



Adventures in accessible storytelling

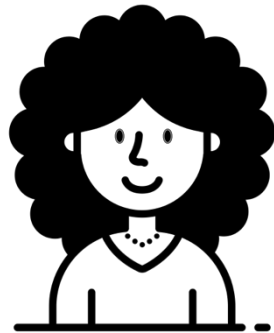
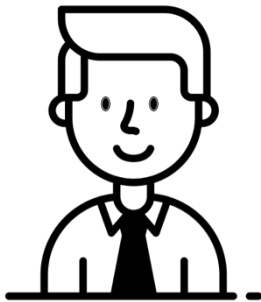
This presentation contains animated content

Hi, I'm Becky

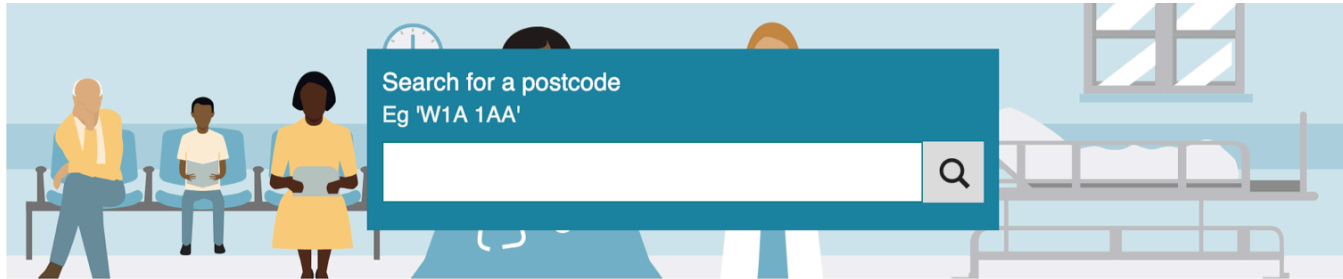
Software Engineer
Visual Journalism, BBC News

@Rushlet_

What is Visual Journalism?







Did your local services hit or miss their targets?

Homerton University Hospital NHS Trust

A&E waits less than four hours

MISS

Target: 95%

Cancer care within 62 days

HIT

Target: 85%

Planned ops & care within 18 weeks

HIT

Target: 92%

NHS City & Hackney

Mental health therapy within six weeks

HIT

Target: 75%

Patients treated or admitted within four hours of arrival at A&E

December 2018 figures

TARGET

95.0%

YOUR TRUST

93.7%

ENGLAND

86.4%

Grab an object of oppression and drag it into the trash!



Start again ↺



How do your food choices impact on the environment?

Which food would you like?

Beef ▾

How often do you have it?

Once a day ▾



75g, equivalent to one typical fast food hamburger, per serving

Over an entire year your consumption of beef is contributing **2,820kg** to your annual greenhouse gas emissions.



That's the equivalent of driving a regular petrol car **7,196 miles** (11,581km).



OR
the same as heating the average UK home for **447 days**.



OR
like taking **8 return flights** from London to Malaga.

Your consumption of beef also uses

8,094m² land, equal to the space of **31 tennis courts**.

What has President Trump said about your country?



Donald Trump is a man who prefers plain speaking to the language of diplomacy.

Find out what he has said about your country, which foreign leaders he has met or called since taking office, and which countries he has mentioned in his tweets.



Enter a country...



...select an option from below...

Most meetings	United Kingdom	North Korea	Japan
Most calls	Russia	Germany	Iraq
Most tweets	China	Iran	Canada

...or [view all](#)

United Kingdom 🤨

6
Meetings

17
Phone calls

10
Tweets

“

"I would have done [Brexit] much differently. I actually told Theresa May how to do it but she didn't agree, she didn't listen to me. She wanted to go a different route. I would actually say that she probably went the opposite way. And that is fine."

- Donald Trump in **an interview** with *The Sun* newspaper, 13 Jul 2018



President Trump and Mrs May with their partners outside Blenheim Palace in Oxfordshire (PA)

Falling through the gap:

