Earthdata Search: The Relevance of Relevance

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EED Program

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Back to Collections

MODIS/Terra Near Real Time (NRT) Land Surface Temperature/Emissivity 5-Min L2 Swath 1km

Retrieve Collection Data

Showing 4 of 4 matching granules for the selected day. (Show All)

Sort by: Start Date (Newest first)

Search Time: 0.2s

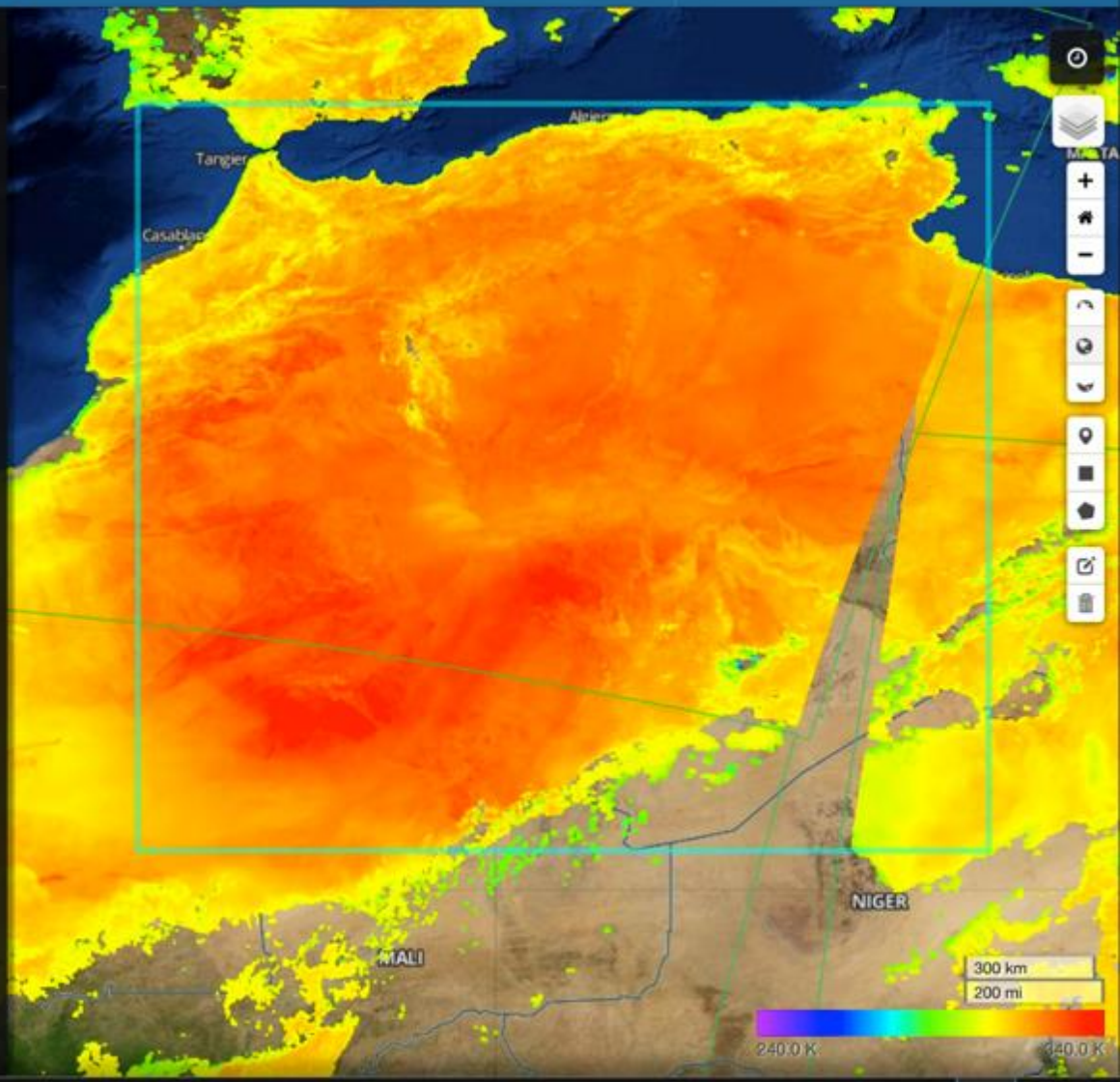
Report a metadata problem

MOD11_L2.A2016162.1100.006.2016162120416.NRT.hdf
2016-06-10T11:00:00Z to 2016-06-10T11:05:00Z

MOD11_L2.A2016162.1055.006.2016162120412.NRT.hdf
2016-06-10T10:55:00Z to 2016-06-10T11:00:00Z

MOD11_L2.A2016162.0920.006.2016162103246.NRT.hdf
2016-06-10T09:20:00Z to 2016-06-10T09:25:00Z

MOD11_L2.A2016162.0915.006.2016162102959.NRT.hdf
2016-06-10T09:15:00Z to 2016-06-10T09:20:00Z

