

Euro-VO Registry Weather Report

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Euro-VO Registry 3.1 with many improvements

- <https://registry.euro-vo.org>
- Improved existing Euro-VO Registry validators
 - See impact on the charts
- REST API for Service Validations
- New CDS's MOC validator
- Users A&A through standard ESA science archives and web services user accounts
- Improved documentation and tutorials
- RegTAP 1.1
- HTTPS
- Significant code refactoring to improve reliability and maintainability



The screenshot shows the Euro-VO Registry website interface. At the top, there are navigation tabs for 'Astronomers', 'Data Publishers', and 'VO Developers'. The main content area is titled 'OVERVIEW' and provides instructions on how to get data into the VO ecosystem. Below the text, there is a video player showing a welcome message to the Euro-VO Full Interchangeable VO Resource Registry. The video player includes a progress bar and a play button.

VALIDATION OF VO RESOURCES
Once you have a VO Resource, it is good practice to make sure that it is behaving properly before registering it in the Euro-VO Registry. The Euro-VO Standalone Validation view and REST API exist to help you do just that.

STANDALONE VALIDATION OF A REGISTERED RESOURCE
In the standalone validation view, you first use the dropdown menu to select the appropriate service type of the resource you want to validate. Then write the URL of the resource and press "Add Job" and then "Run" and "OK." When the validation has finished, you can see which compliance score your resource has received and why. Clicking any of the rows in the bottom table will provide more information on what was tested and more details in case of a failed test.



Euro-VO Registry own validators for protocols:

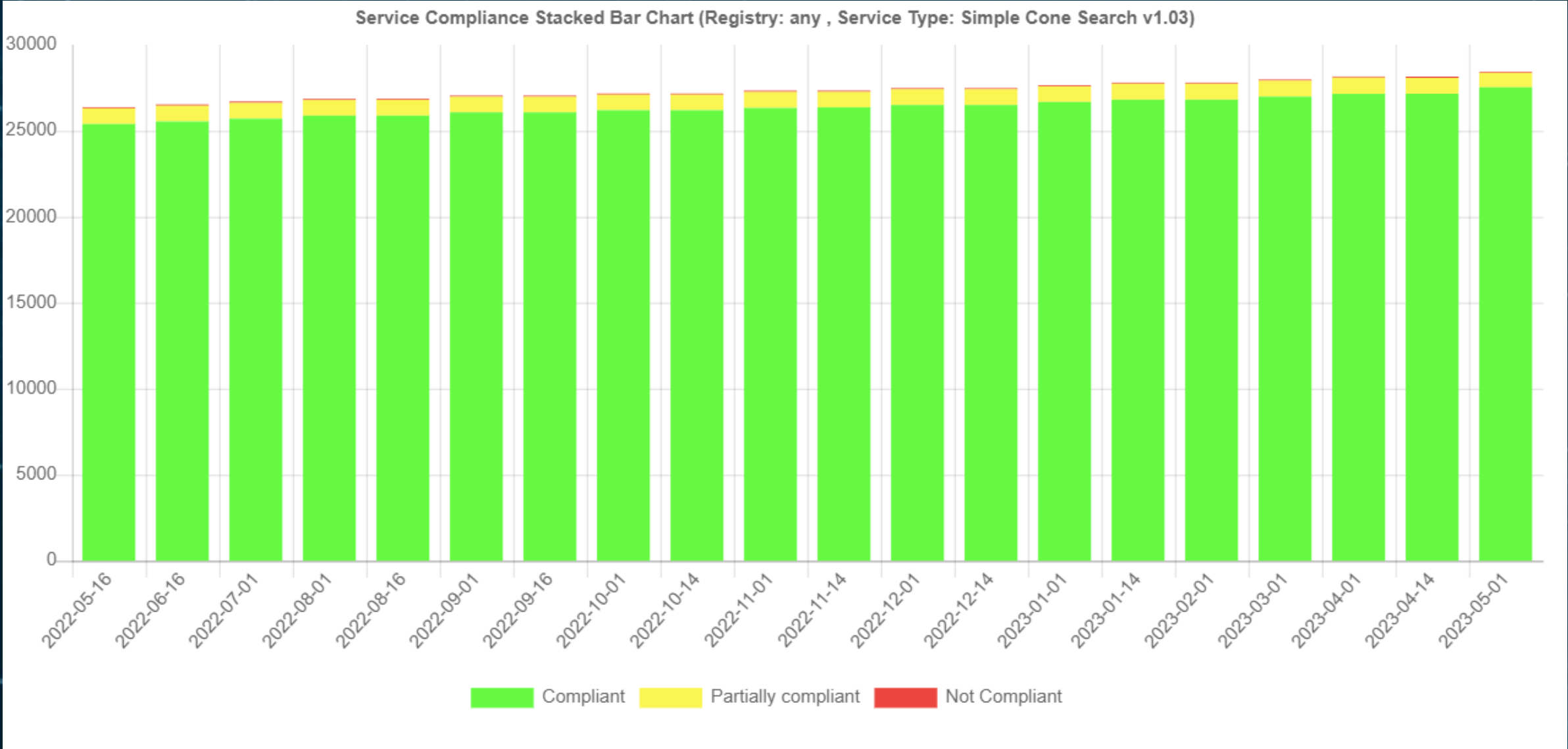
- Simple Cone Search (SCS) v1.03
- Simple Image Search (SIA) v1.0 & v2.0
- Simple Spectral Access (SSA) v1.1