bit.ly/bbc-scrollly

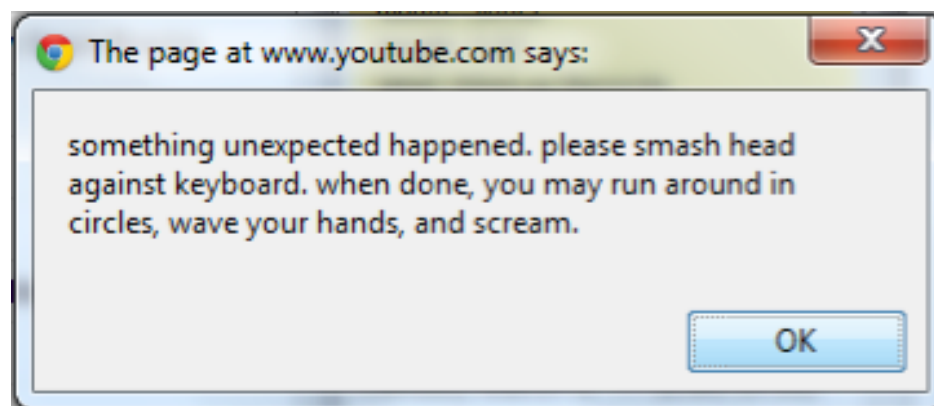




ILLUSTRATION: EYENBURG/SHUTTERSTOCK

How do you draw and animate
over 10,000 data points?






```
regl({  
  
    // In a draw call, we can pass the shader source code to regl  
    frag: `  
    precision mediump float;  
    uniform vec4 color;  
    void main () {  
        gl_FragColor = color;  
    }`,  
  
    vert: `  
    precision mediump float;  
    attribute vec2 position;  
    void main () {  
        gl_Position = vec4(position, 0, 1);  
    }`,  
  
    attributes: {  
        position: [  
            [-1, 0],  
            [0, -1],  
            [1, 1]  
        ]  
    },  
  
    uniforms: {  
        color: [1, 0, 0, 1]  
    },  
  
    count: 3  
})()
```

PETER BESHAI

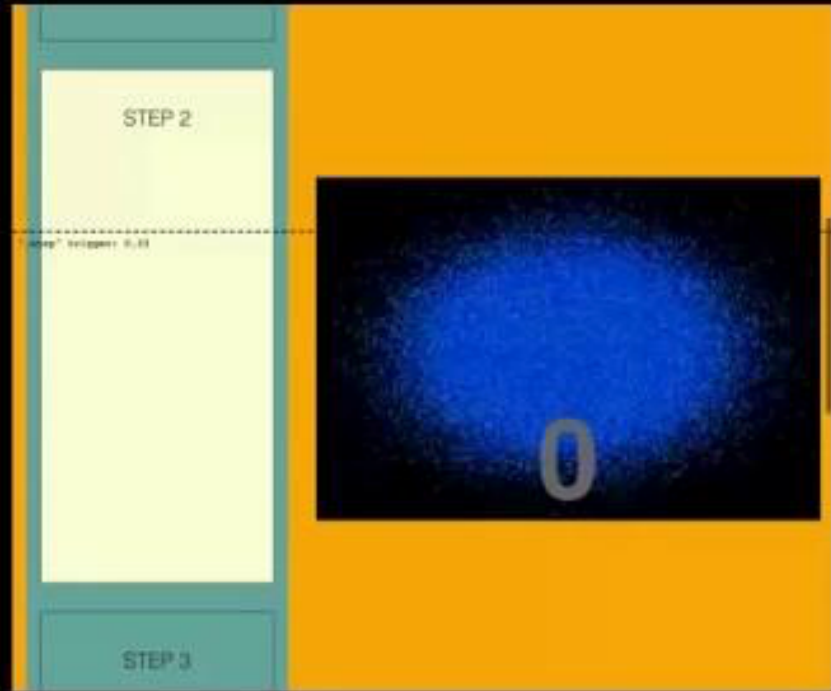
[Home](#) • [Writing](#) • [Projects](#) • [Experiments](#) • [Open Source](#)

BEAUTIFULLY ANIMATE POINTS WITH WEBGL AND REGL

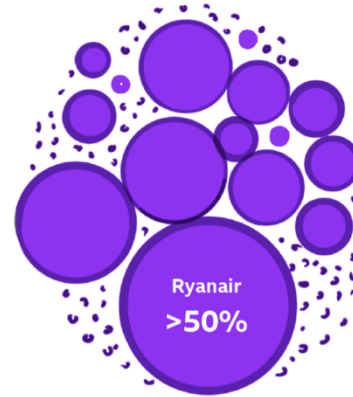
May 26, 2017 • 13 min read • [Demo](#)



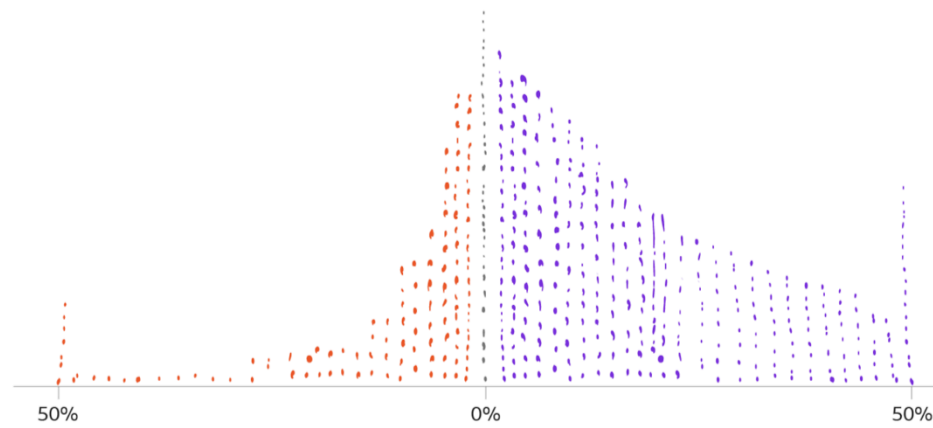
I've got a fever, and the only prescription is more points dancing across my screen. In a previous blog post, I covered [how to animate thousands of points using HTML5 canvas and d3](#), but that approach doesn't scale too well beyond 10,000 points. Perhaps you can push it to 20,000 if you don't mind dropping a frame here or there, but if you need that buttery smoothness, you're going to want to switch from the 2D canvas to using WebGL. And who doesn't need buttery smoothness?