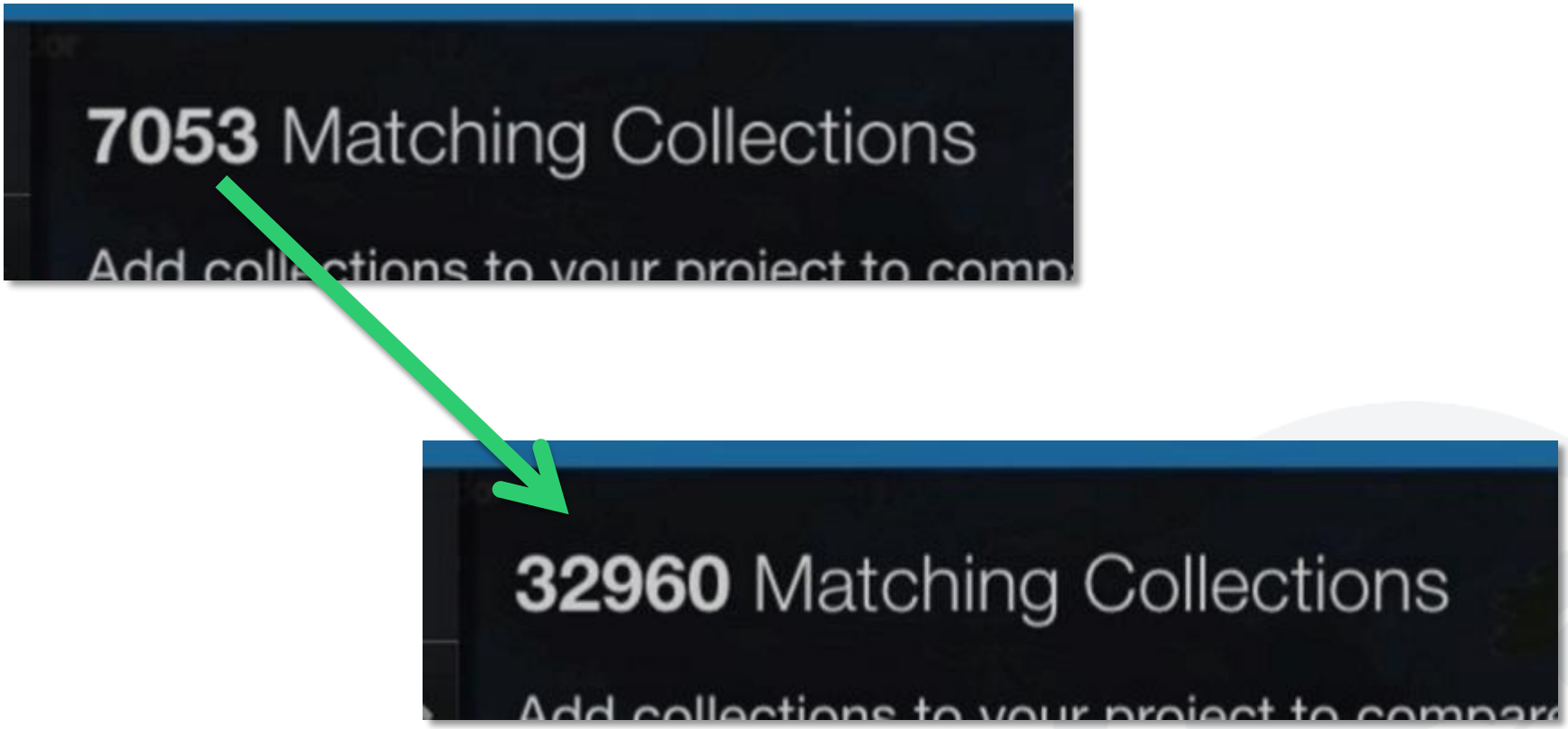


DAY

MODIS/Terra Near Real Time (NRT) Land Surface Temperature/Emissivity 5-Min L2 Swath 1km

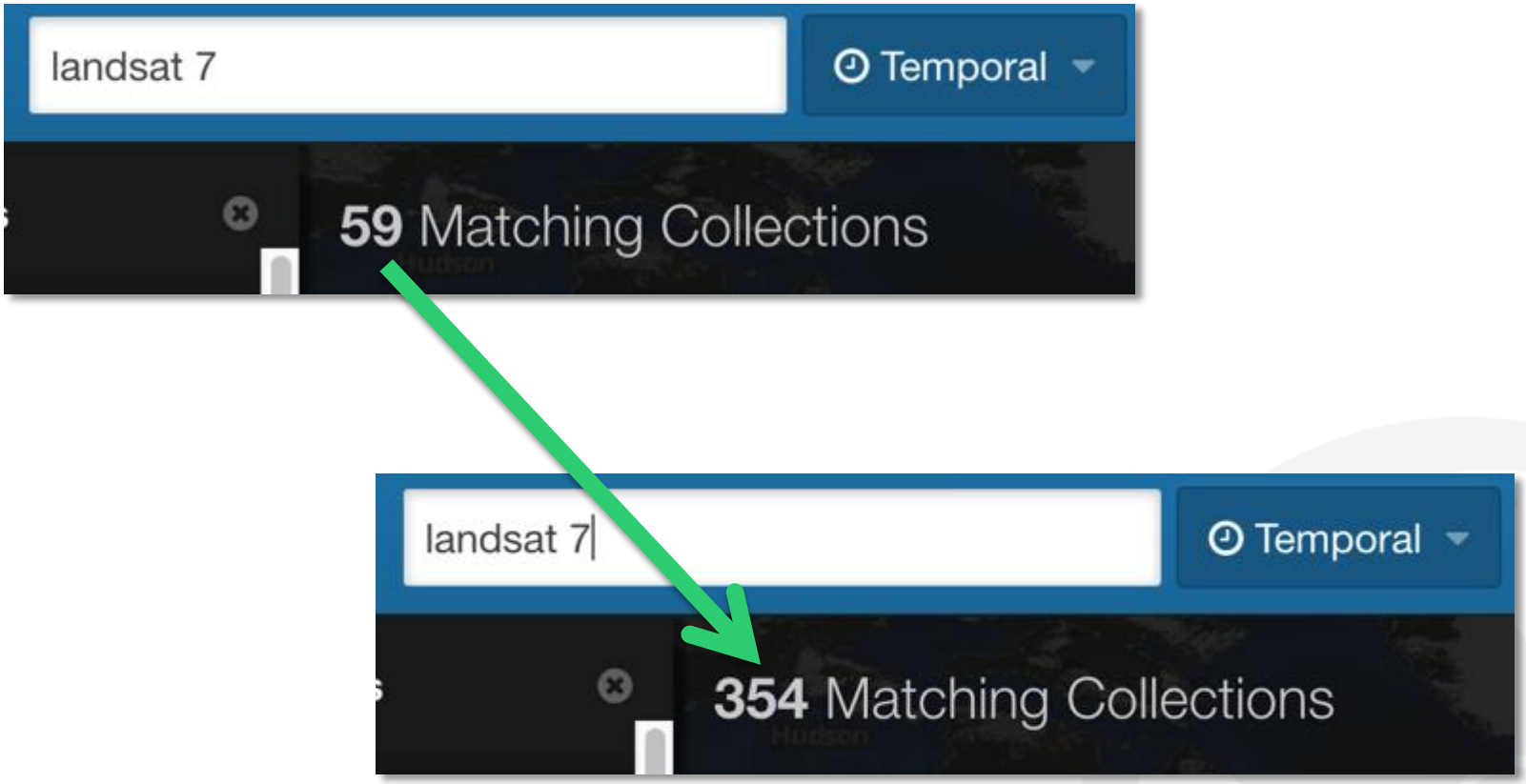
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 01 02 03 04 05 06 07 08 09 10 11 12
Jun 2016

