

The Role of Climate Scientists in the Post-Factual Society



POLE TO PARIS

Eidgenössische Technische Hochschule, Zürich

Erlend Moster Knudsen

June 15th, 2018

What?



The image features a world map with two main routes highlighted: a blue line for the Northern Run and a red line for the Southern Cycle. The Northern Run route starts in Denver, Colorado, goes to Copenhagen, Denmark, then to Kalmar, Sweden, and ends in Paris, France. The Southern Cycle route starts in Paris, France, goes to Abu Dhabi, United Arab Emirates, then to Abuja, Nigeria, Honiara, Solomon Islands, Apia, Samoa, and finally ends in Christchurch, New Zealand. Inset photos show participants: a woman in a white tank top in a field with reindeer, a man in an orange shirt on a road bike, and a man and woman with bicycles in front of the Eiffel Tower. The POLE TO PARIS logo is in the bottom left of the map area.

TARAWA, KIRIBATI

DENVER, COLORADO

COPENHAGEN, DENMARK

KALMAR, SWEDEN

PARIS, FRANCE

ABU DHABI, UNITED ARAB EMIRATES

ABUJA, NIGERIA

HONIARA, SOLOMON ISLANDS

APIA, SAMOA

CHRISTCHURCH, NEW ZEALAND

NORTHERN RUN - 3,000 KM

SOUTHERN CYCLE - 10,000 KM

#ClimateKilometre
What Will YOU Do?

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Why on



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NASA/Apollo 17 crew (1972)

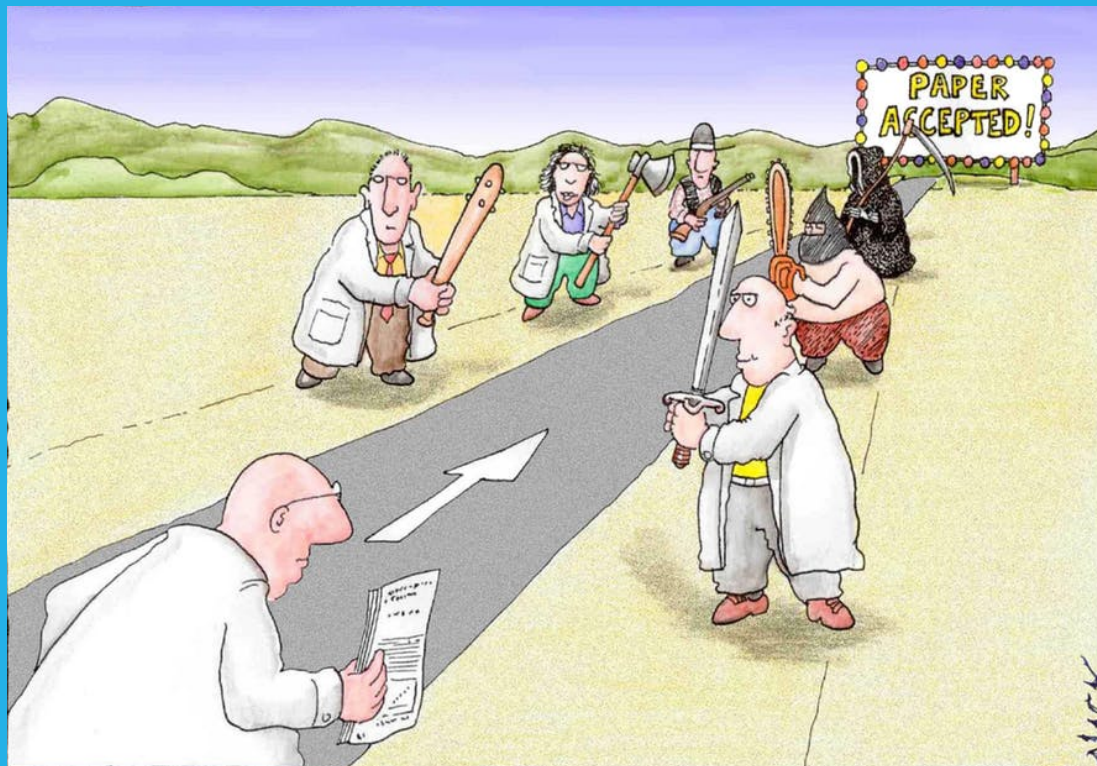
Outline

- The many roles of climate scientists
- A brief history of climate science, climate politics, media attention and public perception thereof
- Pole to Paris
- Summary and discussion

The Various Climate Scientists



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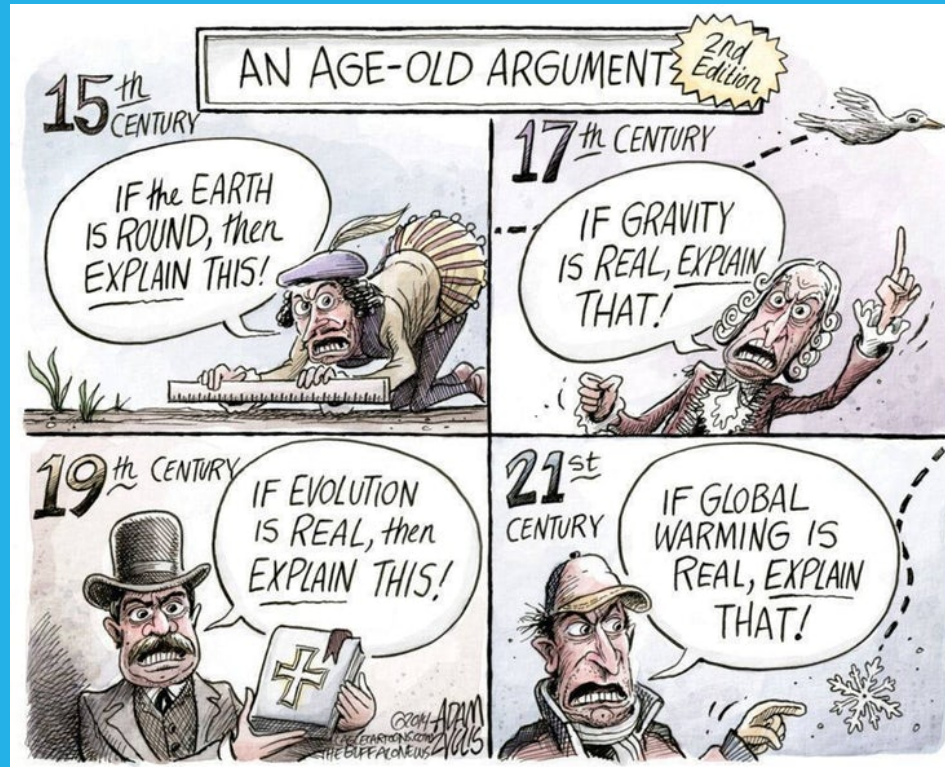
The Various Climate Scientists

