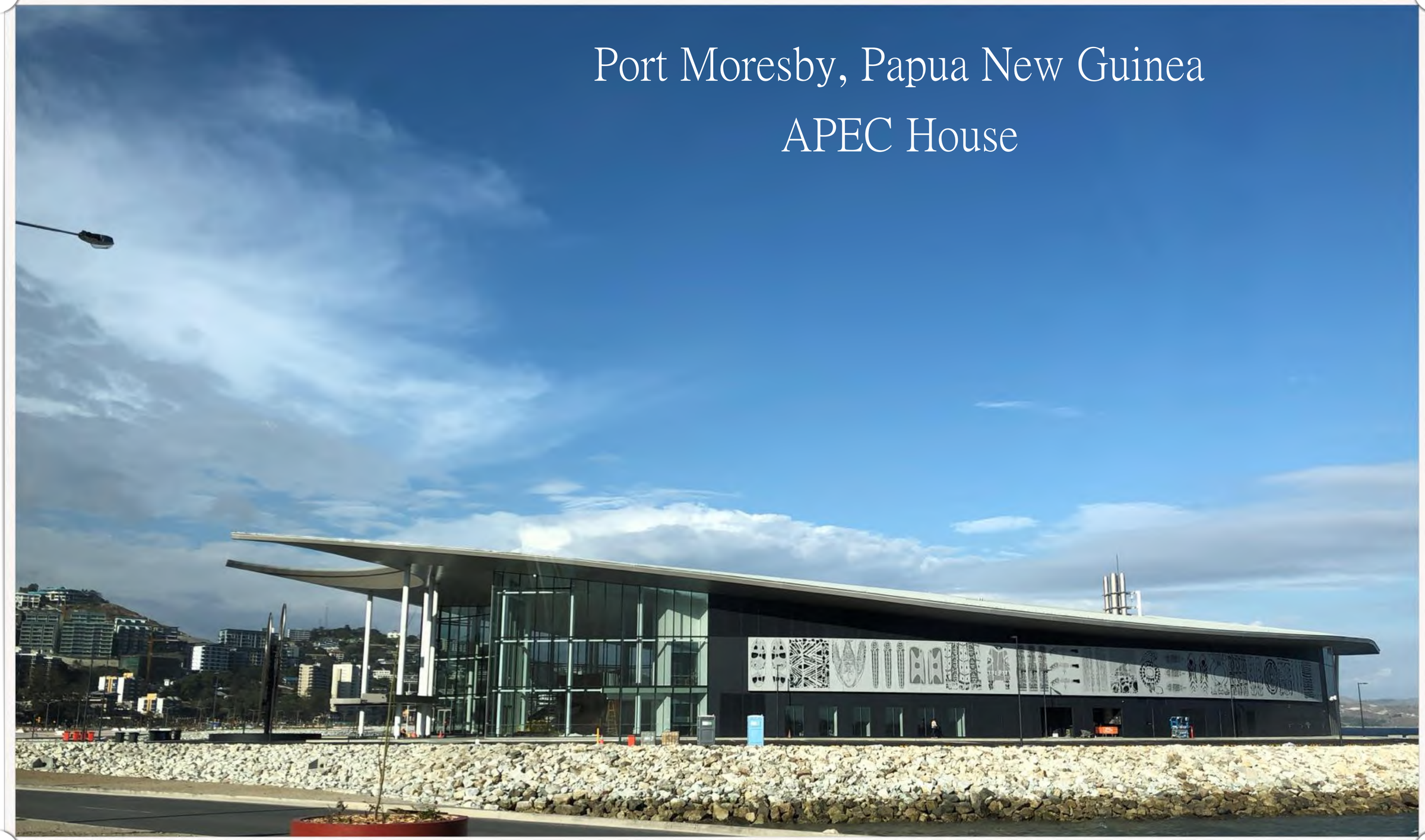
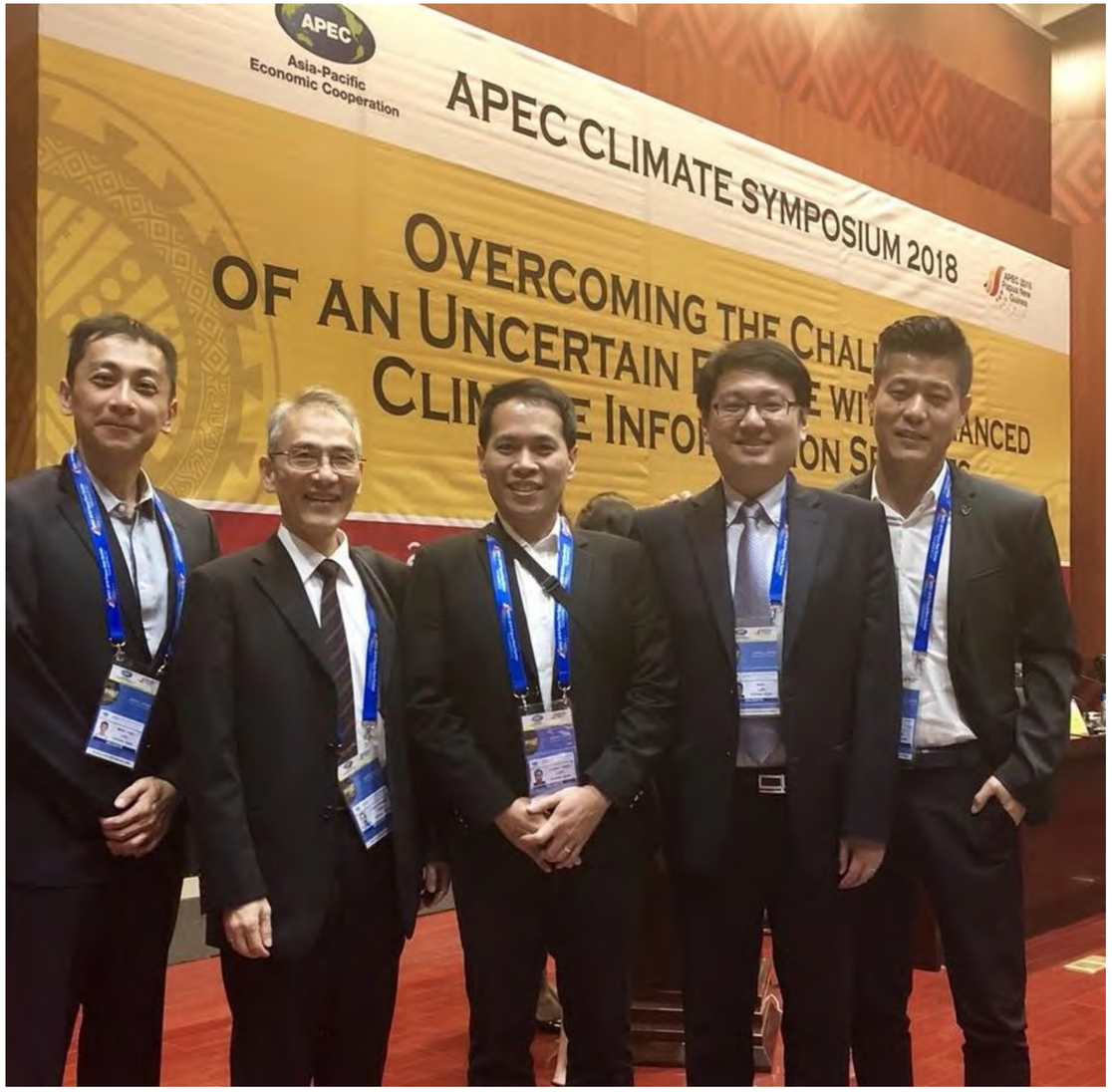
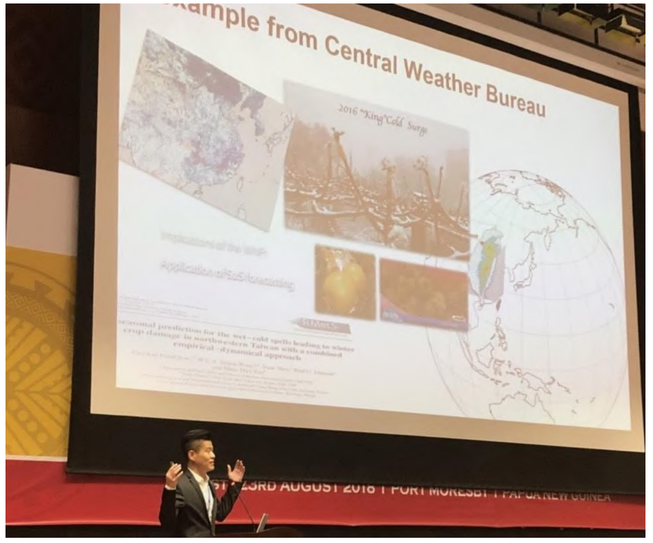
Port Moresby, Papua New Guinea

