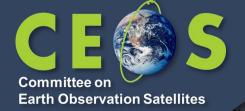


Making Data Actionable for Decision Support



Nitant Dube, ISRO
Agenda Item 12.1
WGISS-60
13-17 October, 2025
Oberpfaffenhofen, Germany

Decision Ready Data



- ❖ What is Decision Ready Data (DRD)?
 - Decision-ready data is data that has already been cleaned, processed, and structured so it can be used directly to support decision-making, without requiring extra transformation or heavy analysis.

heavy analysis.

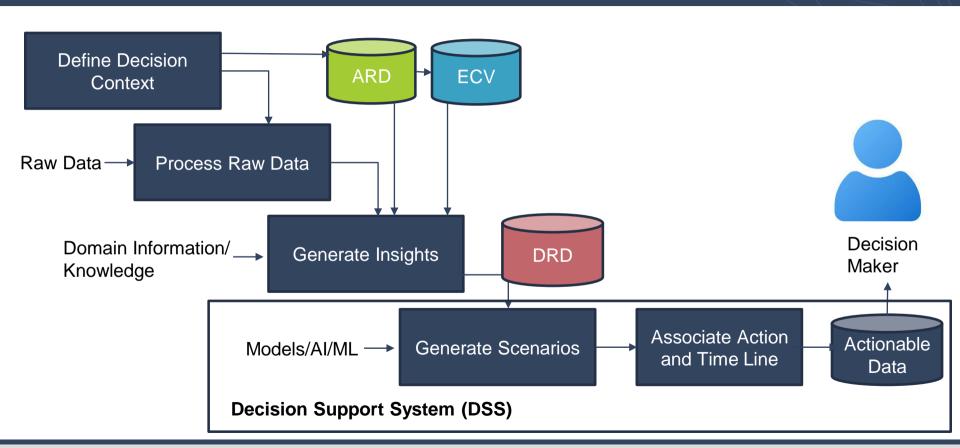
Generic ARD Decision Specific

Data Acquisition Data Processing

Raw Data Level-1 & Level-2 Information, Knowledge

Generating Informed Decisions





Actionable Data



- ❖ Decision Ready Data helps in generating Actionable data
 - Linked to specific decision Goal
 - Clear associated actions for each of the scenario
 - Accurate and Reliable
 - Relevant for a specific Time

ARD – DRD – Actionable Data



	Analysis Ready Data (ARD)	Decision Ready Data (DRD)	Actionable Data	
End User	Scientist, Analyst, Researchers	Analysts, dashboard systems, policymakers, System Managers	Decision-makers, field officers, emergency managers	
Data	Ready for Analysis	Interpreted and Analyzed	Scenarios with Action and Time line	
Format	Consistent Format with required Metadata	Consistent Format with required Metadata	Advisories	
Goal	Optimized for calibration, accuracy and Standardization	Optimized for Decision	Optimized for Actions (Execution)	

DRD and Decision Support Systems



Formats

Raster: GeoTiff, COG, NetCDF, HDF

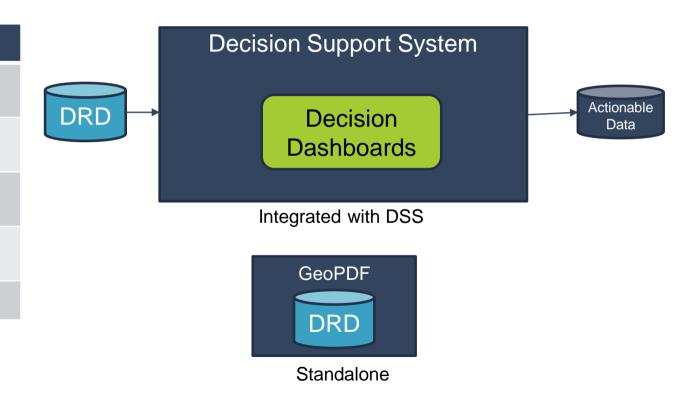
Vector: KML, GeoJSON, ShapeFiles, GeoPackage

OGC Services: WMS, WFS,

WCS, WMTS

API: REST/GraphQL, OGC API, Sensor Things API

Reports: PDF, HTML, PPTX



Ocean

Floods

cane

Cyclone/Hurri

Forest Fires

WGISS-60, 13-17 October, 2025



PFZ Advisory

Flood Advisory

Cyclone Advisory

Slide 7

Fire Advisory

USE Cases			CESS
Theme	ARD	DRD	Actionable Data
Agriculture	Surface Reflectance	Vegetation Condition Index	Crop Advisory

(VCI) Map

Inundation Map

Map

Potential Fishing Zone (PFZ)

Cyclone track forecasts,

surge warning maps.

Fire Radiative Power

Burnt Area Maps

Fire Hot-Spot

intensity estimates, storm

Surface Reflectance Agriculture

(NRB)

Marine Reflectance

Sea Surface Temperature (SST)

SAR- Normalized Radar Backscatter

Scatterometer-Sigma Naught (σ°)

Optical Surface Reflectance

IR-Brightness Temperature

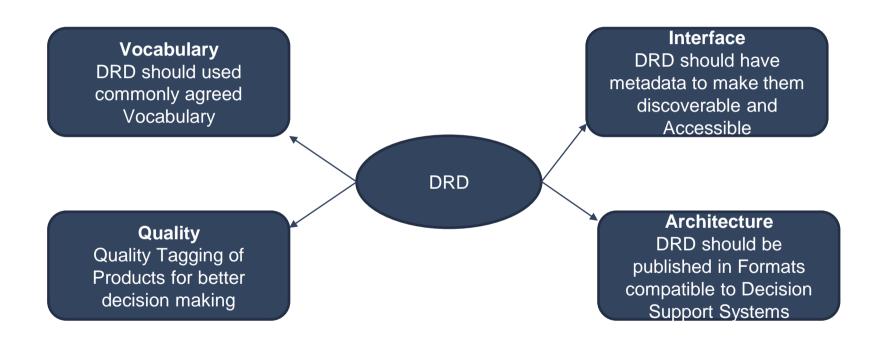
IR-Brightness Temperature

Surface Reflectance

Altimeter-Sea Surface Height

Interoperability





Summary



Decision Ready Data (DRD)

- Helps in Generating Clear Insights from satellite data in the form of Actionable Data
- Make Data/Information more accessible to Non-Experts
- Improved Interoperability of Decision Support Systems
- Fills Gap between Scientific Data Providers and Decision Makers.



Thanks

nitant@sac.isro.gov.in