Pacific Northwest
NATIONAL LABORATORY
Proudly Operated by Battelle Since 1965

A Flash Talk about Flash Talks

CASEY BURLEYSON

15-FEBRUARY 2017

ASGC SCIENCE SOCIAL

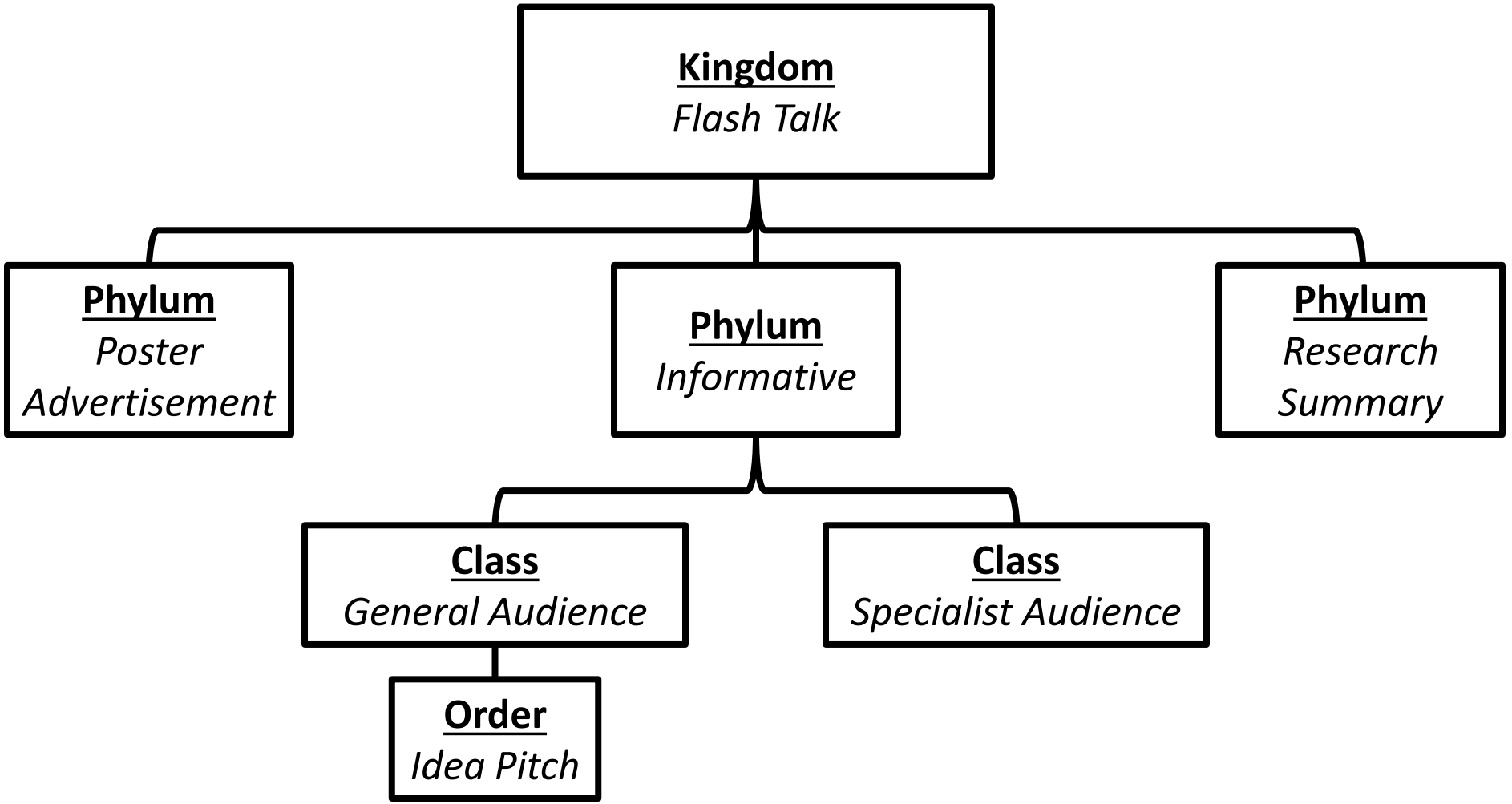
Goal: Giving more effective flash talks

Pacific Northwest NATIONAL LABORATORY
Proudly Operated by Battelle Since 1965

Challenge: How do you stand out in a crowd and make people want to follow up with you?