APEC House







2018 APEC Climate Symposium - 大放光彩！

CLIMATE COMMUNICATION, OR JUST COMMUNICATION?

Simon Wang 王世宇
Utah State University

Who am I to talk about this?

DEPARTMENT OF PLANTS, SOILS AND CLIMATE

UtahStateUniversity

S.-Y. Simon Wang

Plants, Soils, and Climate

Climate Dynamics

Associate Professor

Educational Background

PhD, Meteorology, (progressive MCSs), Iowa State University, 2008

MS, Meteorology, Iowa State University, 2004

MS, Atmospheric Sciences, National Central University (Taiwan), 1999

BS, Atmospheric Sciences, National Central University (Taiwan), 1997

Who am I to talk about this?

I'm a researcher. I publish.

Books & Chapters

Journal Papers

Full list ↓ | Extremes | California | ENSO | Prediction | Decadal | Tropical Cyclone | MCS | Tree Ring |

[♟ student; ☃ postdoc]

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- Promchote, P.♟, **S.-Y. Wang**, Y. Shen, P. G. Johnson, and M.-H. Yao, 2017: A seasonal prediction for the wet-cold spells leading to winter crop damage in northwestern Taiwan with a combined empirical-dynamical approach. *International Journal of Climatology*, DOI: 10.1002/joc.5194 (PDF).
- Barandiaran, D.♟, **S.-Y. Wang**, and R. J. DeRose, 2017: Gridded Snow Water Equivalent Reconstruction for Utah using Forest Inventory and Analysis (FIA) Tree-Ring Data. *Water*, *9*(6), 403; doi:10.3390/w9060403 (PDF)
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As a professor, I mentor.

My group

Research Scientists / Postdocs:

Lunyu Shang - visiting scholar

(2017-2018)

Binod Pokharel - postdoc

(2017-)

Ramesh Kumar Yadav - visiting scientist (2018-)

Hao Chen - visiting scientist (2018-)

Graduate Students (current):

Henrik Panosyan

M.S. (NRT-CAS)

Jacob S. Allen

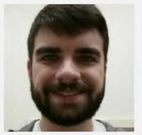
M.S. (NRT-CAS)

Parichart (Noi) Promchote

Ph.D.

