

05-30

Friday, May 30, 2025 9:02 AM

Morning Debrief:

- Sign up for practice presentation for next week Wednesday

Expanded Abstract:

- Figures are helpful for methods.
- Sections:
 - o Abstract (Tiny. A couple sentences)
 - o Introduction & Background
 - o Methods
 - o Results & Discussion
 - o Conclusion / Summary & Future work
 - o Acknowledgements (does not contribute to pg. limit)
 - o References (does not contribute to pg. limit)
 - o Author Contributions (does not contribute to pg. limit)
- What enables author contributions
 - o Subject expert
 - o Processing data
 - o Writing part of the manuscript
 - o Mentorship/guidance of the project
 - o Funding
 - o Collecting data
 - Colorado School of Mines Geophysics Field Camp 2025
- Acknowledgements
 - o Someone who helped but did not contribute to a level deserving of author contribution.
 - o Permits
 - Routt county (Tony Brown)
 - City of Steamboat
 - BLM
 - o Instructors / TA
 - Samara
 - Dr. Bob
 - Bob
 - Jim
 - o Help
 - Rachel Plotts, Brian Passarella, Aaron
 - o Donors of equipment
 - Dawson
 - GTI?
 - Earthscope
 - o Funders
 - Dept. of geophysics???
 - Colo. School of Mines Foundation??
 - Shell Corporation
 - o Go to presentation slides this day, we are supposed to include everyone

- Look at Dr. Bob's cross-section, with the triangle dipping to the East.
- Vertical dipping outcrop from balcony of dining.

Daily work:

Calendar:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
05-25 X	05-26 X	05-27 11AM - Meet w/ Samara X	05-28 11AM - Meet w/ Jim to learn SeiSpace (Julia & Renee) 11AM - Meet w/ Samara to learn Petrel (Peyton & Kadidia) Export images from SeiSpace to Petrel for interpretation. X	05-29 Produce better images for interpretation. (Better horizon pics). Velocity models. X	05-30 Harass Samara for seismic interpretation. Harass Maddie for geologic interpretation. Harass Jim for seismic interpretation. Email Dr. Bob to spitball ideas about geologic interpretation.	05-31 Write abstract. w/ Kadidia & Renee after 7PM.
06-01 Abstract	06-02	06-03	06-04 Presentation	06-05 Ext. Abstract	06-07	06-08

Some notes from Dr. Bob and Paul:

Dr. Bob:

I suggest you try to determine what the 'dipping slab' represents. Is it a reflector within the Cretaceous? What geologic features are present if you project it to the surface?

Consider that water may be flowing along bedding planes in fractured rock. How deeply would the water need to circulate to get the observed temperatures at the springs?

I suggest you think more about convective circulation rather than a dehydrating slab.

From

<<https://outlook.office365.com/mail/inbox/id/AAQkADJhNzdYWM0LWM2MjltNDg4Yi1hYzQ3LTZhMDJmZWNIzmJkZgAQADtkw%2F5ZCYpLi2ep1AinBVc%3D>>

Mid-morning snack planning:

- Peyton = correlate geology from geologic map with the dipping slab
- Julia =
- Renee = research dr. bob's notes to understand feasibility of water transport over our dipping slab

- Wants: what is our slab made of? Migrate the data for depth? Can migrating see the depth of heating / necessary fractures
- Kadidia =

Meeting notes with Jim:

Asking about faulting interpretations.



Zoom
Meeting ...

Wrap-up:

- Decided to shift geologic interpretation to structural geology.
- Waiting on Dr. Bob's response to verify, but tentatively:
 - Found fault on CR43.
 - Exposure of the dipping slab at the outcrop at rabbit ear's pass.
 - The dipping slab is compromise of precambrian crystalline basement. It warmed enough to turn elastic, allowing for the dip but not enough to metamorphize.
 - The fault shows where the dip occurs, as the reflection bends differently on either side of the demarcation.
- Julia met with Bob to determine the vertical feature on CR43. Determined it to be noise.