Know Your Purpose

There are different flavors of flash talks, each of which has a distinct purpose and comes with a unique set of challenges and rules.



Poster Advertisements

There are different flavors of flash talks, each of which has a distinct purpose and comes with a unique set of challenges and rules.

Phylum
Poster Advertisement

Phylum
Informative

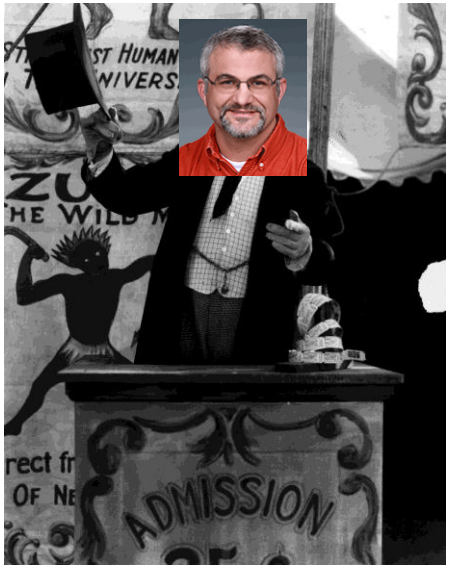
Phylum
Research Summary

Purpose: Get the audience excited to see your poster.
- First date principle

Timing: Generally 1-2 minutes
- KISS

Content: Shallow, but provocative
- No time to talk through an actual finding
- Tease a "sexy" science question or result

Format: Extremely simple slide
- 1 slide only
- Do not assume control of slide (i.e., *NO ANIMATIONS*)
- Simple figures only



Informative Talks

Pacific Northwest NATIONAL LABORATORY
Proudly Operated by Battelle Since 1965

There are different flavors of flash talks, each of which has a distinct purpose and comes with a unique set of challenges and rules.

Phylum
Poster
Advertisement

Phylum
Informative

Phylum
Research
Summary

Purpose: Convey information about your research, group, or idea
- Who you are, what you do, what you want them to know
- If pitching, scaffold to the "ask"

Timing: Variable, but generally <= 5 min
- 1-2 min introduction, 1-2 min content, 1 min summary

Content: Enough to convey information and solicit questions
- General vs. Specialist audience?
- Final slide is your take home message or "ask"

Format: Relatively simple slides
- Up to 5-6 slides
- Keep slides and text simple

Research Summaries

There are different flavors of flash talks, each of which has a distinct purpose and comes with a unique set of challenges and rules.

Phylum
Poster Advertisement

Phylum
Informative

Phylum
Research Summary

Purpose: Convey and defend key findings from your research
- If you could tell them 1-2 things about your paper, what would it be?

Timing: Variable, but generally <= 5 min
- 1 min introduction, 3 min content, 1 min summary

Content: Dig deep on 1 key finding
- Can assume a specialist audience (i.e., skimp on intro)
- Final slide is your take home message

Format: Relatively simple slides
- Up to 5-6 slides
- Keep slides and text simple

Presentation Best Practices Still Apply

Pacific Northwest NATIONAL LABORATORY
Proudly Operated by Battelle Since 1965

I. Thou shalt know thy audience and tailor thy message…

IV. Thou shalt honor thy time constraints…

V. Thou shalt always end on thy “Conclusions” slide…

VI. Thou shalt practice until thou borest thyself to death…

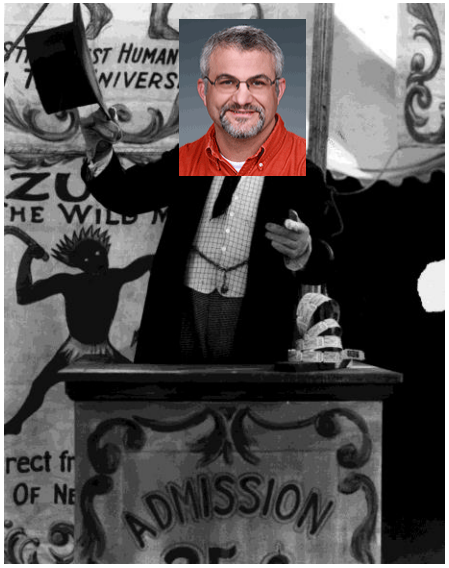
X. Thou shalt be neat and professional…

Effective Flash Talks Summary

Pacific Northwest NATIONAL LABORATORY
Proudly Operated by Battelle Since 1965

Goal is to stand out and motivate audience to follow up

Best practices still apply



Not all flash talks are created equal. Know your purpose and constraints. Tailor your message.

