

International VIRTUAL OBSERVATORY

# Data Access Layer Working Group

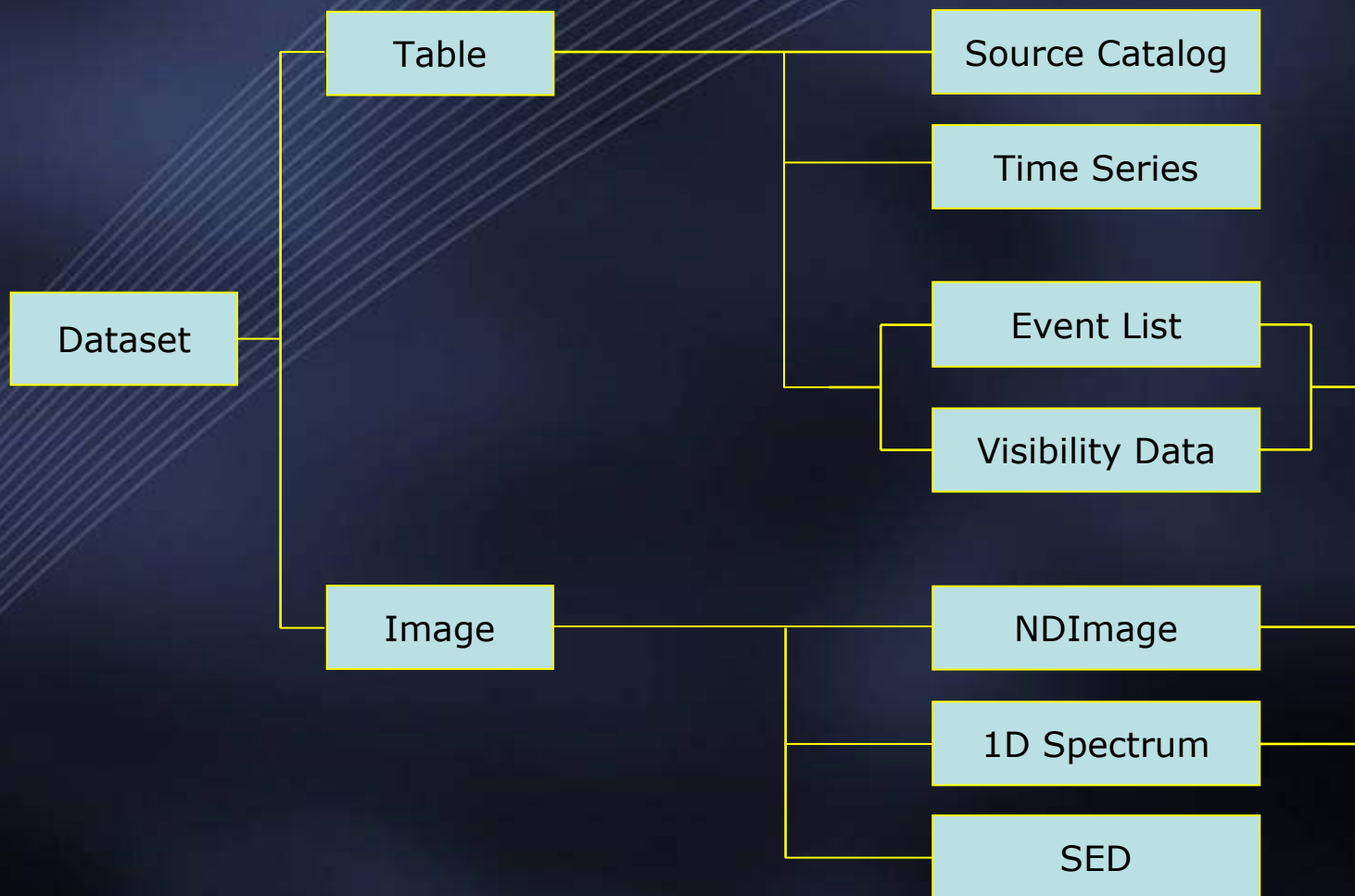
## Update on status and plans

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# Basic DAL Services

- **Catalog**
  - Add a general query language capability
- **Image**
  - Upgrade, modest capability increment
- **Spectrum**
  - New interface
- **Time Series**
  - New interface
- **Event and Visibility Data**
  - First steps (survey, data modeling)

# Service Architecture (Cambridge)



# DAL Service Architecture (updated)

- **Catalog**
  - Point source
  - Extended source
  - Variable object
- **Dataset**
  - Tabular
    - Spectrum
    - Time Series
    - Event List
    - Interferometry
  - Gridded
    - 2D Sky Image
    - Image Cube

# Near Term DAL Priorities

- **Simple Spectral Access (SSA) 0.9**
  - Whole new class of data
  - No existing astronomy standard in this area!
- **Simple Image Access (SIA) V1.1**
  - Upgrade to SIA, new features
- **QL-based Catalog Access**
  - Replace basic cone search
  - Query language capabilities
  - Plan for how to use QL elsewhere in DAL

# Simple Spectral Access V0.9

- **Scope**
  - SEDs, spectra, time series
- **General spectrophotometric data model**
  - joint effort of DM and DAL groups
- **Generic Dataset metadata**
  - dataset identification and characterization
- **Data representation**
  - map SDM to various data formats
    - (XML, VOTable, FITS, text)

# Simple Image Access V1.1

- **Upgrade to reflect new VO standards**
  - UTYPE in VOTable
  - UCD standardization
  - Generic Dataset metadata
- **Features**
  - logical name (group related images)
  - ranking (rank images by match to query)
  - service verification
  - registry integration
- **Issue**
  - how much do we change now?

# Goals for this meeting

- **Advance SSA to working draft**
  - Enable initial services, applications
- **Agree on scope of SIA V1.1**
  - Service uniformity, functionality, robustness
- **Agree on UCD, UTYPE usage in DAL interfaces**
  - Data model representation
- **Catalog access**
  - Agree on plans for ADQL usage in DAL, updated catalog access