Late 2015: Our catalog grew



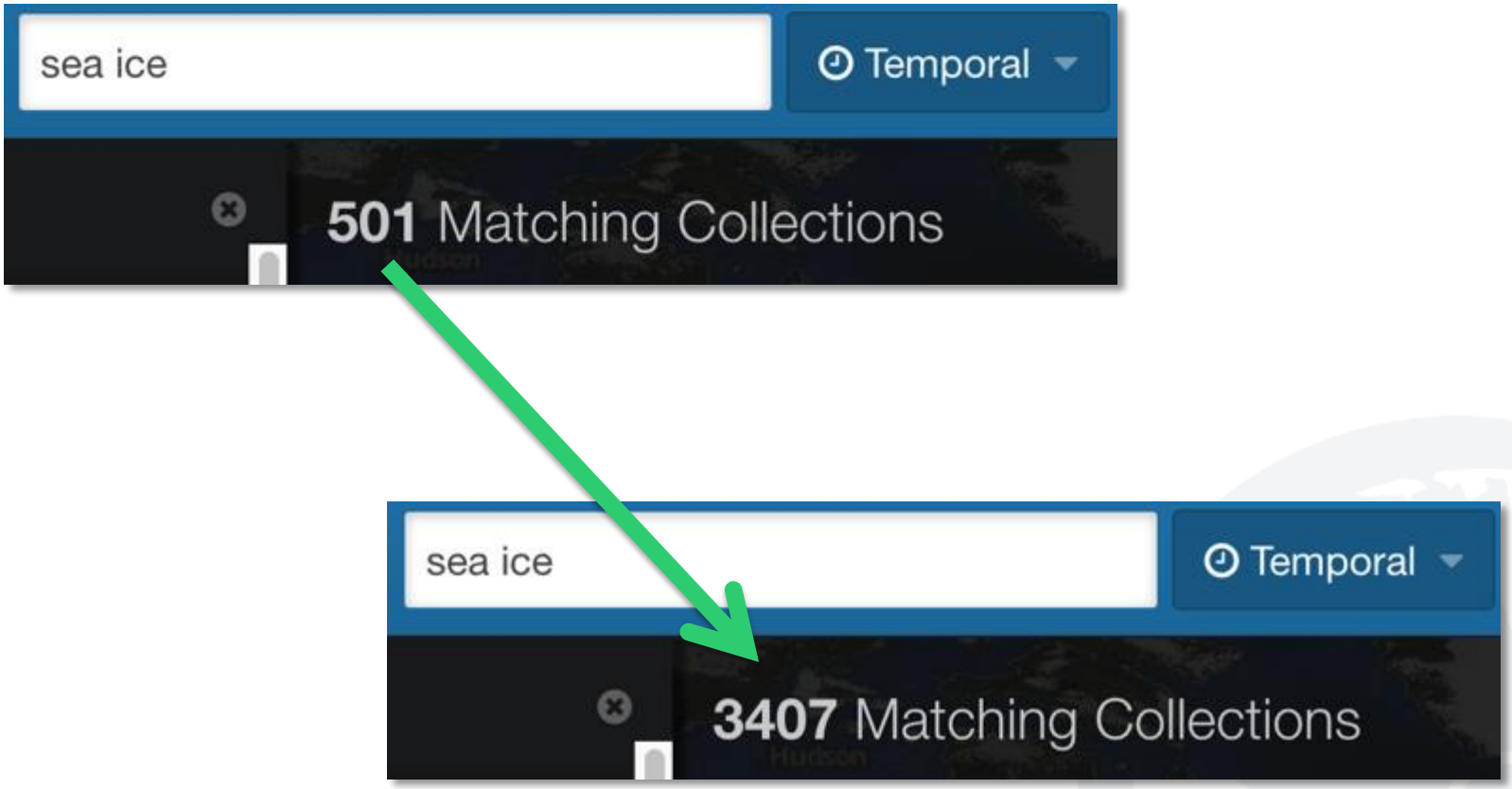
EOSDIS

… as did our relevancy needs



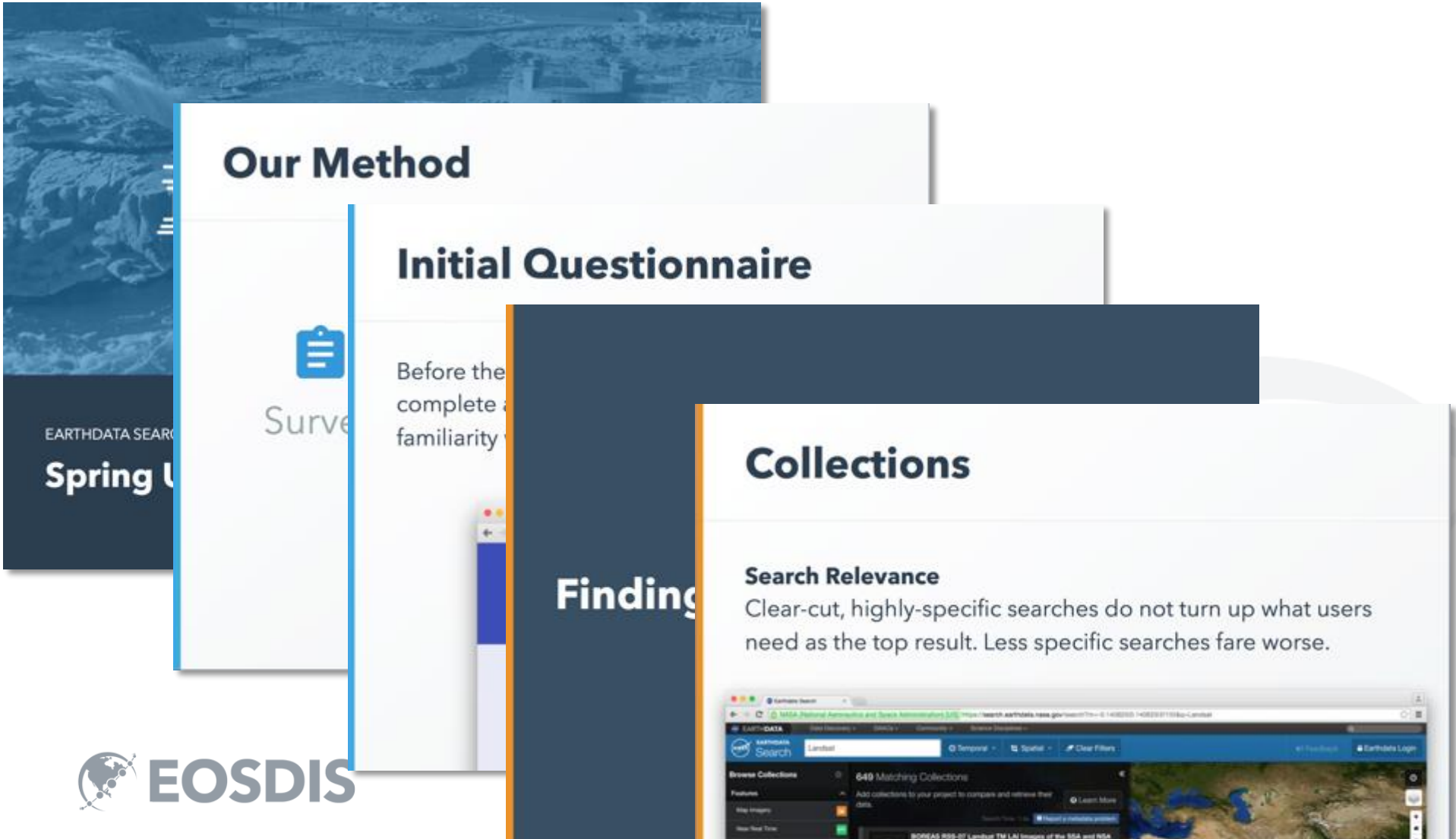
EOSDIS

… as did our relevancy needs



EOSDIS

Users echoed the need for better relevance



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If users can’t find the collections they need,
none of our other work matters