Euro-VO Registry external validators

- Table Access Protocol (TAP) v1.0 & v1.1 using Taplint (STILTS)
- Multi-Order Coverage map (MOC) v1.0, v1.1 & 2.0 using CDS's MOC validator

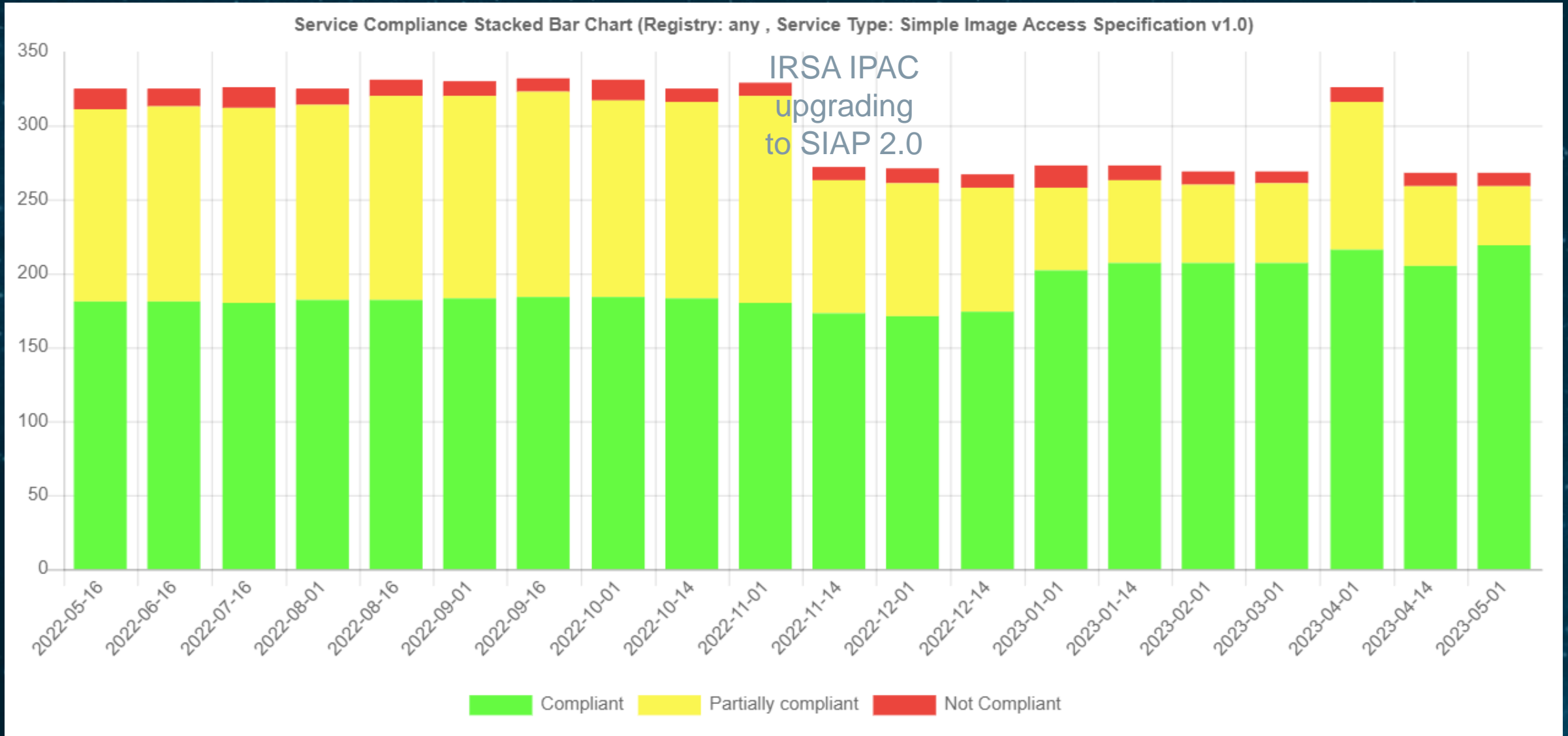
<p>•Compliant (no requirement fails)</p> <p>A++ no criterion fails</p> <p>A+ no requirement, warning or recommendation fails</p> <p>A no requirement or warning fails, but at least one recommendation fails</p> <p>B no requirement fails, but at least one warning fails</p>	
<p>•partially compliant (some (but not all) requirements fail)</p> <p>C at least one (1) req fails, but at least one (1) req equally succeeds</p> <p>C- at least two (2) reqs fail, but at least one (1) req equally succeeds</p> <p>C-- at least three (3) reqs fail, but at least one (1) req equally succeeds</p>	
<p>•not compliant (all requirements fail)</p> <p>D all reqs fail but some other criterion (of lesser importance) succeeds</p> <p>E no criterion succeeds</p>	
Criterion Type	
name	description
REQUIREMENT	Tests drawn from 'MUST' statements in the respective standard
WARNING	Tests drawn from strongly encouraged 'SHOULD' statements in the respective standard
RECOMMENDATION	Tests drawn from 'SHOULD' statements in the respective standard
EXTRA	Criteria not defined in the IVOA 'Service Validation' wiki

Simple Cone Search (SCS)



