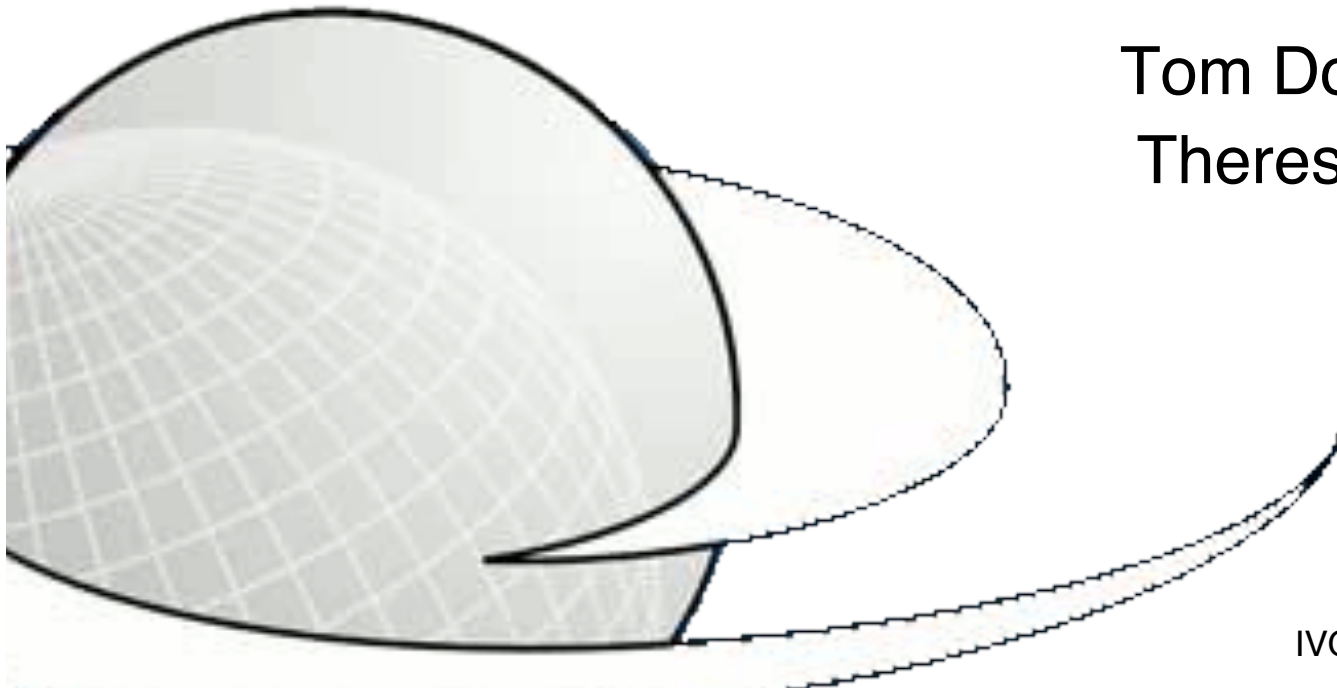# THE INTERNATIONAL VIRTUAL OBSERVATORY ALLIANCE

VAO Curation and Registry Validation

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Resource Curation/Validation Overview

- VAO registry is searchable registry containing self-published and harvested resources from entire IVOA Registry of Registries

- Resources are validated on ingest to DB (XML validation only)

- Existing resources in DB continually validated by automated service at HEASARC (Cone Search, SIA, VOTable results, others pending)

- Ongoing question: what to do with invalid resources?

Resource Validation/Deprecation process history

- Presented May 2011 interop
- Collected Registry WG, curator feedback
- VAO Operations group focused on service connectivity errors for early rounds of resource deprecation
- 1st round of services deprecated (not deleted) Sept 2011
- Deprecated services are now hidden in VAO basic search, are still in OAI, other interfaces

Resource Validation/Deprecation process

- HEASARC automated service collects resource validation failures, reasons
  - http://heasarc.gsfc.nasa.gov/vo/validation/

- Validator results are human-inspected
- Operations group discusses which types of failures are worth deprecating a service
- Curators of invalid services contacted by email
- After 2 weeks without fix or feedback, service is 'deprecated' by editing validationLevels

Deprecating a resource using validationLevels

Within the registry resource for the service as hosted at STScI, validationLevel is set to 1 at:

Registry resource-level (if only one capability)

```
<ri:Resource…>
  < validationLevel validatedBy="ivo://archive.stsci.edu/nvoregistry">1</validationLevel>
     …
</ri:Resource>
```

Capability-level (for the invalid service)

```
<capability xsi:type="cs:ConeSearch" standardID="ivo://ivoa.net/std/ConeSearch">
  < validationLevel validatedBy="ivo://archive.stsci.edu/nvoregistry">1</validationLevel>
     …
</capability>
```

Deprecated Service Breakdown

- ## 564 resources determined invalid
  - Not counting known issues at CDS with multiple resources per record.

- ## ~100 services marked invalid after known issues with LEDAS (not getting updated, possibly already fixed records)

- ## 19 services across IVOA deprecated

Deprecated Service Breakdown

- Of the ~80 invalid services not deprecated
  - Many failed validation only in error conditions
  - Some timed out from too-big test query, were actually valid

- Of the 19 deprecated services
  - All timed out on good test data
  - One has already been fixed!

Moving Forward

- For the time being, will only deprecate services non-responsive to reasonable test data
- Will continue notifying curators of less severely invalid services
- Keeping 2 week notification

- Next step: validating SSA, TAP services
  - Need fix to SSA validator and/or
  - hook into other IVOA projects' existing validators