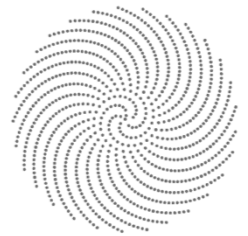
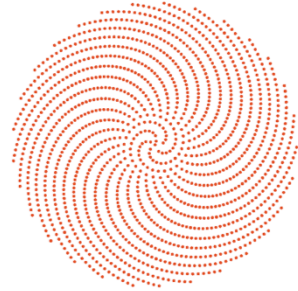
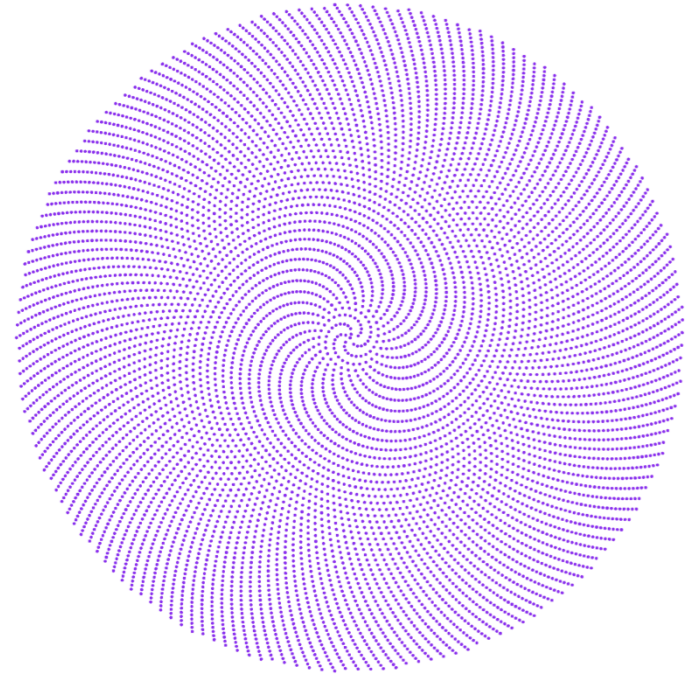
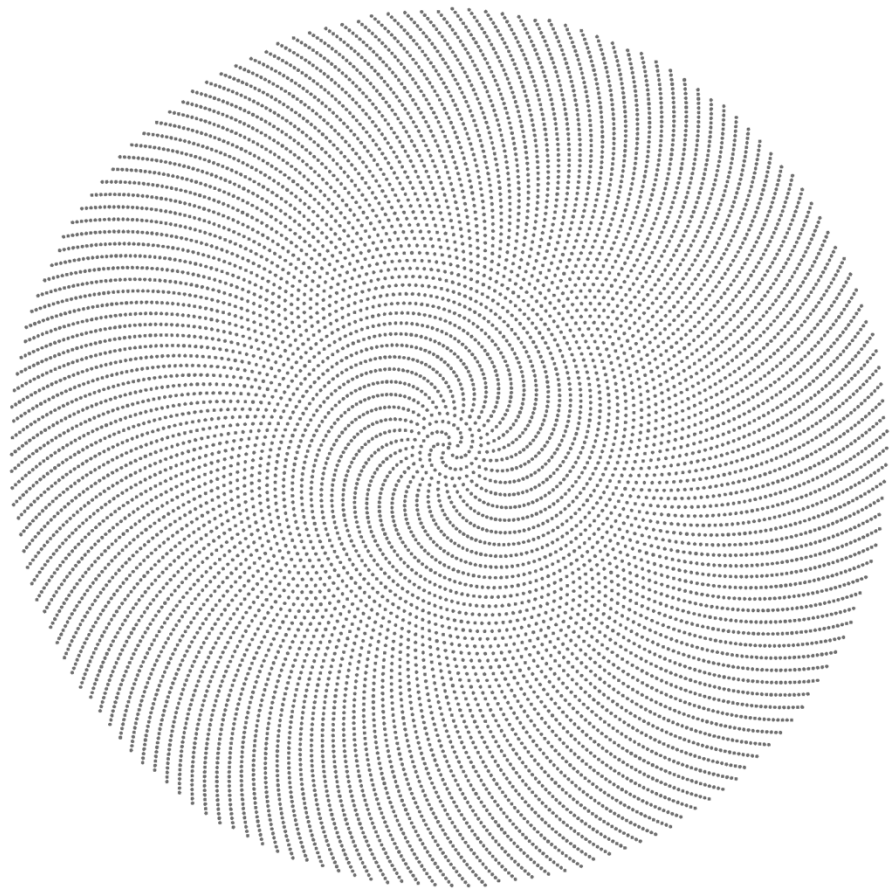


