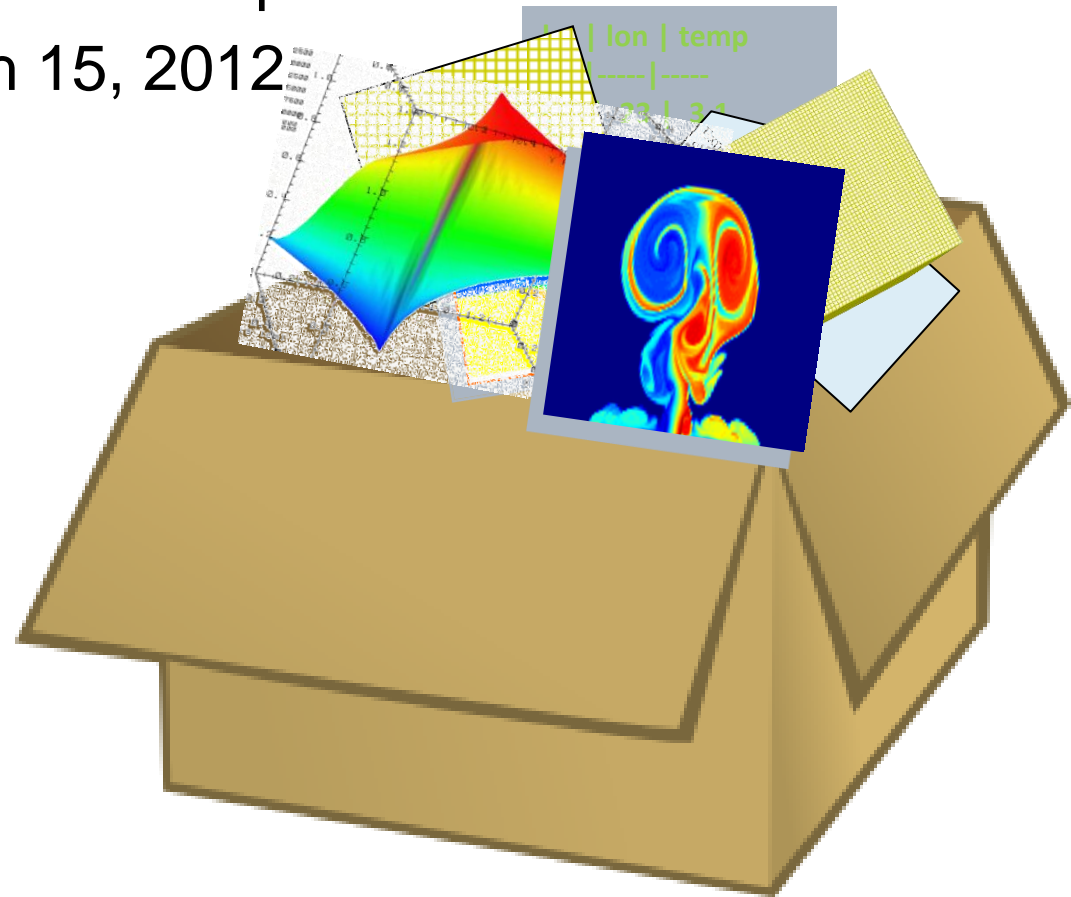


The HDF5 Technology Suite

Mike Folk, Gerd Heber

The HDF Group

March 15, 2012

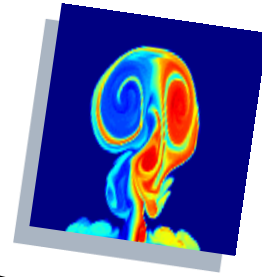
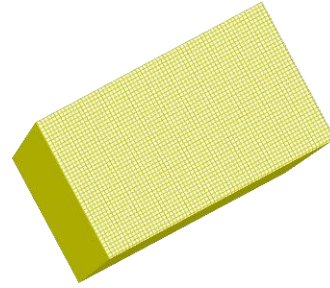
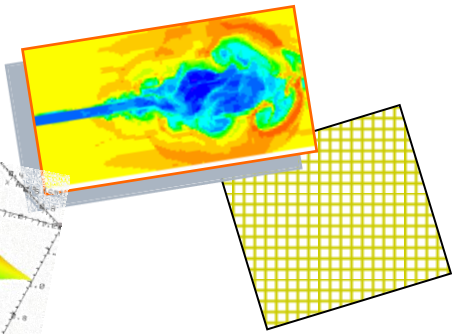
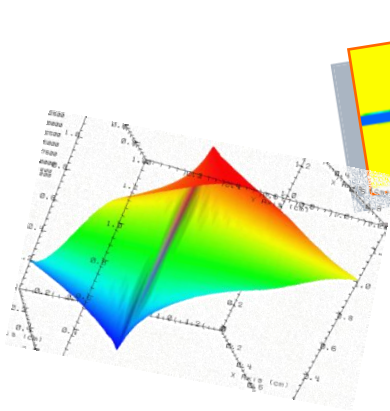


