WinHaze Updates

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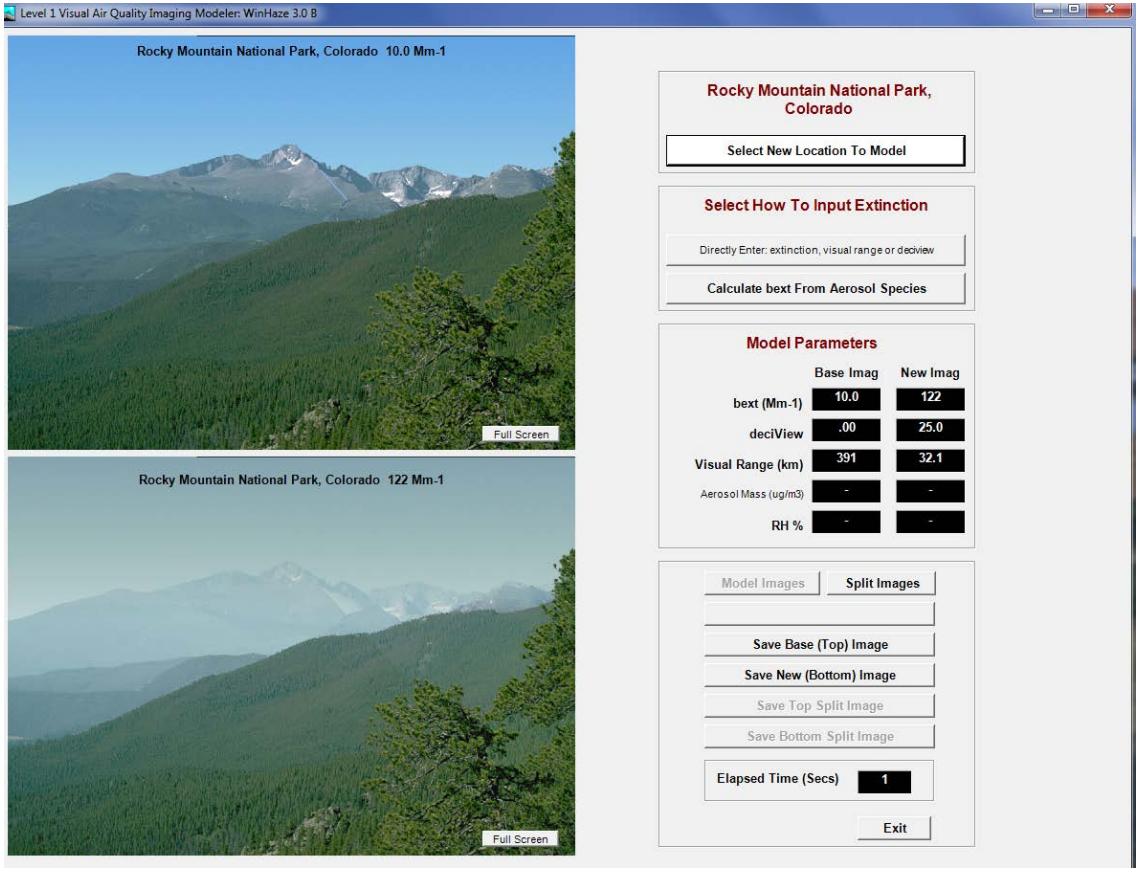
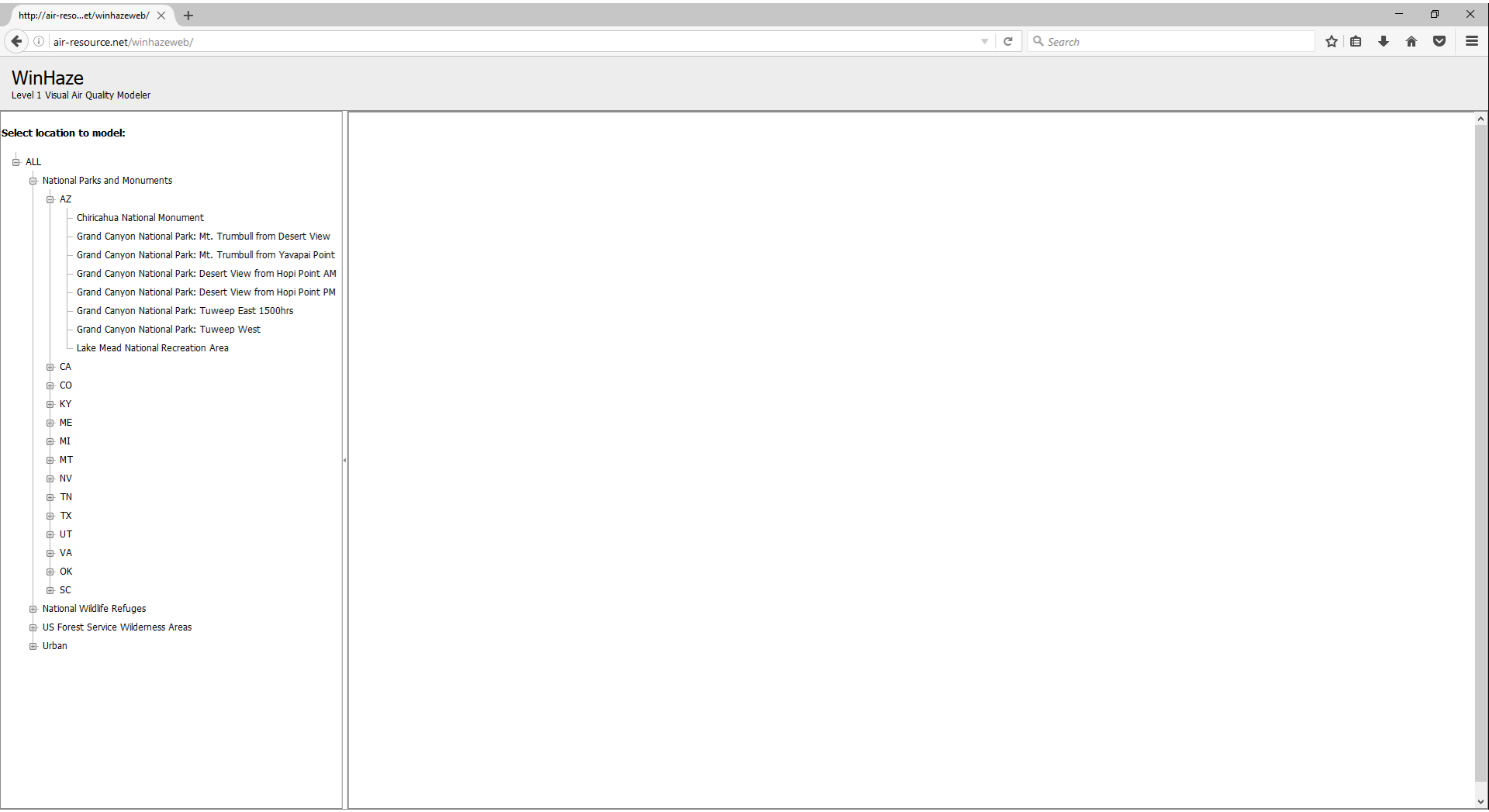
WinHaze