Highlight companies with large companies

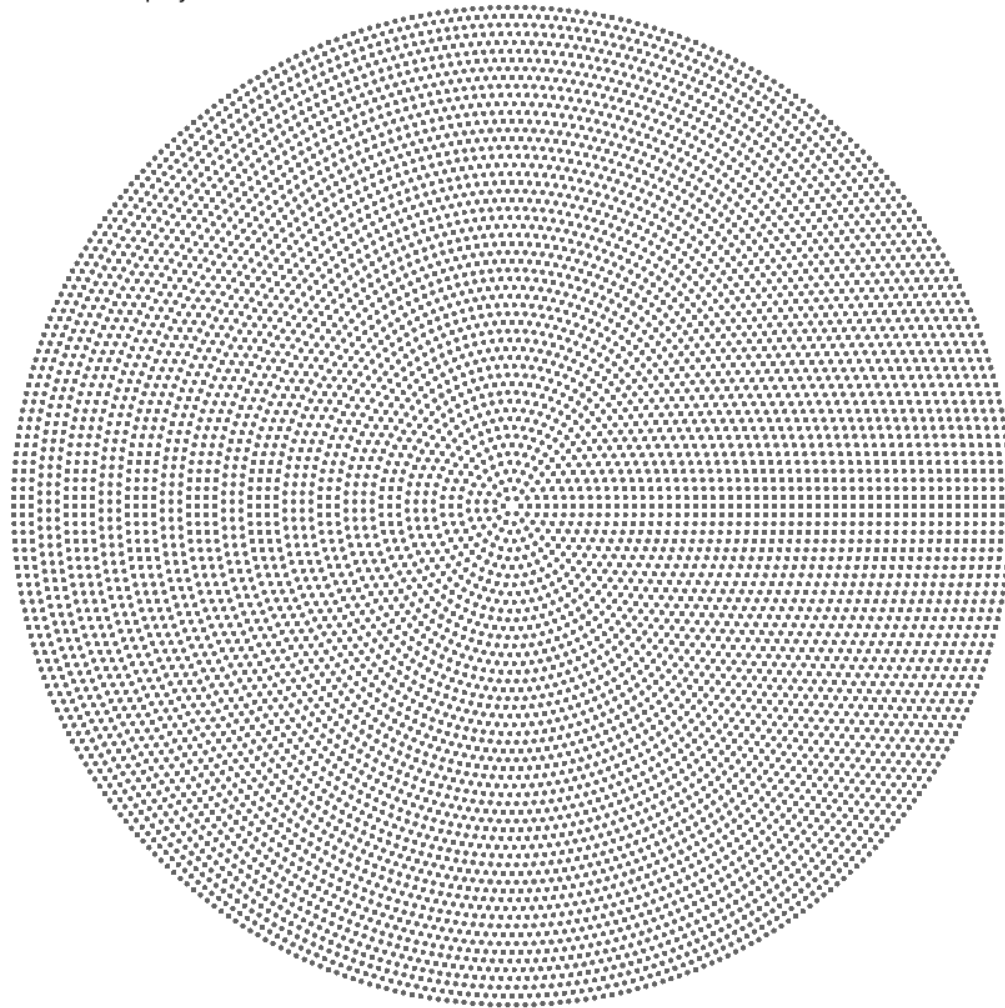


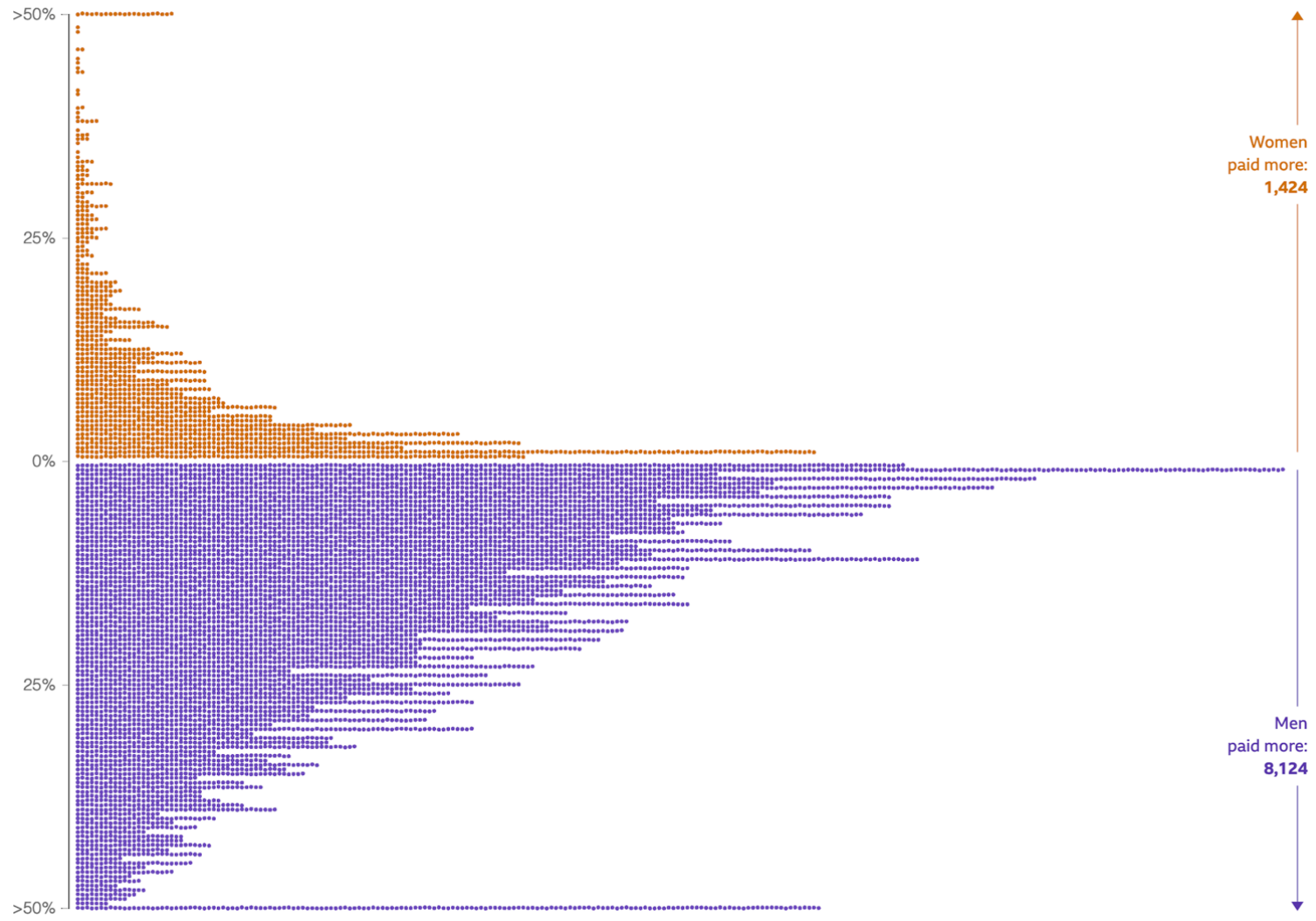
Point Histogram





● one dot = one company









Jake Archibald

@jaffathecake

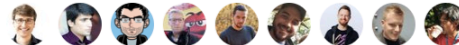
Following



"We don't have any non-JavaScript users"
No, all your users are non-JS while they're
downloading your JS

2:09 PM - 28 May 2012

338 Retweets 306 Likes

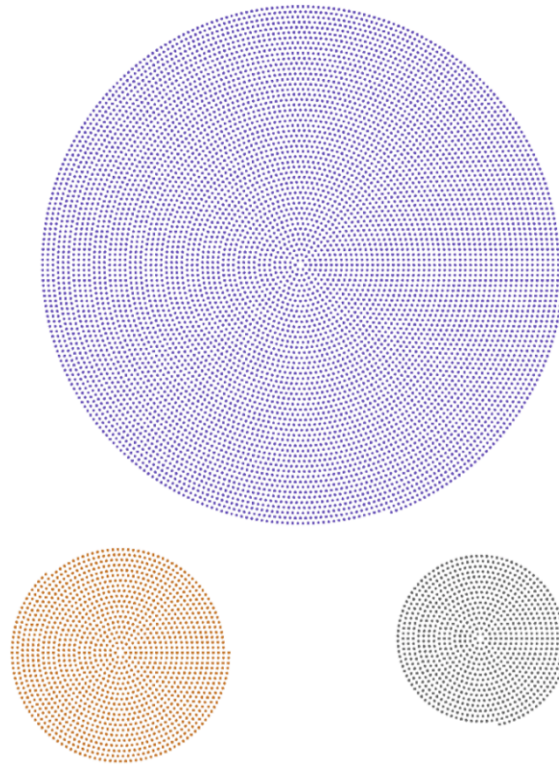


21

338

306





If you work at a large firm it probably pays the average man more than the average woman - **8,124 companies pay men more**, while just **1,424 pay women more**.

“If your website is not accessible, that means
real humans on the internet cannot use it”

- Trish Ang (@feesh)





Billy Gregory
@thebillygregory

Follow



If any devs out there are taking the [#BirdBoxChallenge](#), I suggest you start by blindfolding yourself and trying to use your site with a screenreader. IRL, the chirping birds are tweets saying some folks can't use your work. Ok, cosplay over. You have work to do. [#a11y](#) [#SUX](#)

12:14 PM - 3 Jan 2019

37 Retweets 64 Likes



1



37



64





FEATURES

#ACCESSIBILITY

#SCROLLING

#MIGRAINES ARE TERRIBLE

#MOTION

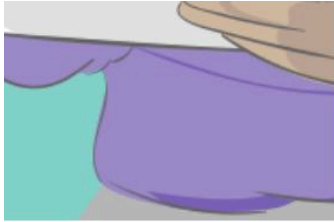
Your Interactive Makes Me Sick

Why your coolest scrolly features can cause problems, and what to do about it

By [Eileen Webb](#)

Posted on: March 1, 2018





By Clara Guibourg,
Nassos Stylianou,
Irene de la Torre
Arenas & Becky Rush

🕒 5 April 2019

[Business](#)

Falling through the gap: How the UK's gender pay gap sizes up

More than 10,000 British firms have revealed the difference between what they pay men and women. This is the second year that all companies with 250 or more employees have been required to disclose their pay gaps, revealing that more than three in four companies pay men more than they pay women. This is how the UK's pay gap sizes up.