According to Rapley and De Meyer (2014), climate scientists may adopt one of five roles:

1. The 'pure scientist'
2. The 'science arbiter'
3. The 'science communicator'
4. The 'honest broker of policy'
5. The 'issue advocate'



History of Climate Science

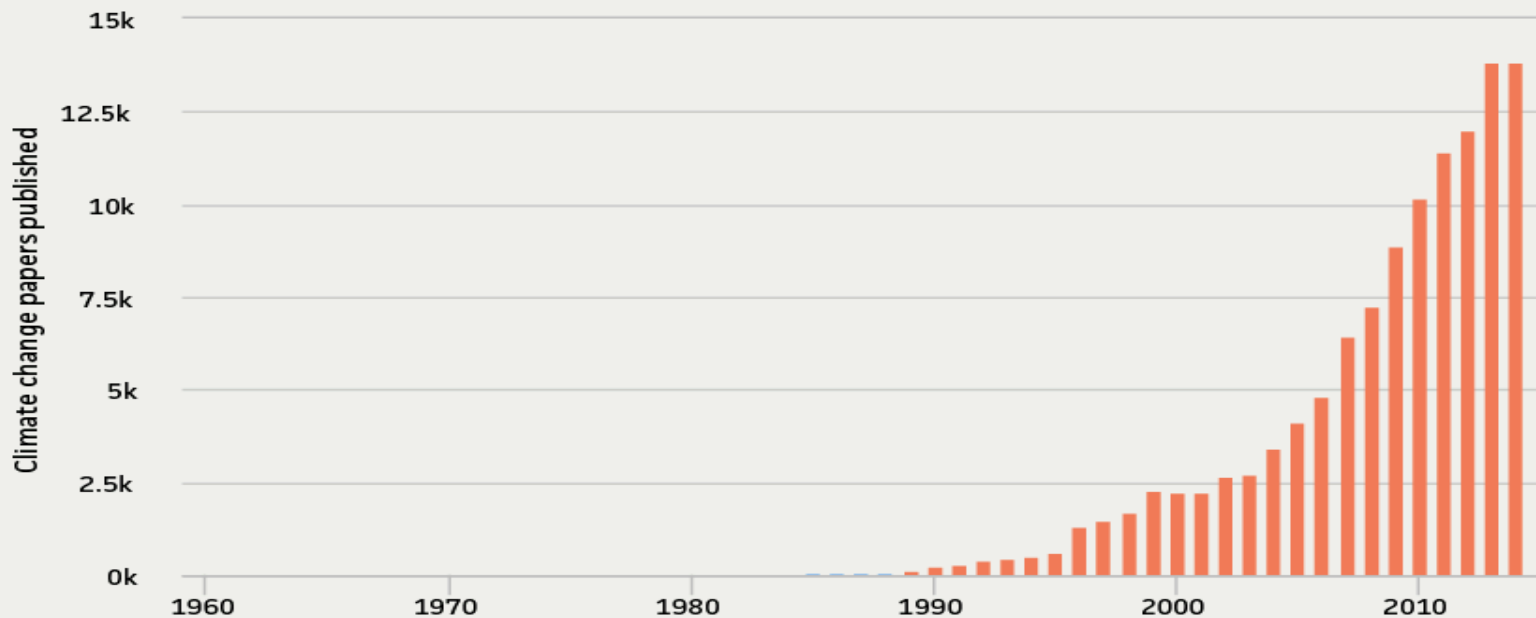


History of Climate Science



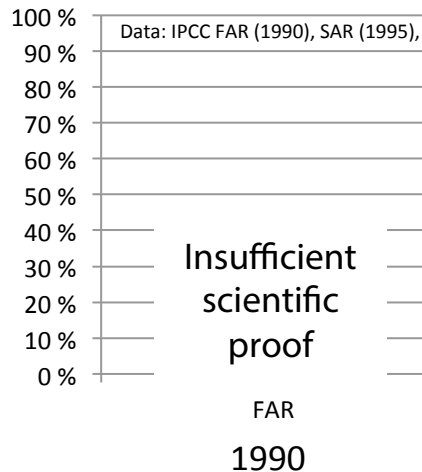
Rosamund Pearce/Carbon Brief (2015)

Total number of climate change papers published, by year

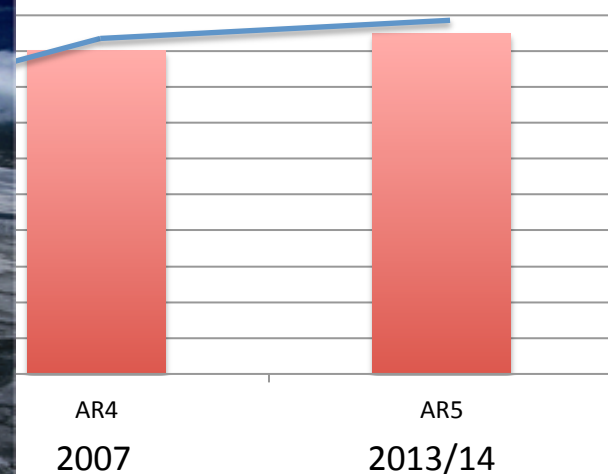


History of Climate Science

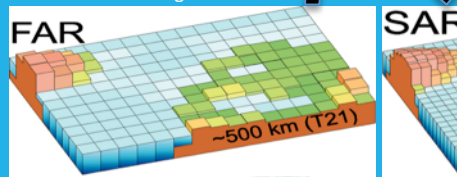
Confidence (%)