Pacific Northwest
NATIONAL LABORATORY
Proudly Operated by Battelle Since 1965

Why I Came to the Desert to Study Clouds

CASEY BURLEYSON

ATMOSPHERIC SCIENCES AND GLOBAL CHANGE DIVISION

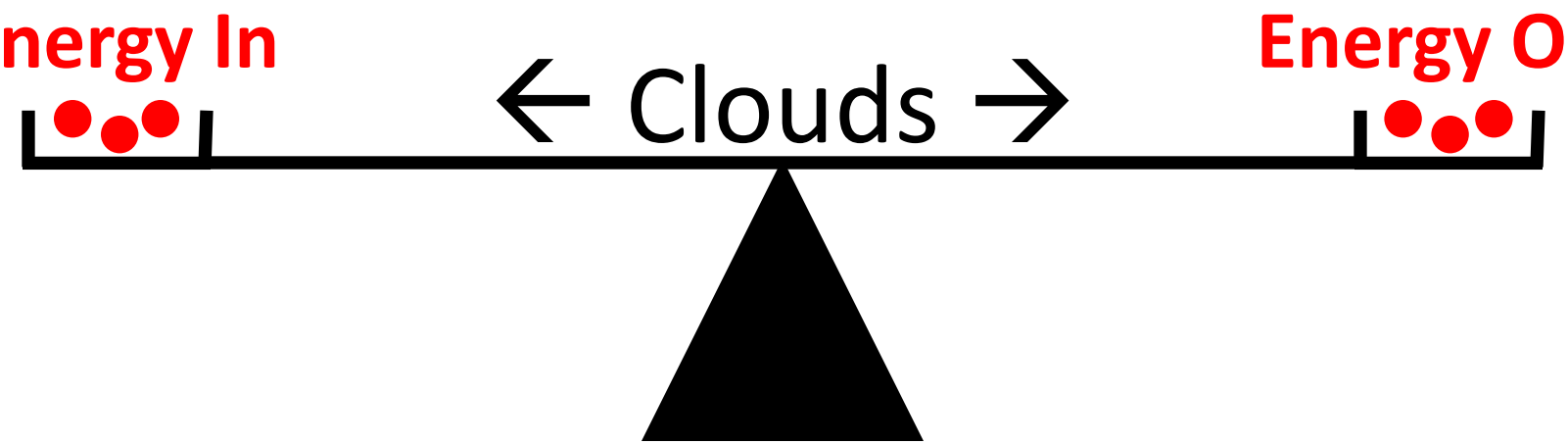
CONTACT: CASEY.BURLEYSON@PNNL.GOV
509-375-2118

Clouds Interact with the Climate

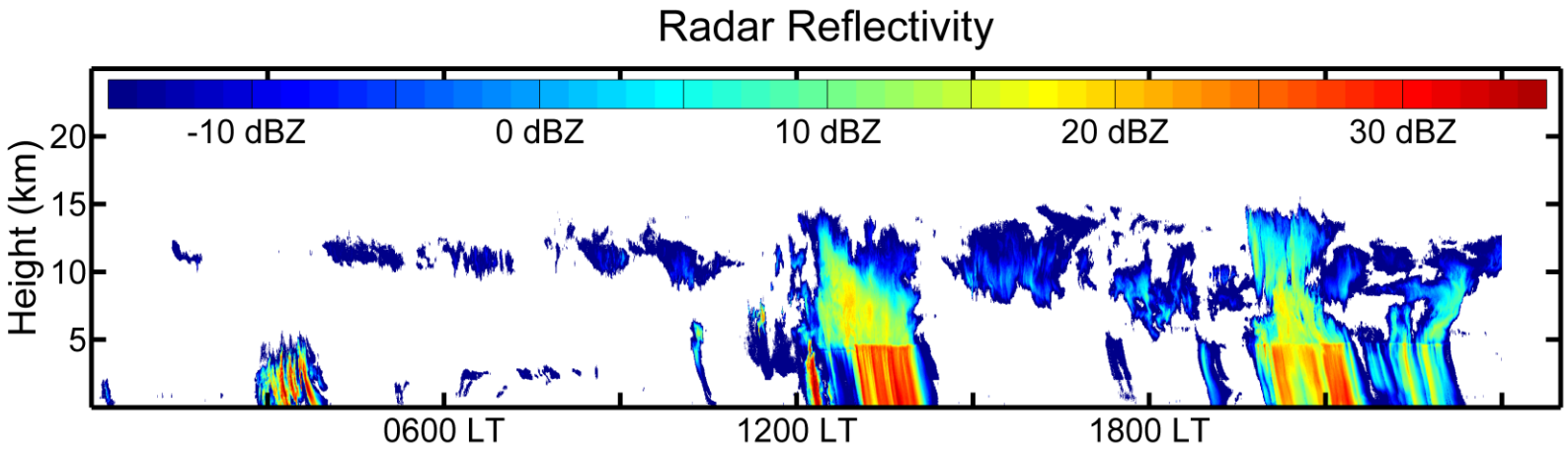
Pacific Northwest NATIONAL LABORATORY
Proudly Operated by Battelle Since 1965