This article contains animated content, if you would prefer not to see this, you can turn animation off by clicking the toggle below.

Animation enabled



Becky Rush [Rushlet] @Rushlet_ · Apr 7

And after reading @webmeadow's article source.opennews.org/articles/motio... I was very aware of accessibility issues with this format. One of the solutions I implemented was an animation toggle - allowing users with vestibular impairments to turn off the animations easily if they want/need

Falling through the gap: How the UK's gender pay gap sizes up

By Clara Guibourg, Nassos Stylianou, Irene de la Torre Arenas & Becky Rush
5 April 2019
[Business](#)

More than 10,000 British firms have revealed the difference between what they pay men and women. This is the second year that all companies with 250 or more employees have been required to disclose their pay gaps, revealing that more than three in four companies pay men more than they pay women. This is how the UK's pay gap sizes up.

This article contains animated content, if you would prefer not to see this, you can turn animation off by clicking the toggle below.

Animation enabled

2 ↻ 6 ||



Eileen Webb
@webmeadow

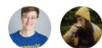
Following

Replying to @Rushlet_

I FEEL SO LOVED

5:28 PM - 8 Apr 2019

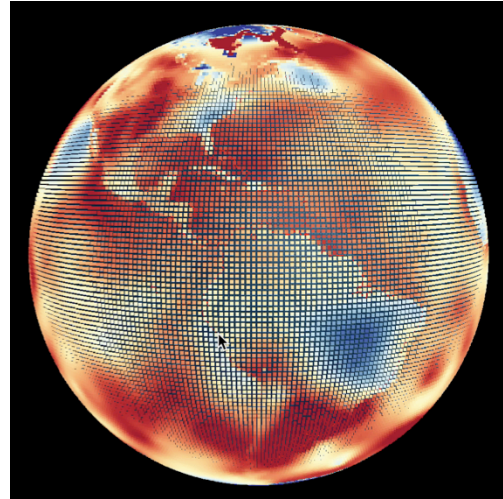
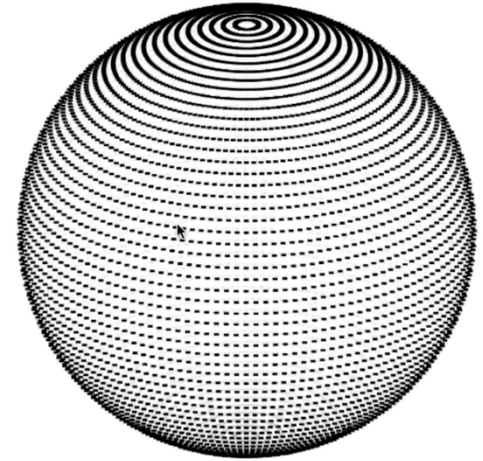
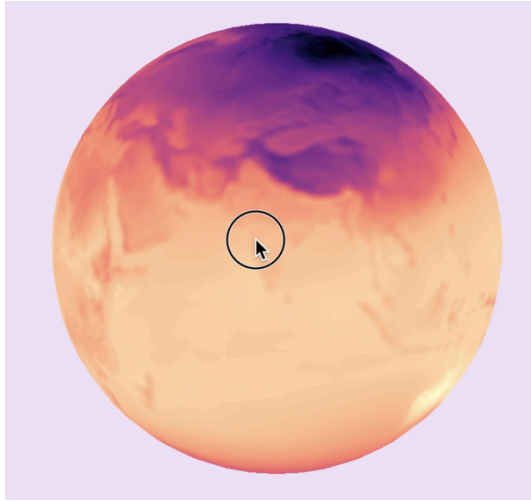
2 Likes