1. How to think about HDF5
2. HDF5 as triple store

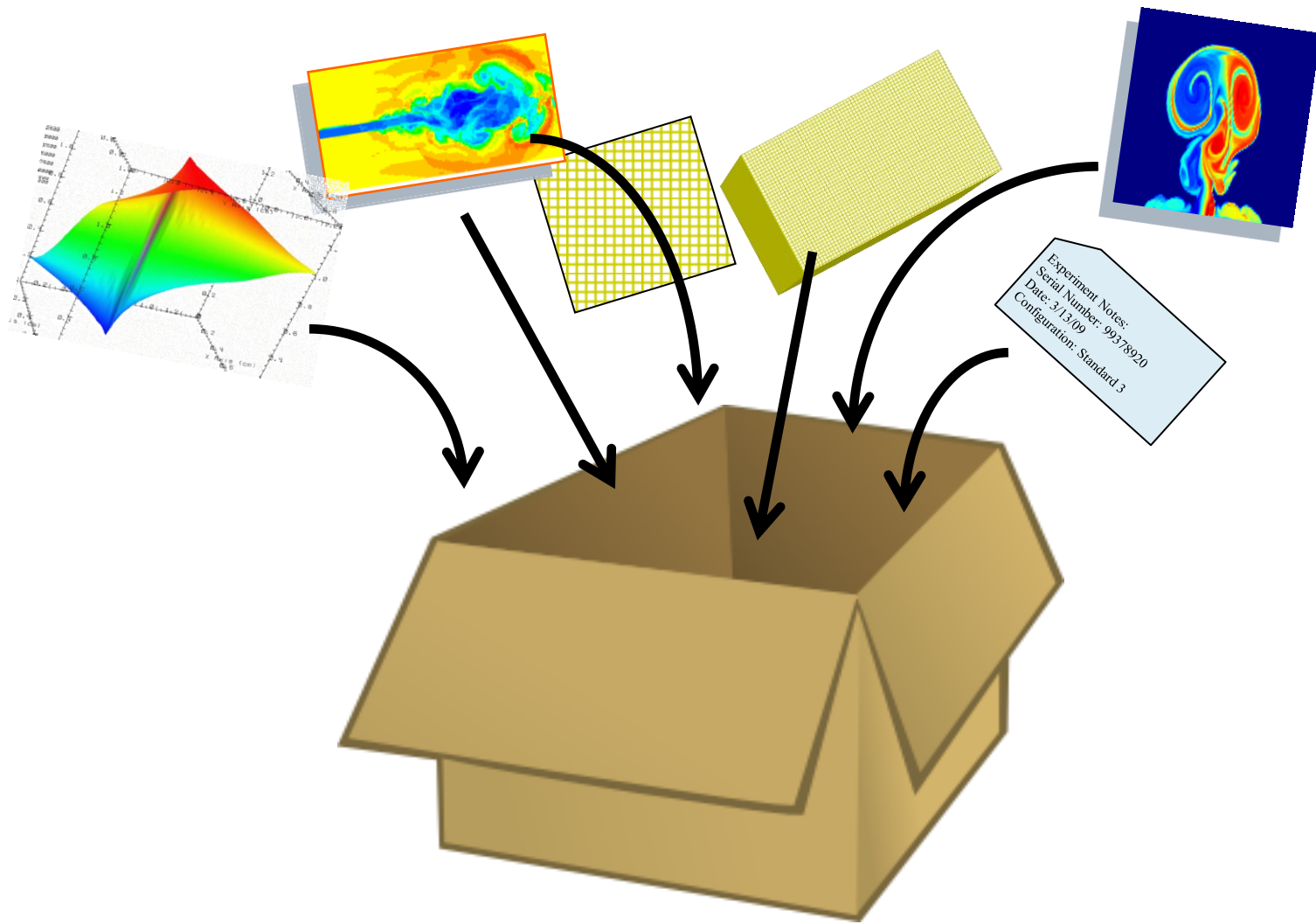
1. How to think about HDF5

HDF5 is designed for...