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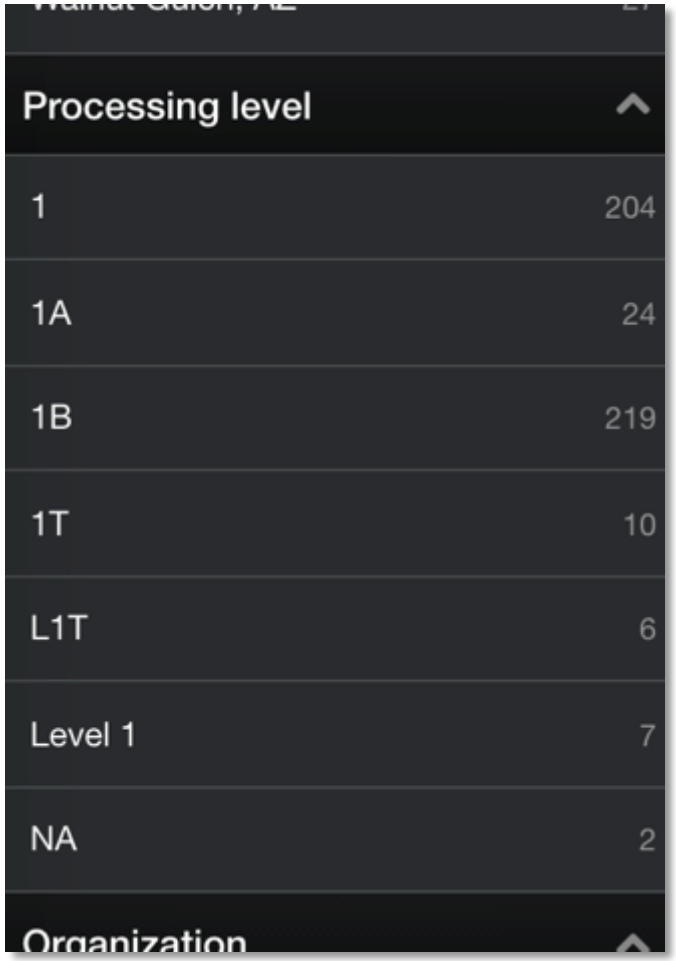
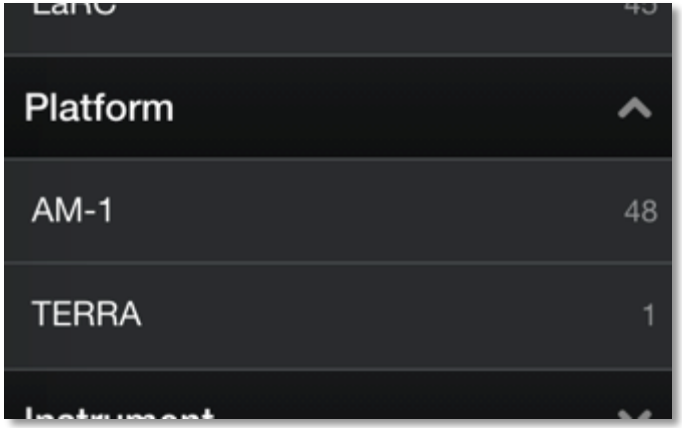
Earthdata Search

METADATA AND DISCOVERABILITY

Metadata isn’t always consistent

(Nor should we require it to be)





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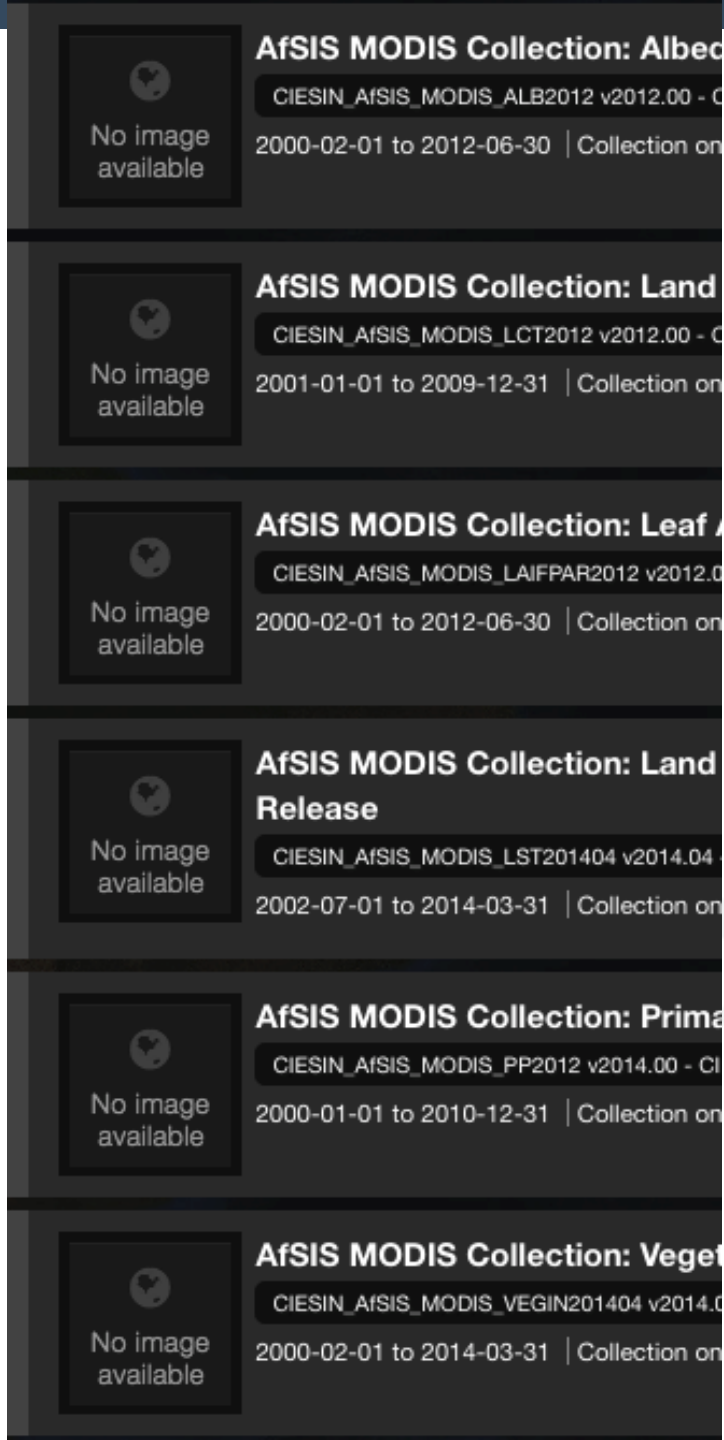
Sometimes it is too consistent