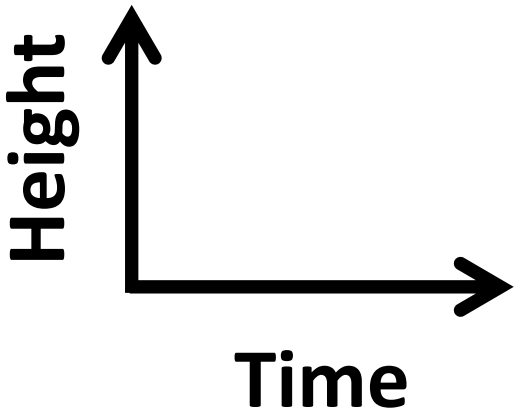
In its most simple form, the climate system can be thought of as an energy balance problem.

Clouds modify the amount of energy that flows both into and out of the system.

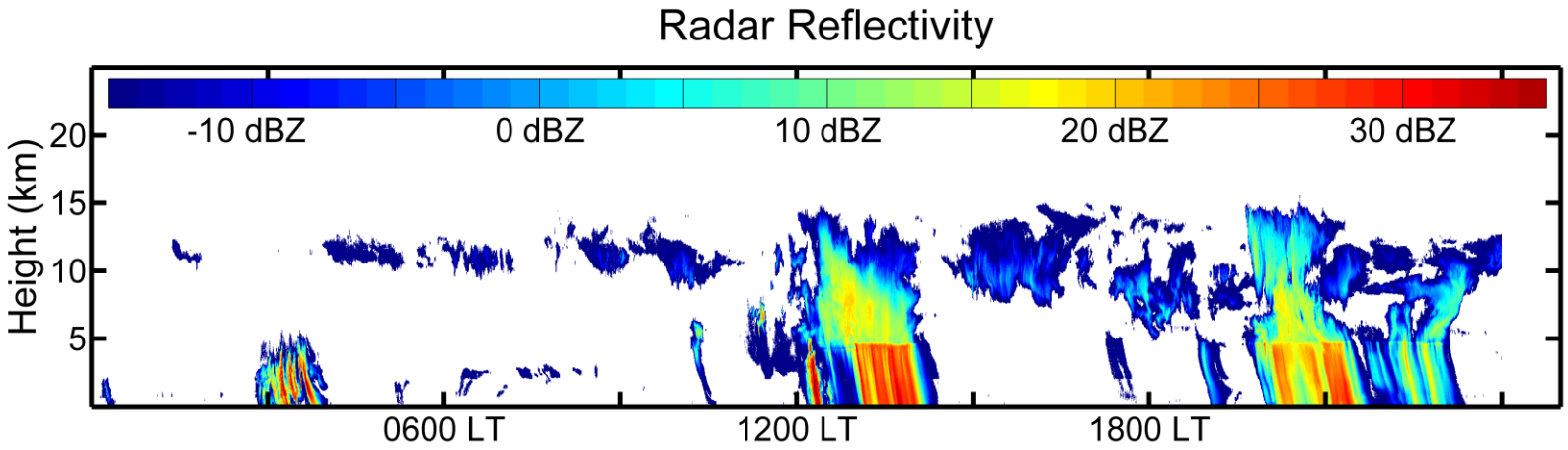


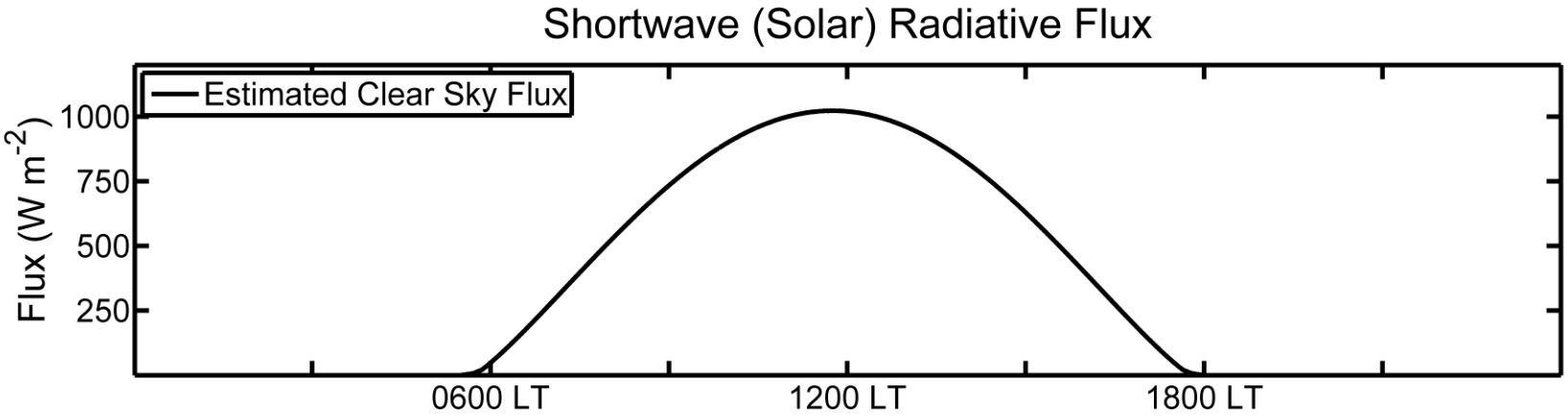
Clouds Interact with the Climate



