

Community Process

- Less formal than “de jure” standards process
- Narrower community affected
- Faster review and adoption
- May involve adoption/adaptation of existing standards or development of recommended practices
- May lead to de jure standards

Earth Science Data System Working Groups

- Are formed, renewed, and retired on an annual cycle.
- Provide expert advice: Recommendations to ESDIS Project for decision making and prioritization.
- Address challenges, issues, and opportunities in response to ESDS Program priorities and community-identified needs.
- Develop guidelines and best practices for practical implementation of standards and technologies, enhancing data interoperability, and improving software development and software architecture practices.

Data Product Development Guide WG

Mission Statement	Stakeholders	Intended Audience
• Help Data Product developers make data more usable for End Users	<ul style="list-style-type: none"> • Data Producers • DAACs • Data Service Developers • Tool Developers • END USERS!!! 	<ul style="list-style-type: none"> • People involved in producing standard Earth observation data products for NASA: <ul style="list-style-type: none"> ➢ algorithm developers ➢ science processing software developers ➢ staff at the Distributed Active Archive Centers (DAACs) ➢ data tool developers • But, primary <i>beneficiaries</i> of data product development are the end users. • We make recommendations that serve end users, though they may occasionally levy extra (but manageable) effort on data producers or DAACs. • Producers of other Earth observation data products may find these guidelines useful as well.
Approach	Outcomes, Deliverables, Milestones	
<ul style="list-style-type: none"> • Develop overall format / template / outline • Develop draft document • Have document reviewed by DPDG WG and selected (small number of) others • Revise document • Submit to ESDIS Standards Office (ESO) • Edit document in response to ESO review comments • Publish and publicize 	Data Product Development Guide for Data Producers	

ESDIS = Earth Science Data and Information System; ESDS = Earth Science Data Systems

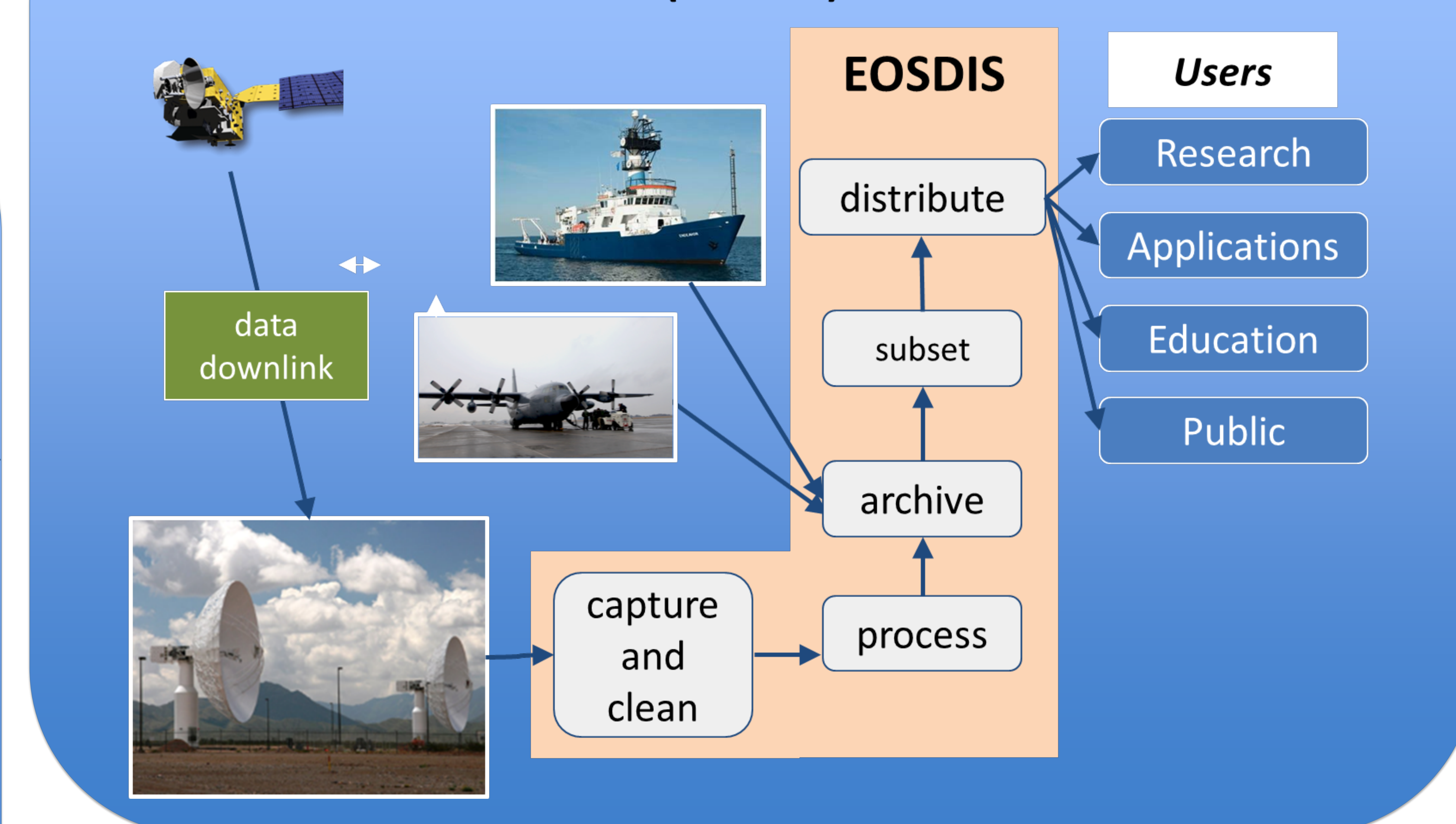
Earth Science Data and Information System (ESDIS) Standards Office (ESO) Process

