# NASA Context for a Planetary Spatial Data Infrastructure

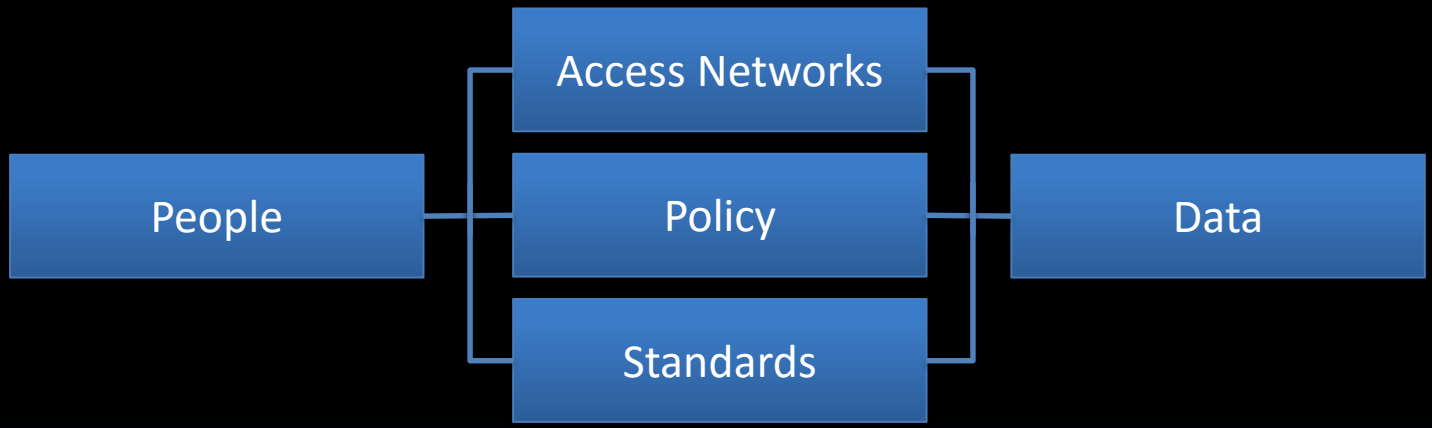
Ross A. Beyer

Sagan Center at the SETI Institute
and NASA Ames Research Center

