Interoperability in the Labyrinth

ESIP Summer-2016 OPeNDAP Workshop
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(excerpted from an earlier presentation)
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Obstacles to Interoperability

● Mismatched Domains
  ● Coordinate Systems
  ● Discretizations (Meshes)
  ● Spatial & Temporal Scales

● Mismatched Ranges
  ● Variable Names
  ● Units of Measure
  ● Acceptable Noise Levels
  ● Quantifying (What’s Measured)
  ● Cartesian versus Magnitude/Direction

● Effects of (Analytic) Transformation
  ● Frequency vs. Space-Time
  ● Values vs. Coefficients
More Obstacles…

- Mismatched Concepts
  - Feature Names
  - Classification Schemes
  - Qualitative vs. Quantitative

- Mismatched Structures/Encodings
  - Explicit vs. Implicit Relations (Tables vs. Arrays)
  - Data Structures, Formats & Serializations

- Problems Arising in Software
  - Hardware & OS Dependencies
  - Programming-Language Dependencies
  - All Aforementioned Obstacles, Manifest in Code!
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