

Data_Management_Functions

- Downlink and telemetry (not to be included in this effort but included in NOSA)
- Ingest
 - ◆ Transmission (Internet, private networks, satellite, media, etc.)
 - ◆ Collection and creation of metadata
- Workflow Management
 - ◆ Performance monitoring (observing, computing, communications, etc.)
- Data Processing
 - ◆ Data Representation (Format)
 - ◆ Quality control
 - ◇ Detect missing data, check value limits, compare with neighbors
 - ◇ Model/data comparison
 - ◇ Detect discontinuities and determine biases
 - ◇ Data filtering (filter high frequency noise)
 - ◆ Aggregation in space and time
 - ◆ Assimilation
 - ◆ Modeling
 - ◆ Product Generation (Charts, data records, forecasts, imagery, statistics, etc.)
 - ◆ Services (Weather radio, search and rescue, etc.)
 - ◆ Statistical analysis (means and extremes, trends, climate indicators, socio-economic analyses, etc.)
 - ◆ Reprocessing
- Archive
 - ◆ Change Data Representation (Format)
 - ◆ Sort, merge and eliminate duplicate records
 - ◆ Catalog and inventory data granules
 - ◆ Permanent storage of data, metadata and documentation
 - ◆ Replication and backup
- Access
 - ◆ Data discovery/catalogs
 - ◆ Query - Interactive browse or via intermediary personnel
 - ◆ Data selection, extraction and translation
 - ◆ Delivery of data and metadata (via telecommunications or media)
 - ◆ Visualization
- Communications or Network Services (cross-cuts most all of the above functions)