

# Euro-VO Registry Service Compliance Statistics

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*IVOA interop, Trieste, 23/10/2016*

Issue/Revision: 1.0

Reference: VO Service Compliance Statistics

Status: Issued

ESA UNCLASSIFIED - Releasable to the Public

<http://registry.euro-vo.org/>



First acknowledgement to Menelaus Perdikeas  
for all his work on the Euro-VO Registry !



**Welcome to the new EURO-VO Full Harvestable VO Resource Registry.**



The new Euro-VO Registry offers you the following main functionalities:



**For astronomers and end users:**

Search the VO resources through the Simple Search Panel, the Advanced Search or through the expert ADQL Search



Panel (click on the  icon ).

**For data publishers:**

Host your resources with EuroVO, create and update your own VO Resources via a password-protected interface,

check their compliance with the associated IVOA standards (click on the  icon; requires an account: click  to join ).



**For VO Applications developers and for other IVOA Registries:**

Harvest the registry, retrieve individual resources, or search the registry through its programmatic [OAI-PMH](#), [RI1](#) and [RegTAP](#) interfaces (click on the  icon to find more information).



If you have any question regarding the EURO-VO Registry, please send an email to:

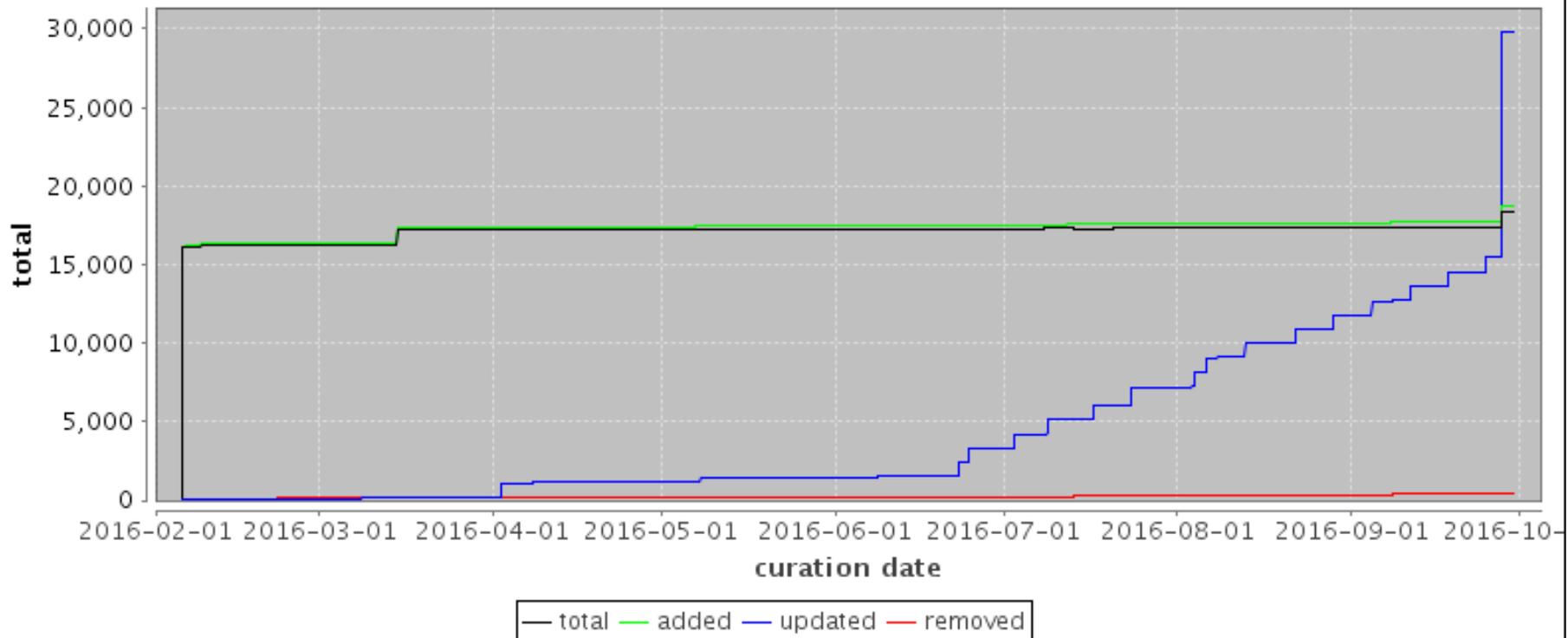
[esavo.registry@sciops.esa.int](mailto:esavo.registry@sciops.esa.int).



# VOResources evolution



Resource population for all registries and IVO-VOR metadata  
1443650400 → 1475186400 (2015-10-01→2016-09-30) (2820 data points)  
# at period beginning: 0, end: 18336  
created=18748, updated=29868, deleted=412