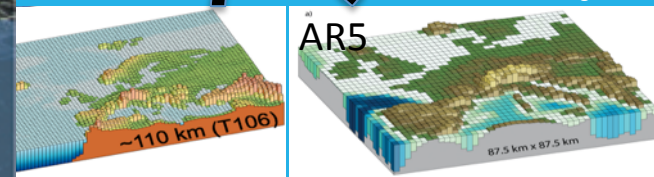
Global warming



IPCC AR4 WG1 Fig. 1.4



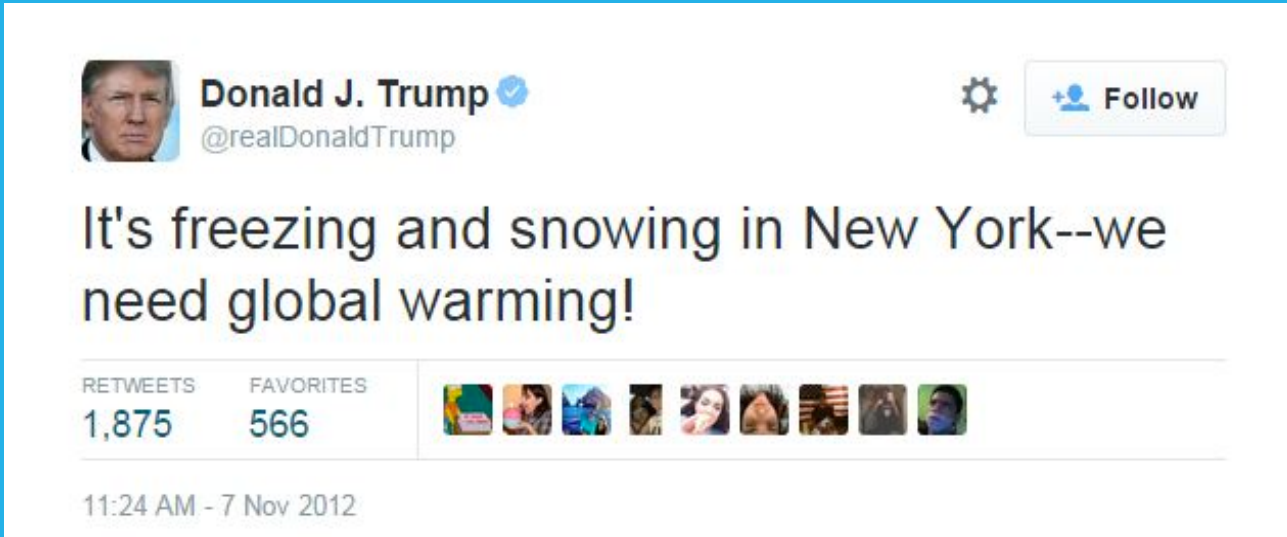
IPCC AR5 WG1 Fig. 1.14a




History of Climate Science



- Exponential growth in scientific publications
- Scientific understanding rapidly increasing

Climate Politics




A screenshot of a tweet from Donald J. Trump (@realDonaldTrump) dated November 7, 2012. The tweet text reads: "It's freezing and snowing in New York--we need global warming!". The tweet has 1,875 retweets and 566 favorites. The interface includes a profile picture, name, handle, a gear icon, a follow button, and a row of user avatars who interacted with the tweet.

 **Donald J. Trump** 
@realDonaldTrump

  Follow

It's freezing and snowing in New York--we need global warming!