# Planetary Spatial Data Infrastructure
# PSDI

PSDI
not DPS
not PDS
not PSD

# SDI Components

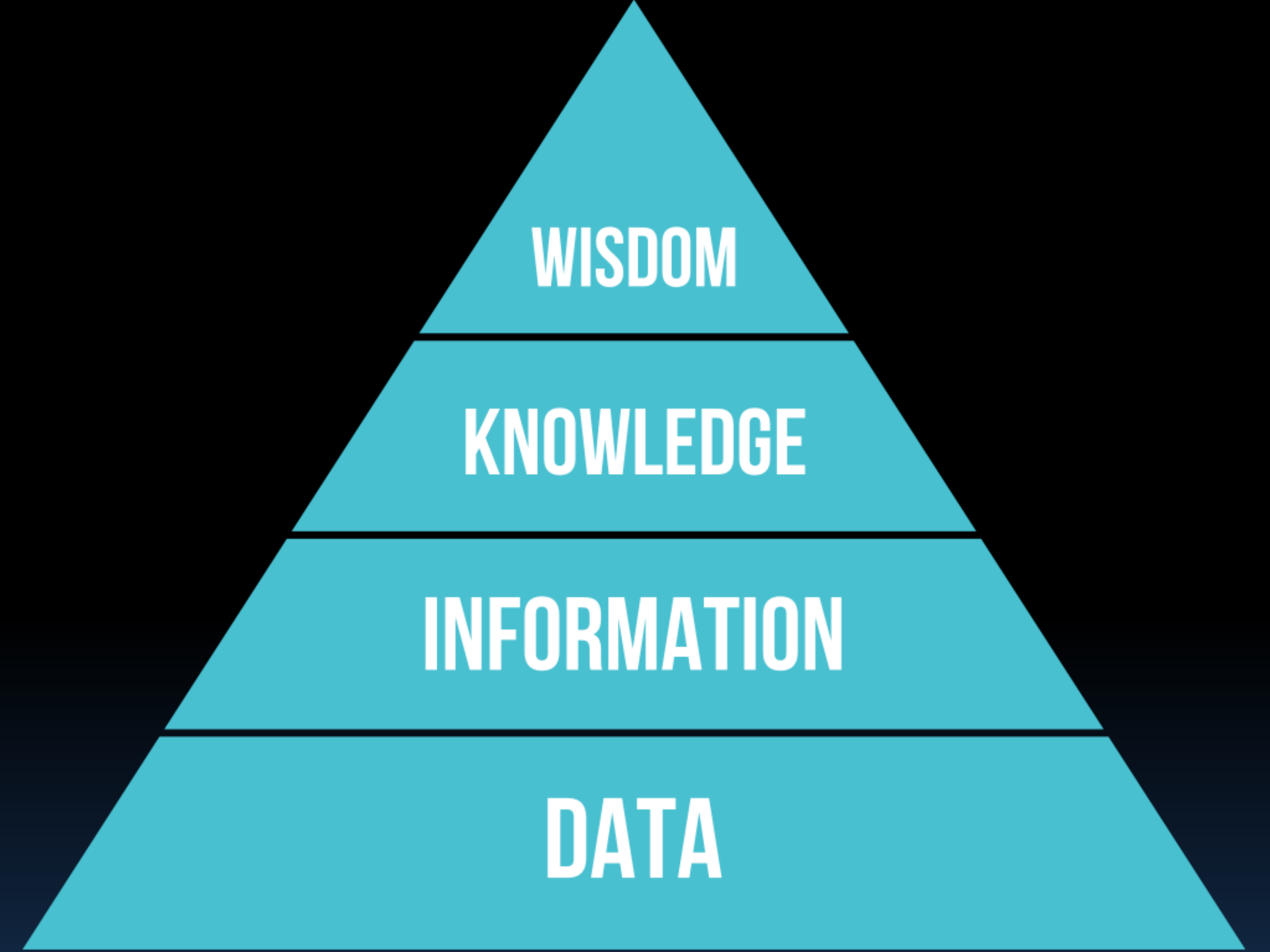


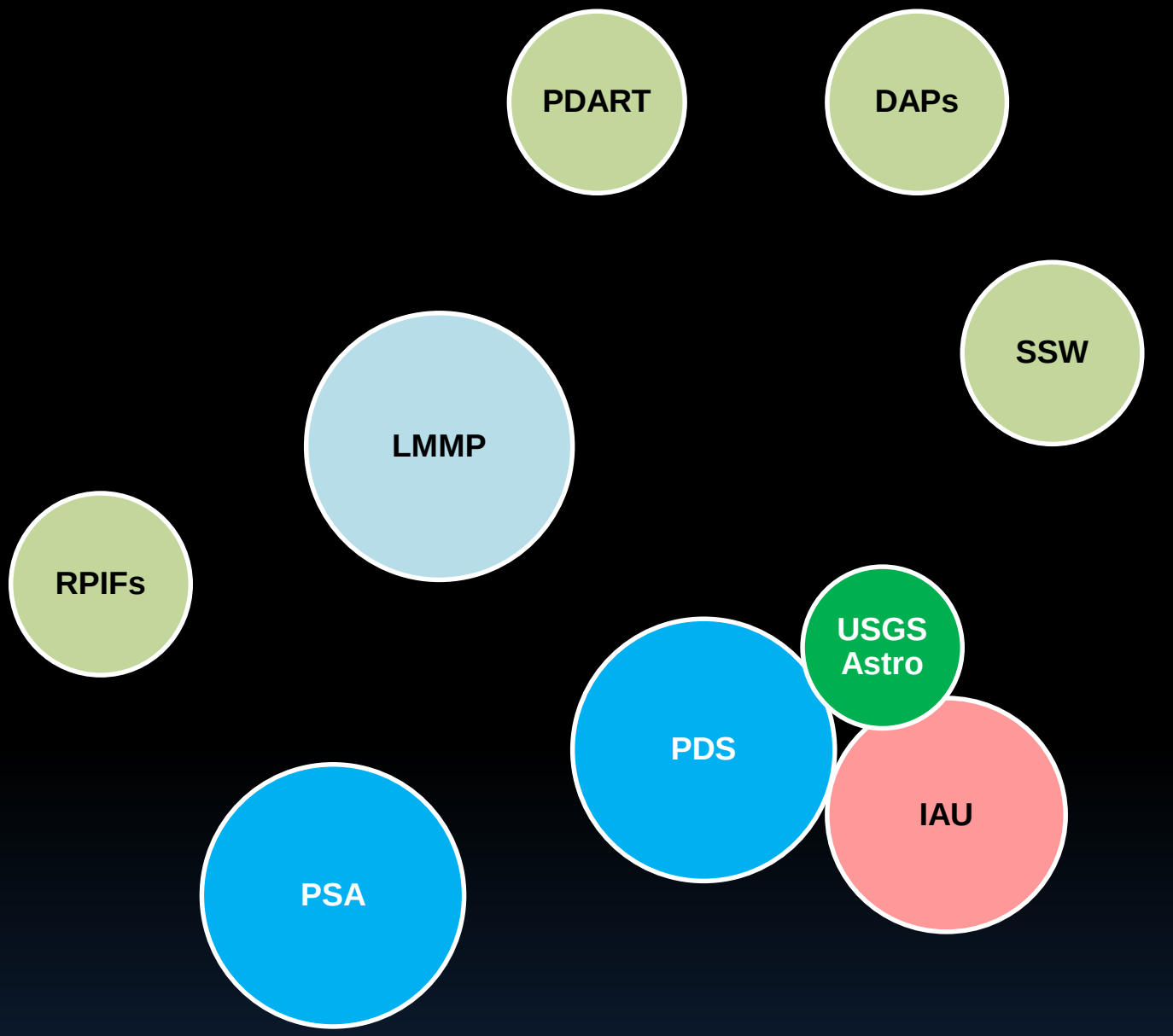

Changing