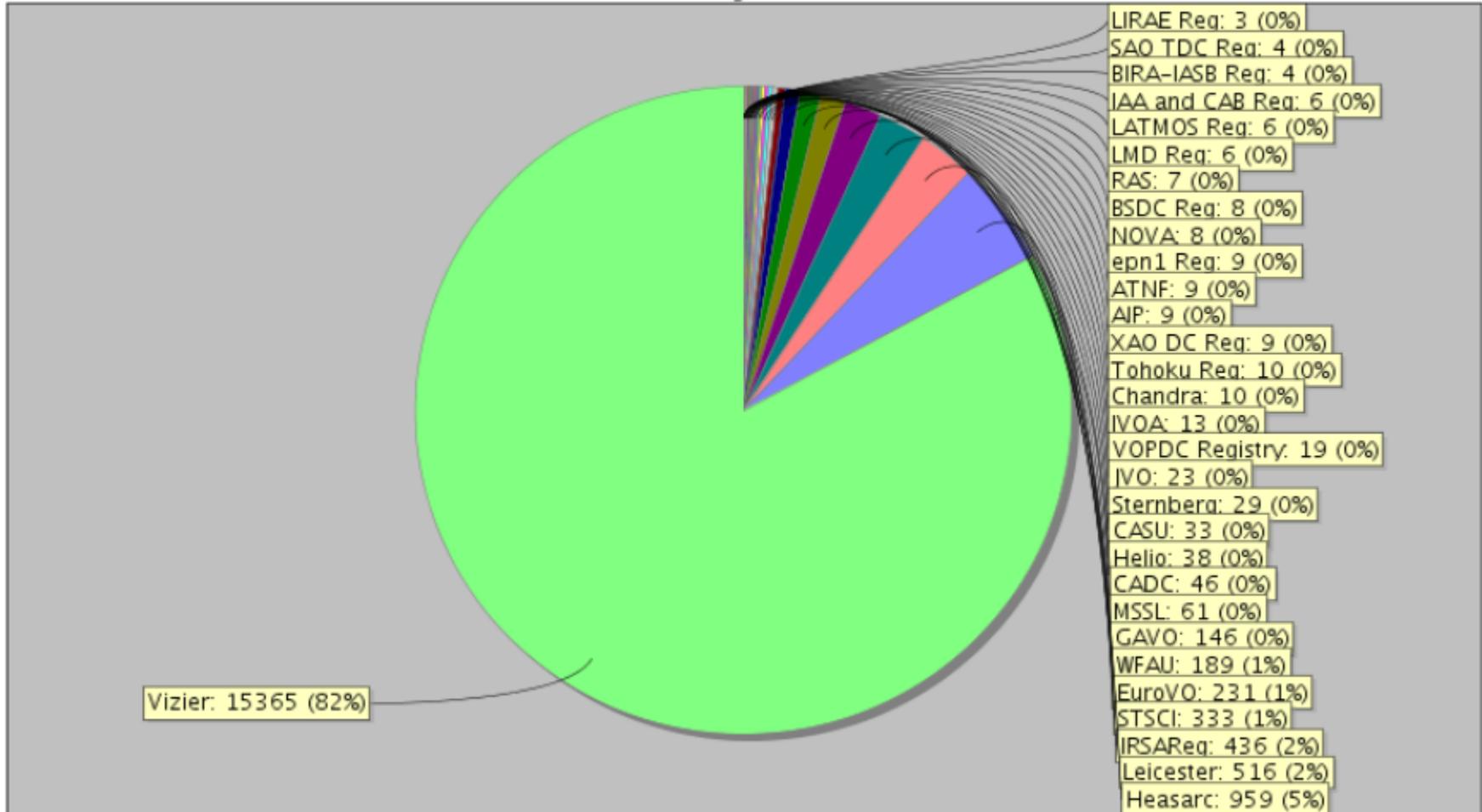
*resources are being added and maintained . . .*



# VOResources per Registry (w/Vizier)



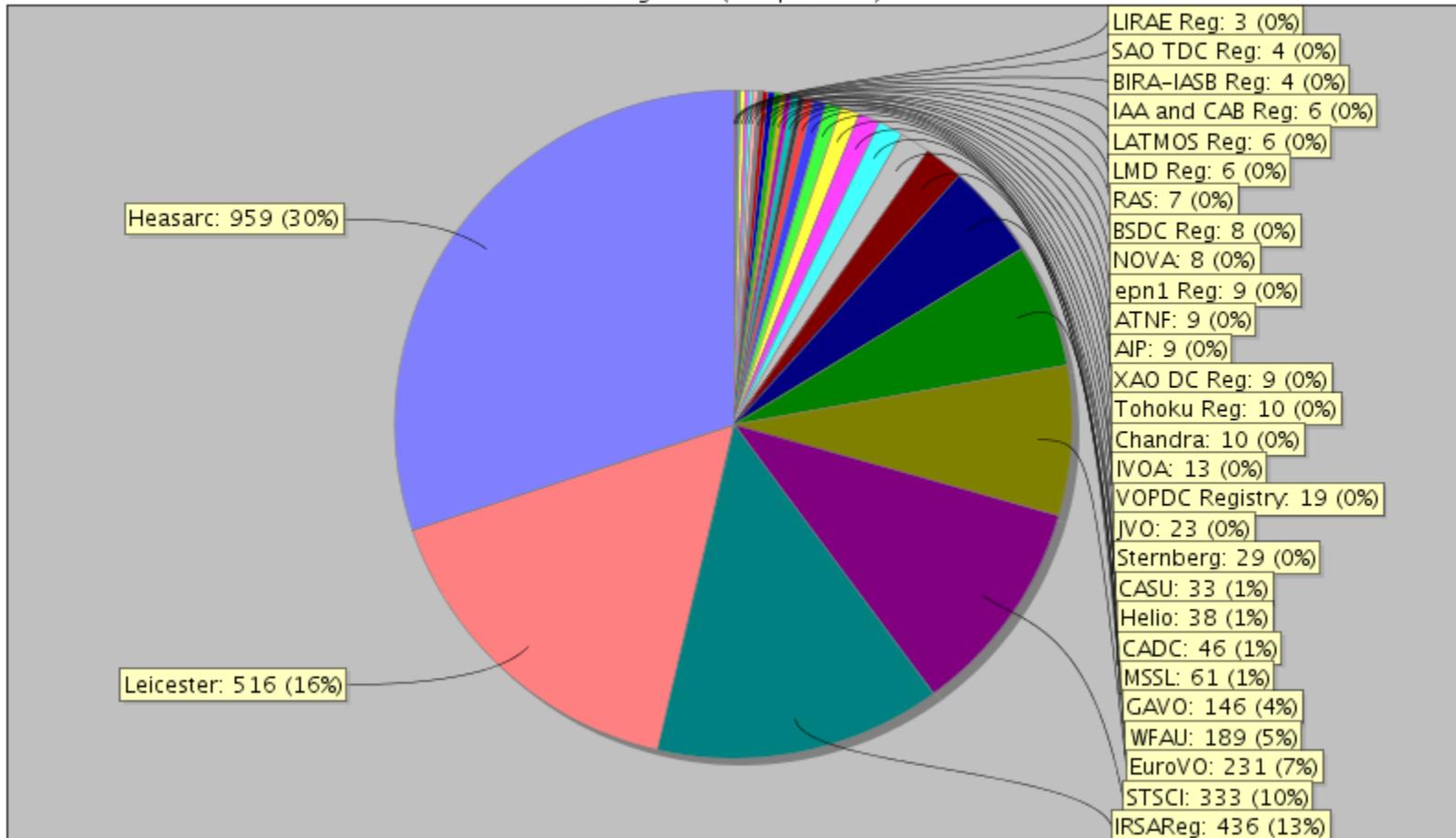
Resource population by registry (IVO-VOR metadata)  
Data as of 2016-35-22 13:35:1 \* 18545 records from 31 registries in total  
all registries