RETWEETS 1,875 FAVORITES 566

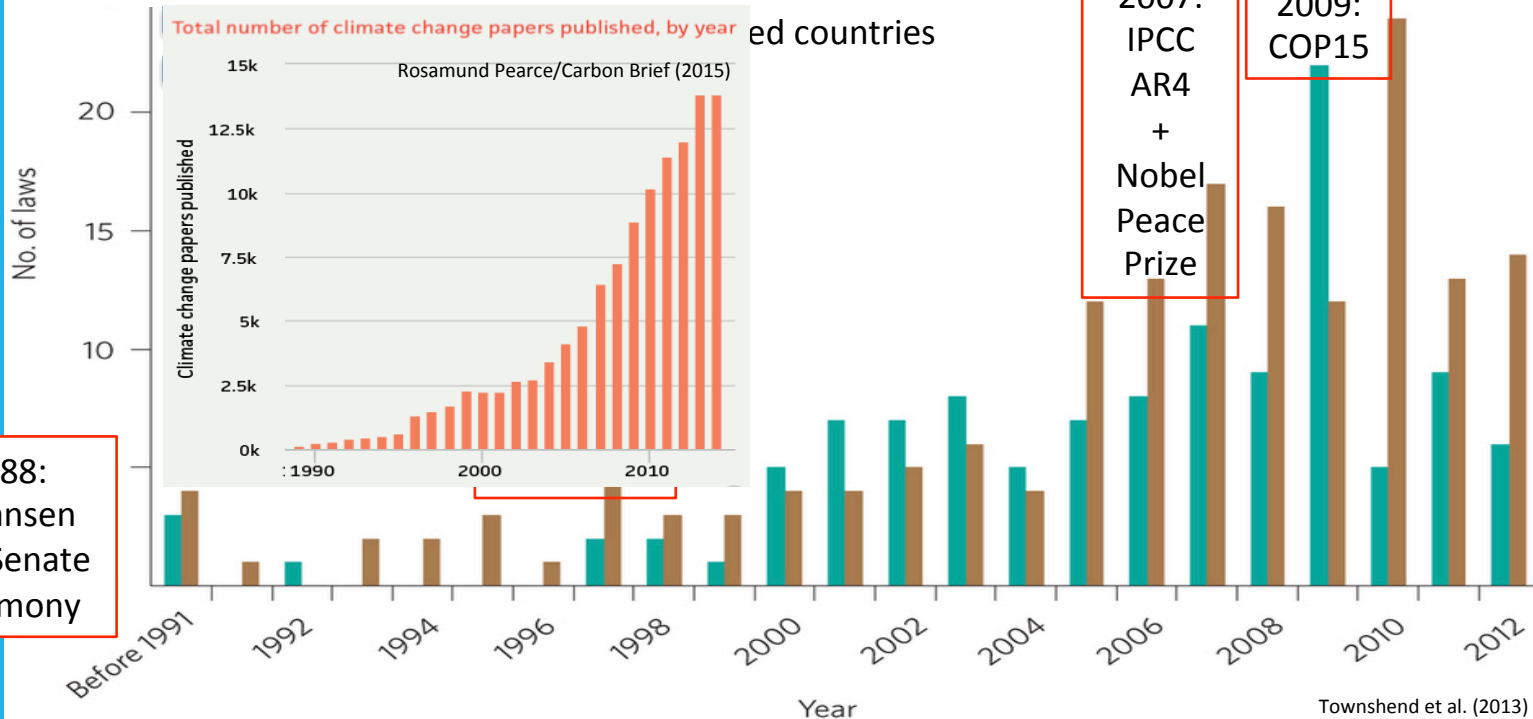


11:24 AM - 7 Nov 2012

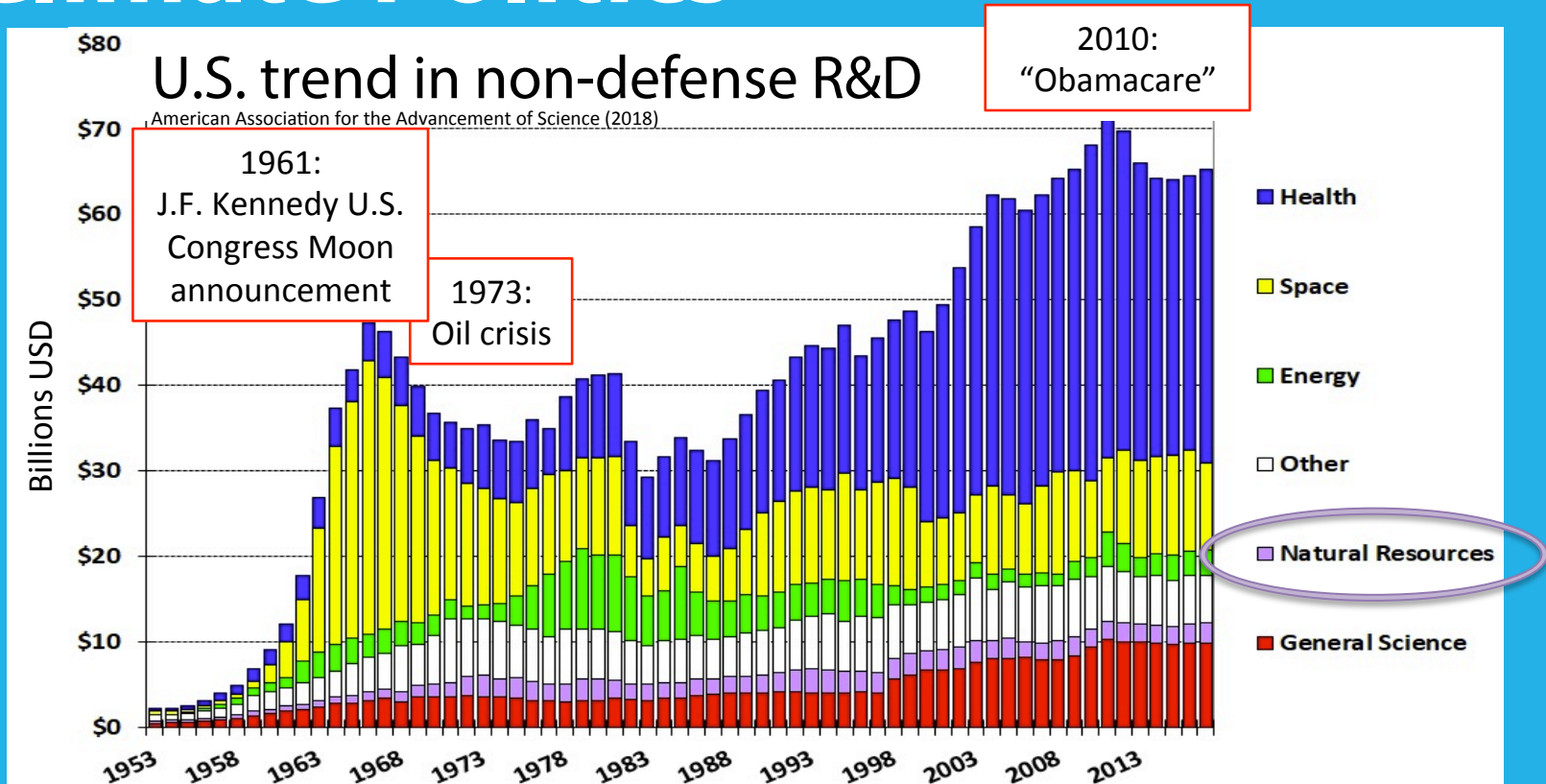


Climate Politics

Timeline of climate change legislation



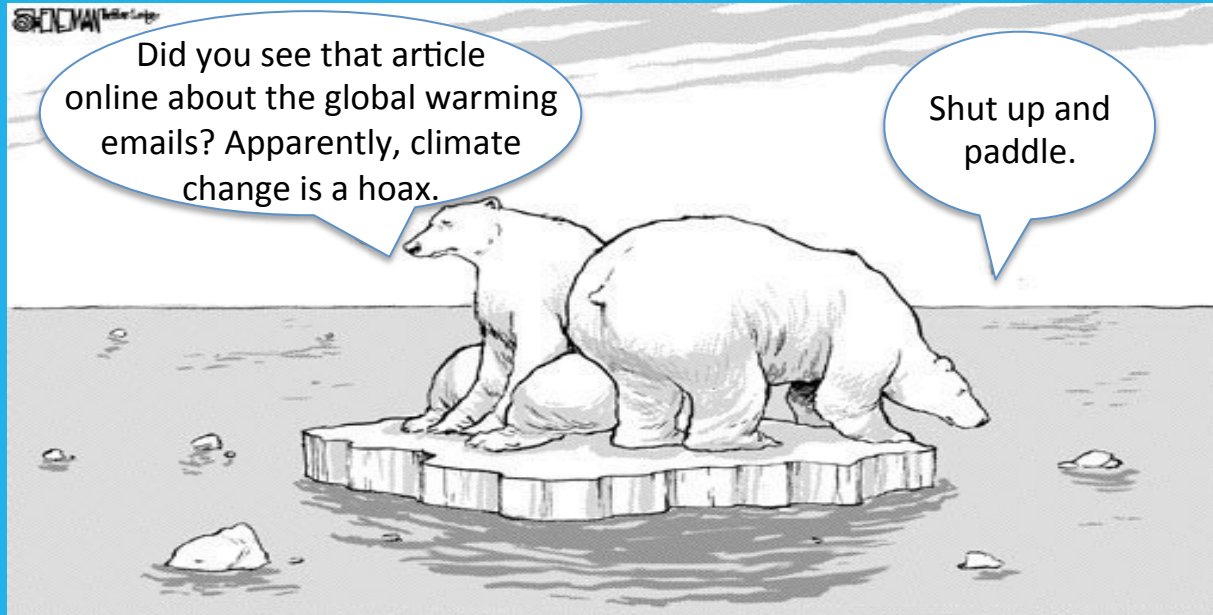
Climate Politics



Climate Politics