Avik Mukherjee

Ph.D.



Matthew Miksch

M.S.

Yu-Tang Chien

M.S.

Previous students and postdocs:

Yen-Heng (Henry) Lin: Ph.D. 2018 (PDRF), now in Utah Climate Center

Boniface Fosu

Ph.D. 2018 (🏆 2017 Researcher of the Year, now in Georgia Tech)

Danny Barandiaran PhD 2016 (🏆 2015 Researcher of the Year; *now in CPC/NOAA)*

Martin Schroeder (*MS 2016 - now in Utah State*)

Kirsti Hakala *(MS 2014 - now in University of Zurich)*

Lin Zhao - visiting scholar

(2016-2017)

Wan-Ling Tseng - visiting scholar

Rong Li - postdoc

(2012-2015)

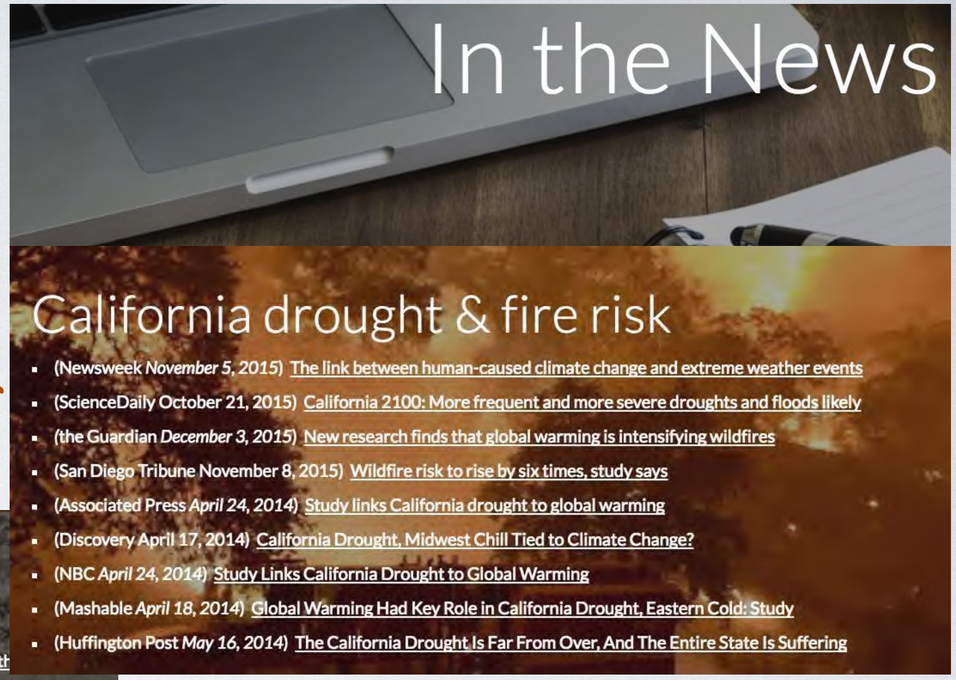
Changrae Cho - postdoc

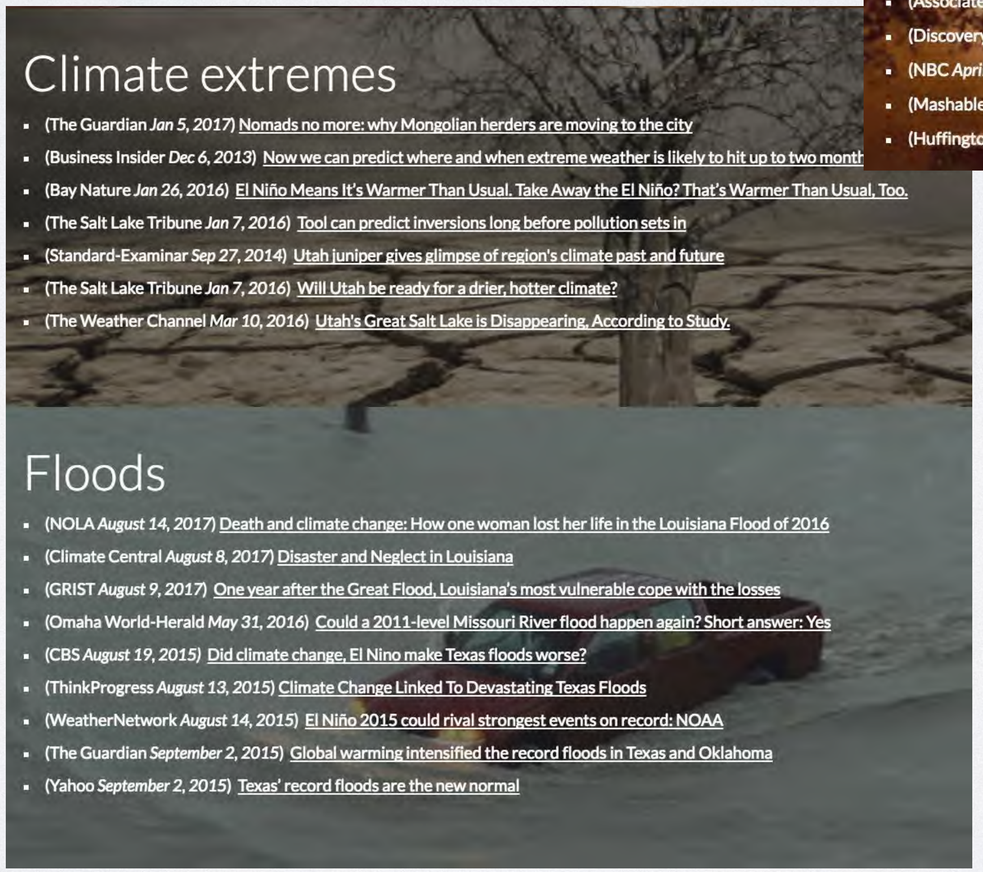
(2012-2014)

As a climate scientist, I face reporters…

and a lot of them!