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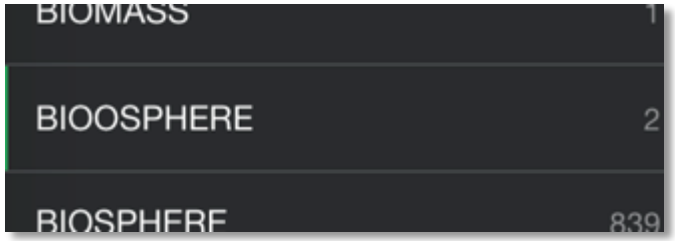
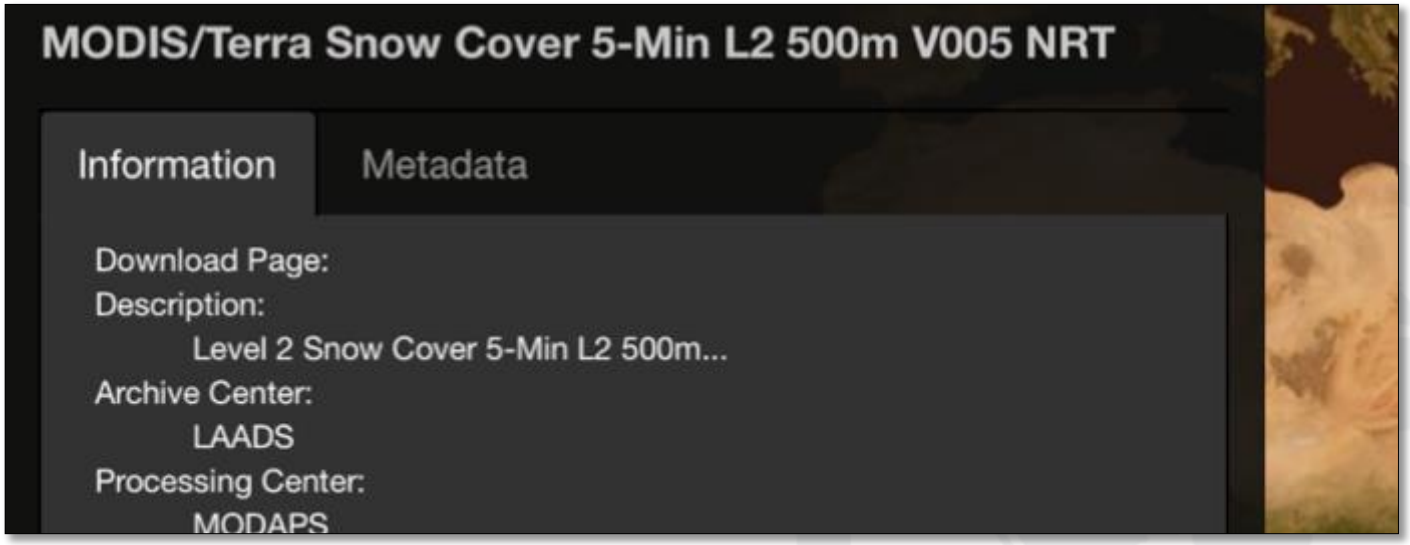
Sometimes it's incomplete or contains errors





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Sometimes it is too complete

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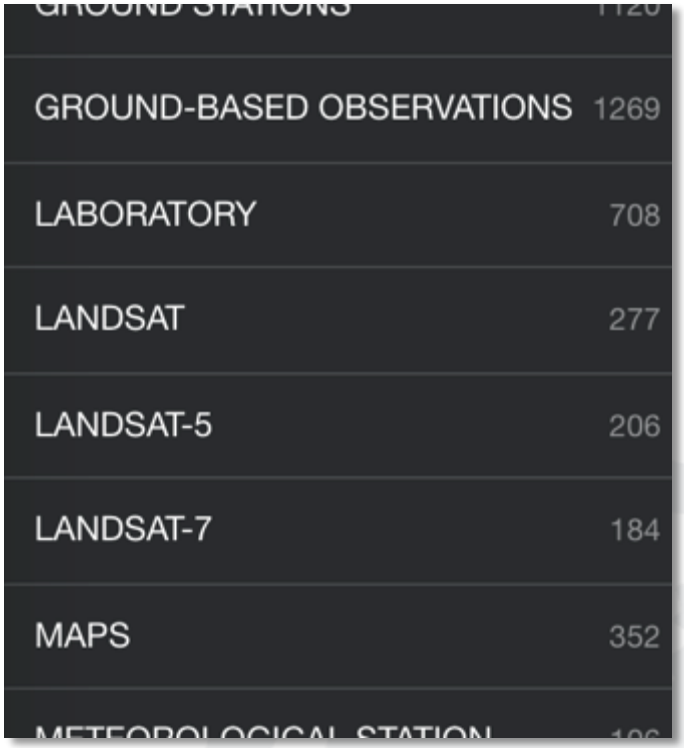
Facet relevancy matters, too



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Providing relevant refinement options and meaningful distinctions between results is as important as result order

Earthdata Search

HOW DO WE IMPROVE RELEVANCY?