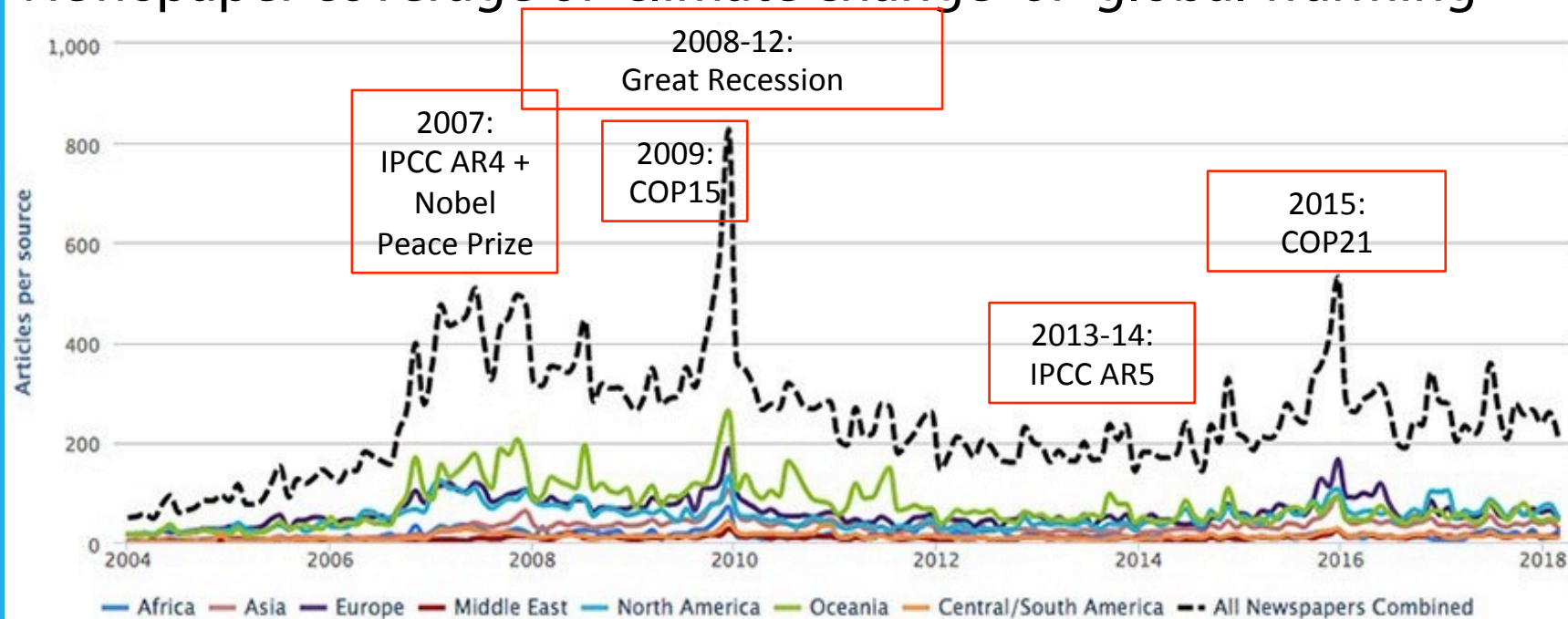
- Climate legislation changes “like the wind”
- Significant increase in scientific publications, but not in funding them

Climate Change in Media



Climate Change in Media

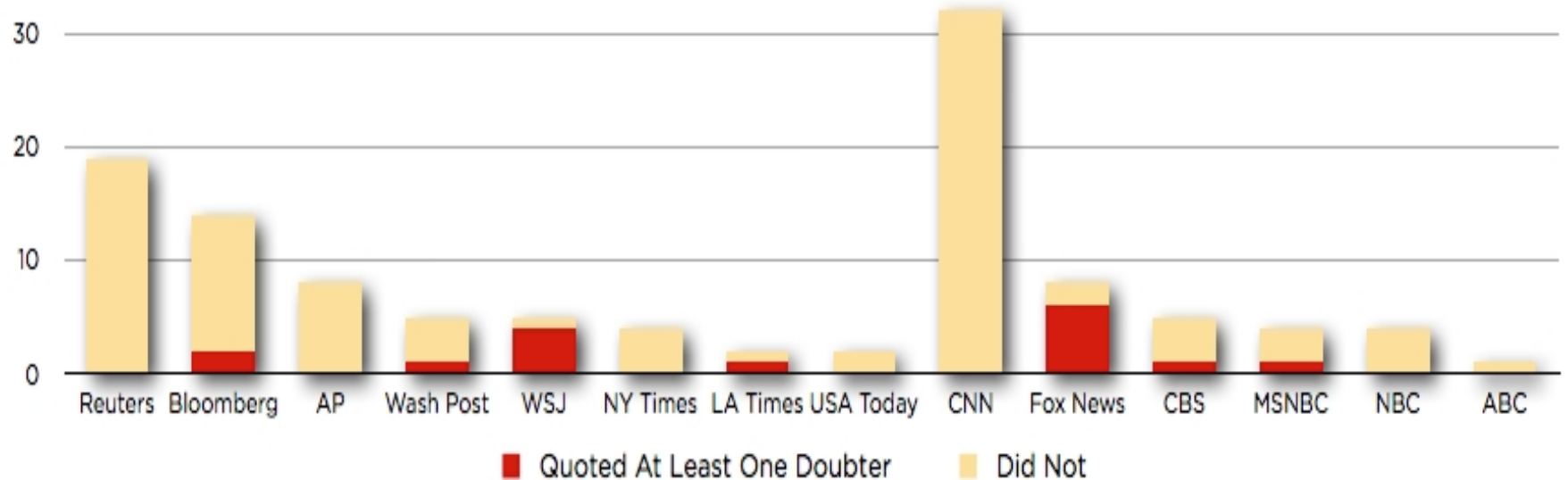
Newspaper coverage of 'climate change' or 'global warming'