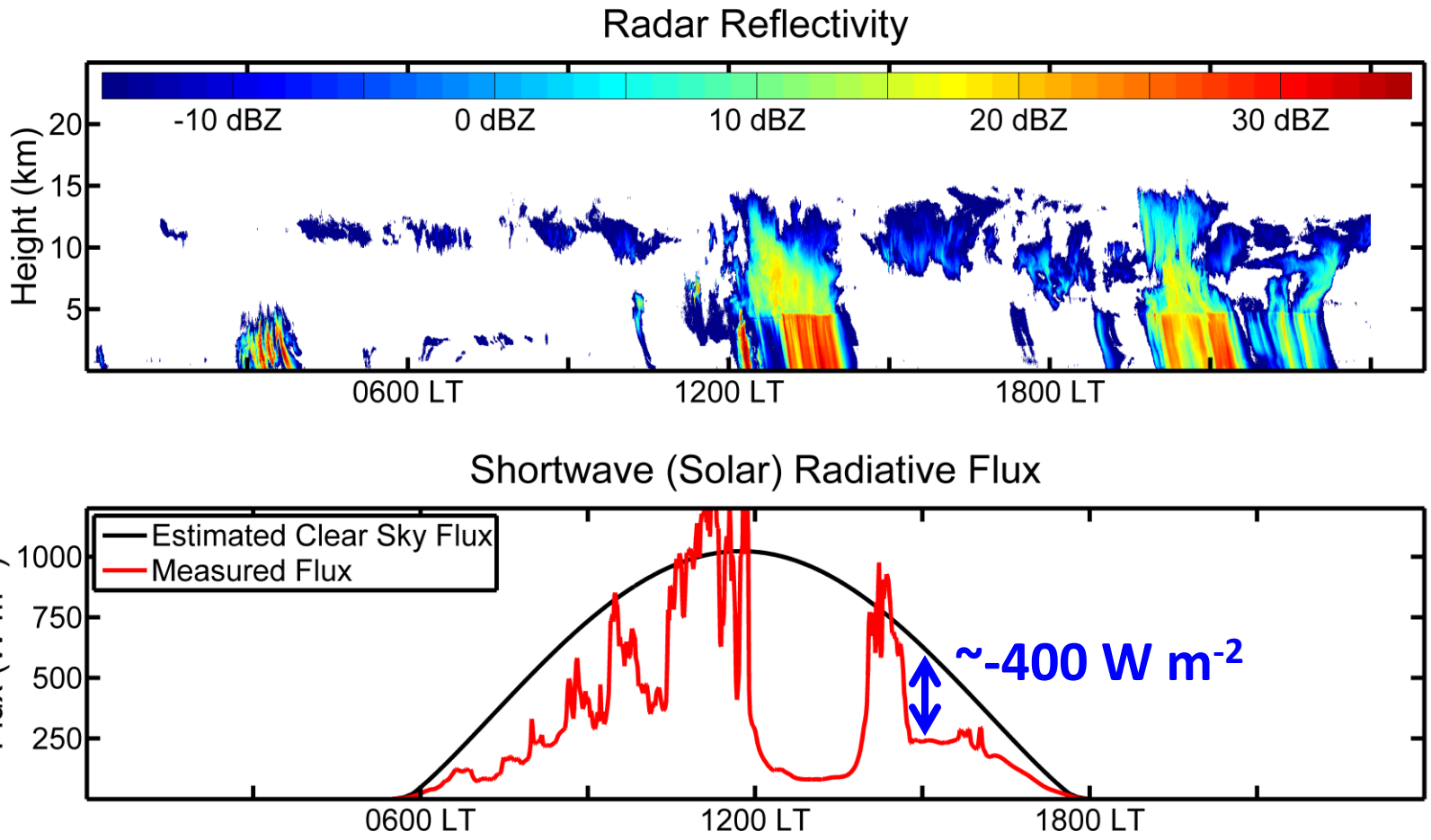


Clouds Interact with the Climate





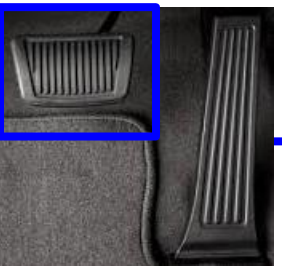
Clouds Interact with the Climate



Global Mean Cloud Radiative Effect = -21.1 W m^{-2} ± 2 W m^{-2}

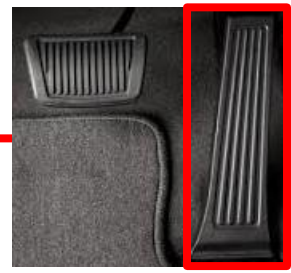
Why Does DOE Care About Clouds?

The is large uncertainty in how clouds will respond in a warmer climate.



