

Critical Zone

Research Scenarios

1. TBD
2. TBD

Data Use Cases

You can view the PPT slides with template, straw-man examples, and rough Dose of Nature example.

Name	Location (Ideally a URL)	Formats (Commas separated list)	Desired Derived Data or Metadata	Software used (out of box, or group created software /scripts, etc.)	Scenario	Notes
Group hard drive, SEAD- Medici:	http://imlczo.ncsa.illinois.edu/acr/ http://imlczo2.ncsa.illinois.edu:9001/	Excel - *.xls, *.csv Matlab- *.mat, Raster - *.tif, *.grid, R - *.Rdata, Image file - *. png, *.jpg, *.tiff Video file - *. mp4 Numpy file - *. npy Video bounding box files - *.vbb	Geomorpho graph /landscape images, aerial and eye-level photos; geographic locations;	ArcGIS, Matlab, WinRiver, Streamprofile r, Python, Go ogle Earth, EXCEL	Qina is a graduate student interested in hydrology, geomorphology, and their complex interaction with human activities. Her research focuses on how landscape developed from the Great Ice Age affects present hydro-ecosystem and how the hydro-ecosystem response. LiDAR is the key resource to conduct her researches aiming at understanding natural processes, human modifications and their complex interactions.	
Group hard drive SEAD- Medici:	http://imlczo.ncsa.illinois.edu/acr/ http://imlczo2.ncsa.illinois.edu:9001/	Excel - *.xls, *.csv, Matlab- *.mat	Geographic location, Land cover /usage	Matlab, C++, Cuda, Excel	Dongkook is a graduate student interested in the terrestrial biosphere that consists of complex interactions between water and nutrient dynamics. His research focuses on soil carbon and nitrogen cycle altered by cultivating energy crops, and on nitrogen age distribution. Nitrogen isotope experiment data is key to drive his research that aims at understanding the connection between ecohydrologic and geobiochemical processes.	