CIRES Center for Science and Technology Policy Research (2018)

Climate Change in Media

Amount of IPCC coverage Aug-Sep 2013



Media Matters for America (2013)

Climate Change in Media

- As for policies, highly fluctuating over time
- Coverage not only dependent on events, but also on news provider

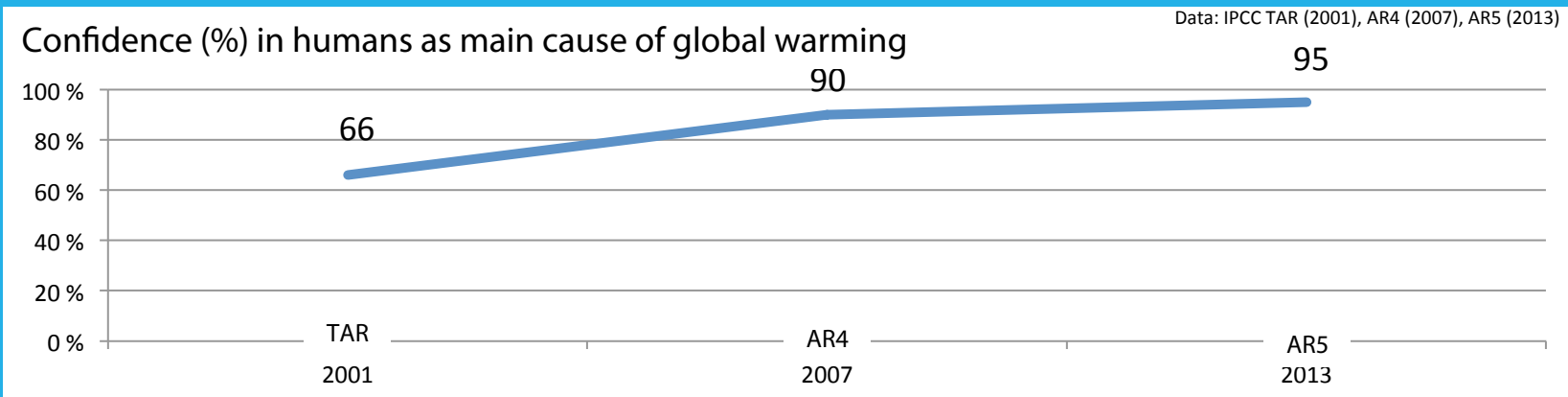
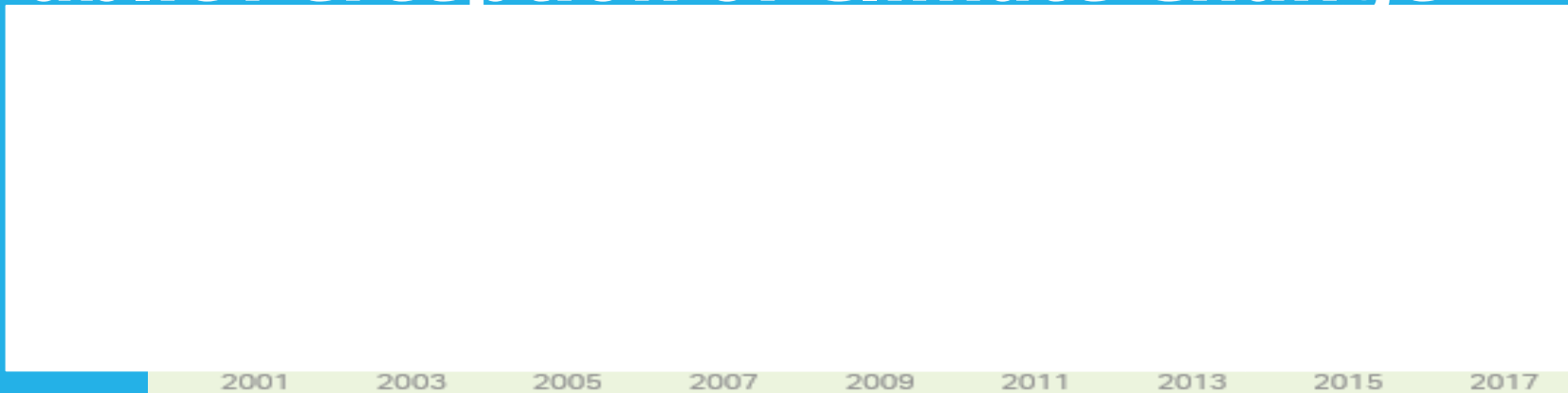


Public Perception of Climate Change





Public Perception of Climate Change





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Public Perception of Climate Change