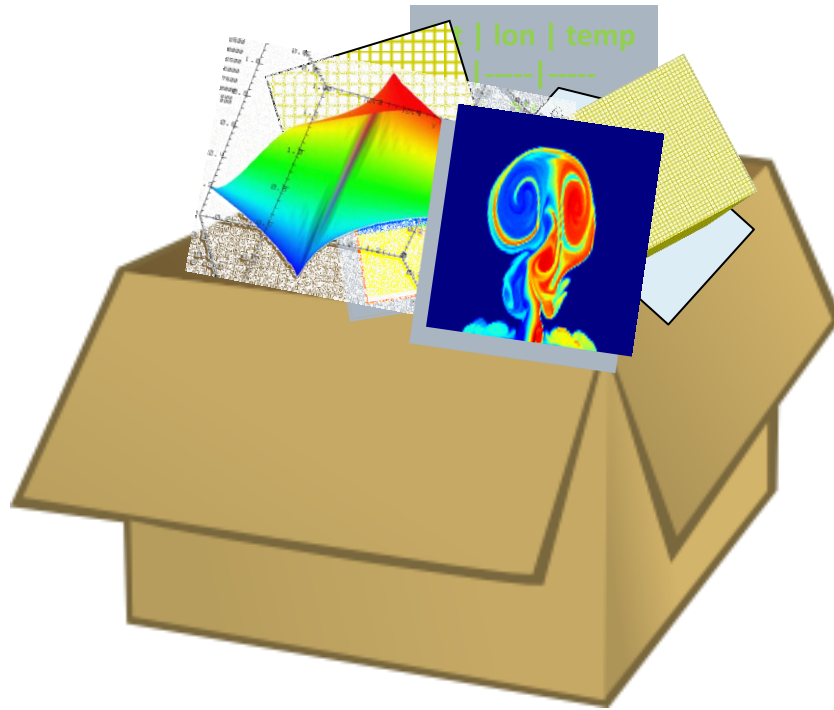
- high volume and/or complex data
- heterogeneous data
- flexible, efficient storage and I/O
- every size and type of system



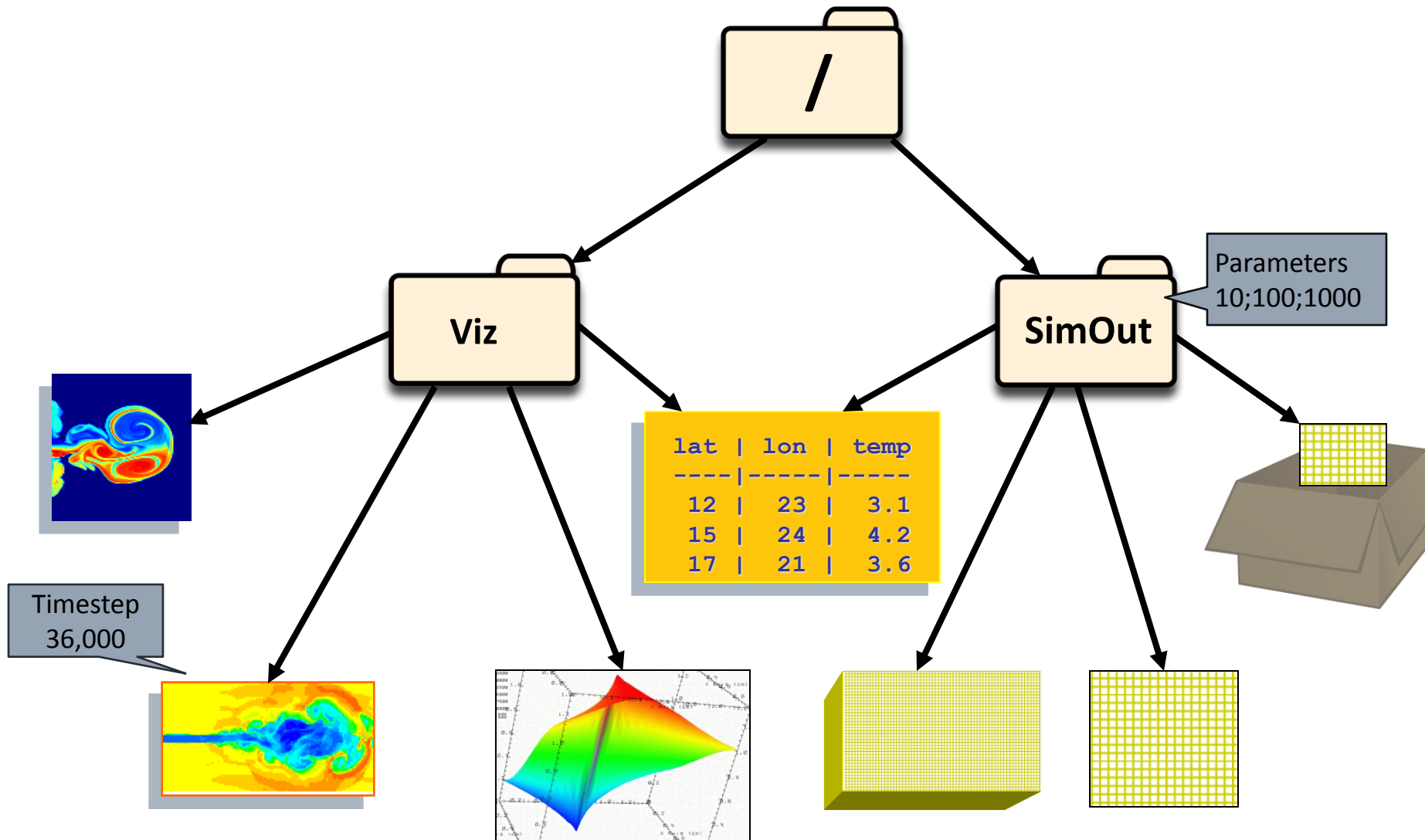
Experiment Notes:
Serial Number: 99378920
Date: 3/13/09
Configuration: Standard 3



