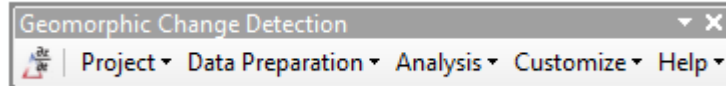


GEOMORPHIC CHANGE DETECTION

V. RECAP OF DAY 2 & PREVIEW OF DAY 3



April 30th to May 1st, 2014

Sponsored by:



WORKSHOP PLAN – DAY 2... (Morning)



K. Approaches to Estimating Errors

9:15 – 9:30



L. Error Modelling in GCD

9:30 – 10:00



M. Ground-Based LiDAR Flume Demo

10:00 – 10:30

10:30 – 10:45 BREAK



N. Statistical Methods for Error Modelling

10:45 – 11:15



O. ToPCAT & GCD: Roughness

11:15 – 11:45









P. Introduction to Fuzzy Error Modelling

11:45 – 12:30

Lunch 12:30 – 1:30

WORKSHOP PLAN – DAY 1... (AFTERNOON)

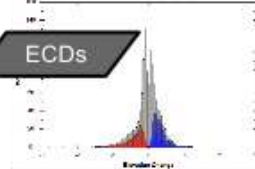
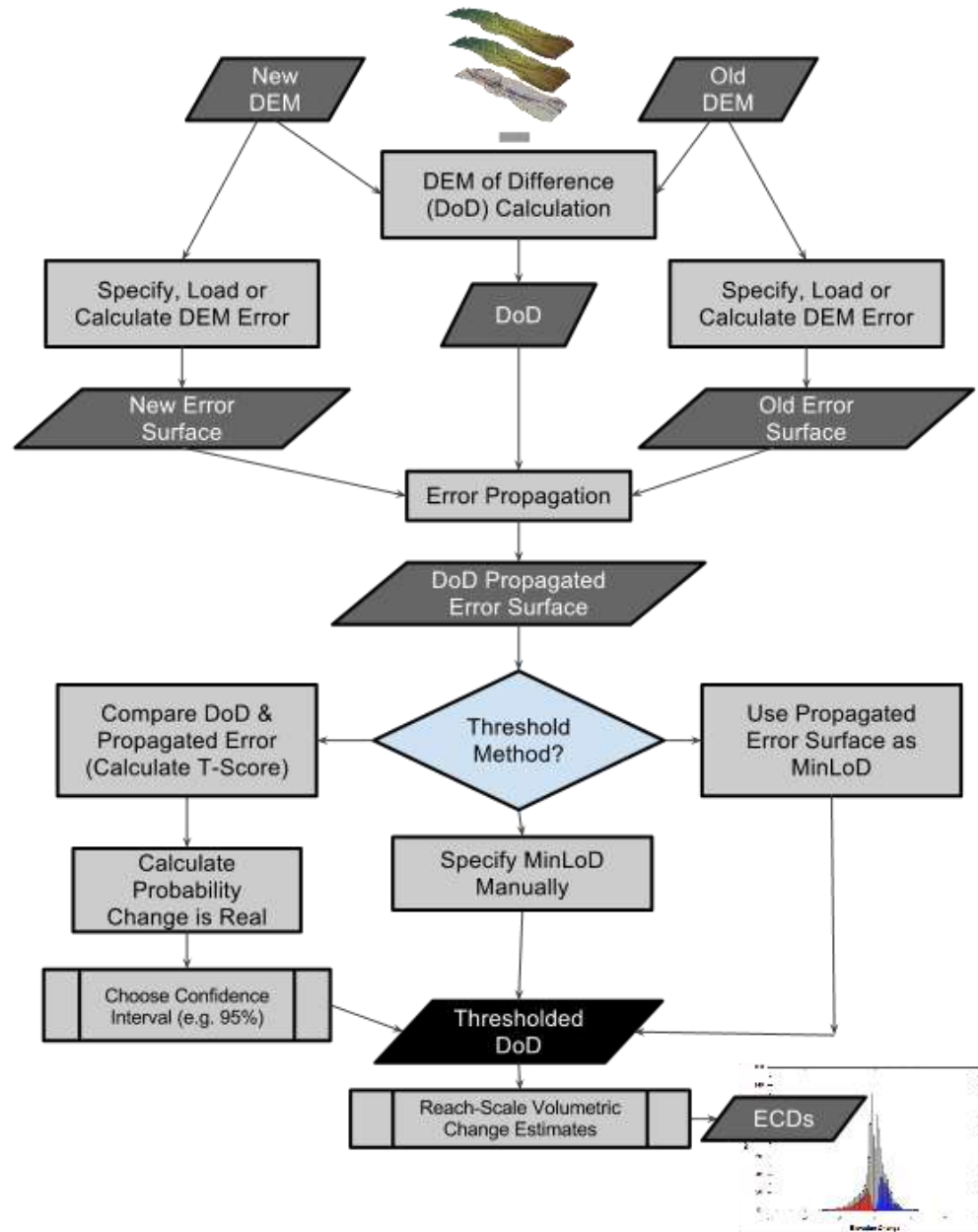
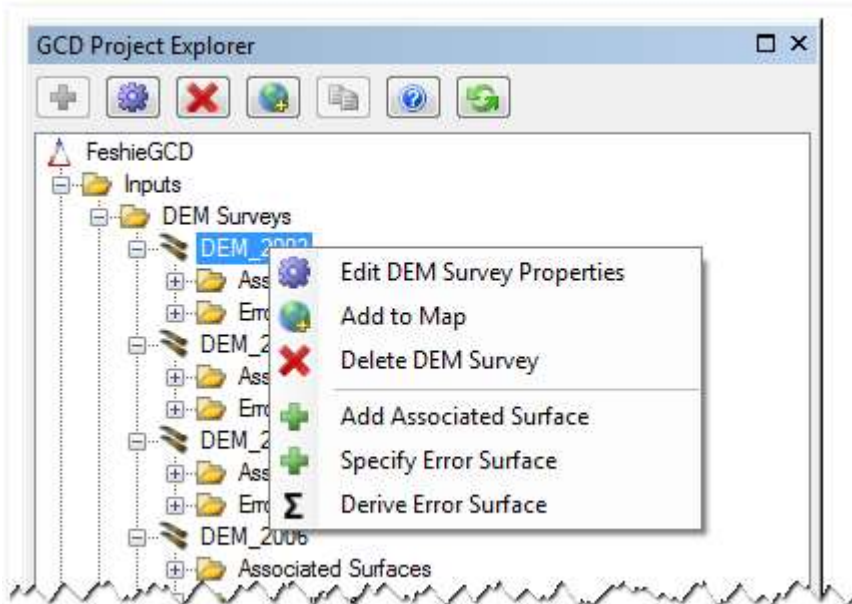
- | | | |
|--|--|---------------------------|
|  | Q. Building your own FIS
Error Models | 1:30 – 2:30 |
|  | R. Self Paced - Inputs | 2:30 -3:00 |
|  | S. Self Paced – Change
Detection | 3:00 – 3:30 |
| | | <i>3:30 to 3:45 BREAK</i> |
|  | T. Interpreting Outputs | 3:45 to 4:15 |
|  | U. Spatial Coherence &
Bayesian | 4:15 to 4:45 |
|  | V. Recap / SLOP | 4:45 to 6:00 |

MAIN TAKE HOMES FROM DAY 2

- Spatially Variable Error is Important
- FIS Gives us Flexible Ways to Model & Approximate Error
- Big Point Clouds offer flexibility of building statistical models of roughness and/or error
- Bayesian approaches offer flexibility for incorporating additional lines of evidence



USING THE GCD SOFTWARE...



WORKSHOP LEARNING OUTCOMES

- ✓ A comprehensive overview of the theory underpinning geomorphic change detection
- ✓ Instill background necessary to design effective repeat topographic monitoring campaigns and distinguish geomorphic changes from noise
 - Methods for interpreting and segregating morphological sediment budgets quantitatively in terms of both geomorphic processes and changes in physical habitat
- ✓ Hands-on instruction on use of the [GCD software](#) through group-led and self-paced exercises
- Partial ✓ An opportunity to interact with experts on geomorphic monitoring and the software developers of GCD to help you make better use of your own data
- Partial ✓



WORKSHOP BIG PICTURE PLAN

- A. DAY 1 – Surveying & Change Detection Principles
- B. Day 2 – Error Modelling & Uncertainty Accounting
- C. Day 3 – Interpreting the Signal & Cool Applications**