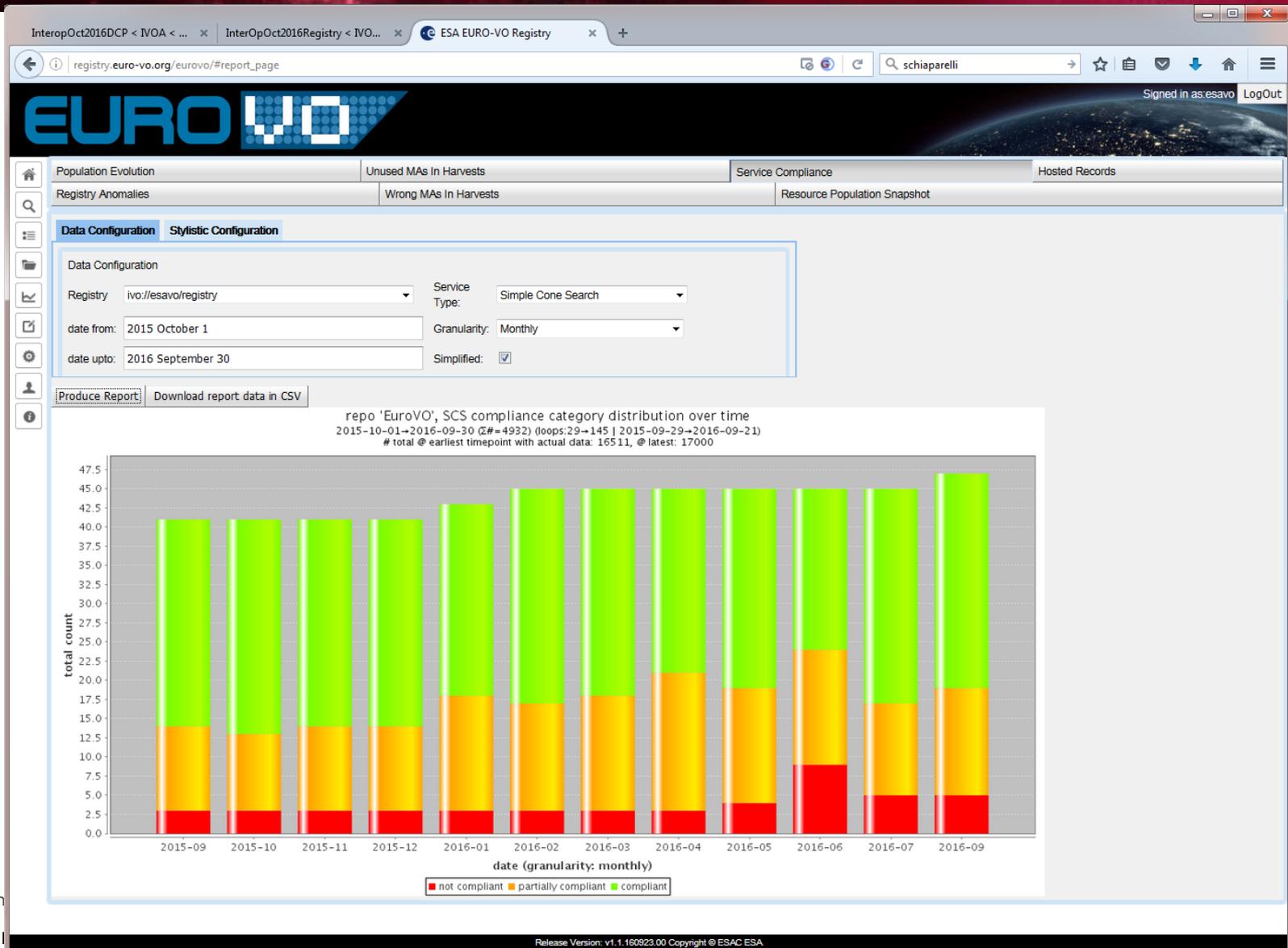
# VOResources per Registry (w/o Vizier)