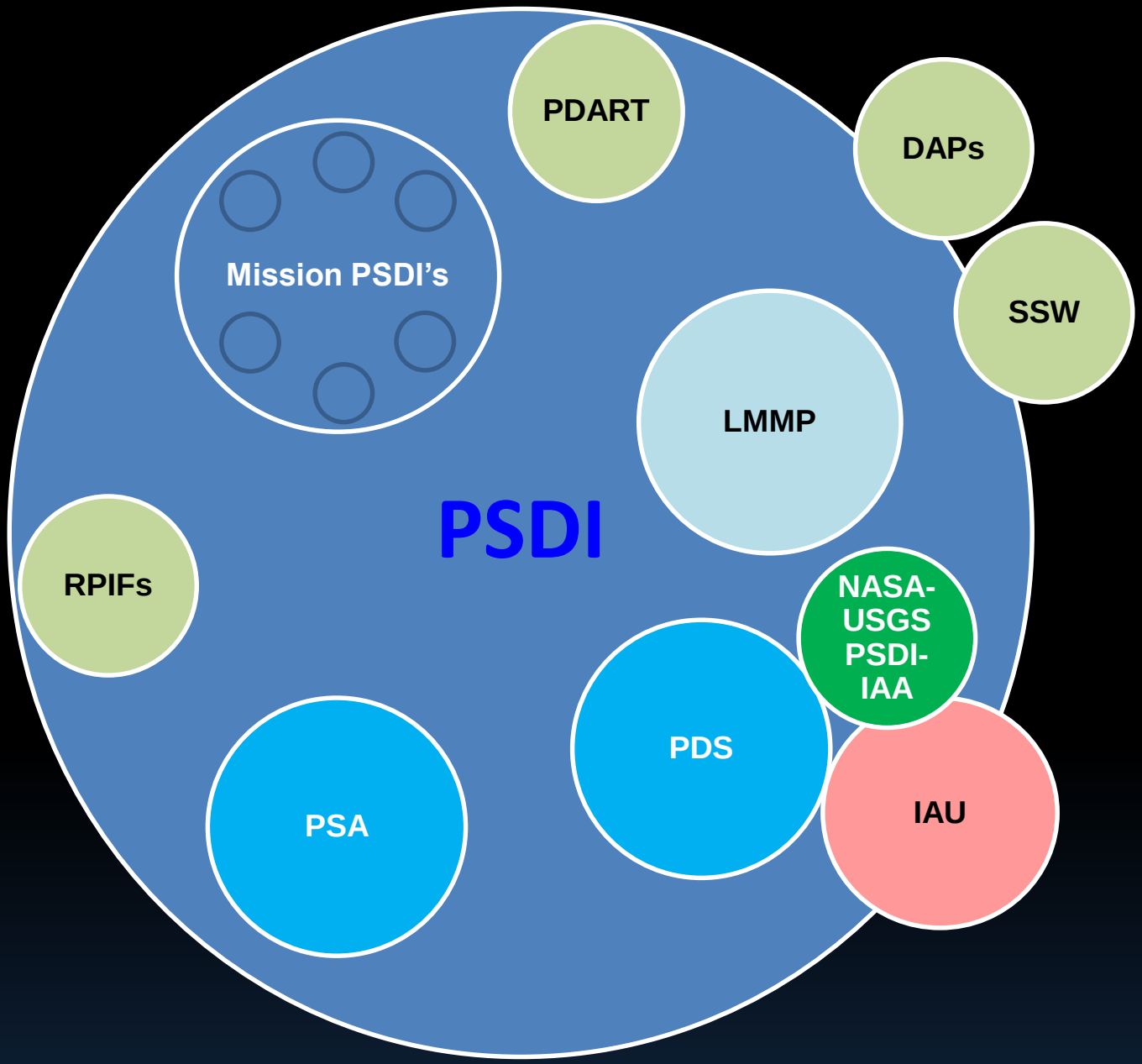
Accumulating but stable

# Why should NASA care about PSDI?

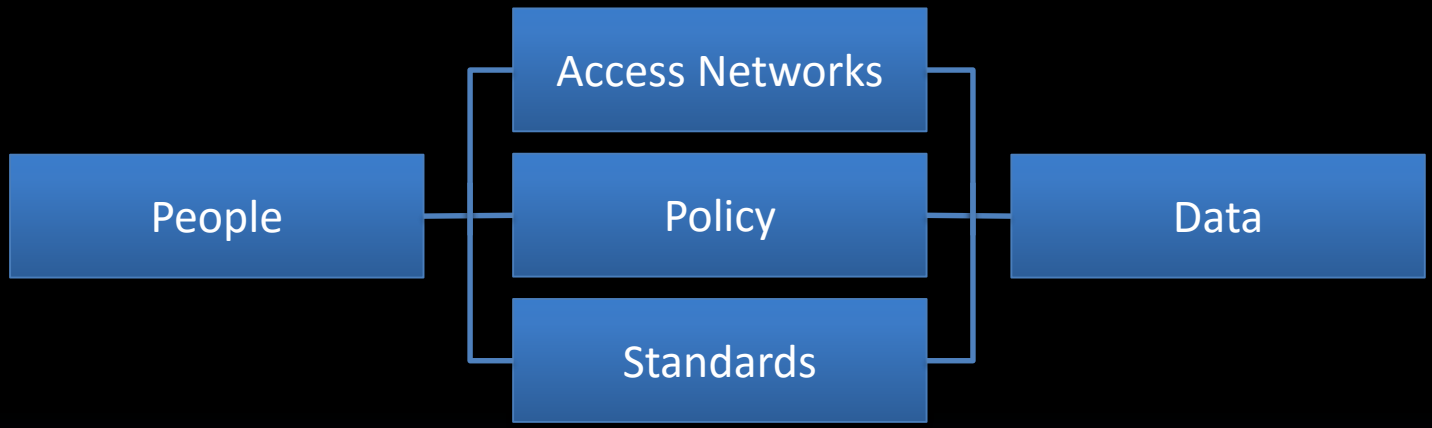
- NASA Strategic Plan includes:
  - expand the frontiers of knowledge, capability, and opportunity in space
  - accomplish the NASA mission mandate by effectively managing people, technical capabilities, and infrastructure