Immediate easy wins

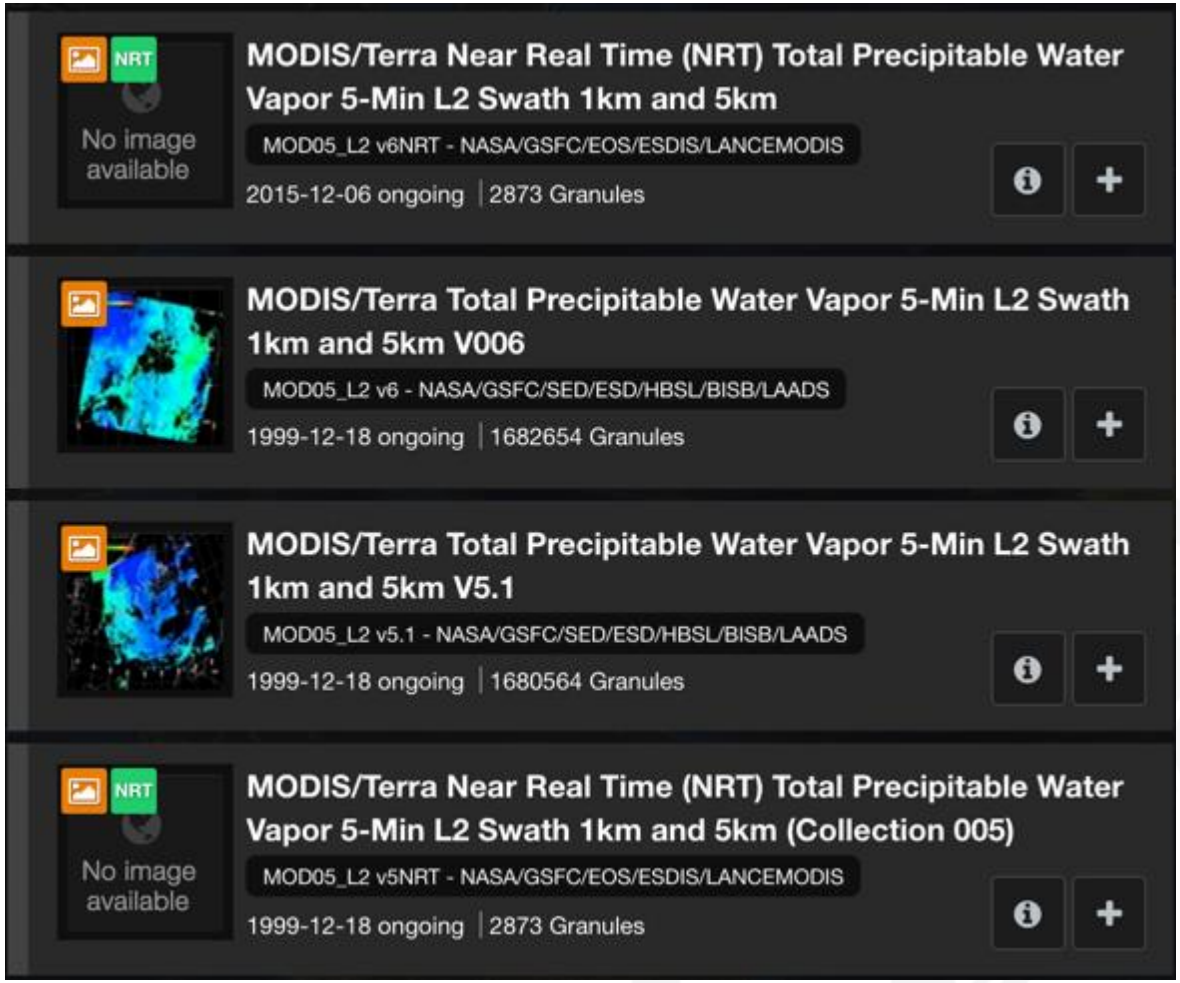
Sort order: Newer versions first

Version 6 Near-Realtime

Version 6

Version 5.1

Version 5 Near-Realtime



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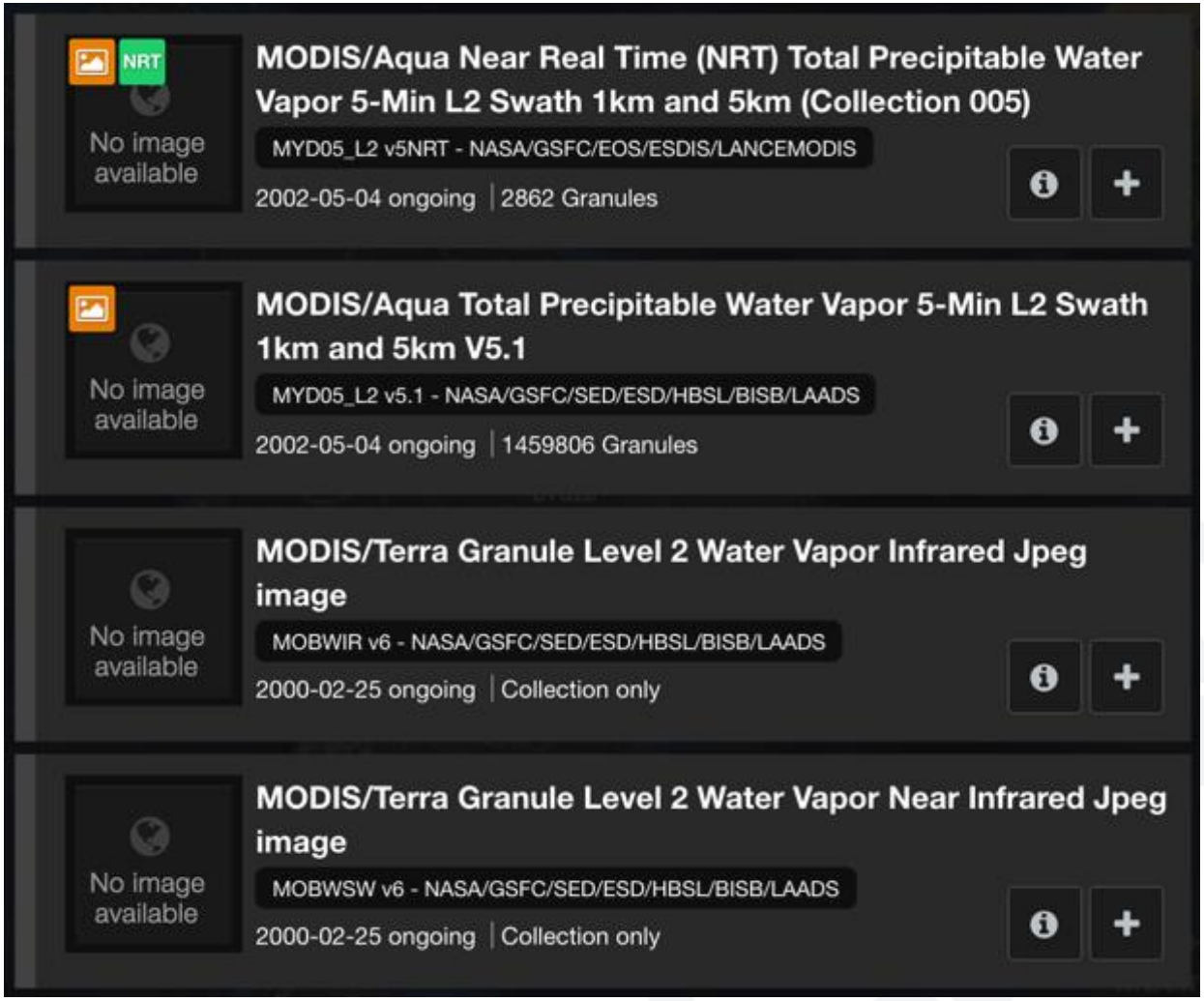
Sort order: Collections with granules first

2,862 Granules

1,459,806 Granules

Collection only

Collection only



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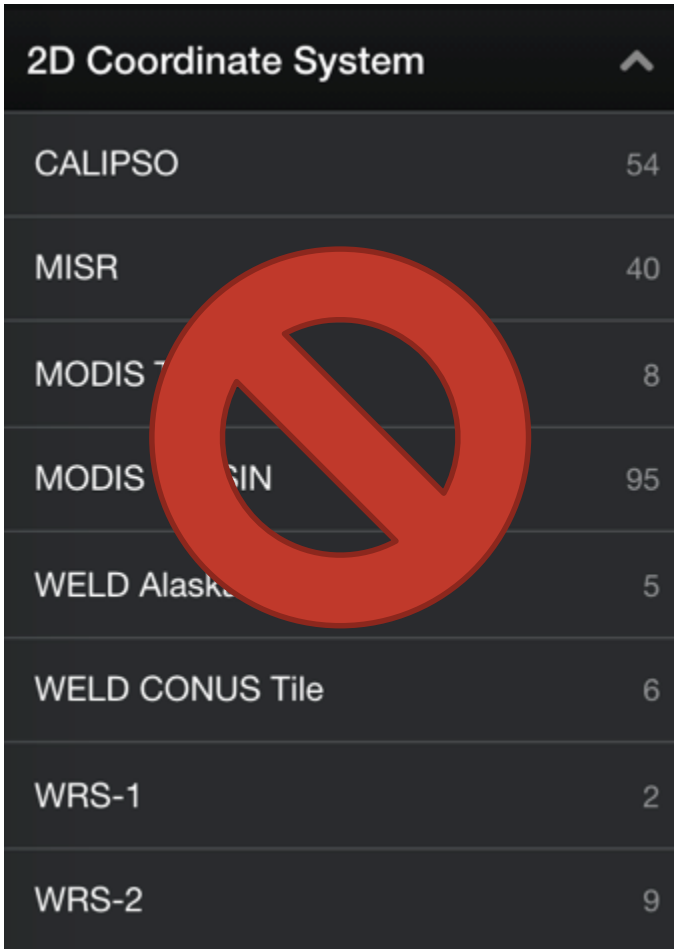
Remove Less Useful Choices