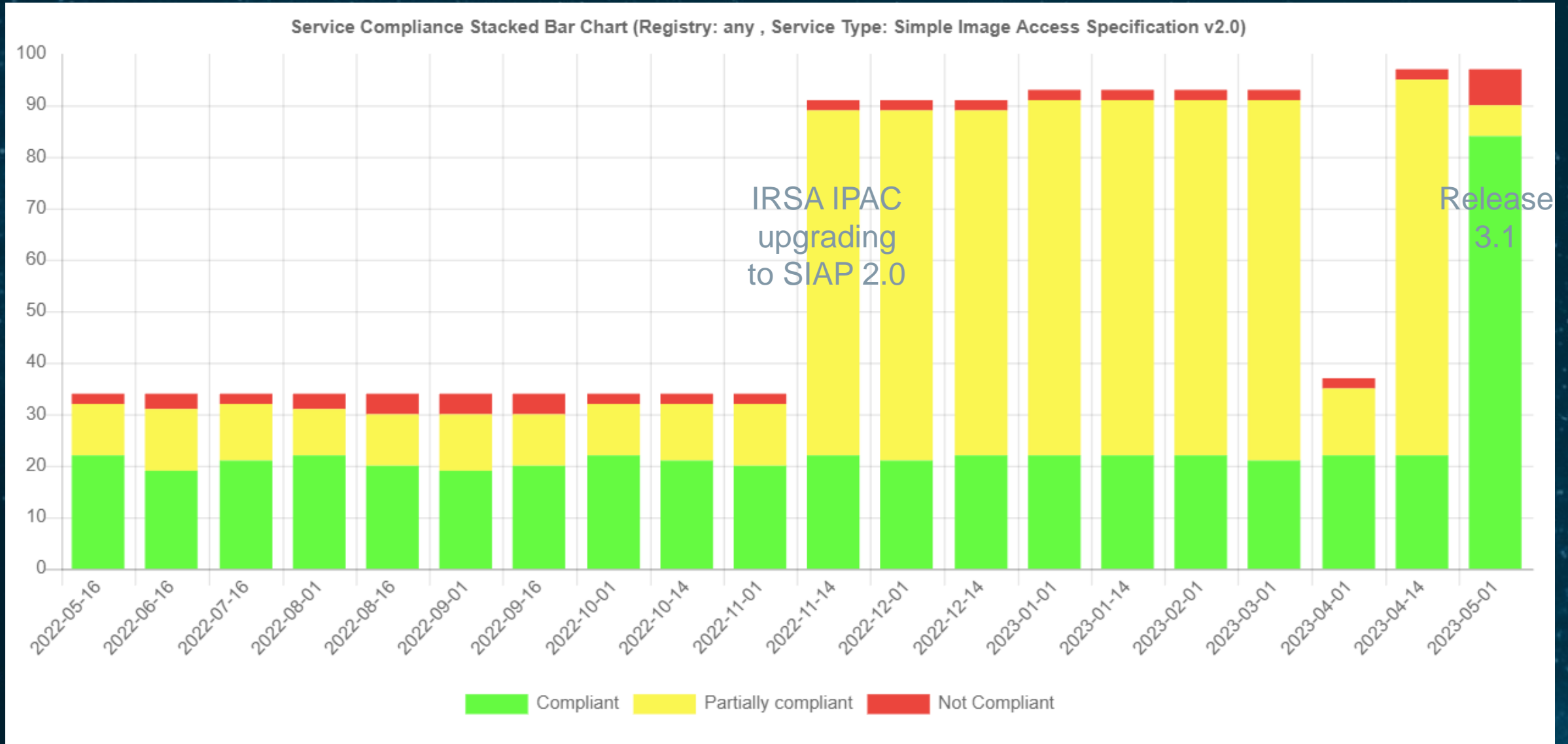
- Great compliance
- Incorrect UCDs are the most common issue
 - No ID_MAIN column OR more than one
 - Missing POS_EQ_RA_MAIN and POS_EQ_DEC_MAIN

