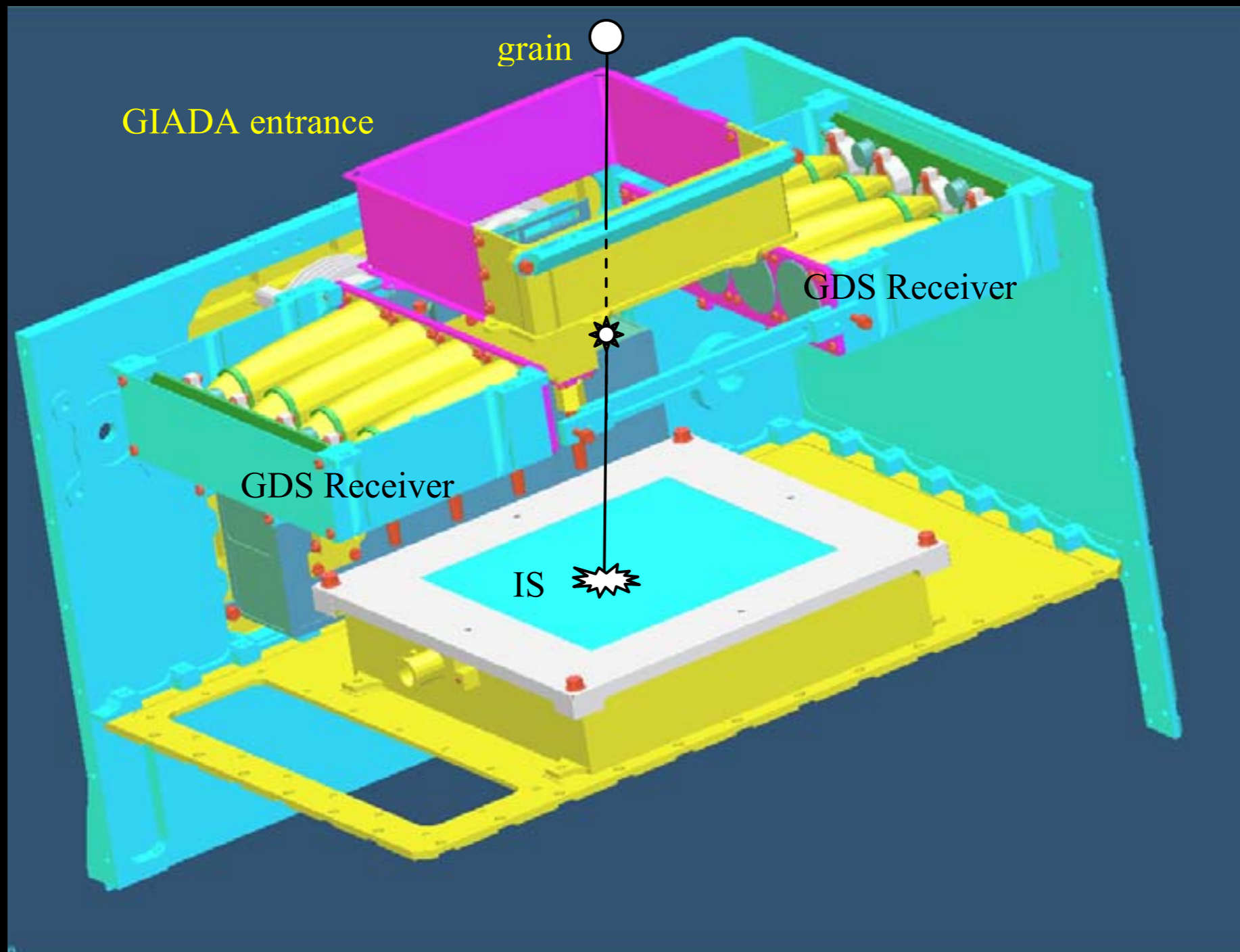# PDS Review
GAIDA

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The Instrument

Summary

- CODMAC Level 5 Data

- Rosetta-Orbiter GIADA Escort 1 and 2 67P Dust Maps

  - Maps of the spatial dust density (particles/m^3) in the comet coma

  - Maps of the dust mass distribution in the coma (kg/m^3)

  - Maps of the dust speed magnitude in the coma

  - Maps of the dust speed range in the coma

  - Maps of the dust production areas on the nucleus

Issues

- Readme.txt refers to wrong data product: …*Rosetta GIADA data during Rosetta Extension 3 phase*

- Docinfo.txt refers to the content of a different archive

- Catinfo.txt does not describe the content of the catalog directory

- Indxinfo.txt seems to refer to different archive

- *Many typos (see RIDs)*

- Incorrect map projections

Data Products

- Managed to read all tables

- Verify consistency partially outside of my area of expertise:

- ALL files appear to have incorrectly defined the map projection:

  - If truly the radius is 15km, then the km/pixel would be:
    15000 * PI * 2 / 1024 = 0.092039 km/pixel or
    MAP_SCALE   = 0.092039 <KM/PIXEL>

  - For a global file -180 to 180 and -90 to 90 lats, then the
    OFFSETS should be
    LINE_PROJECTION_OFFSET   = 255.5
    SAMPLE_PROJECTION_OFFSET   = 511.5

  - If the file is not global in extent (or the radius is not 15km),
    then the above formulation is not correct.

RID: Major

- ALL files appear to have incorrectly defined the map projection

RID: Minor

- Fixing typos

- This should also include fixing the archive documents (not included in the submitted RIDs)