WISDOM
KNOWLEDGE
INFORMATION
DATA


PDART
DAPs
SSW
LMMP
RPIFs
USGS Astro
PDS
IAU
PSA


PDART
DAPs
Mission PSDI's
SSW
LMMP
PSDI
RPIFs
NASA-
USGS
PSDI-
IAA
PDS
IAU
PSA

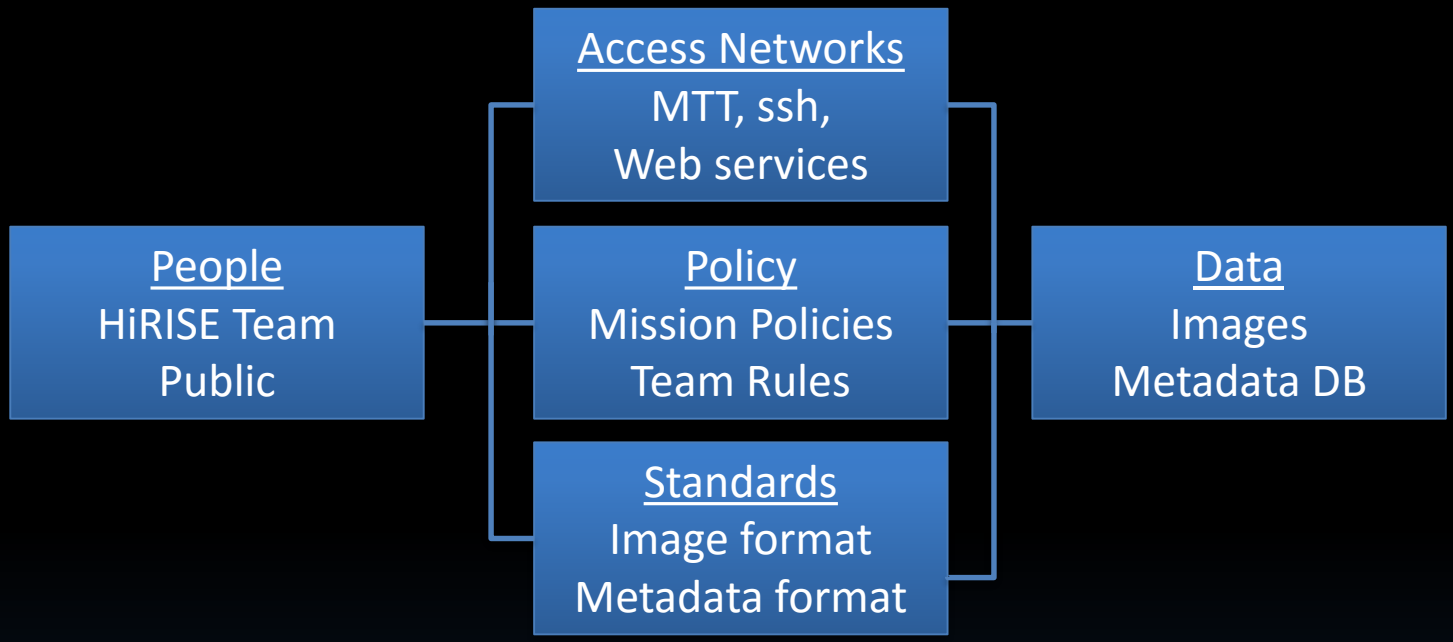
# SDI Components



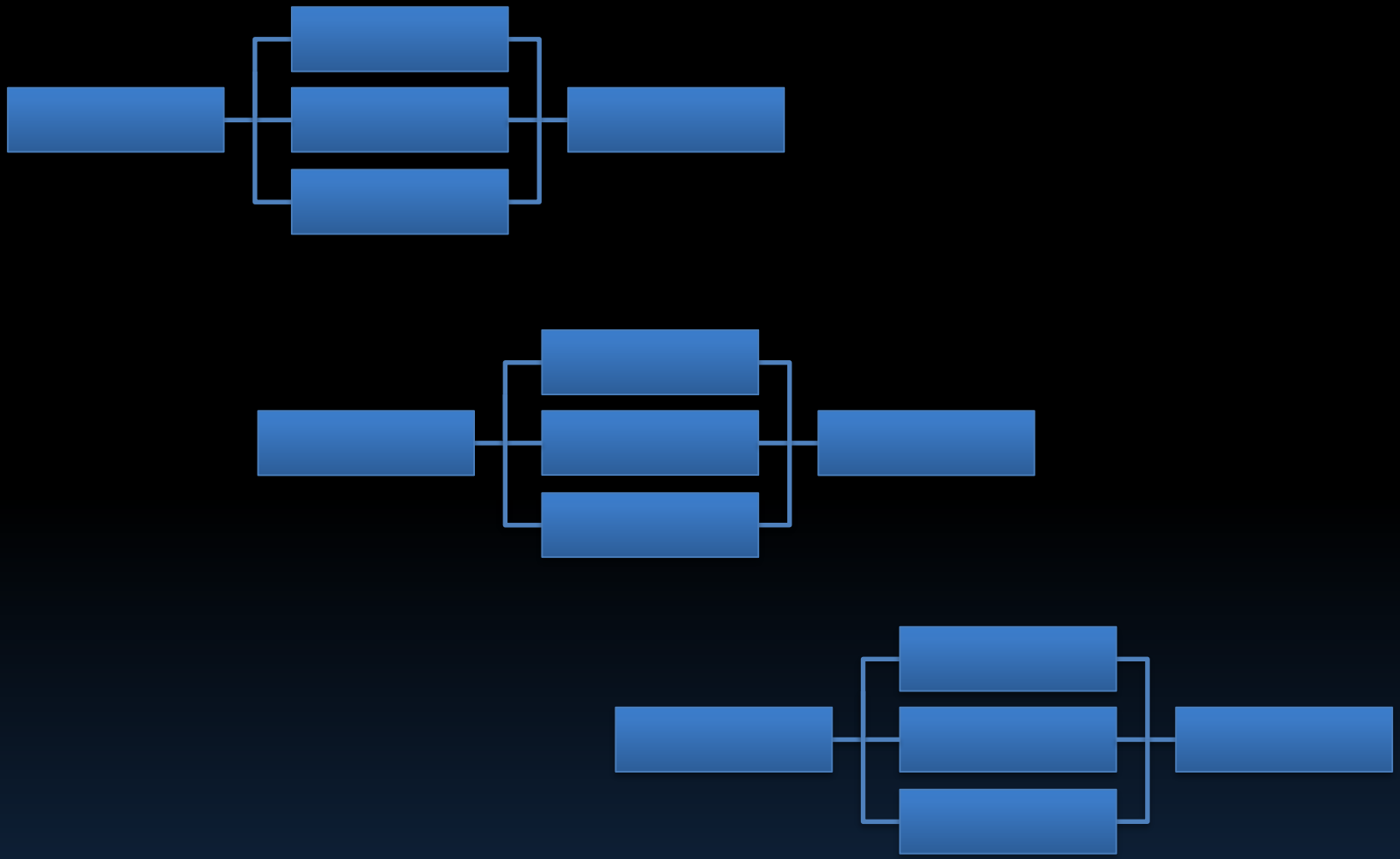