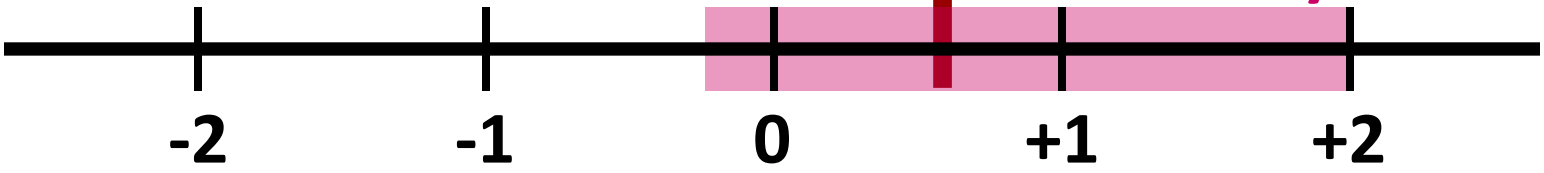
More Clouds
Negative Feedback

Less Clouds
Positive Feedback

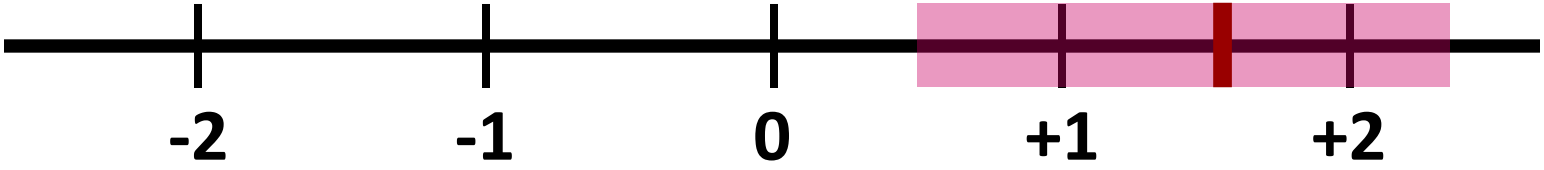


Best Guess

Uncertainty