Resource population by registry (IVO-VOR metadata)  
Data as of 2016-41-21 14:41:47 \* 3180 records from 30 registries in total  
all registries (except: Vizier)



# VO services validation



# each service access URL is validated against a vector of pass/fail criteria



```
SELECT criterion_type, description FROM vo_curation.validation_criterion WHERE cap_type='cs:ConeSearch';
```

-----  
REQUIREMENT | The service is ON

REQUIREMENT | The zero response is well-formed XML

EXTRA | The zero response is XSD-valid XML

REQUIREMENT | The MIME type of the zero response has a legal value ('text/xml', 'text/xml;content=x-votable' RECOMMENDATION | The MIME type of the zero response has the recommended value ('text/xml')

WARNING | The MIME type of the zero response is not the optional value ('text/xml;content=x-votable')

RECOMMENDATION | The MIME type of the zero response is not the strongly discouraged value ('text/xml;votable')

REQUIREMENT | The effective response is well-formed XML

EXTRA | The effective response is XSD-valid XML

REQUIREMENT | The MIME type of the effective response has a legal value ('text/xml', 'text/xml;content=x-votable' RECOMMENDATION | The MIME type of the effective response has the recommended value ('text/xml')

WARNING | The MIME type of the effective response is not the optional value ('text/xml;content=x-votable')

RECOMMENDATION | The MIME type of the effective response is not the strongly discouraged value ('text/xml;votable')

REQUIREMENT | The service must respond with an XML document in the VOTable format [for the zero URL]

REQUIREMENT | The service must respond with an XML document in the VOTable format [for the effective URL]

REQUIREMENT | The zero response contains no data

REQUIREMENT | The effective response has to contain some data

REQUIREMENT | The VOTable MUST comply with these conditions: [...] Exactly one FIELD must have ucd='ID\_MAIN', REQUIREMENT | The VOTable MUST comply with these conditions: [...] Exactly one FIELD must have ucd='POS\_EQ\_RA\_MAIN', REQUIREMENT | The VOTable MUST comply with these conditions: [...] Exactly one FIELD must have ucd='POS\_EQ\_DEC\_MAIN', REQUIREMENT | no INFO elements with @name='Error' should appear in the zero response

REQUIREMENT | no INFO elements with @name='Error' should appear in the effective response

REQUIREMENT | In the case of error, the service MUST respond with a VOTable that contains a single PARAM (23 rows)



Service Type

Access URL

Validate Now

sia:SimpleImageAccess

http://friendlyvo.herokuapp.com/query/sia?

[Live-Access](#)

Validated on: 13:04:40 19/10/2016

Duration in ms: 2452

Cap Type: sia:SimpleImageAccess

Compliance: C--

[Validations](#)
[Traces](#)

Val Code	Val Type	Val Result	Description	valURL	valException	valDetail
4.2.1a	REQUIREMENT	Pass	The VOTable must contain a RESOURCE element, identified with the tag type='results', containing a single TABLE element which contains the results of the query	http://friendlyvo.herokuapp.com/query/si...		
4.2.1b	recommendation	Pass	If multiple resources are present it is recommended that the query results be returned in the first resource element	http://friendlyvo.herokuapp.com/query/si...		
4.2.2a	WARNING	Failed	The RESOURCE element should contain an INFO with name='QUERY_STATUS'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0>=1' supplied with the derived values: [0] evaluated to false
4.2.2a-gl	recommendation	Failed	The RESOURCE element should contain [gloss: 'an'-'one'] INFO with name='QUERY_STATUS'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.2b	recommendation	Failed	Its value attribute should set to 'OK'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0=='OK' supplied with the derived values: [] evaluated to false
4.2.4.a.i	REQUIREMENT	Pass	Exactly one field must have ucd='VOX:Image_Title', with datatype='char', and arraysize='*'	http://friendlyvo.herokuapp.com/query/si...		
4.2.4.a.ii	WARNING	Failed	Exactly one field should have ucd='INST_ID', with datatype='char', and arraysize='*'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.a.iii	WARNING	Failed	Exactly one field should have ucd='VOX:Image_MJDateObs', with datatype='double'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.a.iv	REQUIREMENT	Pass	Exactly one field must have ucd='POS_EQ_RA_MAIN', with datatype='double'	http://friendlyvo.herokuapp.com/query/si...		
4.2.4.a.ix	REQUIREMENT	Pass	Exactly one field must have ucd='VOX:Image_Format', with datatype='char', and arraysize='*'	http://friendlyvo.herokuapp.com/query/si...		
4.2.4.a.v	REQUIREMENT	Pass	Exactly one field must have ucd='POS_EQ_DEC_MAIN', with datatype='double'	http://friendlyvo.herokuapp.com/query/si...		
4.2.4.a.vi	REQUIREMENT	Failed	Exactly one field must have ucd='VOX:Image_Naxes', with datatype='int'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.a.vii	REQUIREMENT	Failed	Exactly one field must have ucd='VOX:Image_Naxis', with datatype='int', and arraysize='*'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.a.viii	REQUIREMENT	Failed	Exactly one field must have ucd='VOX:Image_Scale', with datatype='double', and arraysize='*'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.b.i	WARNING	Failed	Exactly one field should have ucd='VOX:STC_CoordRefFrame', with datatype='char', and arraysize='*'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.b.iii	WARNING	Failed	Exactly one field should have ucd='VOX:WCS_CoordProjection', with datatype='char' and arraysize='*'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false