- Make WinHaze an online tool.
- Create a new masking technique that uses GIS data to quickly create the mask.



WinHaze as an Online Tool



WinHaze as an Online Tool

http://air-reso...et/winhazeweb/

air-resource.net/winhazeweb/

Search

WinHaze

Level 1 Visual Air Quality Modeler

Select location to model:

- ALL
  - National Parks and Monuments
  - National Wildlife Refuges
  - US Forest Service Wilderness Areas
  - Urban

Model Data Type:

- (•) Extinction
- ( ) Visual Range
- ( ) deciView

Extinction:

- (•) Increment
- ( ) Percent

Model Image

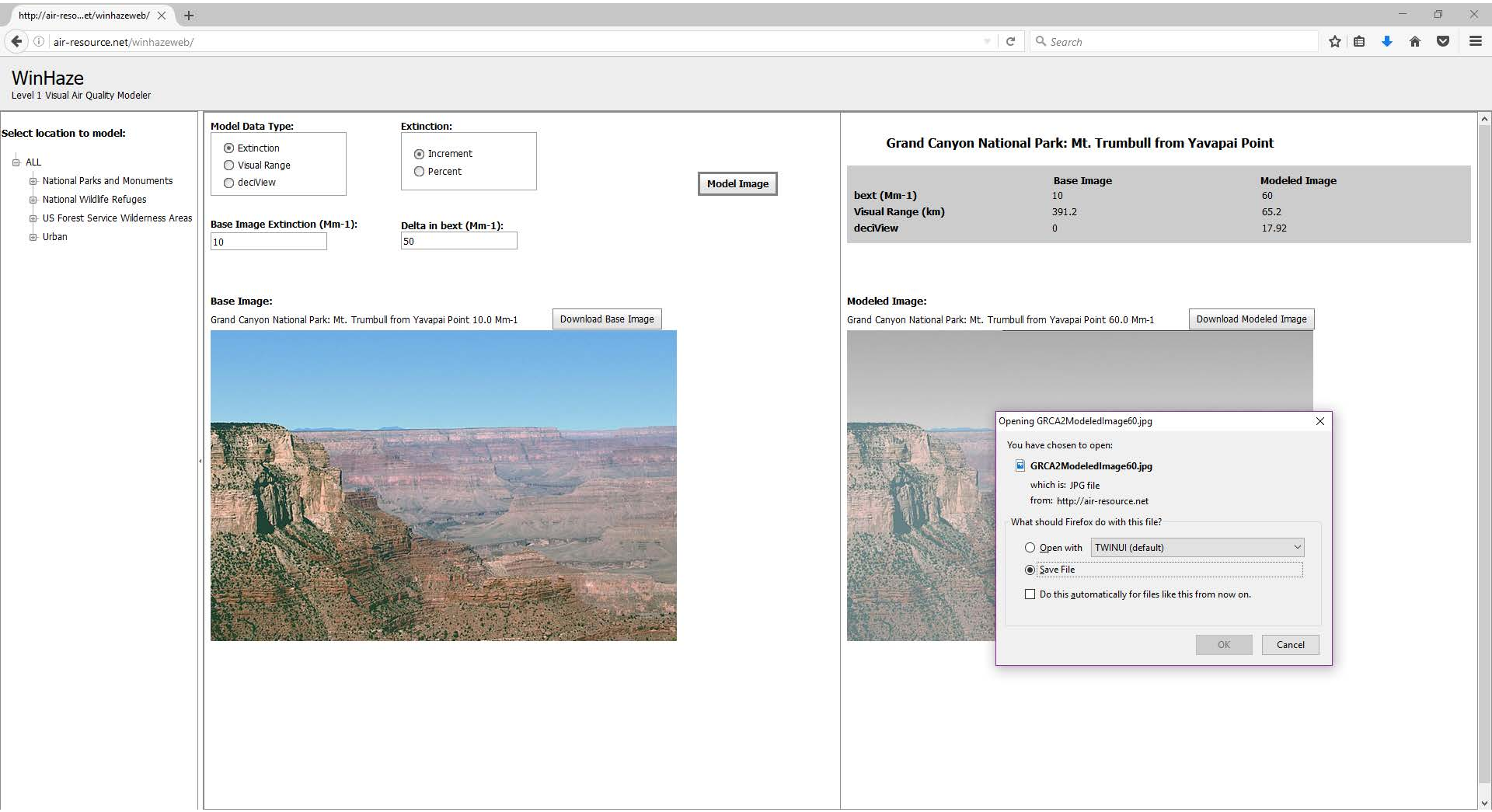
Base Image Extinction (Mm-1): 10

Delta in bext (Mm-1): 50

Base Image:

