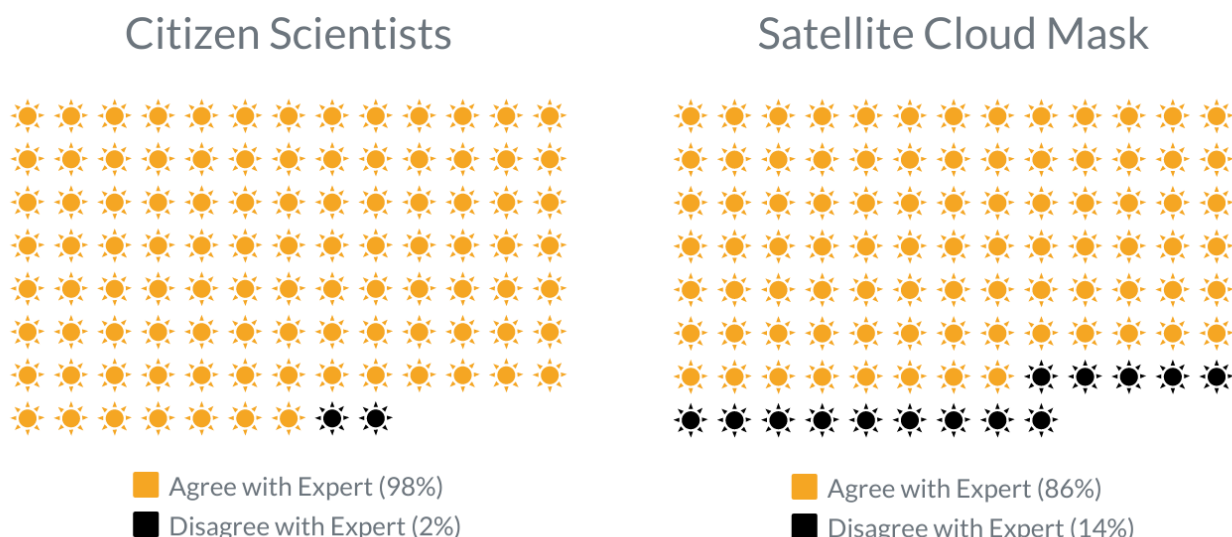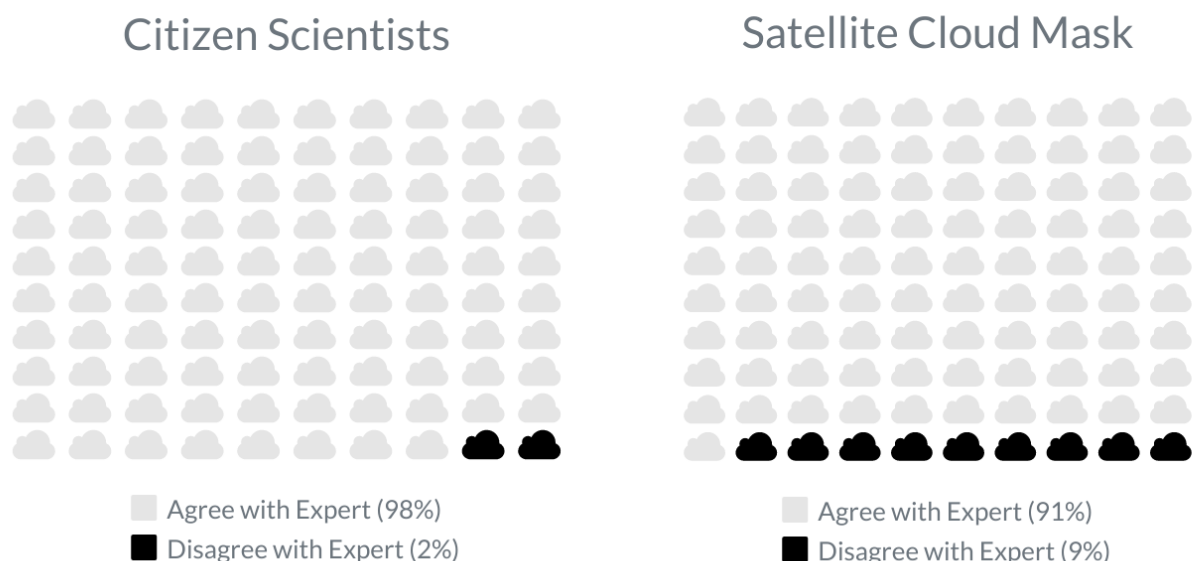- People who checked 500 or more images (1.59%)

These results were used to check if this concept works as a validation tool, therefore we compared your answers with that of an expert

Each image was checked by 15 Citizen Scientists to get a consensus

Citizen Scientists

Expert

# For the simplet cases (ice-free, sunglint-free, ocean) our Citizen Scientists performed better than the satellite cloud mask at spotting both cloudy and clear skies

