

Lidar Forestry Applications in the Upper Trinity Watershed

Topography

Yes indeed

Tree Canopy

- CHM
- Shown here over slope

Tree Canopy

- CHM
- Shown here over slope

Tree Canopy

- CHM
- TTOPS

Tree Canopy

- CHM
- TTOPS
- Crowns

Slope

- Slope!

Openness

- Integration of relative horizontal elevation in 16 directions within 15 pixel search window on DEM
- i.e., Is there stuff around this pixel?

Red Relief

- Nice for visualization
- Based on slope and openness

High Pass Filter

- Sharpens local features
- Here with 7.5m focal mean and 0.5 m pixels

High Pass Filter

- Sharpens local features
- Here with 7.5m focal mean and 0.5 m pixels...
- leaving out vertical changes $< |0.2 \text{ m}|$

Another Compound visualization

- Nice visualization based on openness, slope and high pass filter

Geomorphons

- High frequency spatial data
- i.e. small features

Geomorphons

- Intermediate frequency spatial data
- i.e., medium sized features

Total Animal Situation (TAS)

- Fish
- Unicorn
- shd_05.png

Total Animal Situation (TAS)

- Mouse
- slp_05.png
- L. Ron Hubbard