

Application Layer (LDM-151)

- Scientific Layer
- Pipelines constructed from reusable, standard “parts”, i.e. Application Framework
- Data Products representations standardized
- Metadata extendable without schema change
- Object-oriented, python, C++ Custom Software

Middleware Layer (LDM-152)

- Portability to clusters, grid, other
- Provide standard services so applications behave consistently (e.g. provenance)
- Preserve performance (<1% overhead)
- Custom Software on top of Open Source, Off-the-shelf Software

Infrastructure Layer (LDM-129)

- Distributed Platform
- Different sites specialized for real-time alerting vs peta-scale data access
- Off-the-shelf, Commercial Hardware & Software, Custom Integration

02C.05 Science User Interface and Analysis Tools	02C.01.02.02 - 03 SDQA and Science Pipeline Toolkits	
02C.06.01 Science Data Archive (Images, Alerts, Catalogs)	02C.01.02.01, 02C.02.01.04, 02C.03, 02C.04 Alert, SDQA, Calibration, Data Release Productions/Pipelines	
02C.03.05, 02C.04.01 Application Framework		
02C.06.02 Data Access Services	02C.07.01, 02C.06.03 Processing Middleware	
02C.07.02 Infrastructure Services (System Administration, Operations, Security)		
02C.07.04.01 Archive Site	02C.07.04.02 Base Site	02C.08.03 Long-Haul Communications
Physical Plant (included in above)		