SIAP – Simple Image Access Protocol v1.0



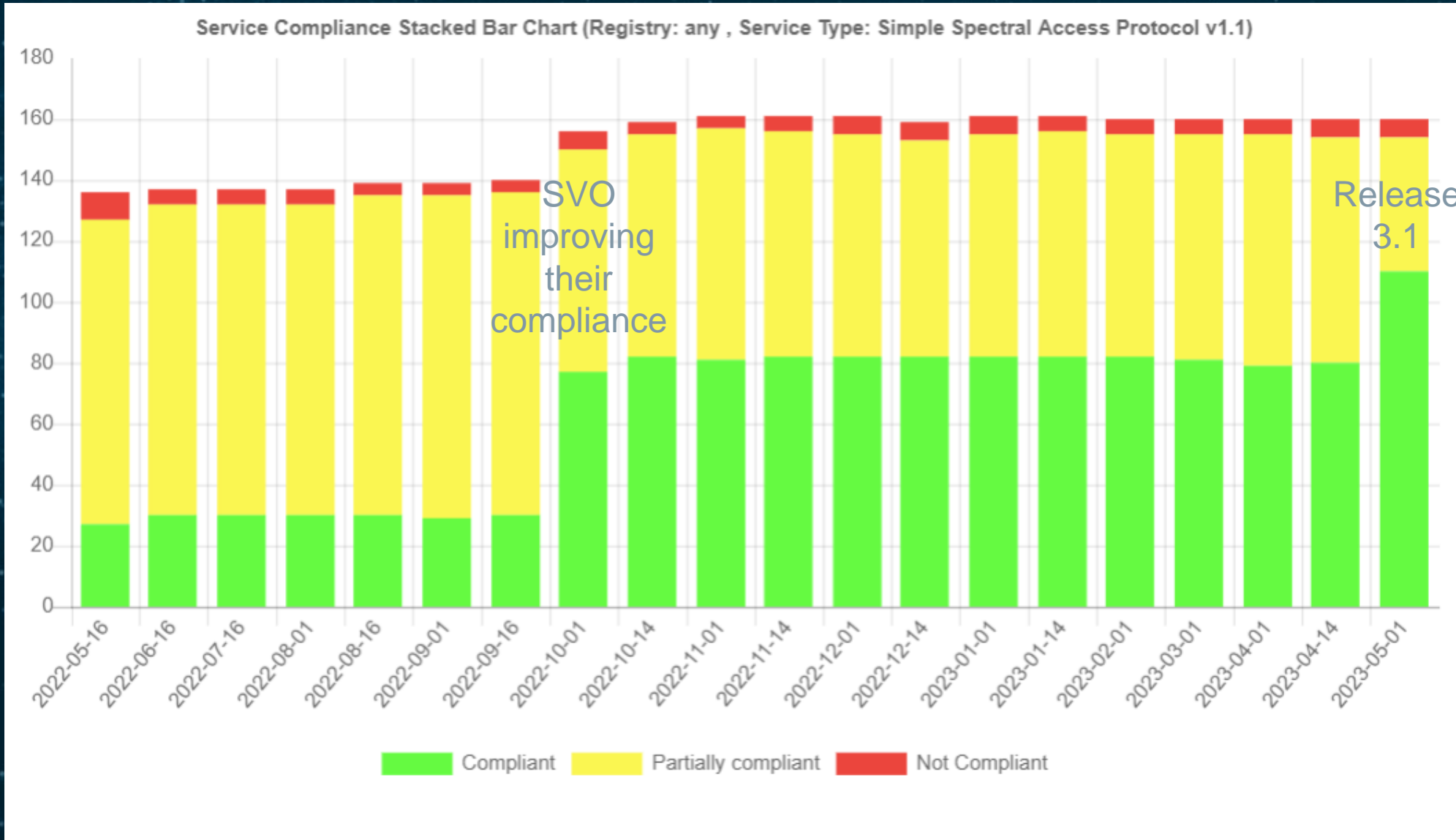
- Exactly one field must have UCD
 - VOX:Image_Naxes
 - VOX:Image_Naxis
 - VOX:Image_Scale
 - VOX:Image_Title
 - POS_EQ_RA_MAIN
 - POS_EQ_DEC_MAIN
- ~50 % of services receive warnings for minor UCD violations
- <https://cds.unistra.fr//UCD/cgi-bin/descr2ucd>