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4.2.2a-gl	recommendation	Failed	The RESOURCE element should contain [gloss: 'an'-'>'one] INFO with name='QUERY_STATUS'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.2b	recommendation	Failed	Its value attribute should set to 'OK'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0=='OK' supplied with the derived values: [] evaluated to false
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4.2.4.a.ii	WARNING	Failed	Exactly one field should have ucd='INST_ID', with datatype='char', and arraysize=''	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.a.iii	WARNING	Failed	Exactly one field should have ucd='VOX:Image_MJDateObs', with datatype='double'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.a.iv	REQUIREMENT	Pass	Exactly one field must have ucd='POS_EQ_RA_MAIN', with datatype='double'	http://friendlyvo.herokuapp.com/query/si...		
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4.2.4.a.v	REQUIREMENT	Pass	Exactly one field must have ucd='POS_EQ_DEC_MAIN', with datatype='double'	http://friendlyvo.herokuapp.com/query/si...		
4.2.4.a.vi	REQUIREMENT	Failed	Exactly one field must have ucd='VOX:Image_Naxes', with datatype='int'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.a.vii	REQUIREMENT	Failed	Exactly one field must have ucd='VOX:Image_Naxis', with datatype='int', and arraysize=''	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.a.viii	REQUIREMENT	Failed	Exactly one field must have ucd='VOX:Image_Scale', with datatype='double', and arraysize=''	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.b.i	WARNING	Failed	Exactly one field should have ucd='VOX:STC_CoordRefFrame', with datatype='char', and arraysize=''	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false
4.2.4.b.iii	WARNING	Failed	Exactly one field should have ucd='VOX:WCS_CoordProjection', with datatype='char', and arraysize='3'	http://friendlyvo.herokuapp.com/query/si...		The expression: '\$0==1' supplied with the derived values: [0] evaluated to false

# Compliance category concept



- **Compliant** (no requirement fails)

- A++** no criterion fails
- A+** no requirement, warning or recommendation fails
- A** no requirement or warning fails, but at least one recommendation fails
- B** no requirement fails, but at least one warning fails

- **partially compliant** (some (but not all) requirements fail)

- C** at least one (1) req fails, but at least one (1) req equally succeeds
- C-** at least two (2) reqs fail, but at least one (1) req equally succeeds
- C-** at least three (3) reqs fail, but at least one (1) req equally succeeds

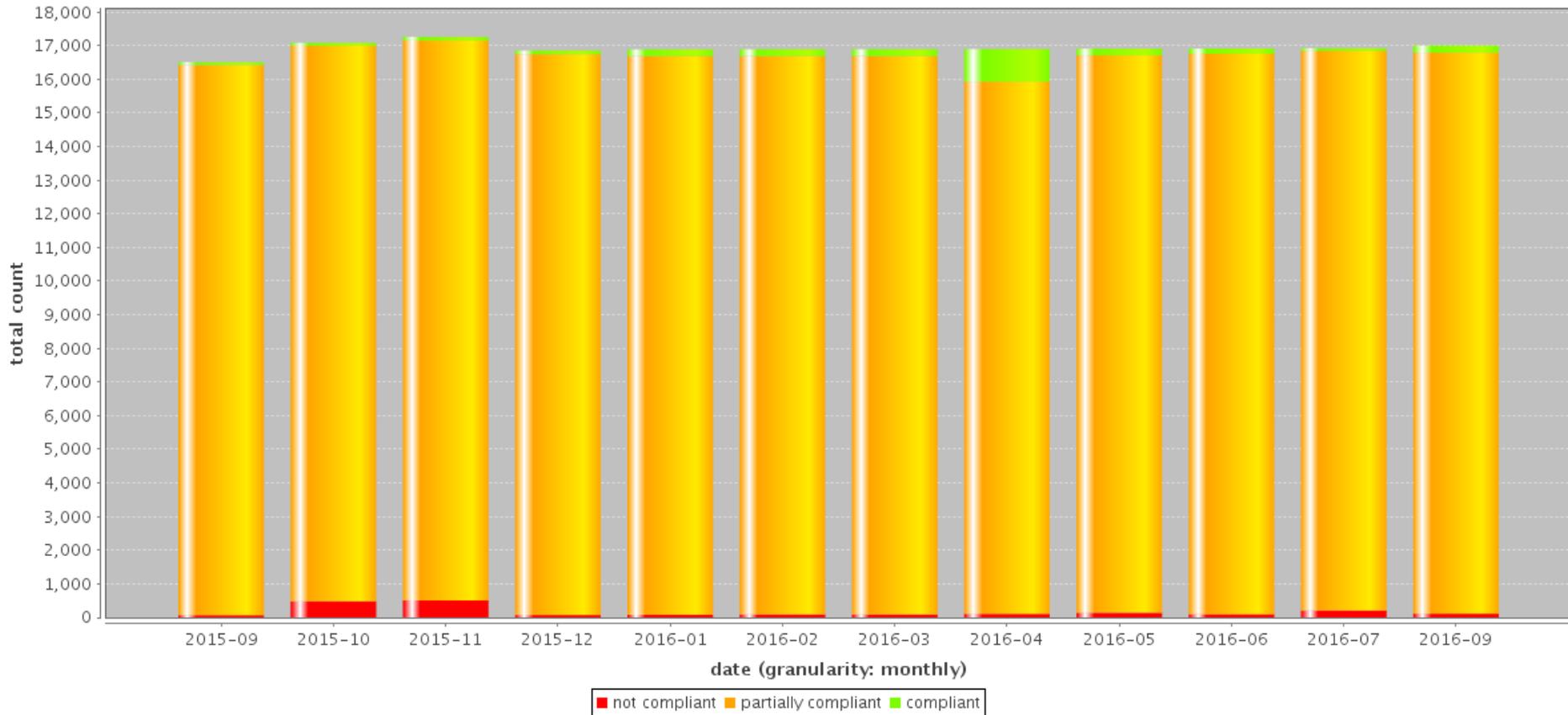
- **not compliant** (all requirements fail)