(see IN21D-0875 for more details)

- Proposer (s)
 - Identifies a currently used standard, convention, or common practice that could be of benefit to NASA's ESDS
 - Submits documentation (Request for Comment – RFC) to ESO
- ESO
 - Performs initial screening through 3-4 member Technical Working Group
 - Identifies potential reviewers for broader review
 - Conducts community review of RFC
 - Coordinates with proposer (s) to disposition community comments
 - Publishes approved RFC at <https://earthdata.nasa.gov/standards>



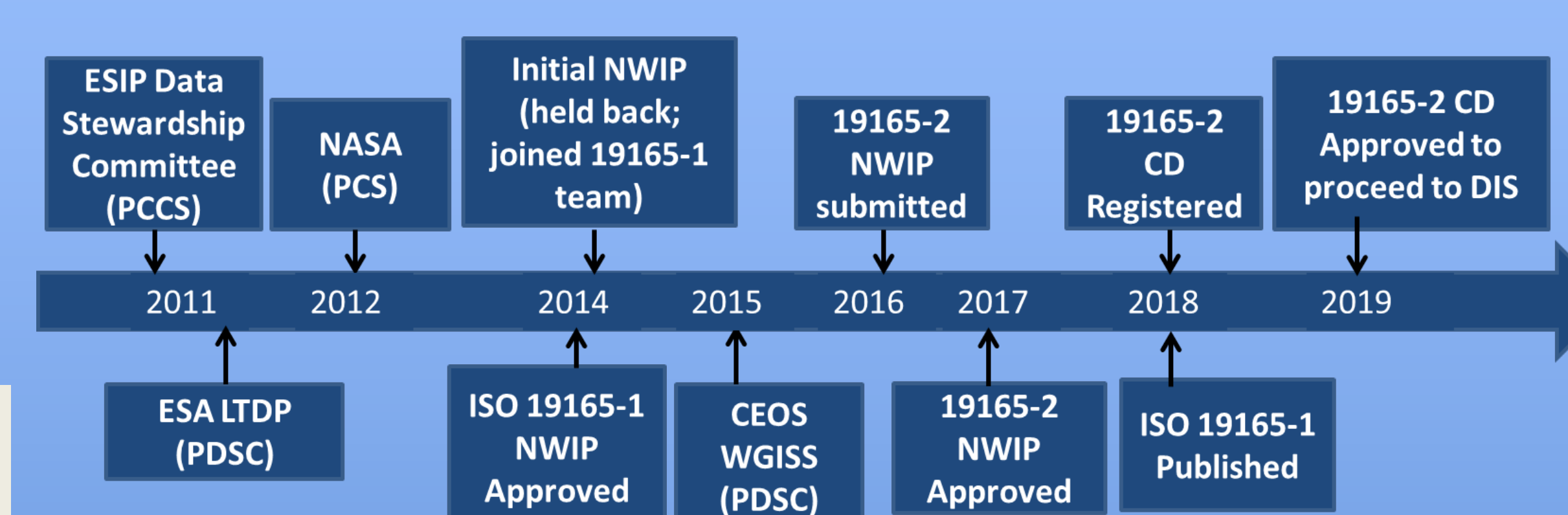
Earth Observing System Data and Information System (EOSDIS)



Formal International Process

- “De jure” standards process
- Slow development
- Adoption not guaranteed
- Greater interoperability if widely adopted
- May need adaptation to circumstances applicable to narrower groups (e.g., by defining profiles)

Example: ISO 19165-2 Geographic information -- Preservation of digital data and metadata -- Part 2: Content specifications for Earth observation data and derived digital products



CD	Committee Draft	NASA	National Aeronautics and Space Administration
CEOS	Committee on Earth Observation Satellites	NWIP	New Work Item Proposal
DIS	Draft International Standard	PCCS	Provenance and Context Content Specification
ESA	European Space Agency	PCS	Preservation Content Specification
ESIP	Earth Science Information Partners	PDSC	Preserved Data Set Content
LTDP	Long-Term Data Preservation Program	WGISS	Working Group on Information Systems and Services

International Standards Organization (ISO) - Standard Development Steps

- ❖ 00 – Preliminary
- ❖ 10 – Proposal – Approval through international balloting; Project Team members (experts from participating member countries) named to form Project Team (PT)
- ❖ 20 – Preparatory – New project is registered with Technical Committee (TC 211)
- ❖ 30 – Committee - CD registered; ballot initiated and closed; comments handled; CD approved for registration as Draft International Standard (DIS)
- ❖ 40 – Enquiry - DIS registered; ballot initiated and closed; comments handled; DIS approved for registration as Final Draft International Standard (FDIS)
- ❖ 50 – Approval – FDIS registered for formal approval; ballot initiated and closed; FDIS approved for publication
- ❖ 60 – Publication – International standard published