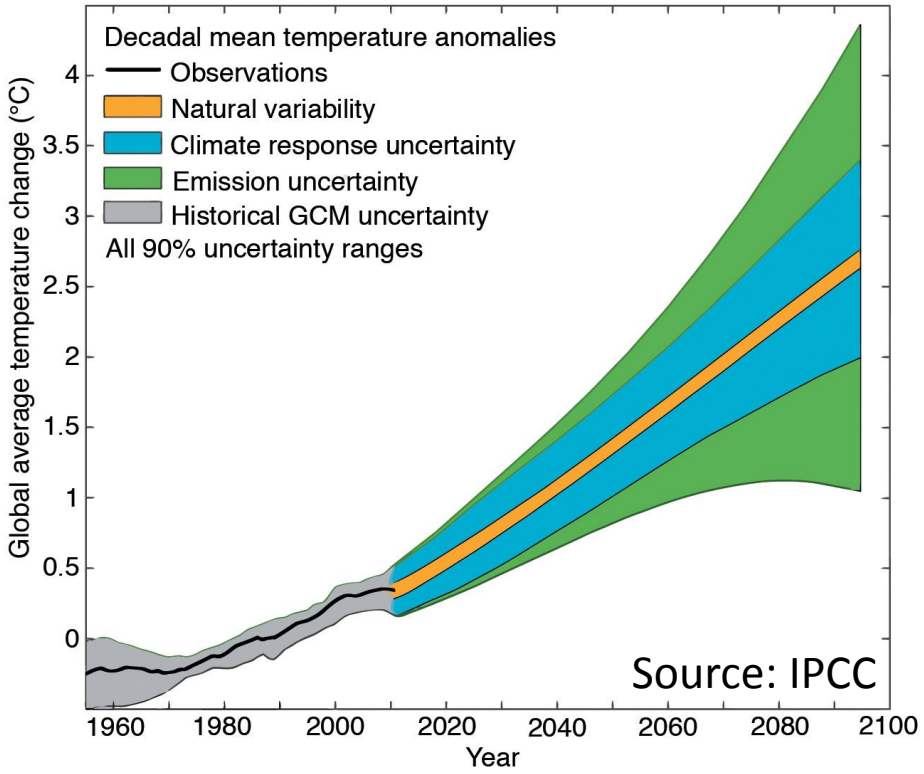
Cloud Radiative Feedback [W m^{-2} °C^{-1}]



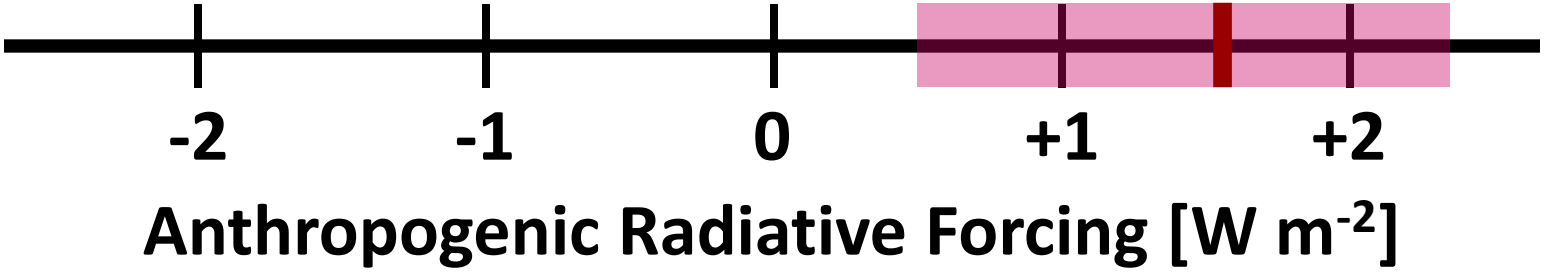
Anthropogenic Radiative Forcing [W m^{-2}]

Why Does DOE Care About Clouds?