美聯社、Discovery、CBS、NBC、
Nature、科學人雜誌、英國衛報





SCIENTIFIC AMERICAN 科學人雜誌

環境與生態

北極暖化 全球振盪

過去四年，由於噴射氣流的起伏加劇，引發北半球各地夏季與冬季的異常天氣。但脫序的噴射氣流並非特例，可能成為新的氣候狀態。

撰文／馬斯特斯（Jeff Masters）

然而上個冬季（2013年末到2014年初），羅士比波的起伏加劇，有如心律不整的心電圖。如此一來，風經過上空的時間也比以往增加，有時甚至原地滯留數個星期，使異常天氣持續相當長的時間。2014年5月，美國猶他州立大學的王世宇（Shih-Yu Wang）與研究團隊發現，那段時期北美洲上空的噴射氣流為史上最劇烈起伏的形態。

中時電子報 chinatimes.com

2015年09月28日 16:33 中時 林志成 / 台北報導

今年5月美國德州雨量破紀錄，水患釀超過30死，損失超過十億美元。一份由台灣科學家參與的研究報告指出，德州今年破紀錄的降雨及水患的確與氣候暖化有關，此研究一刊登後立刻受到美國知名新聞ＣＢＳ報導，讓台灣氣候學術成果登上國際舞台。

該研究的第一作者、同時也是旅美台灣學者，猶他州立大學副教授王世宇解釋，形成極端氣候現象的成因很多，不能以偏概全，但是就如同一個球隊，儘管所有球員都有貢獻，勝敗總是能追究於一、二個主力隊友的表現。這個新研究指出，「在氣候暖化下的聖嬰現象」容易加深氣候異常的強度。

As a climate scientist,
I face reporters…

I learned to be an expert,
but *not* to do ‘expert talk’.

The road to being an expert

School

B.S.

M.S.

10 years!

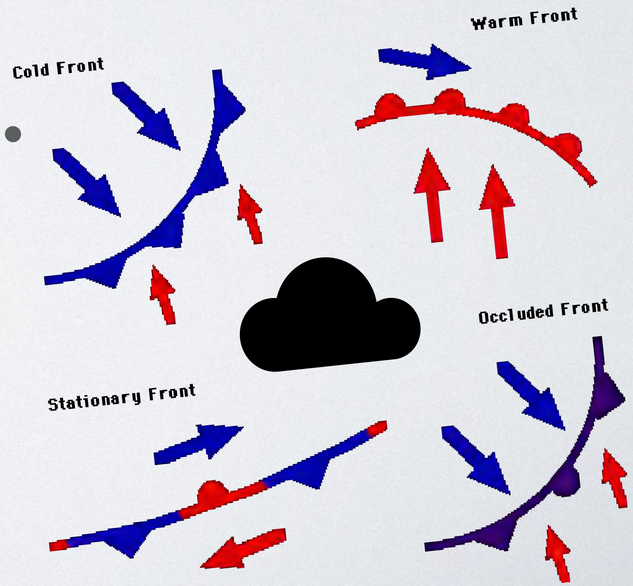
Ph.D

School

B.S.

M.S.

