

## IceTrendr – Point

### A web-enabled Landsat time series visualization and characterization tool

<http://icetrendr.oregonstate.edu/public/>

For more information contact:

Peder Nelson

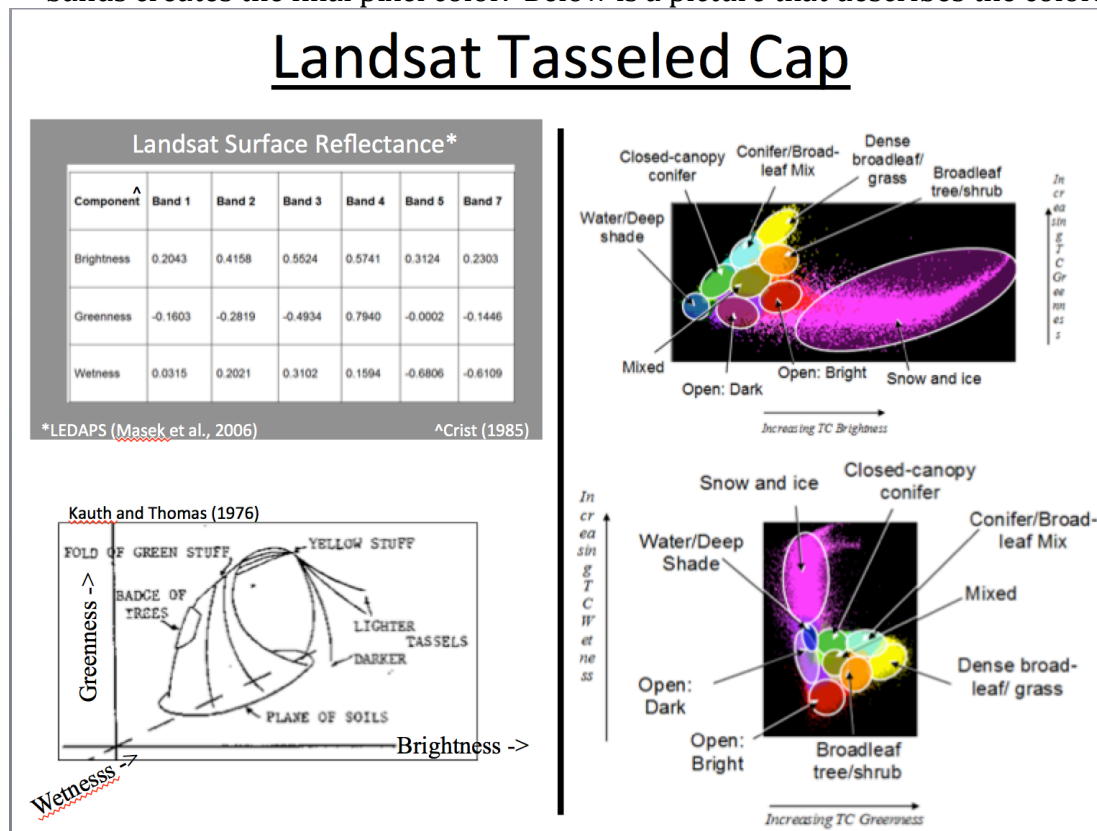
[peder.nelson@oregonstate.edu](mailto:peder.nelson@oregonstate.edu)

[iceTrendr.peder@gmail.com](mailto:iceTrendr.peder@gmail.com)