- D** all reqs fail but some other criterion (of lesser importance) succeeds
- E** no criterion succeeds

# Cone Search



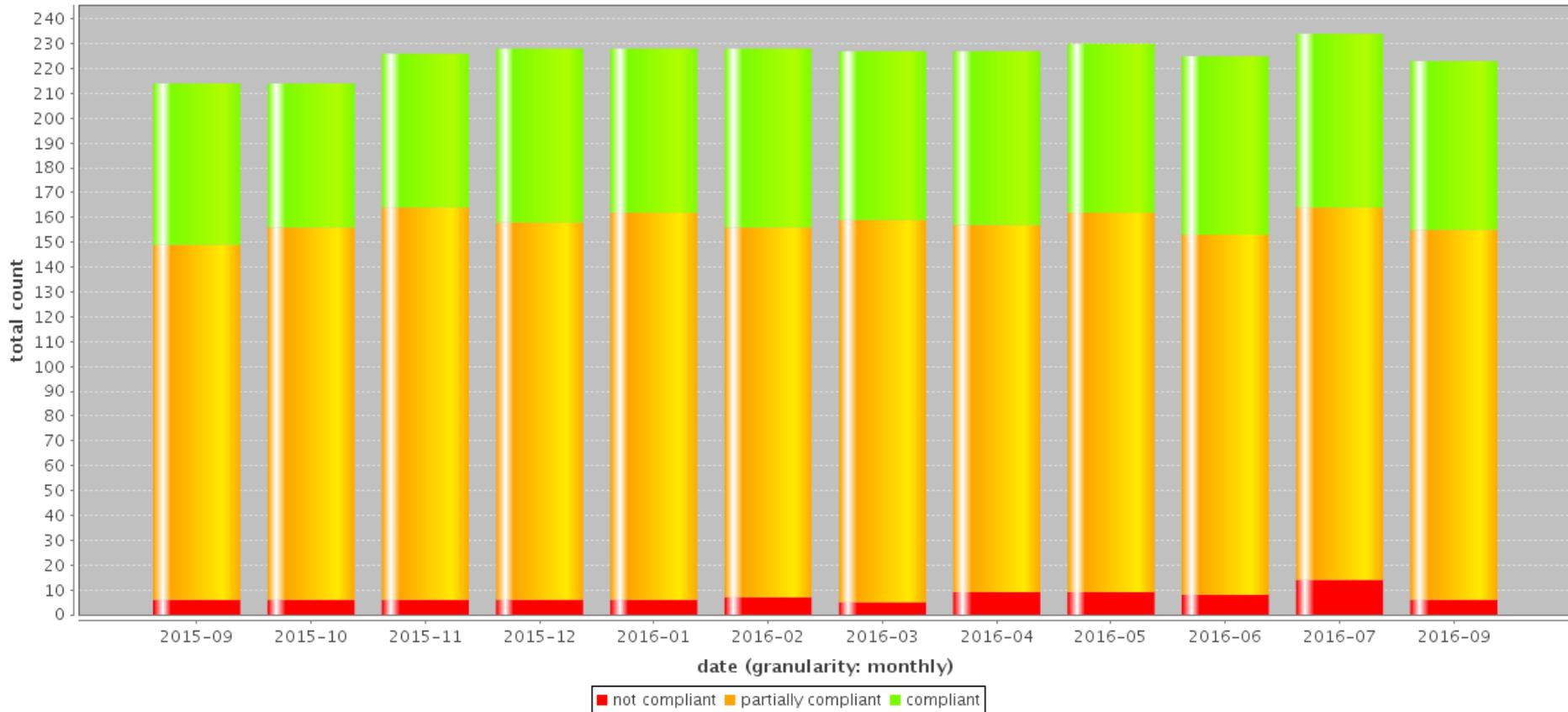
all repos, SCS compliance category distribution over time  
2015-10-01→2016-09-30 (Σ#=1900703) (loops:29→145 | 2015-09-29→2016-09-21)  
# total @ earliest timepoint with actual data: 16511, @ latest: 17000