Ph.D

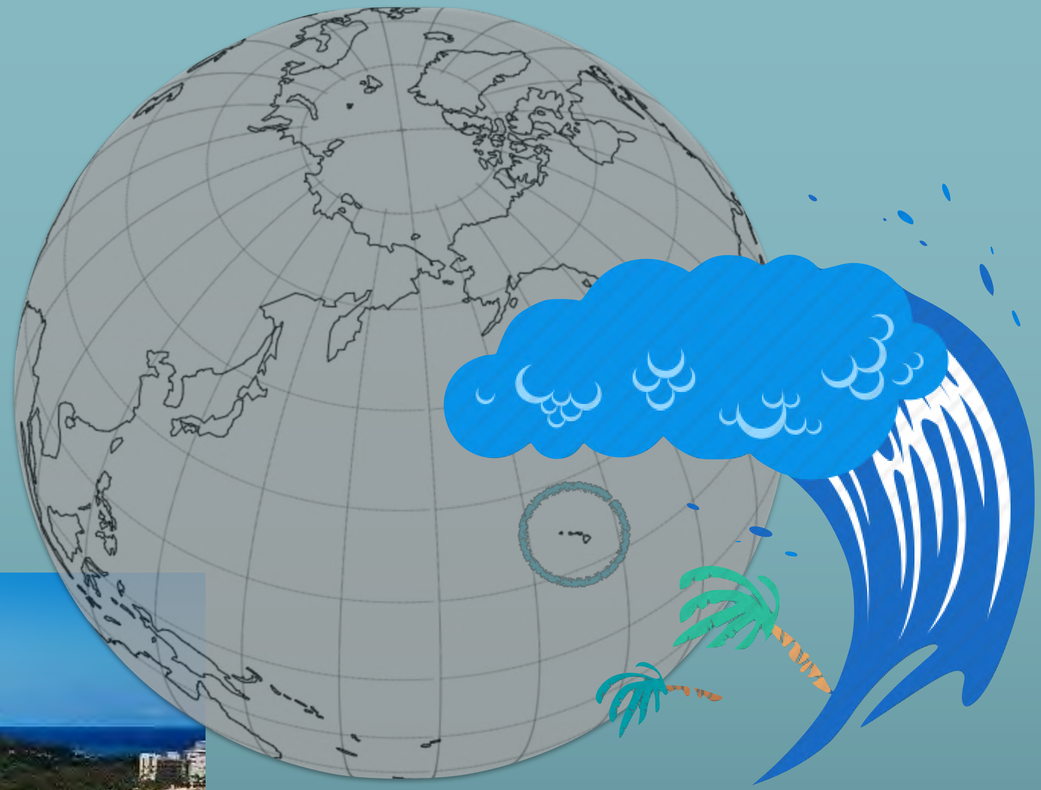


Expert

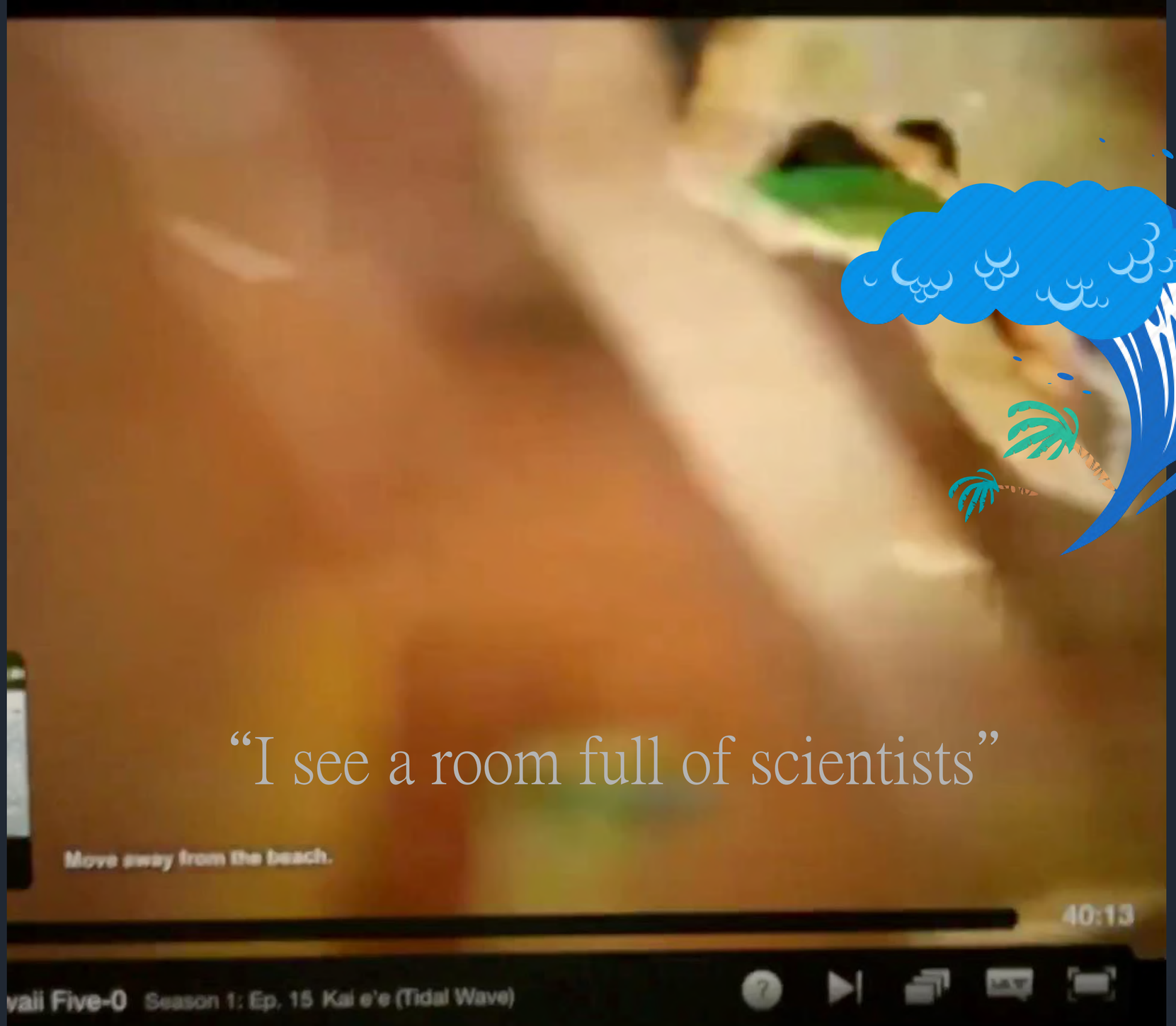
can be a

communicator

too