Container

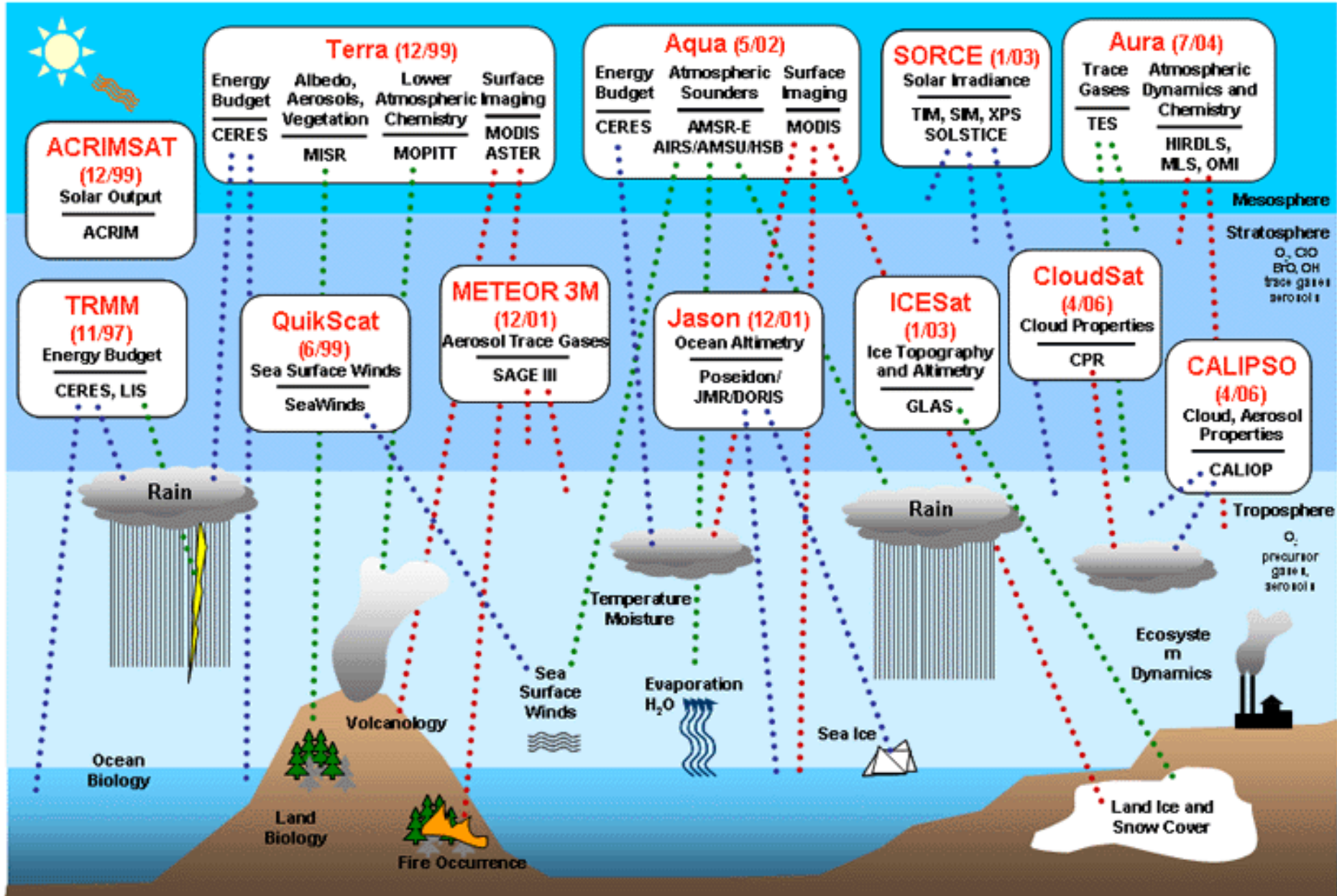


Groups, datasets, attributes, datatypes

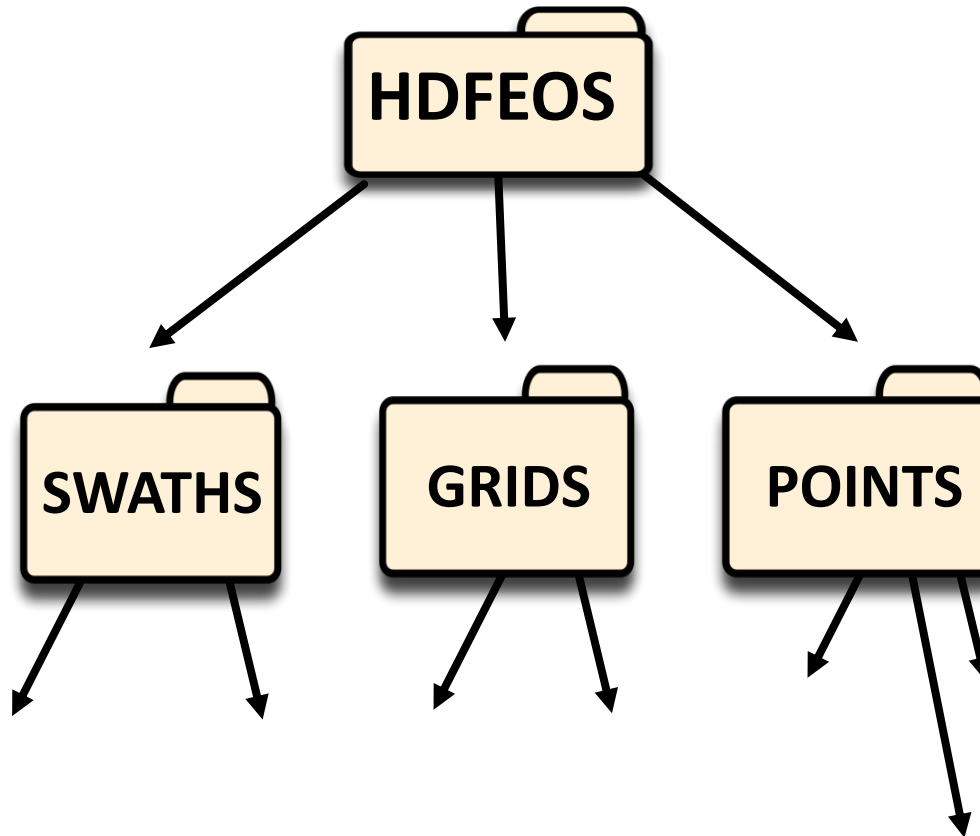


“meta-format”