### Frequently Asked Questions

#### What do the image chips show?

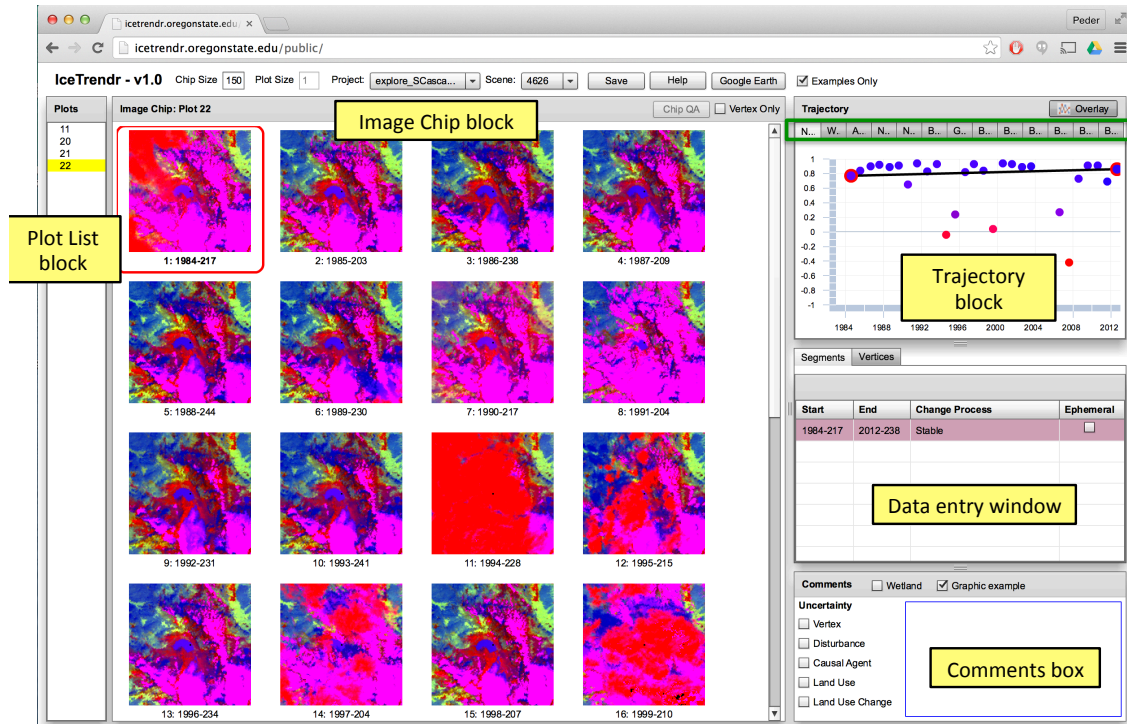
The image chips are Landsat images that have been transformed by the Tasseled Cap data reduction. It simplifies the six Landsat reflectance bands to describe this data in terms of pixel 'Brightness', 'Greenness', and 'Wetness/Shadow'. This data transformation retains most of the original reflectance measurements while allowing for better display on a computer screen with only Red, Green, and Blue options. To display the colors, 'Brightness' is put into Red, 'Greenness' into Green, and 'Wetness' into Blue. The Tasseled Cap values across each of these color bands creates the final pixel color. Below is a picture that describes the colors.



Where can I find the kml files for my project?

<http://icetrendr.oregonstate.edu/public/localhoststorages/>

## How do I work with the Web Attribution Tool?



- Chip window—plot at chip center; vertices (red boxes) selected by mouse clicks
- Trajectory window—segmentation displayed (vertices as red circles)
  - Toggle among major bands and popular indices for multivariate solution
- Data entry window—tables with selectable labels for segments and vertices
  - Change process (segments), land use & cover (vertices)
- Comments box

### References

Crist, E. P., 1985, A TM tasseled cap equivalent transformation for reflectance factor data, *Remote Sensing of Environment*, 17: 301-306.

R.J. Kauth and G.S. Thomas, "The tasseled Cap -- A Graphic Description of the Spectral-Temporal Development of Agricultural Crops as Seen by LANDSAT." *Proceedings of the Symposium on Machine Processing of Remotely Sensed Data*, Purdue University of West Lafayette, Indiana, 1976, pp. 4B-41 to 4B-51.

Masek, J.G., Vermote, E.F., Saleous, N., Wolfe, R., Hall, F.G., Huemmrich, F., Gao, F., Kutler, J., and Lim, T.K. (2006). A Landsat surface reflectance data set for North America, 1990-100, *IEEE Geoscience and Remote Sensing Letters*. 3:68-72.