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Gather Metrics for Improvement

```
{"event": "search",
 "data":{"page_size":"20","free_text":"sea ice","page_num":"1”}}

{"event": "filter",
 "data”:{"echo_collection_id":"C1000001538-PROV”,"page_size":"20","page_num":"1”}}

{"event": "search",
 "data":{"page_size":"20","free_text”:"modis sea ice","page_num":"1”}}

{"event": "search",
 "data":{"page_size":"20","free_text”:"mod29","page_num":"1”}}

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"page_size":"20","page_num":"1”}}

{"event": "access",
 "data":{"collections":["C1000001160-NSIDC_ECS"]}}
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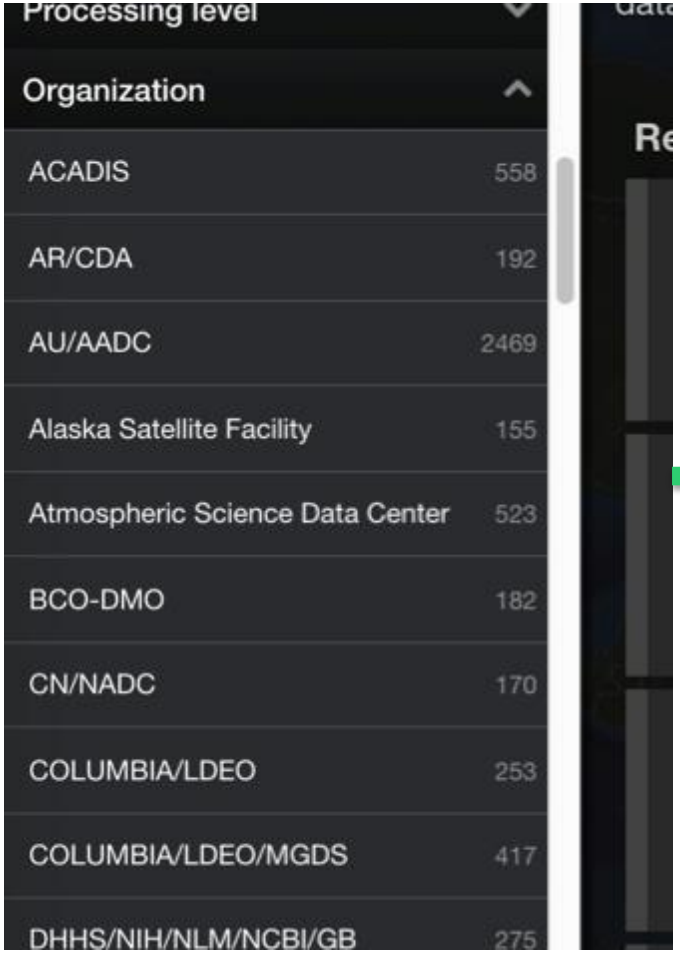
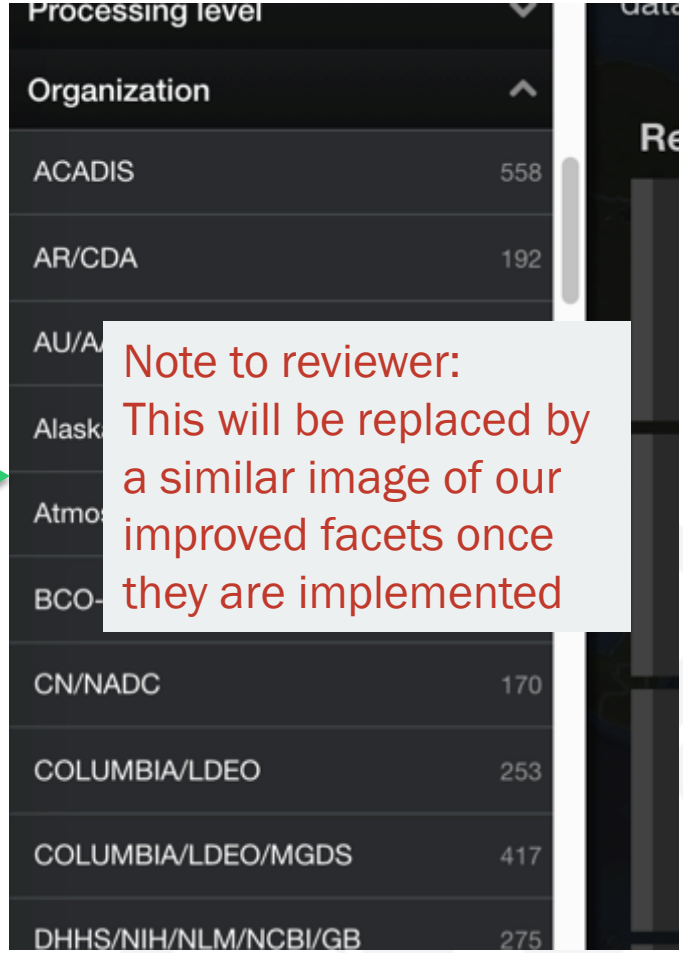
Broader Discoverability Improvements

“Humanized” Facets





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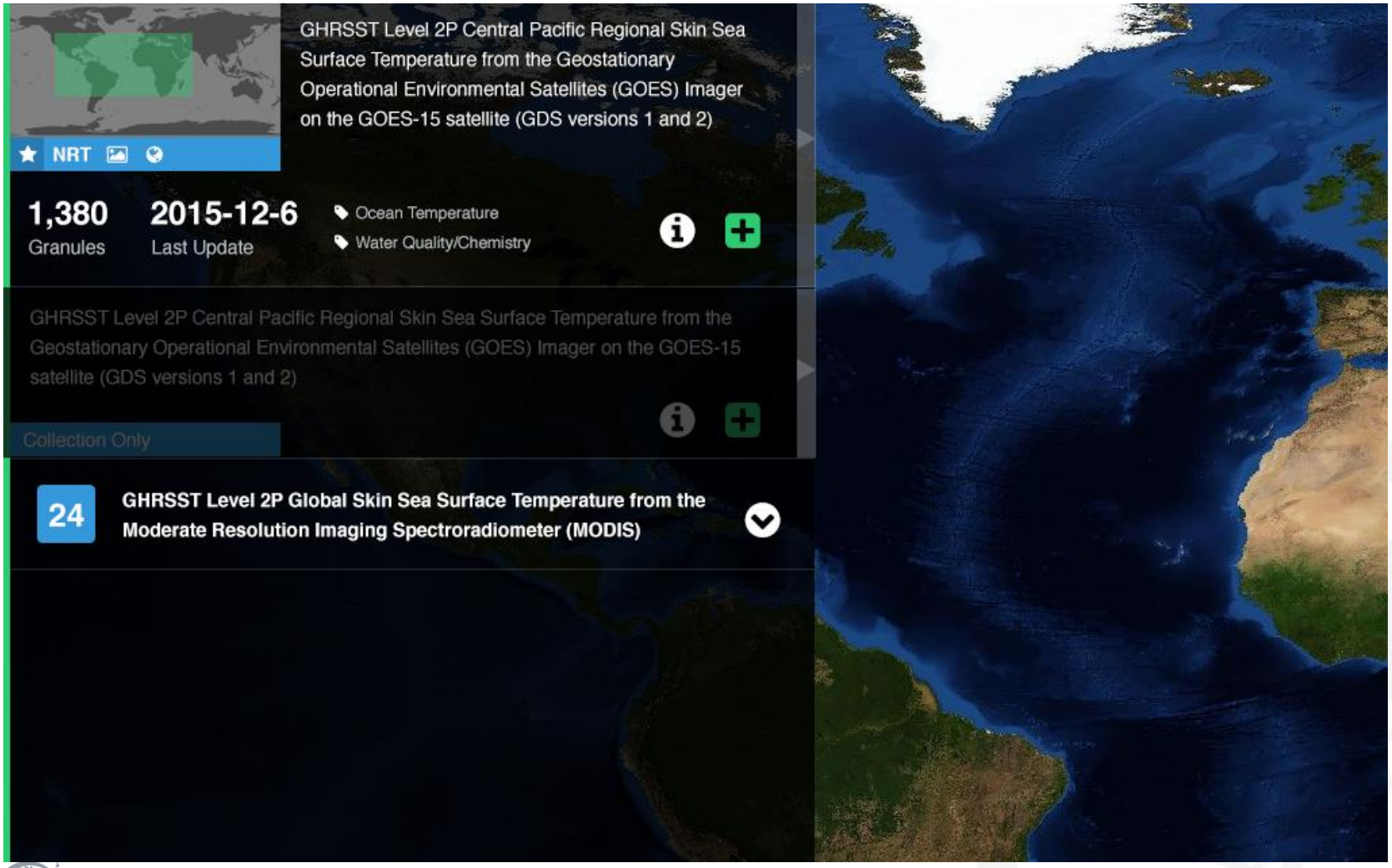
Surface more distinguishing information in collection results



EOSDIS

Use Learned Relevancy