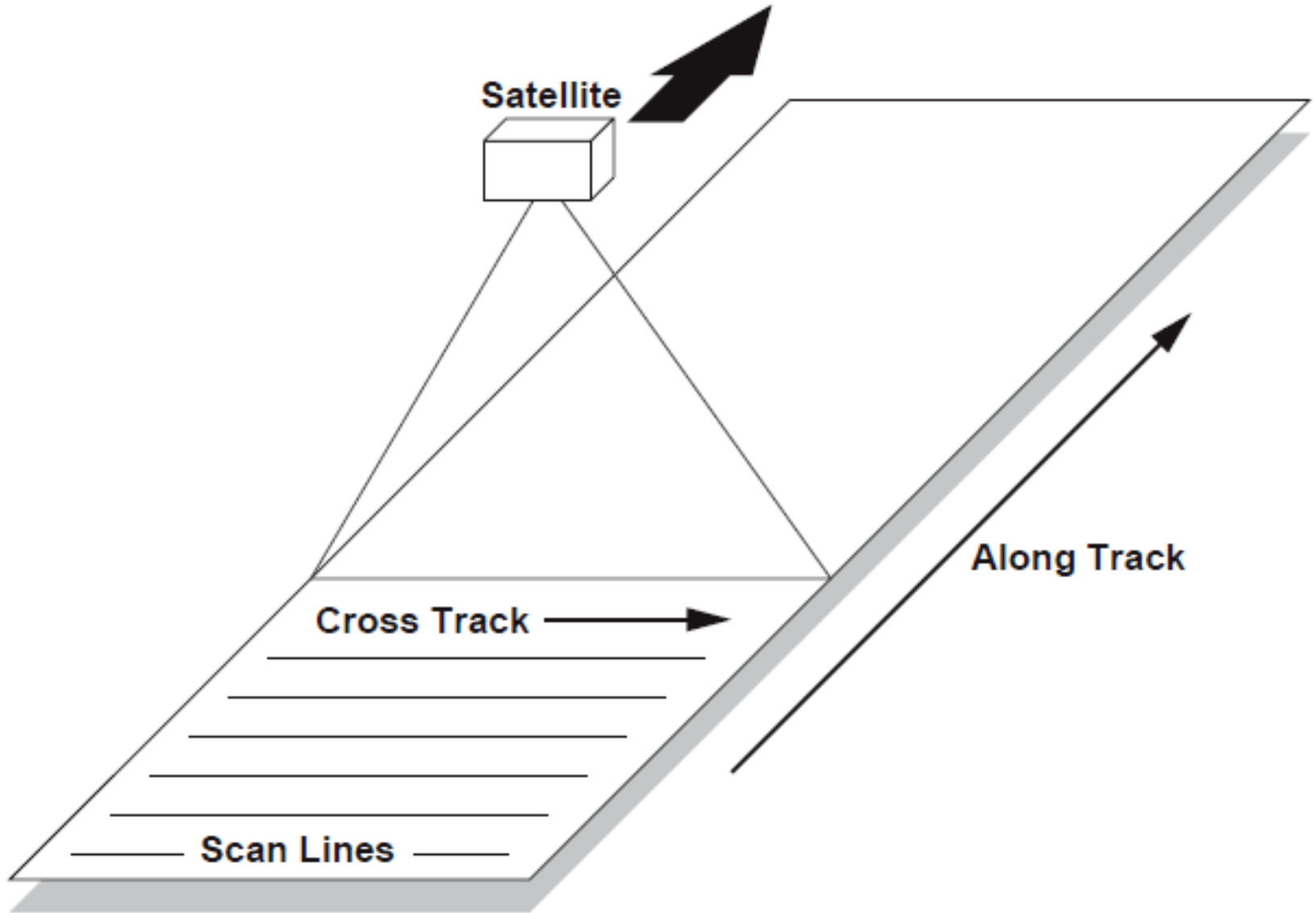
Earth Observing System



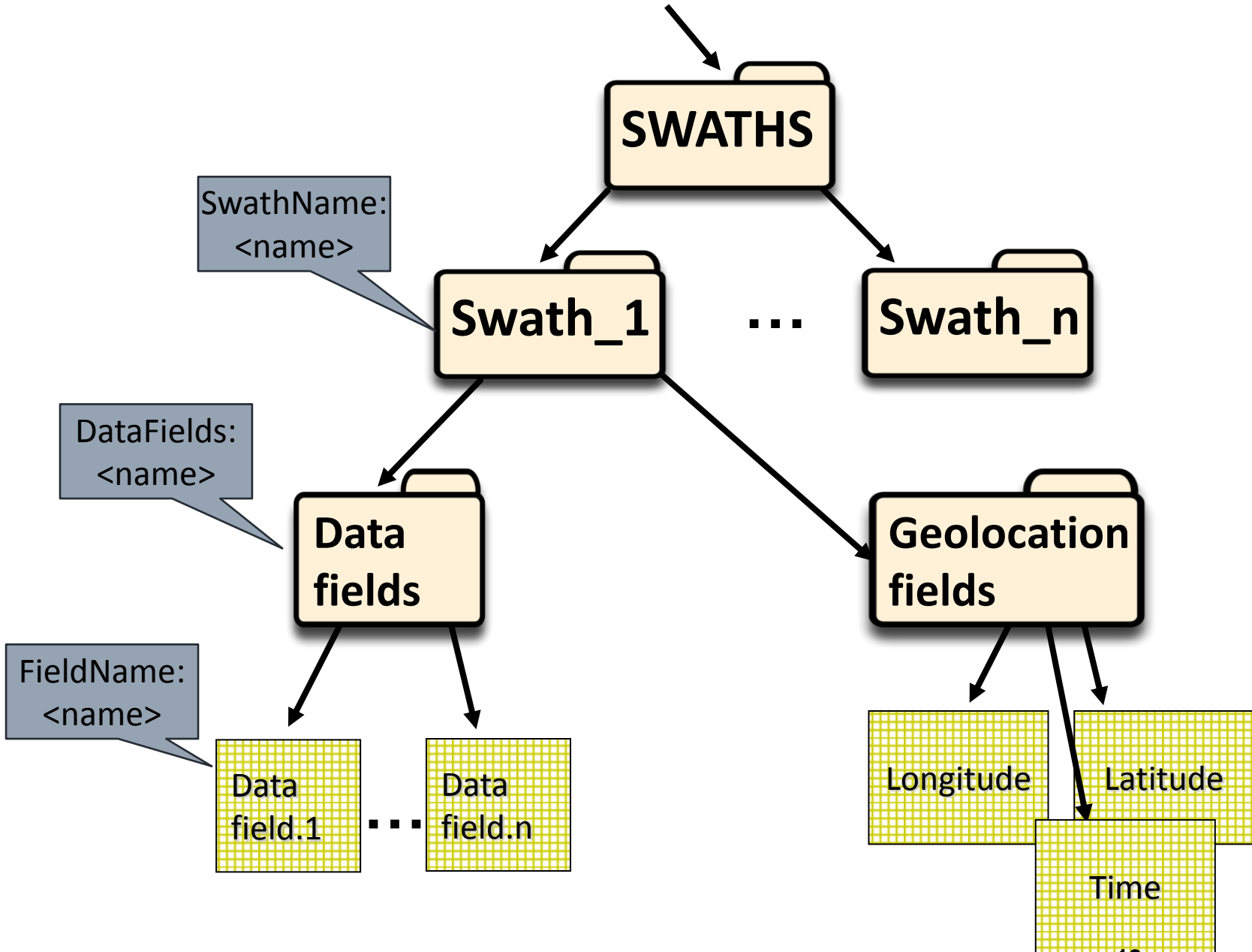
HDF-EOS Structure



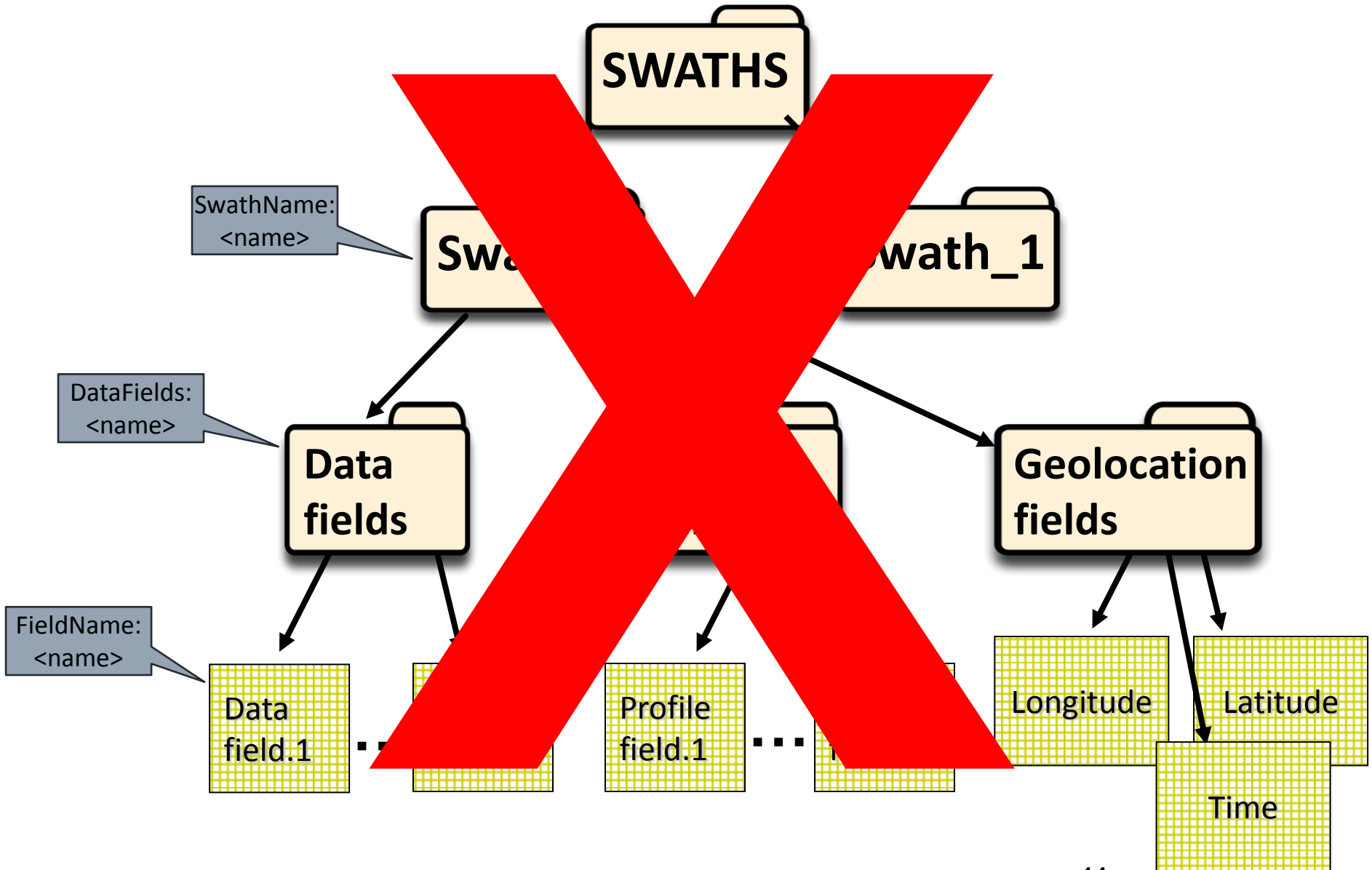
Swath



Swath Structure



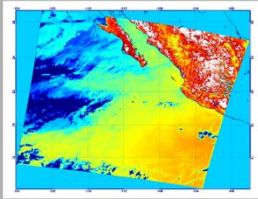
Swath Structure



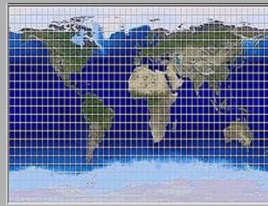