## Citizen Scientists



Agree with Expert (98%)
Disagree with Expert (2%)

## Satellite Cloud Mask



Agree with Expert (91%)
Disagree with Expert (9%)

## Citizen Scientists



Agree with Expert (98%)
Disagree with Expert (2%)

## Satellite Cloud Mask



Agree with Expert (86%)
Disagree with Expert (14%)

Over land, our Citizen Scientists found it more difficult, but still did better than the satellite mask

These first results are promising and show CloudCatcher can be used for validating cloud although more analysis is needed.
Now we launch a new workflow

SilverLinings

## Catch That Cloud

- Simple tick-box answer
- Quick-fire
- Classifies only a few pixels at a time
- Can use on PC, tablet or mobile

Image was taken at 09:01 on 15-12-2016 over sea
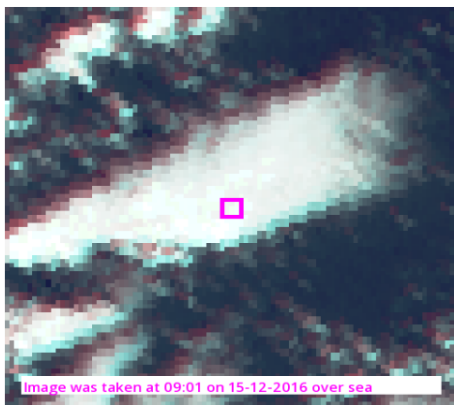
## SilverLinings

- More skillful
- Takes longer to classify each image
- Classify many pixels over a larger area
- Requires PC for careful mouse control

- Catch That Cloud
- Silver Linings

60°N
30°N
0°
30°S
60°S

180°W    135°W    90°W    45°W    0°    45°E    90°E    135°E    180°E
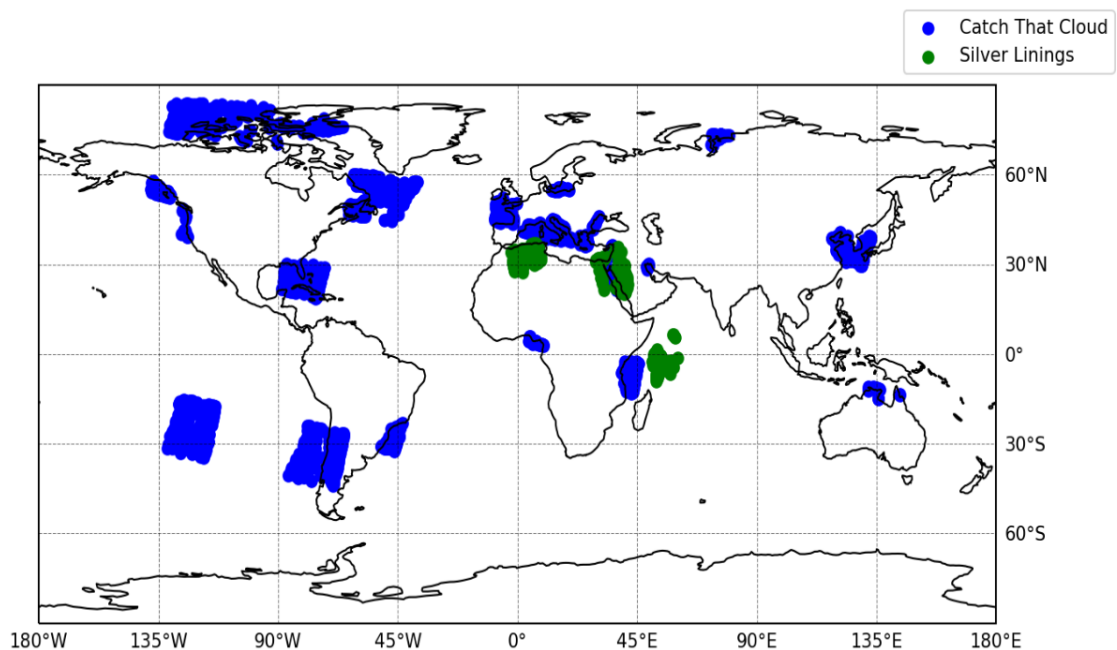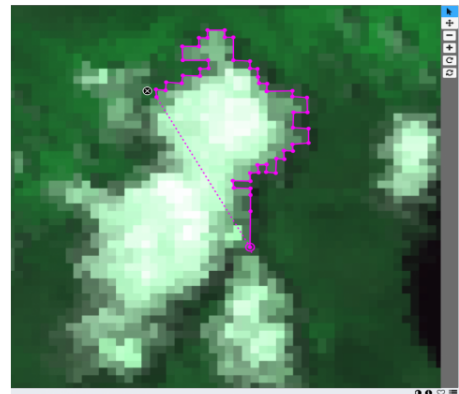
# Have a go at
# **bit.ly/CloudCatcherPrj**