```
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{"event": "filter",
 "data”:{"echo_collection_id":"C1000001538-PROV”,"page_size":"20","page_num":"1”}}

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{"event": "search",
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{"event": "filter",
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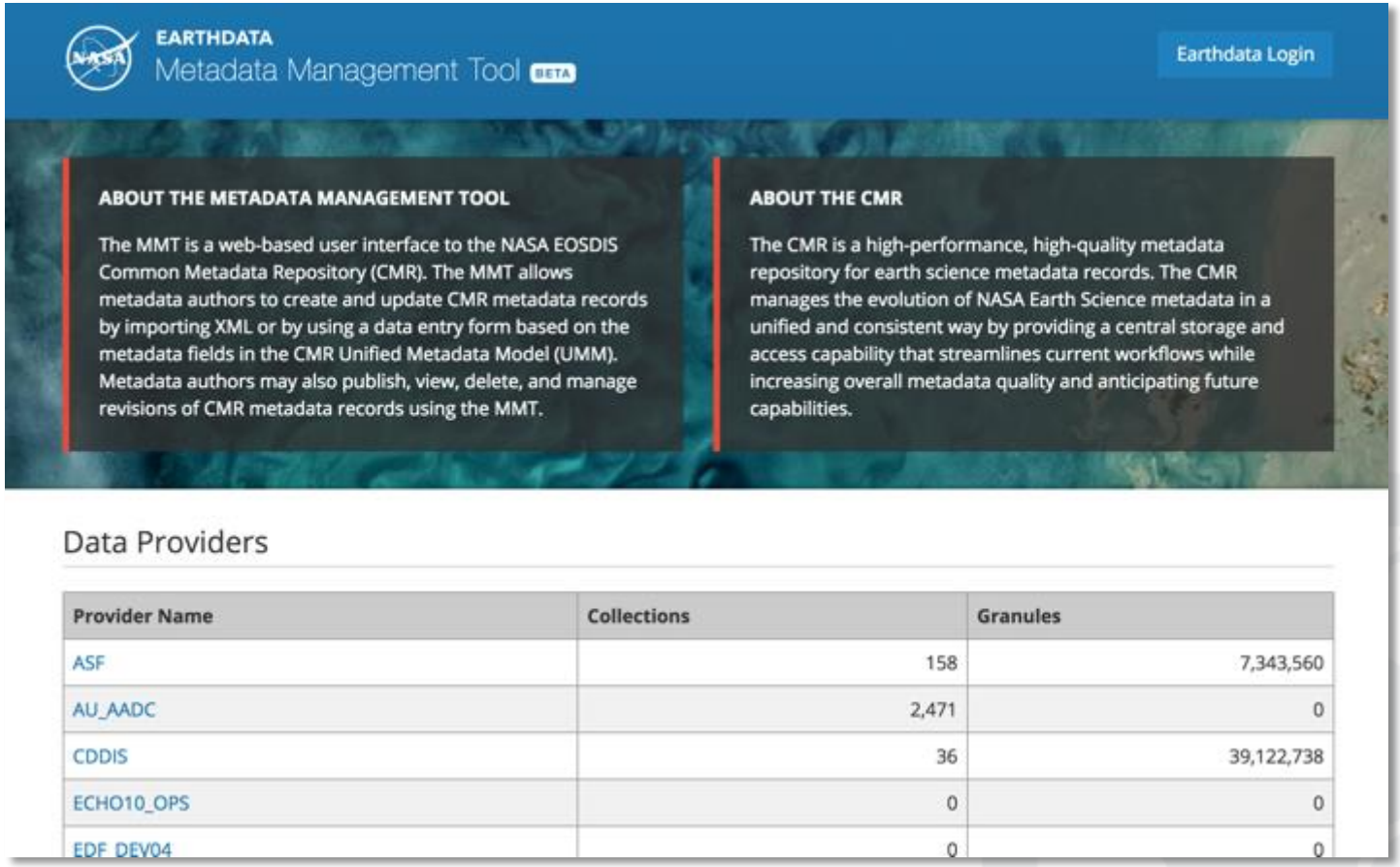
"page_size":"20","page_num":"1”}}

{"event": "access",
 "data":{"collections":["C1000001160-NSIDC_ECS"]}}
```

EOSDIS

Keep Improving Metadata



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Did it help?

An ESIP 2017 Talk

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QUESTIONS?

Thank You!

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This material is based upon work supported by the National Aeronautics and Space Administration under Contract Number **NNG15HZ39C.**

Raytheon

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