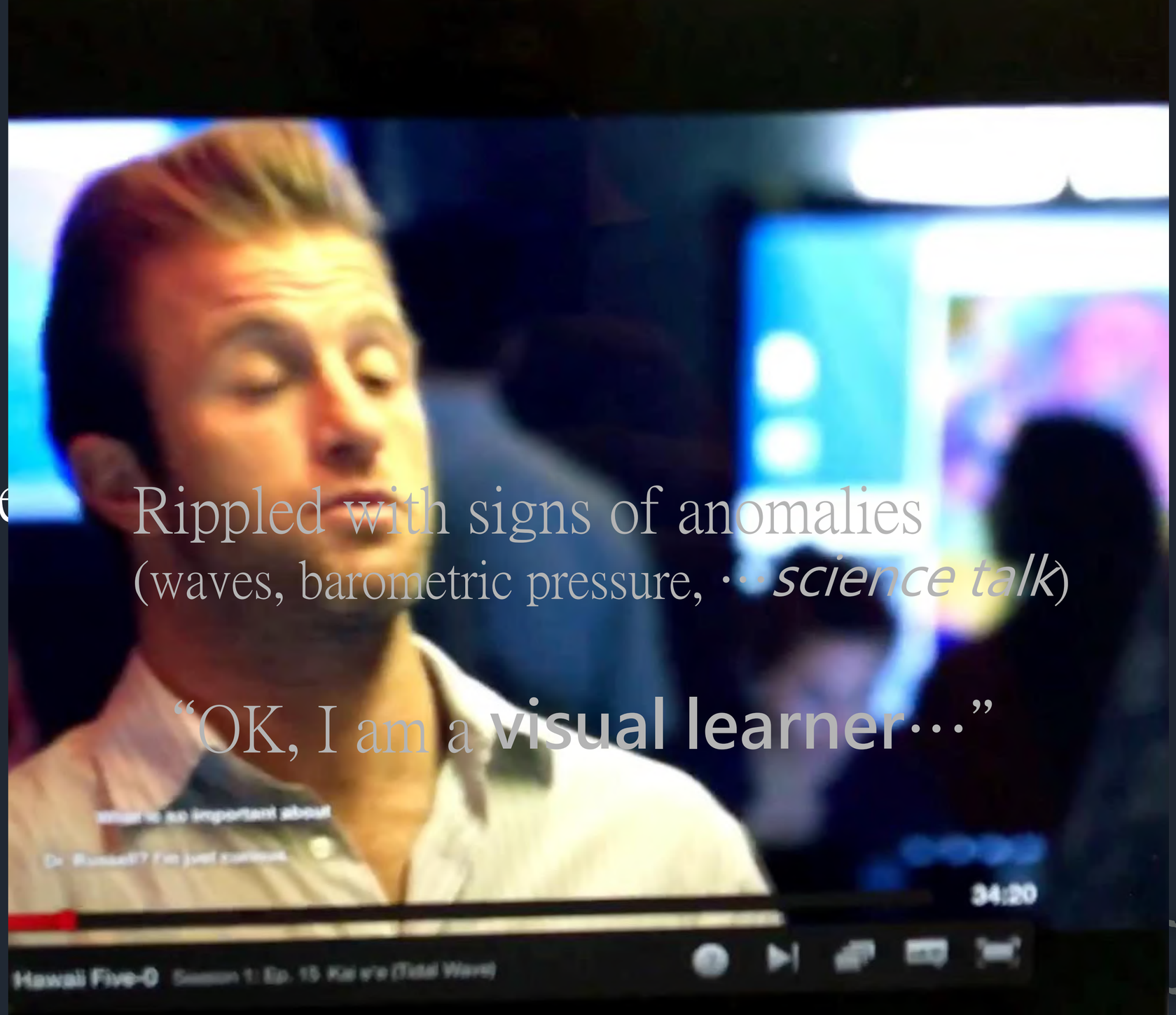


Scene 1:
Tsunami warning



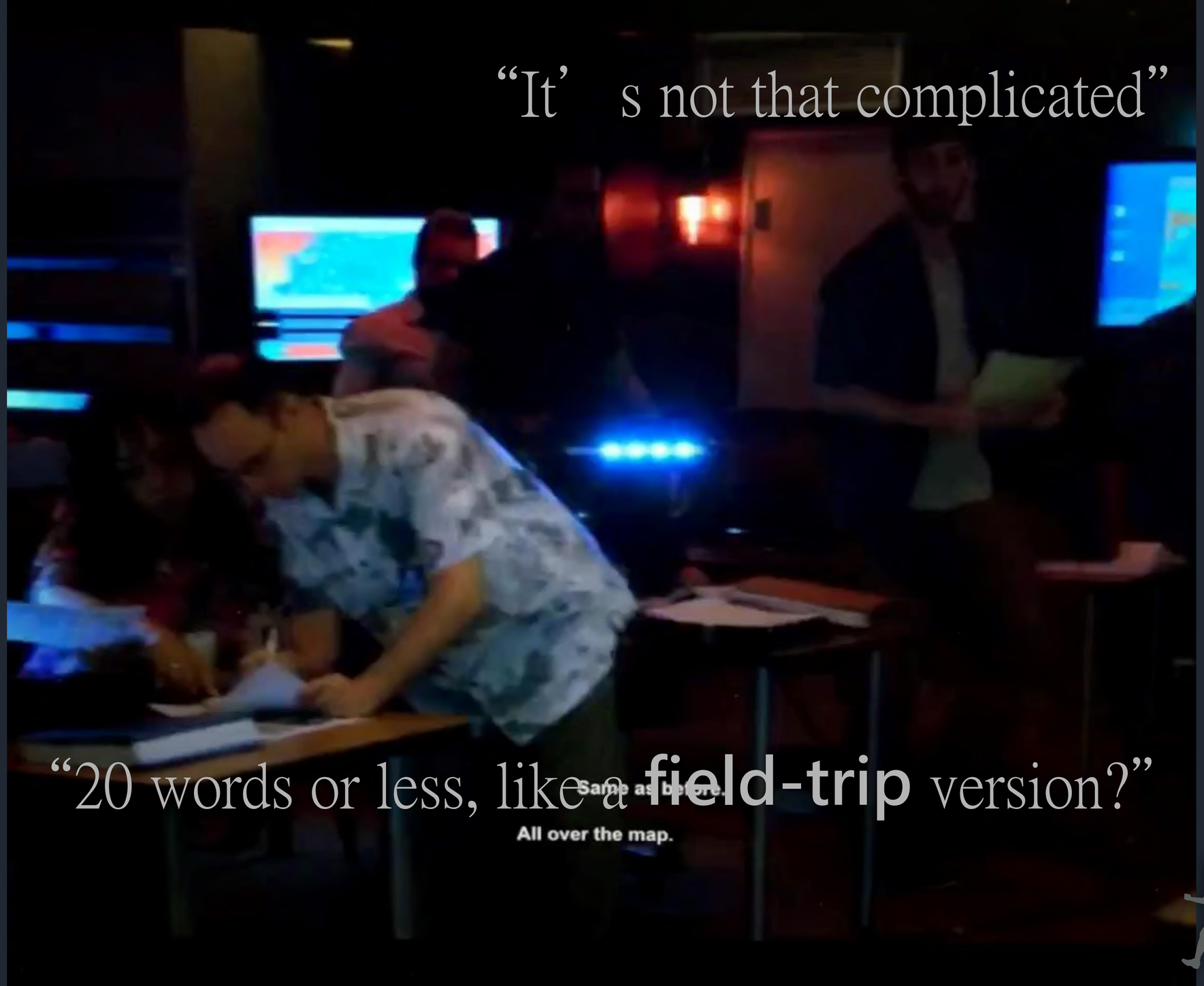
"I see a room full of scientists"

