DM Working Group Closing Remarks

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Agenda

- **DM1** (Tuesday Nov 17, 15:00-16:00 UTC)
  - **ObsLocTAP** status report (Jesus Salgado)
  - **Meas, Coords, Transform** Model Status report (Mark Cresitello-Dittmar)
  - **MANGO** a Model for Source Data (Laurent Michel)

- **DM2** (Wednesday Nov 18, 6:00-7:00 UTC)
  - **Provenance** activities in the European project ESCAPE (Matthieu Servillat)
  - **ProvTAP** evolution after first community feedback (François Bonnarel)
  - Extending **ObsCore** for Time Data (announcement by Mireille Louys)
  - Data Model posture review (Markus Demleitner)

- **Cross Domain Sessions**
  - DAL1 (Tuesday Nov 17 2020 @ 13:30 UTC)
    - **ObjVisTap** status & discussion (Aitor Ibarra)
  - DAL2 (Wednesday Nov 18 2020 @ 22:00 UTC)
    - Implementation of the IVOA **Spectral Data Model** at IPAC (Vandana Desai)
      - Need to improve spectral data serialization to be included in DM roadmap (Spectral DM? Cube DM?)
    - Enriched Query-Server Response: DataLinks and Column Groups (Judith Silverman)
  - Education/Apps/DAL/DM (Thursday Nov 19 2020 @ 20:30 UTC)
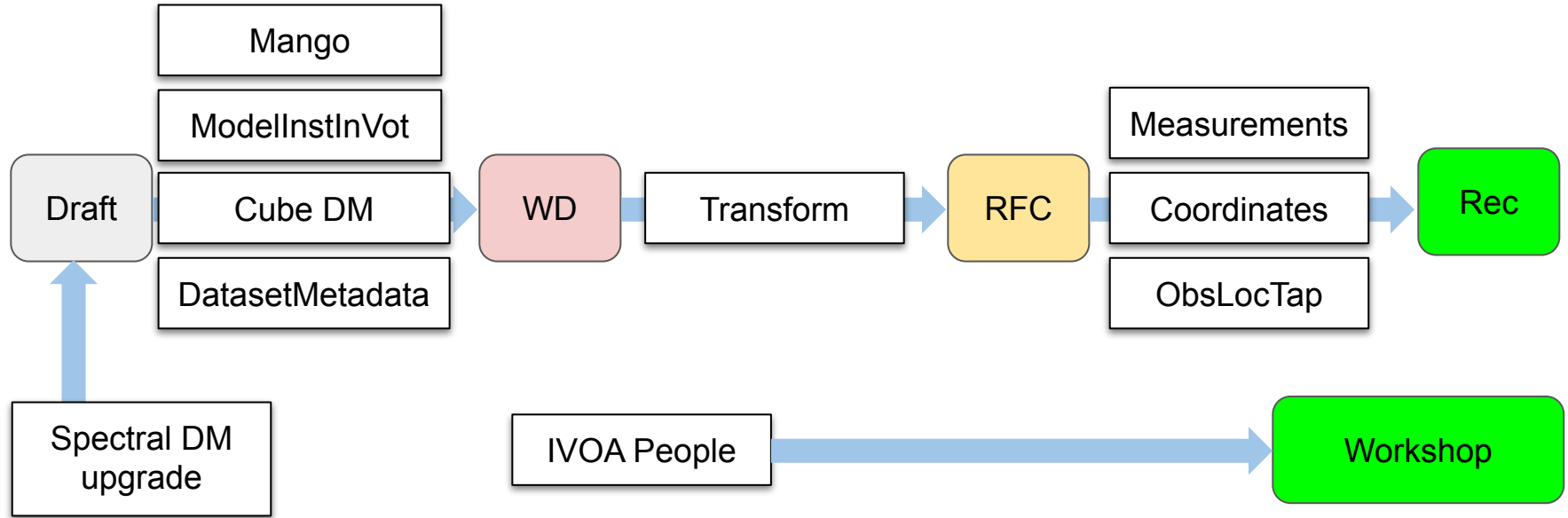   - Protocols for handling file-oriented catalog data (Gregory Dubois-Felsmann)

Sessions

- ## Provenance in ESCAPE European Project
    - Model description
    - **Provenance** is connected with the FAIR principles
    - Creation of a working group to define the minimum provenance is being created

- ## Provenance in TAP: ProvTAP
    - The evolution due to community feedback is presented
    - Example shown on **ProvHiPS** where the configuration files are discovered
    - Need to simplify the relational mapping ot facilitate the query setup (less joins is the better)
        - Denormalization, usage of views ...
        - Approach proposed is to keep full **ProvTAP** schema and propose views

- ## ObsLocTAP (Observation Locator Protocol) (RFC: Deadline 2020/11/27)
    - Definition of metadata related to observations planning and schedule
    - Implementations: Chandra, XMM and Integral
    - Existing tools to help to community to implement the protocol
    - Recommendation of IAU endorsement — IAU General Assembly August 2021

- ## ObsCore Extension for Timeseries
    - Define a table (ivoa.t_obs) to expose time series related fields which can be joined to the main **ObsCore** table.
    - Add an extra capability to discover the feature is this a DAL action?
    - Discussion topics e.g defining the time series type, joining obscore with time extension….
    - RoadMap to the next interop: Draft a note to expose the elements.

Meas, Coord, Transform, Mango and Related Issues

- ## Meas Coord and Transform (Meas and Coord in RFC: Deadline 2020/12/07)
  - **Measurements**, **Coordinates**:
    - Formal comparison with Astropy objects, exercised with Mango, coord exercises with Transf
  - **Transform** (last update 2020/08):
    - No big change in the model but renaming things + scope refined
    - Implementation with AST and gWCS: Fits -> ADSF exports

- ## Model for Source Data
  - Flexible model for annotate catalog data
  - Model (**MANGO**)+ VOTable annotations (**ModelInstanceInVot**) accessible on GitHub
  - End to end workflow from annotation building to a generic client
    - Exercised with Chandra, XMM, a few Vizier catalogues and a Gaia sample.

- ## Discussion on DM Design and Usage
  - Discussion initiated by Markus
    - Lots of contributions
    - A majority trend to simplify the models and their usages
  - The ball is in WG court,
    - Arranging a Workshop (survey + data challenge)?
    - Preserving the work done
    - Mail on a list coming soon.

WG Roadmap

Good Interop in spite of the outbreak!