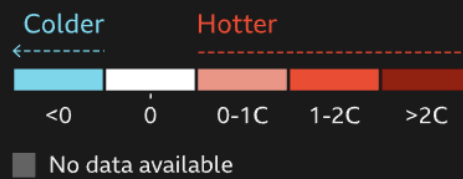
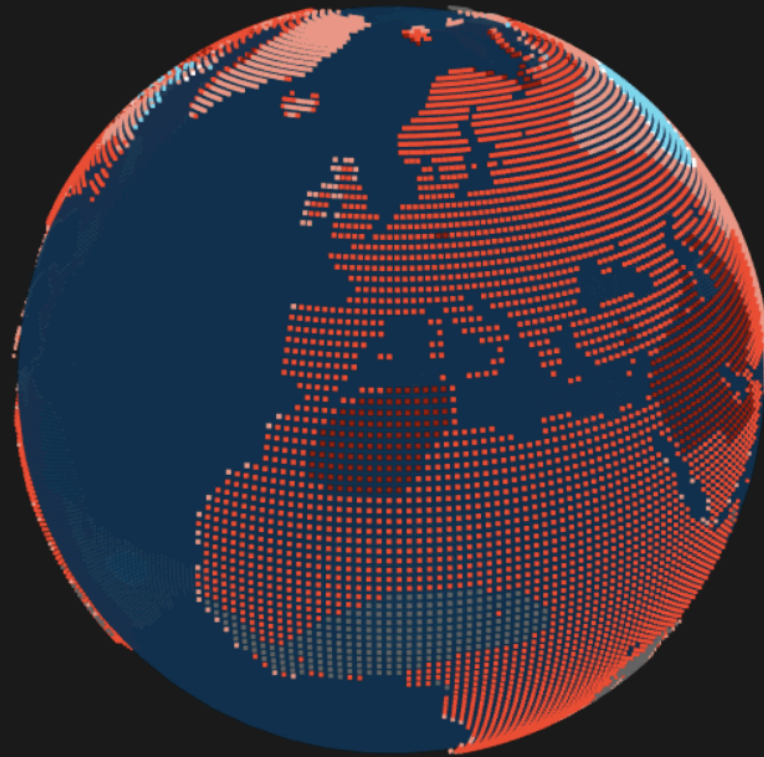
How much warmer is your city?

bit.ly/bbc-climate

How do you make a 3d globe?

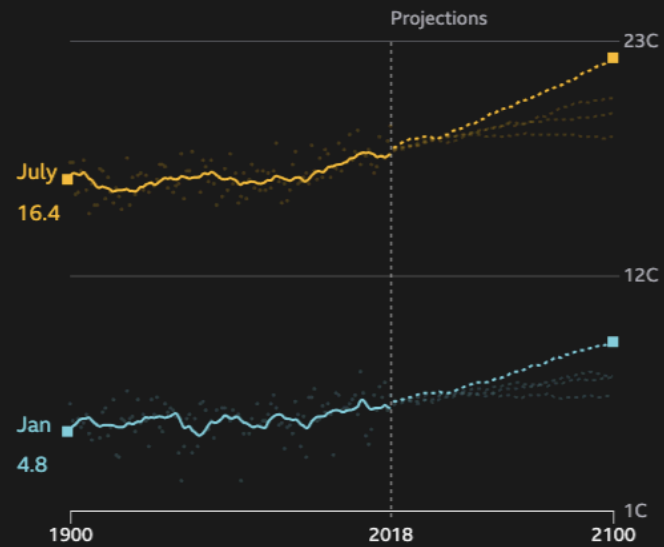


 Spin globe



How much warmer will Brighton be?

■ Average monthly temperatures — 10-year rolling average



Which of these scenarios is closest to the reality of 2100 will depend on the action countries across the globe take. Temperatures could be even higher or lower depending on how the atmosphere reacts to new levels of CO₂ in the future.





Jon Schwabish ✓
@jschwabish



Hey @visualisingdata, check out this little animation on/off toggle at the very top of this @BBCNewsGraphics story. #littleviz #littlevis (how do you spell it?) | bbc.co.uk/news/resources...



2:13 PM · Aug 4, 2019 · [Twitter Web App](#)

5 Retweets 29 Likes



Megan Longoria @MMarie · Aug 4



Replying to @jschwabish @visualisingdata and @BBCNewsGraphics
That is a good accessibility feature



1



2



Jon Schwabish ✓ @jschwabish · Aug 4



Yep, especially for people with vision or balance issues. I love that they considered this.



2



How much warmer is your city? Maagaalaan keessan hangam ho'a?

የሚኖሩበት ከተማ ምን ያህል ሞቃታማ ነው? إلى أي مدى ارتفعت حرارة مدينتك؟

Şəhərinizdə hava nə qədər istiləşib? Quanto sua cidade

esquentou? 你所在城市溫度升高了多少? तमालं शहर केतलुं गरम छे?

Yaya zafin garinku yake? आपका शहर कतिना गरम है? Apakah kota Anda

makin panas? 당신이 살고 있는 도시는 얼마나 더워졌을까? तुमचं शहर कति

उष्ण आहे? ¿Cuánto subirá la temperatura en tu ciudad? तपाईंको

सहर कति तातो छ شهر شم چقدر گرمتر شده است؟ उगडा मगिर विना गरम वै?

Насколько потеплело в вашем городе? Koliko je topliji vaš grad?

Magaaladaada heer kulkeeda halkuu gaarsiisan yahay? Mji wako una

kiasi gani cha joto? உங்கள் நகரம் எந்த அளவுக்கு வெப்பமாக உள்ளது?