Scene 2:
What triggered the warning?

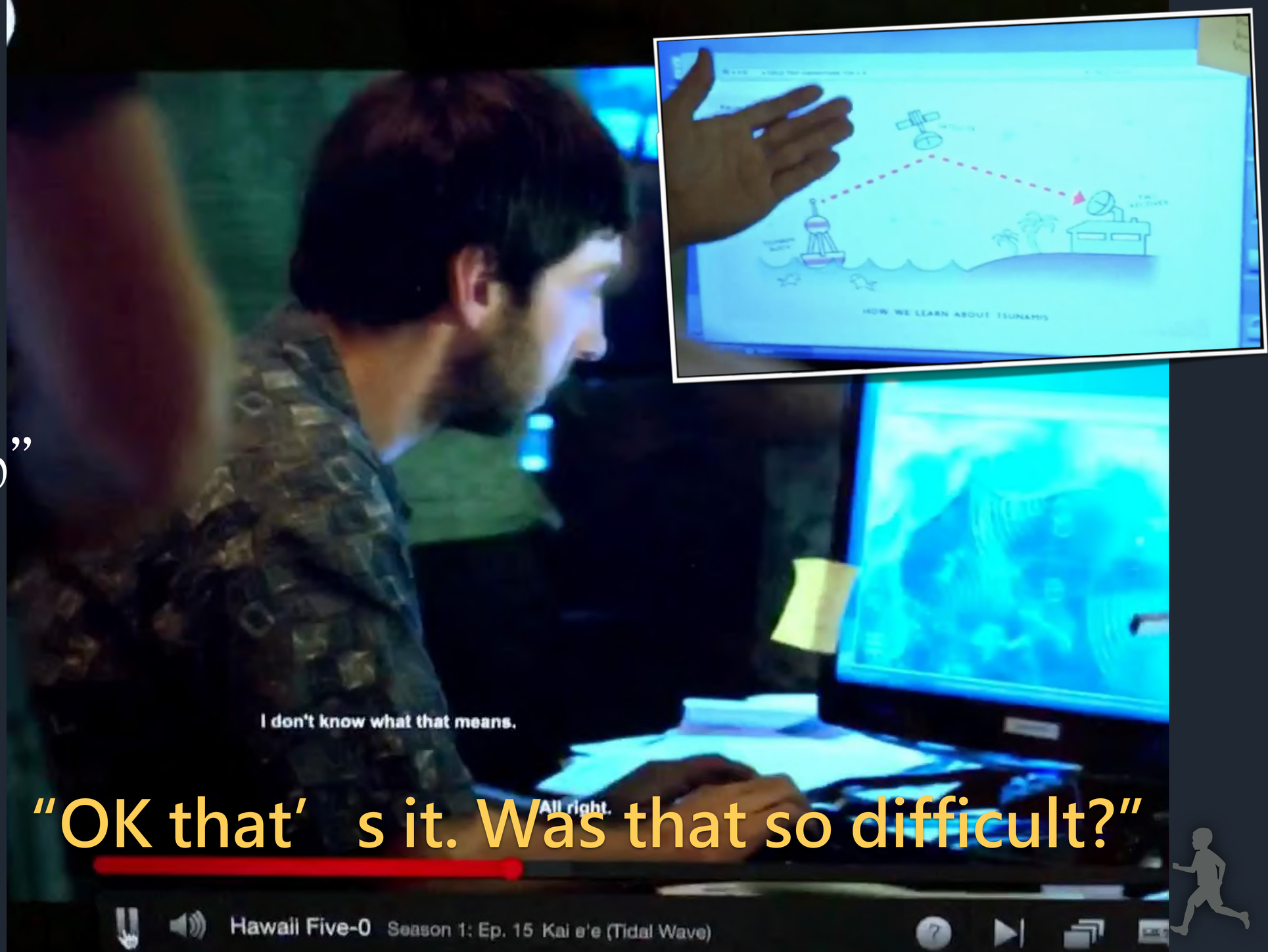


Scene 2 cont’ d: What triggered the warning?