Enough



What about

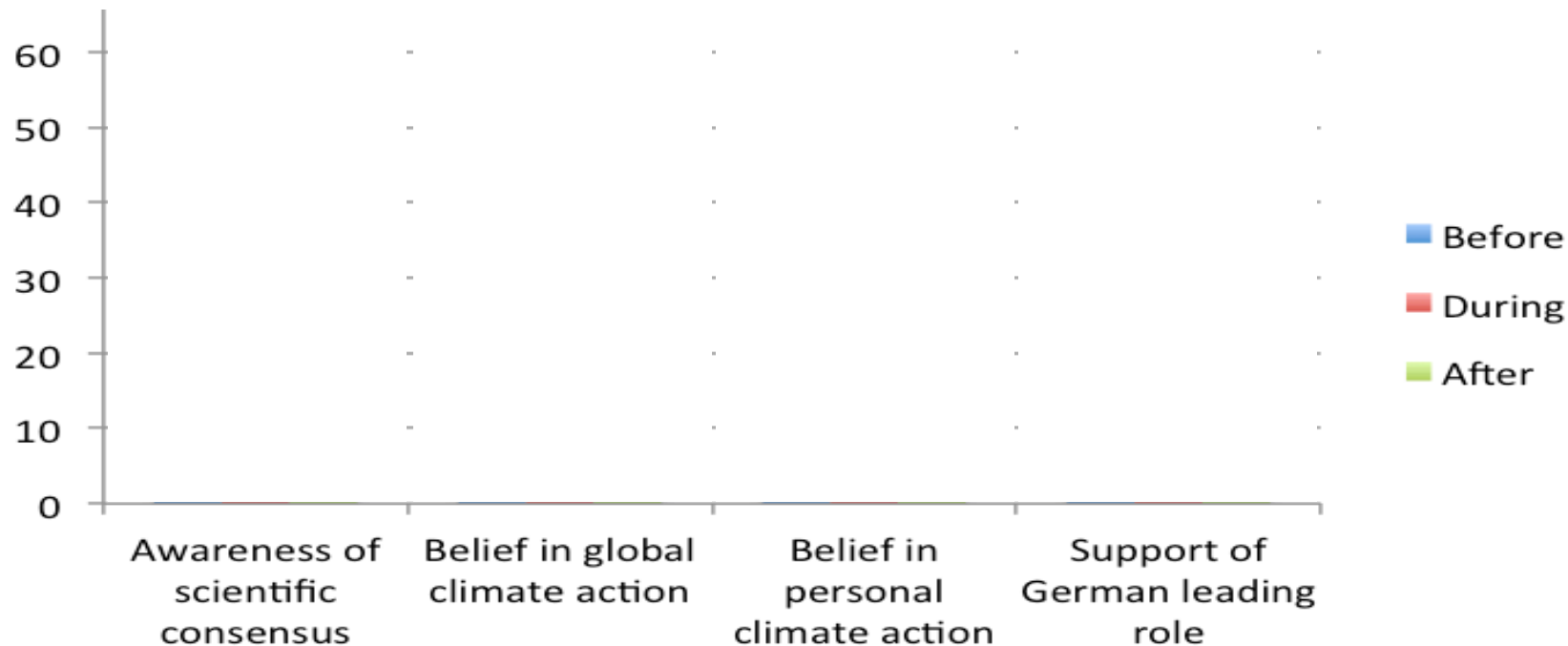


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Public Perception of Climate Change

Attitudes (%) before, during and after the 2015 Paris climate summit among Germans



Brüggermann et al. (2017)

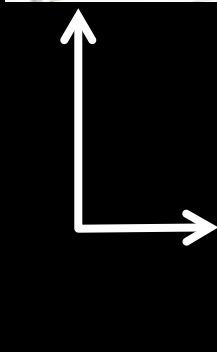
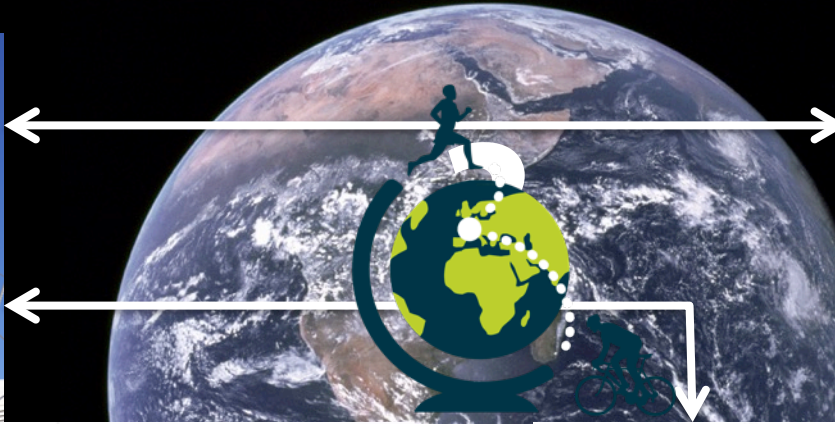
Public Perception of Climate Change

- Strong mismatch between scientific and public understanding on what is causing climate change
- Easy to disconnect, to think that “my”/“our” role does not matter

How do we to connect

Southern African-Nordic Center (2014)

Johannes Eisele/AFP (2018)



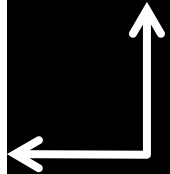
AP (2017)



NASA/Apollo 17 crew (1974)



The Fifth Estate (2013)





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Pole to Paris: The Journeys



Pole to Paris: The Team



Daniel Price

FOUNDER / DIRECTOR / SOUTHERN CYCLIST



Erlend Moster Knudsen

DEPUTY-DIRECTOR / NORTHERN RUNNER



Thomas Gillman

GENERAL MANAGER / UNDP LIAISON



Catherine Jones

PARTNER DEVELOPER



Beth Ward

PUBLIC OUTREACH COORDINATOR



Jeff Willis

ENGAGEMENT STRATEGY



Oria Jamar de Bolsée

EUROPEAN UNION COORDINATOR



Kieron-Scott Woodhouse

DIGITAL ADVISOR



William (Niancen) Miao

PARTNERS AND SPONSORS LIAISON



Jodi Gustafson

UK OUTREACH

Pole to Paris: The Roads



Espen Mortensen





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Pole to Paris: Two-Way Interactions

Ove Aavo



Adrien Taylor



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Pole to Paris: Educational and Public Events

Clare Howes



DWA Foundation

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erlend@poletoparis.com



[/poletoparis](https://www.instagram.com/poletoparis)



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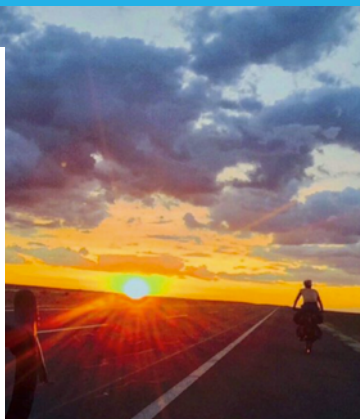
Pole to Paris: Conventional and Social Media

@UNDP

UN Development @UNDP Følger

Learn something new today: Here's your #climatechange crash course provided by @poletoparis: ow.ly/Tb5OW

RETWEETS 53 FAVORITMARKERINGER 28



poletoparis FØLG

59 liker

poletoparis Dan is currently boosting through Northern #China on his way to #Mongolia! Expect some amazing shots of the Gobi #Desert to come soon.