Changing

Accumulating but stable

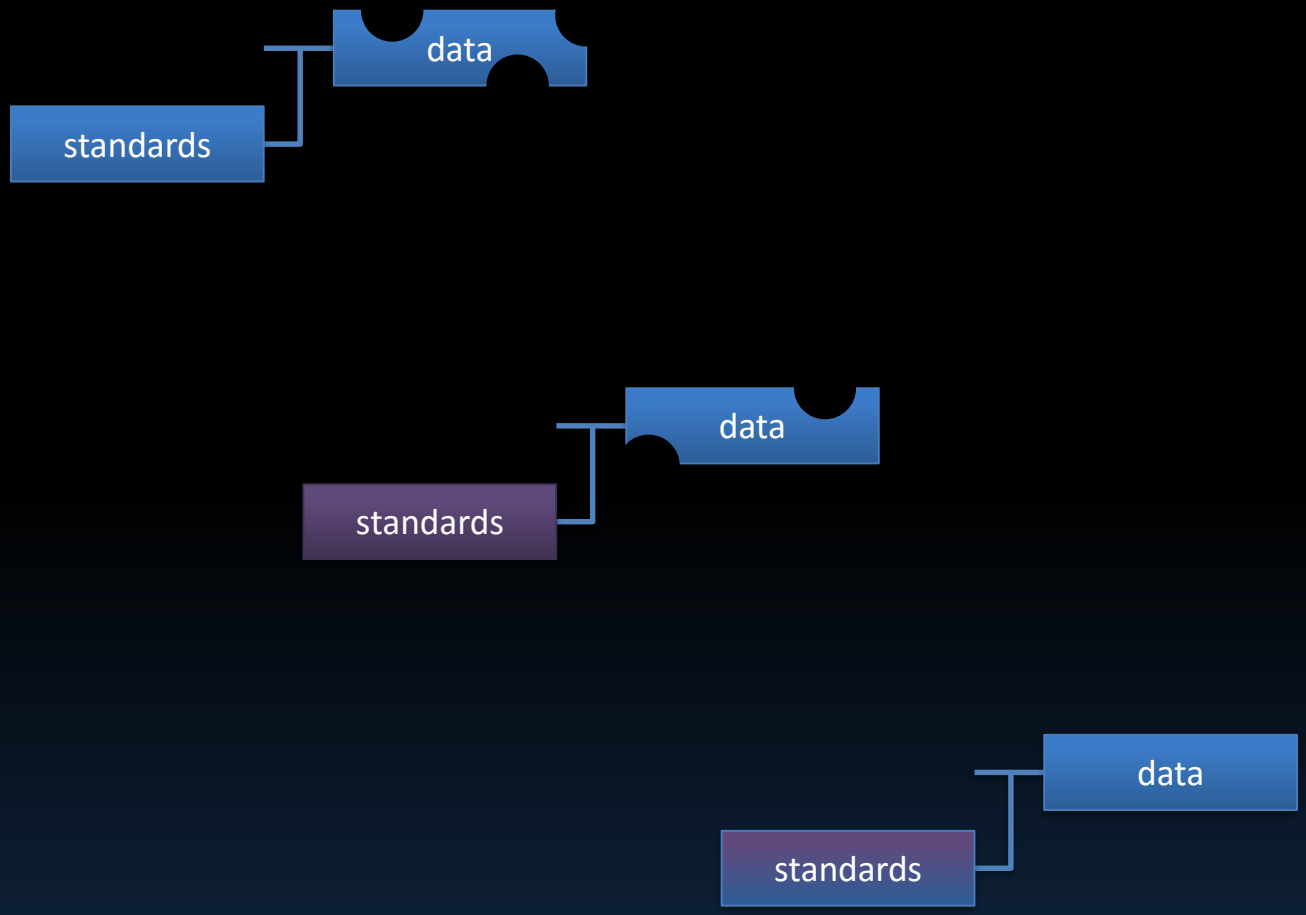
# HiRISE PSDI Components



# MRO instrument PSDIs



# After the mission



# PSDI for instruments, missions, planets, NASA

# Why a PSDI?

- Increasing data volumes
- High data acquisition costs
- Cross-domain research teams
- Need to remove spatial data expertise as a prerequisite

# PSDI Goals

- Provide discovery, access, and exploitation of spatially enabled planetary data for everyone