The is large uncertainty in how clouds will respond in a warmer climate.



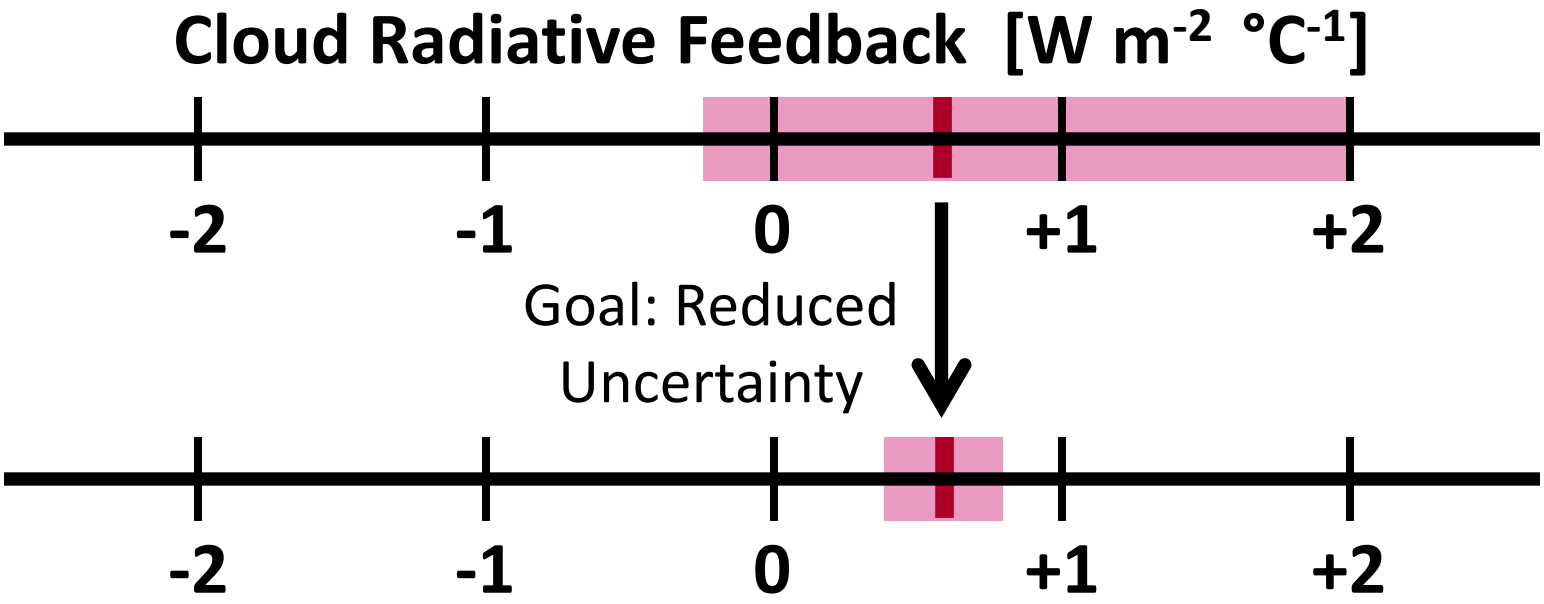
Clouds are one of the largest remaining sources of uncertainty and cause of intermodel spread in projecting climate sensitivity and feedbacks (e.g., Dufresne and Bony 2008).



A Way Forward at PNNL

Pacific Northwest NATIONAL LABORATORY
Proudly Operated by Battelle Since 1965

1) Use new and innovative observational methodologies to gain a better understanding of how clouds work.
2) Push the limits of cloud-resolving and global climate model resolution using high-performance computing.
3) Have observational and modeling scientists work together to design, test, and implement new modeling techniques using a "measurements to models" framework.



A Way Forward at PNNL

Contact:
casey.burleyson@pnnl.gov

1) Use new and innovative observational methodologies to gain a better understanding of how clouds work.
2) Push the limits of cloud-resolving and global climate model resolution using high-performance computing.
3) Have observational and modeling scientists work together to design, test, and implement new modeling techniques using a "measurements to models" framework.