SIAP – Simple Image Access Protocol v2.0



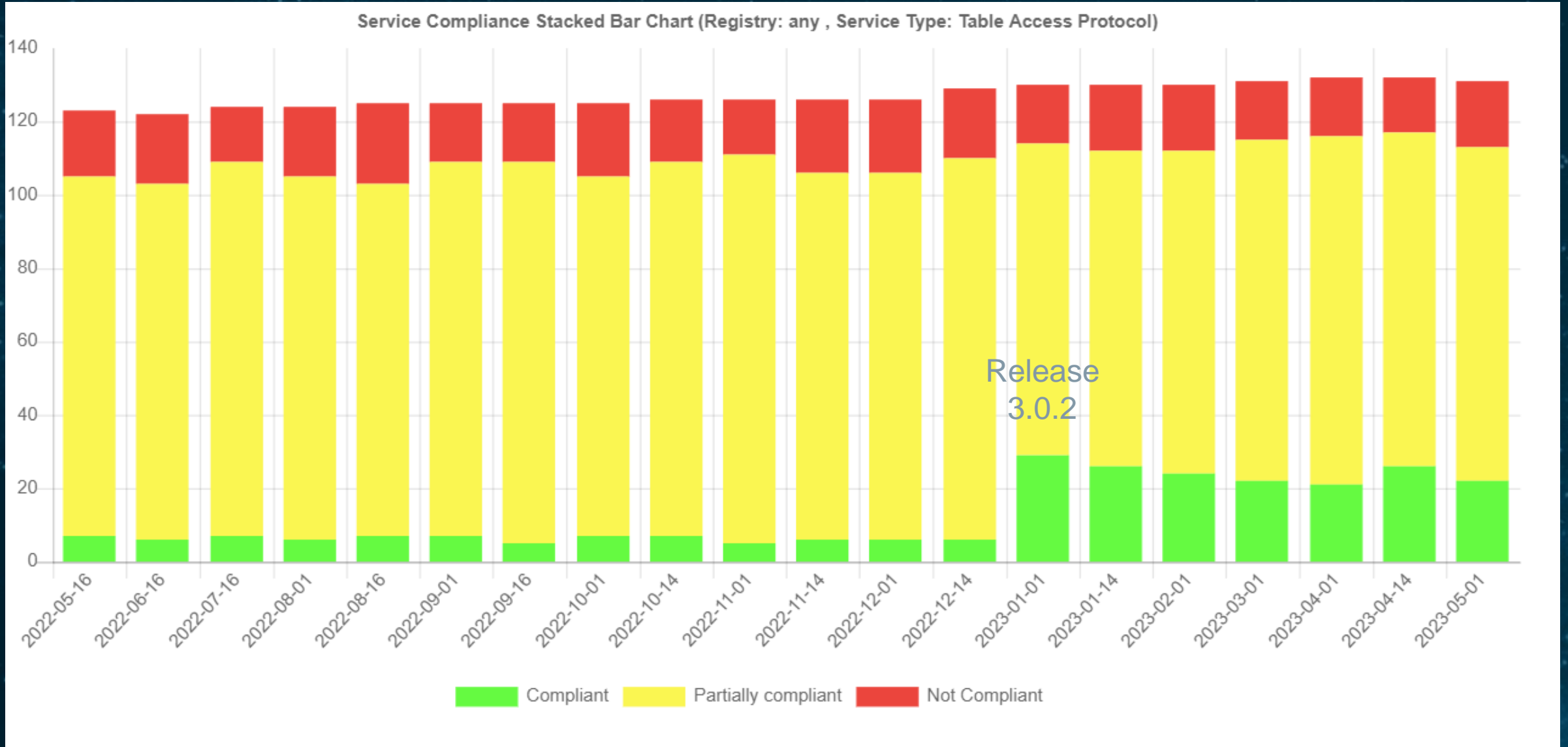
- A lot of issues have been fixed on our side, which have resulted in past bad ratings
- Amazing compliancy!
 - 84 of 97 (86.5%) services get the rating of A++ (no criterion fail)

SSA – Simple Spectra Access Protocol v1.1



- A lot of issues have been fixed on our side, which have resulted in past bad ratings
- Many services get the partially compliant rating because the validator cannot find any data to validate. Service providers could help by providing testQuery information as described in the [SimpleDALRegExt standard](#)
- Missing entries or utypes for
 - Char.TimeAxis.Coverage.Location.Value
 - Char.SpectralAxis.Coverage.Bounds.Extent
 - Char.SpatialAxis.Coverage.Bounds.Extent

TAP - Table Access Protocol



- Most services fail on only one requirement – But not the same requirement
- Please have a look at your TAP service, as most of the issues are easy to fix
- It is common to introduce TAP_SCHEMA errors as the service evolve
- The most common issues:
 - Errors reading the tap schema tables (key_columns, keys, columns, tables, schemas)
 - Table column name is ADQL reserved word - Mostly 'size', 'date', 'value', 'area', 'position', 'level'
 - Bad content-type for VOTable

- Henrik Norman (henrik@winterway.eu) is now taking care of Euro-VO Registry
- Reach the team at: esavo.registry@sciops.esa.int

- Upcoming features:
 - Improved VOSI support
 - RegTAP 1.2