#SouthernCycle #Roadtoparis #COP21 #travel #road #roadtrip #summer #sunset #travel #bike #biking #bicycle #cycle #cycling #drama #nofilter #friends #instamood #journey #adventure pics_abroad 🙌🙌🙌

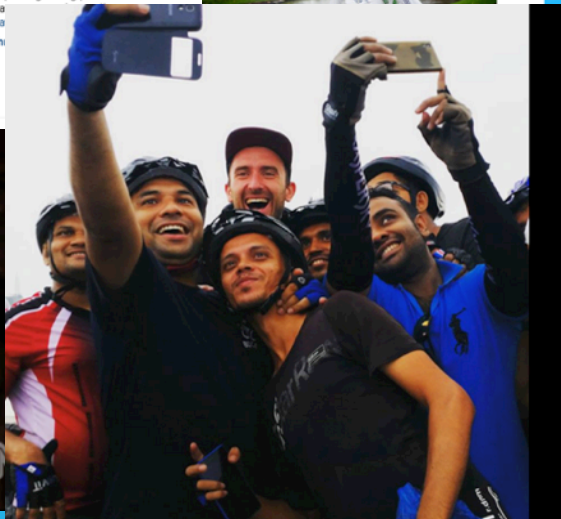
climastore Good luck and hang in there. We're posting a blog post on our site to raise a #clima kim_h

theguardian

Running for climate change: 'I was very much on the edge physically and mentally'

Emma Howard takes to the road with Elenor Menter Krauß, one half of Pole to Paris, a campaign and journey by two scientists from the two polar regions of the world to crucial UN climate talks in Paris

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Pole To Paris
Publisert av Jeff Willis (7)
29. juli · Redigert · 🌐

One of the best things about being on the #RoadToParis has been making so many new friends who care passionately about the need to #ActOnClimate.

In some ways we will be carrying all of their stories with us to #COP21.

#Bangladesh
#SouthernCycle

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Liker · Kommenter · Del

👤 Emmy Stavastrand Neuls, Oriá Jamar de Bolsée, Anne Steenstrup-Duch og 68 andre liker dette.

🔗 4 delinger

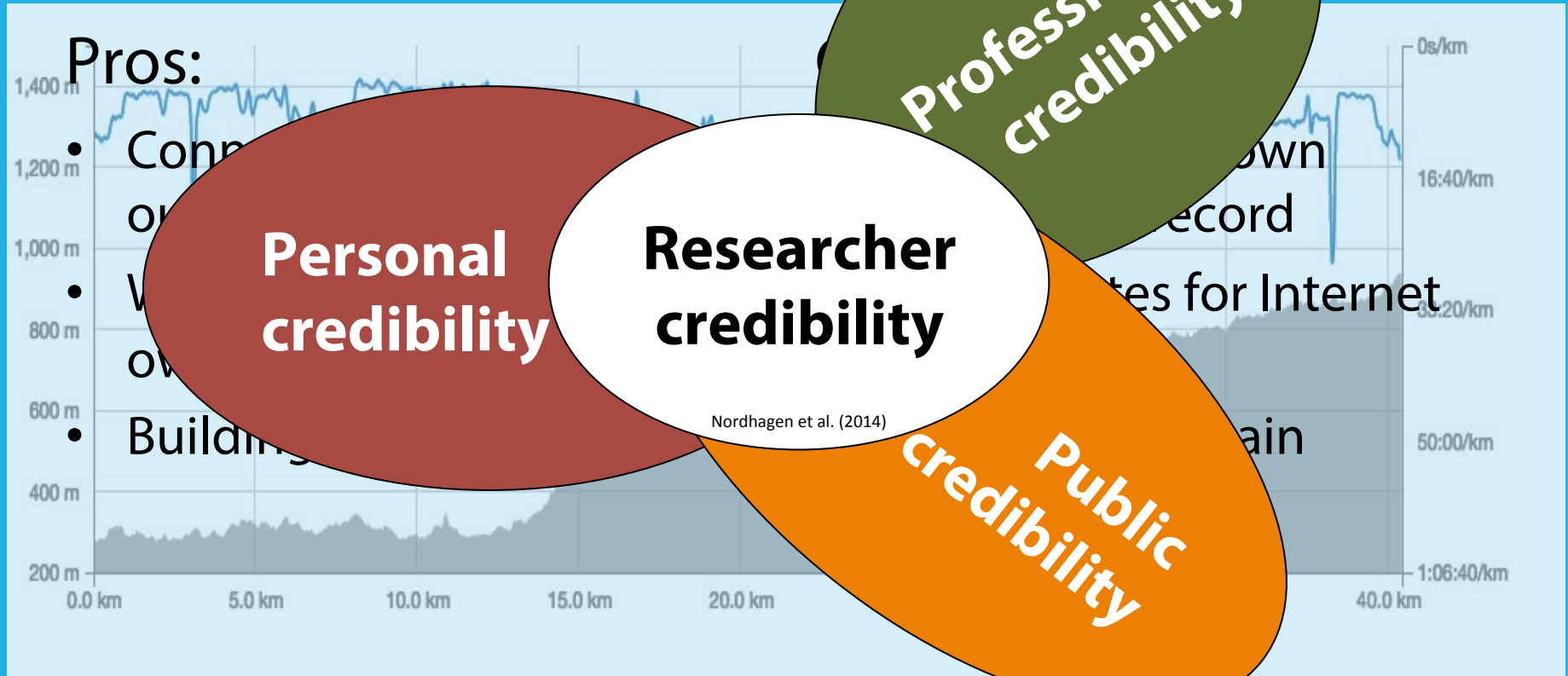
Skriv en kommentar ...

Pole to Paris Co-Founder

Pole to Paris: At the Road's End



Ups and Downs



The Road Ahead

Key components for successful science communication outside academia:

1. Listening
2. Meeting the audience on their terms
3. Positivity
4. Perseverance
5. Passion



ClimCommColn (2017)

The Modern Climate Scientist

We have seen...:

- a. ...a pronounced expansion of climate science...
- b. ...in an unpredictable political sphere...
- c. ...where media's focus shift rapidly...
- d. ...along with personal interests

The Modern Climate Scientist

This call
for the 2

t trained

1. Comr
2. Media
3. Decis
4. Pseuc





WMO OMM

KickForward

Bjerknes Centre for Climate Research



generation zero



Empowered lives. Resilient nations.



LÖP LAB DET



Danke schön!