Scene 4:
How does the warning system work?



Scene 5:
The “field trip” version



“OK that’ s it. Was that so difficult?”

Scene X:
Real life scenario

同理心、講重點

The road to being a communicator involves simplification ≠ being simple

avoid jargons (GOES, barometric pressure…)

visual aid (field trip version)

同理心、講重點

Know your audience

priority

Seek help

Read

轉譯是科學界新趨勢

Geophysical Resea

AN AGU JOURNAL

Open Access Creative Commons

Research Letter

Accelerated increase in th events surpassing stratos winter

S.-Y. Simon Wang, Yen-Heng Lin, Min

Philip J. Rasch

First published: 22 April 2017 Full publication his

DOI: 10.1002/2017GL073012 View/save citation

Cited by (CrossRef): 0 articles Check for upda

Am score 15

Abstract

In January 2016, a robust reversal of the Arctic Oscill warming in the Arctic region; this was followed by th March. The succession of these two distinct Arctic wa their characteristics in terms of similarities and diffe were identified and validated based upon tropical lin documented in previous studies. The analysis indicat tropospheric warming type versus a flat trend in stra rapid transition of tropospheric warming events may extremes, more so than the route of stratospheric w general circulation model suggest that the reduced A tropospheric warming events and associated remark 2016.

Plain Language Summary

Rapid Arctic warming events disrupt mid-latitude weath normal weather conditions. The atmospheric origins of developing in the troposphere and the stratosphere. Us of tropospheric warming events has increased through We have also found that tropospheric events develop t predictable. With observations of historically low Arctic warming events, computer simulations provided evider observational evidence for enhanced transport of tropi events, these results suggest that future mid-latitude w weather patterns that are inherently less predictable.

nature climate change

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ARTICLE PREVIEW

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NATURE CLIMATE CHANGE | COMMENTARY

California from drought to deluge

S.-Y. Simon Wang, Jin-Ho Yoon, Emily Becker & Robert Gillies

Affiliations | Corresponding author

Nature Climate Change **7**, 465–468 (2017) | doi:10.1038/nclimate3330
Published online 30 June 2017

Citation Rights & permissions Article metrics

三十字概述

The dramatic switch from extreme drought to severe flooding in California, and the accompanying flip from atmospheric ridge to trough in the northeastern Pacific, exemplifies the pathways to an intensified water cycle under a warming climate.

Subject terms: Atmospheric dynamics · Climate change · Hydrology

一分鐘搞懂？

52 seconds

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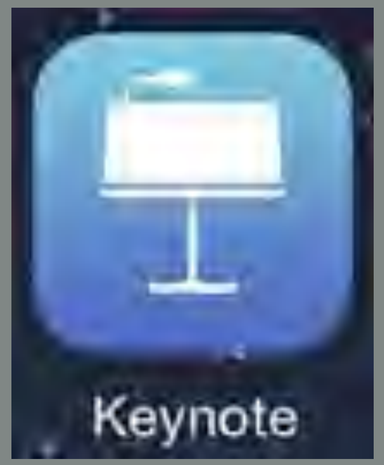
Took me 1.5 hr to make

.

Tools used in that video



你也能做到

Enlist Expert Help

Prepare the new generation

Master's in Climate Communication
Joint MS/MA program proposal
Department of Journalism and Communication | College of Humanities and Social Sciences
Department of Plants, Soils and Climate | College of Agriculture and Applied Sciences
Assistant Professor Matthew D. LaPlante
Associate Professor Shih-Yu Wang

Objective: Utah State University's master's program in climate communication will prepare scientists, journalists and strategic relations professionals to communicate with clarity and expertise about the interconnection of research and

Program options:

Plants, soils and climate (9+ credits)
- PSC 4820: Challenges in climate change and energy
- PSC 6123: Climate Data Analysis
- PSC 6810: Climate and Climate Change
- PSC 6900: Special topics in climate science

Journalism and communication (9+ credits)
- JCOM 3310: Writing for Public Relations
- JCOM 4110: Computer-Assisted Reporting
- JCOM 5420: The Mass Media and Politics
- JCOM 6300: Case Studies in Public Relations

Electives: (9+ credits)
- ADVS 5650: Science Communication
- CMST 3400: Persuasion
- CMST 5250: Communication, Social Justice and the Environment
- ENVS 6410: Translational Ecology
- GEO 3100: Natural Disasters
- GEOG 6400: Natural Hazards and Society
- HST 3950: Environmental History
- JCOM 4010: Mass Communication Ethics
- JCOM 4030: Mass Media Law
- JCOM 5110: Literary Journalism
- PSC 5680: Paleoclimatology
- WATS 3000: Oceanography

nature.com

Why scientists should communicate science – getting to the heart of the matter

20 Nov 2017 | 13:00 BST | Posted by Rebecca Wild | Category: Blog, Communication, In the news, Perspectives, Social media

Communicating science effectively needs more than facts, says Eileen Parkes.