HDF-EOS

HDF-EOS Libraries

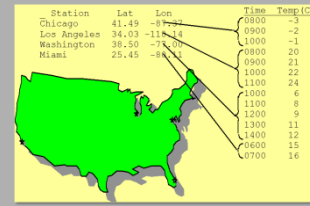
EOS Domain
Data Objects



Swath



Grid



Point

HDF5 Library

Storage

HDF-EOS

EOS
Application

MATLAB

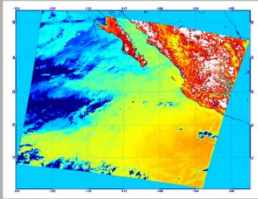
IDL

GrADS

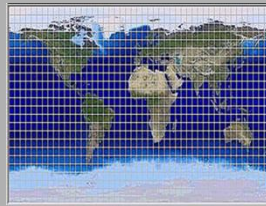
Etc.

HDF-EOS Libraries

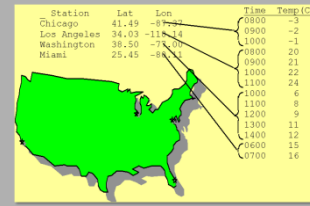
EOS Domain
Data Objects



Swath



Grid



Point

HDF5 Library

Storage

2. HDF5 as triple store

HDF5 as triple store

- Encoding subject-predicate-object triple
- Organizing for efficiency
- Enabling access