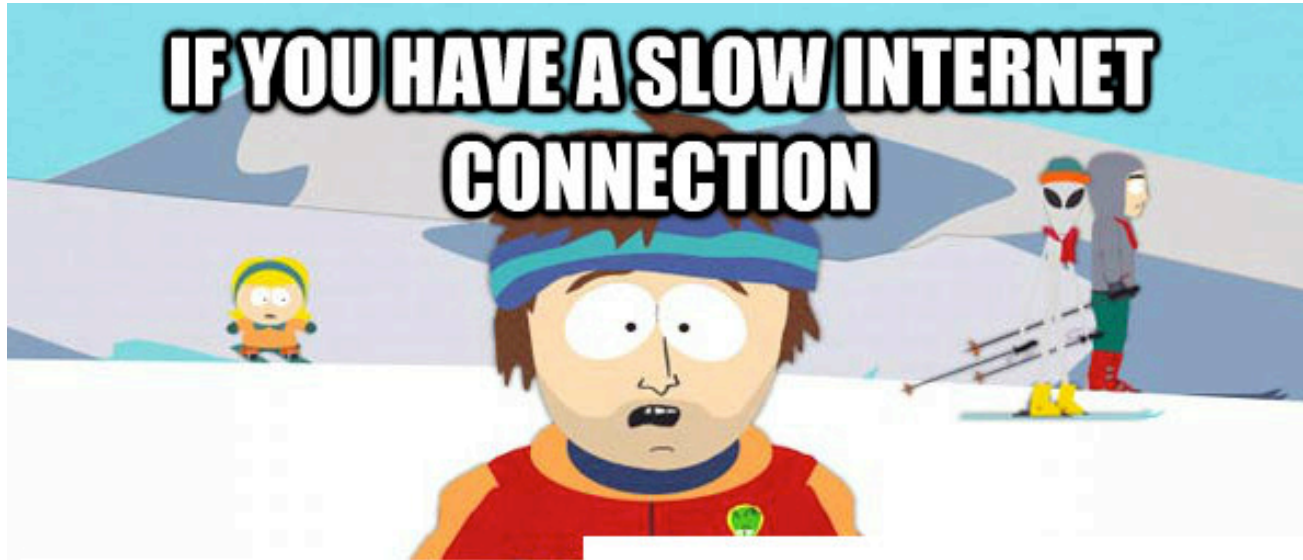
మీ నగరం ఎంత వేడిగా ఉంది? เมืองที่อบอุ่น ร้อนขึ้นแค่ไหน

Kentiniz ne kadar ısındı? Наскільки потеплішало у вашому місті?

آپ کے شہر کا موسم کتنا گرم ہے؟ Thành phố của bạn nóng lên thế

nào?

**IF YOU HAVE A SLOW INTERNET
CONNECTION**



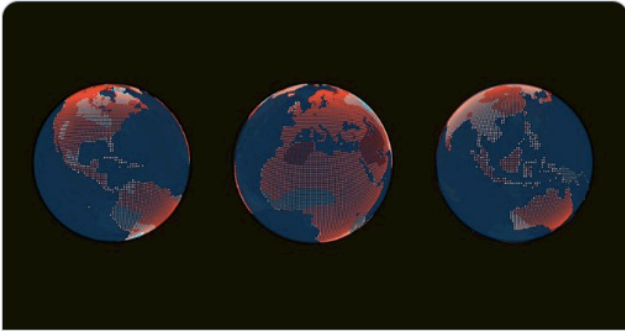


JS



Greenpeace @Greenpeace · Aug 12

The world is getting hotter. July 2019 was one of the warmest months ever recorded. Find out how much your city has already warmed and what may lie ahead. [#climatecrisis](#)



How much warmer is your city? - BBC News

Climate change: Find out how much the area around your city has already warmed and what may lie ahead

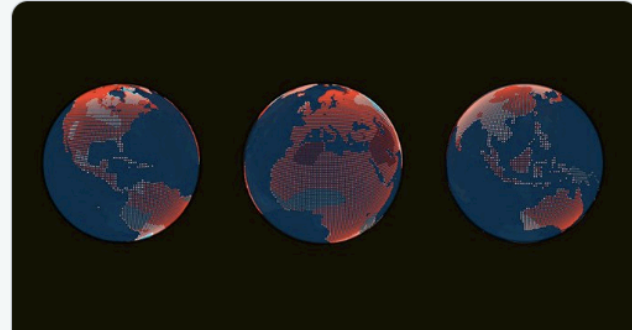
[bbc.co.uk](#)

12 245 351



Lee Hsien Loong @leehsienloong · Aug 15

[@BBCNews](#) collated temperature data from 1,000 cities & charted out how much temperatures would increase in coming years. A sobering result of global warming. I will be speaking more about how we are tackling climate change at [#NDRsg](#) this Sun 18 Aug. - LHL



How much warmer is your city? - BBC News

Climate change: Find out how much the area around your city has already warmed and what may lie ahead

[bbc.co.uk](#)

20 98 224

Thanks for listening

@Rushlet_