http://rammb.cira.colostate.edu/visitview/custom/AmeriGEOweek Aug2019/AmeriGEOweek Aug2019 Short.html

Demonstrate the HAniS tool:

Animación (forward and backwards), view a new loop by clicking another button, zoom, annotate, save image.

Goal: Annotate at least one image from each case.

Case 1:

Ubinas Volcano, Peru

19 July 2019

<u>HAnis CH 1-16</u>: The eruption started at night at ~7:30 UTC. View the 16 GOES channels between 15:10 and 17:20 UTC.

During an explosive volcanic eruption, materials and gases are emitted. The gases include water vapor, ash, sulfur dioxide, and other gases. Which channels can you see volcanic plume clearly? Why? With what channels is it difficult to see the volcanic plume? Why?

Annotation suggestion: stop on one of the images and designate volcanic plume levels (ok to do something simple like low, mid, and high).

HAniS GeoColor, IR, Ash, SO2:

Compare these loops. Use the RGB quick guides for reference on the interpretation.

HAniS VOLCAT Retrievals and SO2 Retrievals:

Compare the VOLCAT retrievals with your simple estimates of plume heights. How did you do?

Compare the SO2 Retrievals with the SO2 RGB. Does the pattern match up?

Divide participants to work on the next 3 cases:

Case 2: Ubinas and Sabancaya 24 July 2019

Case 3: Ulawun 26 June 2019

Case 4: Ulawun 3-4 August 2019

For a case, what do you see? Ash, SO2, Dust, combination, or none? Is there any additional information to confirm or negate what is being seen?

Case 5: Sierra Negra 26-27 June 2018

Examine the RGBs and the individual components. What are you viewing? Ash, SO2?