# Simple Image Access



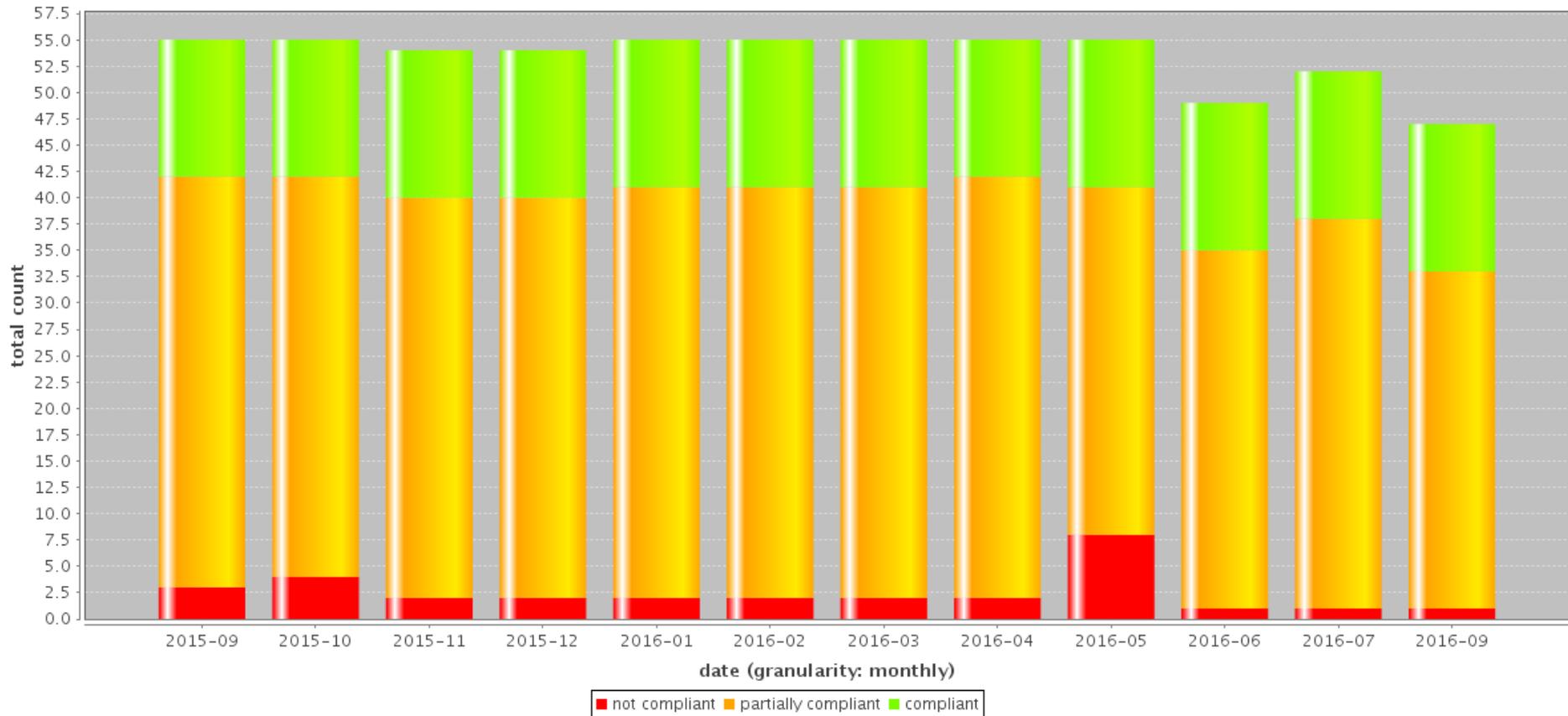
all repos, SIA compliance category distribution over time  
2015-10-01→2016-09-30 (Σ#=23805) (loops:29→145 | 2015-09-29→2016-09-21)  
# total @ earliest timepoint with actual data: 216, @ latest: 226