Download Base Image

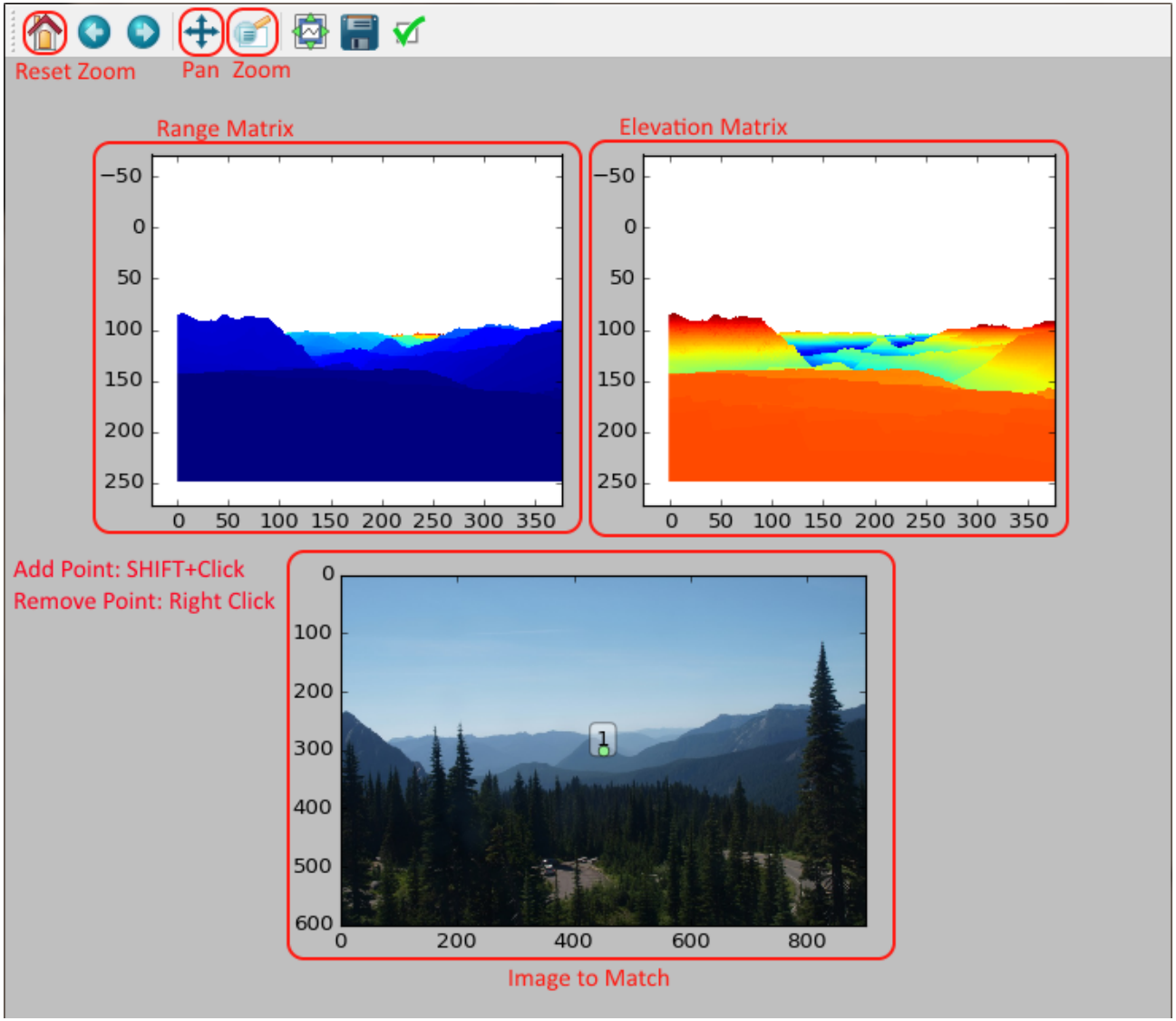
WinHaze as an Online Tool



Masking Technique

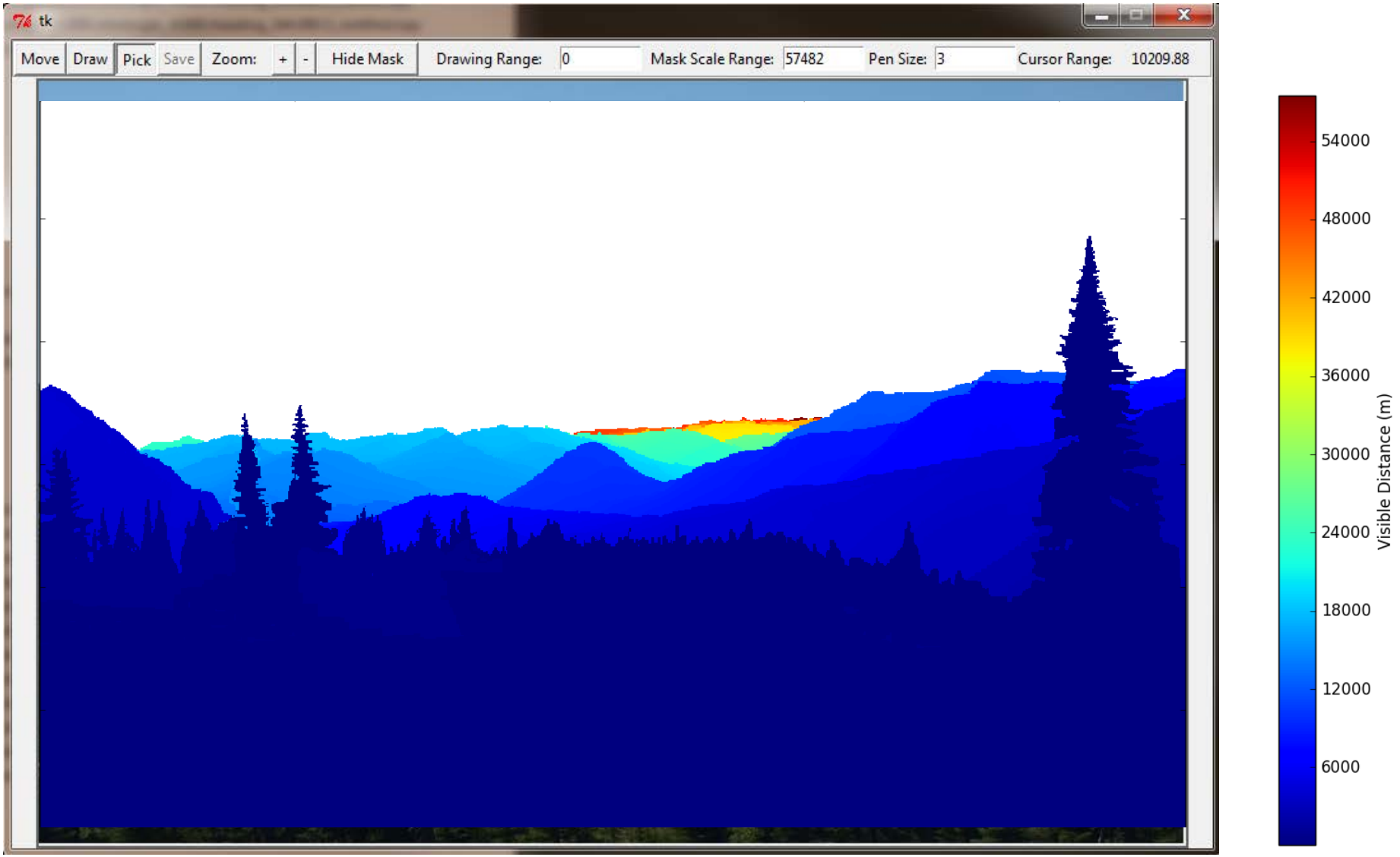
- Given a landscape photo and estimated camera position generate a matrix of per-pixel visible distances.
  - Automated as much as possible
  - User intervention still required
- Entire Process is ~30 min for a new image.

User Interface for creating mask



- DEM files automatically retrieved based on observation point, camera heading, and maximum visible distance
- Refine Camera Pose.
- Compute Ray Casting
- Perspective correction
- Artifact correction

Mount Rainier



Mount Rainier