

# Lidar Forestry Applications in the Upper Trinity Watershed

# Topography

Yes indeed

# Tree Canopy

- CHM
- Shown here over slope

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- 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