Day 3 Session 2: Working Group & Synthesis Reports

Question	Answer
@Peter Griffith: Will the current iPoster links work for a while if we want to share these with stakeholders.	Yes, the iPoster links will remain operational in the gallery. Investigators can choose to have a DOI assigned to their poster as well. A poster would only be removed from the gallery if an investigator asked for it to be removed.
@Brendan Rogers: Regarding the refined burn area product, what years does it cover? Is it limited to the Landsat era?	As of now it's 2001 - 2017. Our processing requires at least 1 year before and 1 year after fires for imagery. We may update through 2018 for the publication. Although the product is based on Landsat, there are regions and times with missing imagery, so MODIS is used to fill these gaps (all contained in the quality flags of the product). Hence, we're limited to the MODIS era.
@Brendan Rogers: On the graphic it looked like the higher combustion rates in Alaska were primarily determined using 2004 data--is that true? Or is this a multi-year trend?	Yes a number of the sites used for model training in Alaska are from the 2004 large fire year, but certainly not all. We used data from Turetsky et al 2011 (included fires from 1991 - 2004), Boby et al 2010 (2004 fires), Rogers et al 2014 (2012 fire), and Hoy et al 2016 (included fires from 2004 - 2010). If the person who asked this question is interested in a more detailed breakdown, we'd be happy to run those numbers. It should also be noted that much of our Canadian data comes from the large fire years of 2014 in NWT and 2015 in SK. So, getting data from smaller fire years may be a limitation based on the available data sets. Since presenting the poster at the ASTM6, we have also discovered a small bug in our processing that may change our overall domain-wide patterns.

@Brendan Rogers: Do you plan on comparing these combustion maps to any of the fire Model Intercomparison Project (global model) outputs?	Great suggestion, and yes.
@Brendan Rogers: Can you use Sentinel/Landsat in your burn area algorithm rather than MODIS to get high spatial resolution and more accuracy?	Yes, the majority of burned pixels in our burned area product are based on Landsat dNBR, but the final product is then aggregated to 500 m. We only use MODIS to fill gaps due to missing Landsat imagery, and MODIS is specifically linked to thresholds in the Landsat product that result in 50% burned / unburned at the 500 m level. Because of this we believe our product will be an improvement over existing ones in terms of accuracy.
@Howie Epstein: Does the greening and browning literature synthesis explore NDVI as a driver?	No, we consider NDVI to be our proxy for vegetation greening and browning, and most studies have not looked for autocorrelation in the data, i.e. NDVI in one year influencing NDVI in the following year.
@Howie Epstein: What drives the temporal differences in the greening trends in these two different time periods: 1980 - present vs 2000 - present?	This is an excellent question, and we don't have a good answer. Clearly there was more "browning" in the latter part of the NDVI record. It could be a combination of many things, including cooler temperatures in some regions of the Arctic, as well as increased disturbances (fire, thermokarst processes, insects). Also warming can lead to detrimental effects on vegetation, e.g. early snowmelt followed by soil freezing.
@Paul Montesano: Are you going to generate gridded complexity metrics as well? and if so, do you have the documentation for this metric?	We hadn't planned on gridding a complexity metric, but I think it should be straightforward to add this to the suite of grids we produce since it is already a L2 data field. We can add this the next time we run the data, before we post it.
@Paul Montesano: Will the L3 datasets pertain to just the forested regions within LVIS collects or will this include tundra regions as well, e.g. Sew Pen?	These L3 datasets will cover whichever extents for which there is L2 data. There will be a "footprint" shapefile that shows the extent of the grids that we make, but basically

	wherever LVIS collected sufficient data is where gridded data will exist.
@Paul Montesano: Why did you settle on 30 meters for the L3 aggregated data?	We think 30 m grids might be the most useful for 2 reasons: (1) because it it straightforward to snap to the ABoVE 30m grid, and (2) because at this resolution there is decent point density for estimating the mean value (each pixel is the mean value of the corresponding L2 footprints). However, we can make grids at any resolution - its just that finer res grids will have increasingly more 'no data' values. At the moment, we also have the data gridded at 20 m which can be put on the ABoVE Science Cloud next to the 30 m data. Please let us know if you have any recommendations.
@Paul Montesano: When do you expect the L3 data will be available?	The 30 m & 20 m grids can probably most quickly be made available on the ABoVE Science Cloud as preliminary data. Final data sets might be best stored at the NSIDC DAAC.
@Paul Montesano: What spatial resolution will the LVIS grids be provided at i.e. grain size?	30 m and 20 m grids are what we have made up until now. Going to a finer res means increasingly more 'no data' values and a less robust estimate of mean pixel values.
@Kevin Schaefer: Do you plan to use the LVIS data to validate the interferograms and subsidence products	We plan to make a comparison. The limitation we have is that the LVIS surface heights have a vertical accuracy of about 10 cm, while the signal for seasonal subsidence we want to detect is 2-5 cm. The LVIS data will likely prove more useful in detecting thermokarst, where the subsidence can greatly exceed the vertical accuracy of 10 cm.
@Kevin Schaefer: Can you discuss how you are using continuous data?	We will integrate the full time series into the validation dataset. However, for comparisons with the remote sensing products, we will extract the times closest to the actual P-band flyovers.
@Kevin Schaefer: Peter Kirchner here, In addition to the Lake Clark Sites you noted on	We are interested in both. I will contact Peter directly about this data.

your slide, we also have data for the two most southern lines in Katmai.	
@Josh Fisher: On drivers and run protocols, yes we NEED this and the data needs to be flexible to be adapted to different model formats. Think we actually need a concerted effort/discussion on this. Cross-walks with NGEE modeling as well. And ahhh yes how to coordinate spin-up where needed.	Yes agreed! We need someone to step up and lead this activity on unification of drivers and run protocols. Kind of like an ABoVE-MsTMIP. I'm sure it would be straightforward to get the modelers to agree, but someone just needs to take charge.
General Question: How do I get involved in a working group?	To join the working groups, find and join them here: https://cce-datasharing.gsfc.nasa.gov/aboveprojects/wglist/0/h/0/