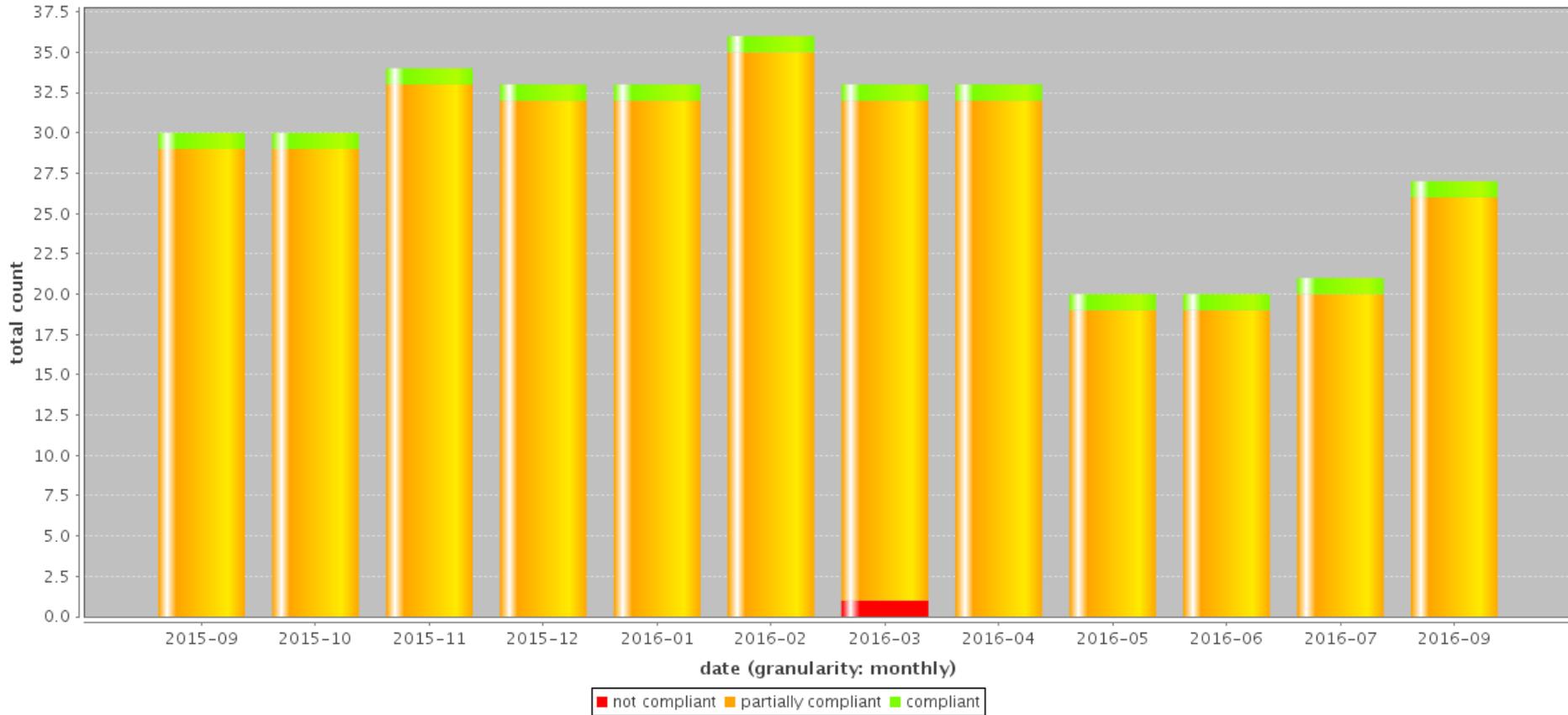
# Simple Spectral Access



all repos, SSA compliance category distribution over time  
2015-10-01→2016-09-30 (Σ#=6054) (loops:29→145 | 2015-09-29→2016-09-21)  
# total @ earliest timepoint with actual data: 55, @ latest: 47



all repos, TAP compliance category distribution over time  
 2015-10-01→2016-09-30 (Σ#=4364) (loops:29→145 | 2015-09-29→2016-09-21)  
 # total @ earliest timepoint with actual data: 35, @ latest: 34



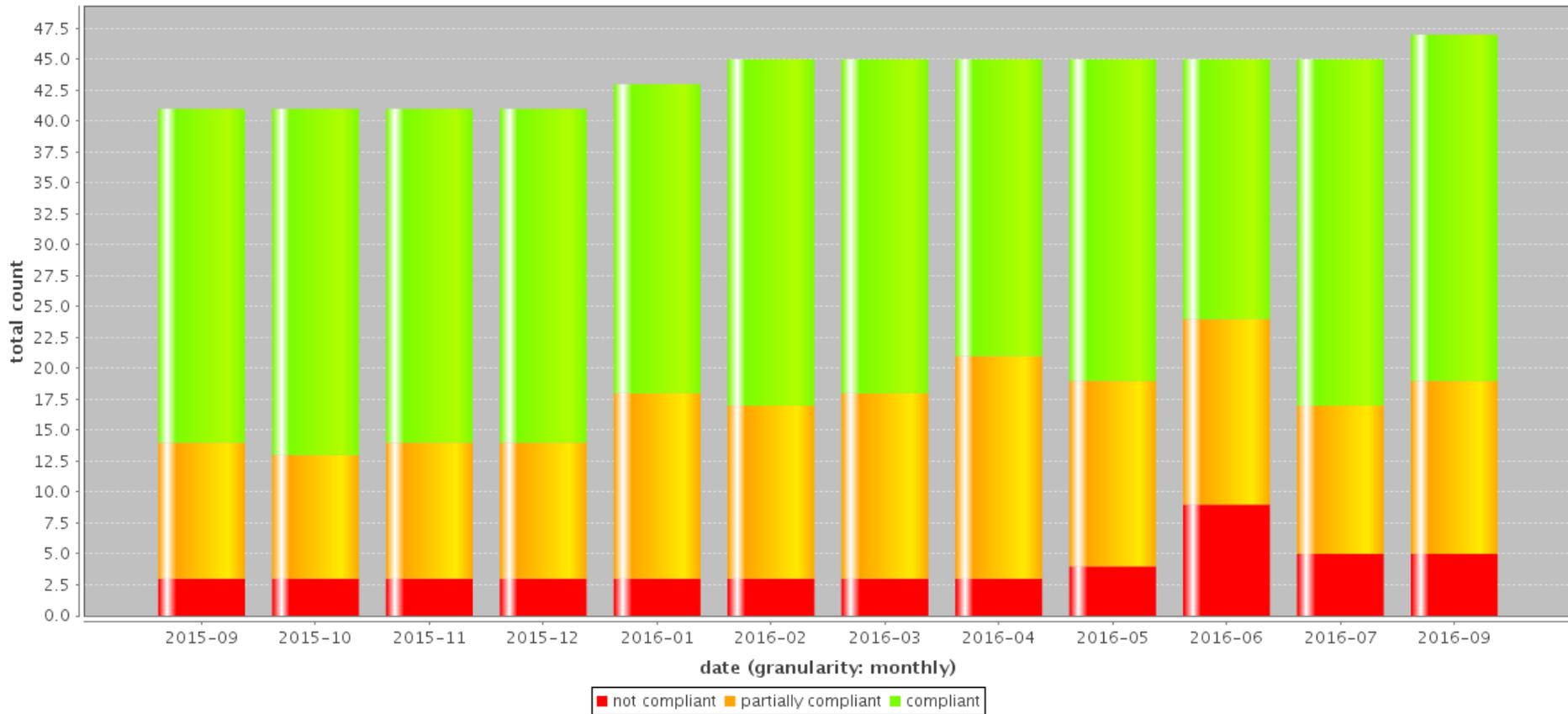
# Backup slides (Euro-VO Registry VOResources stats only)



# Euro-VO Registry Cone Search



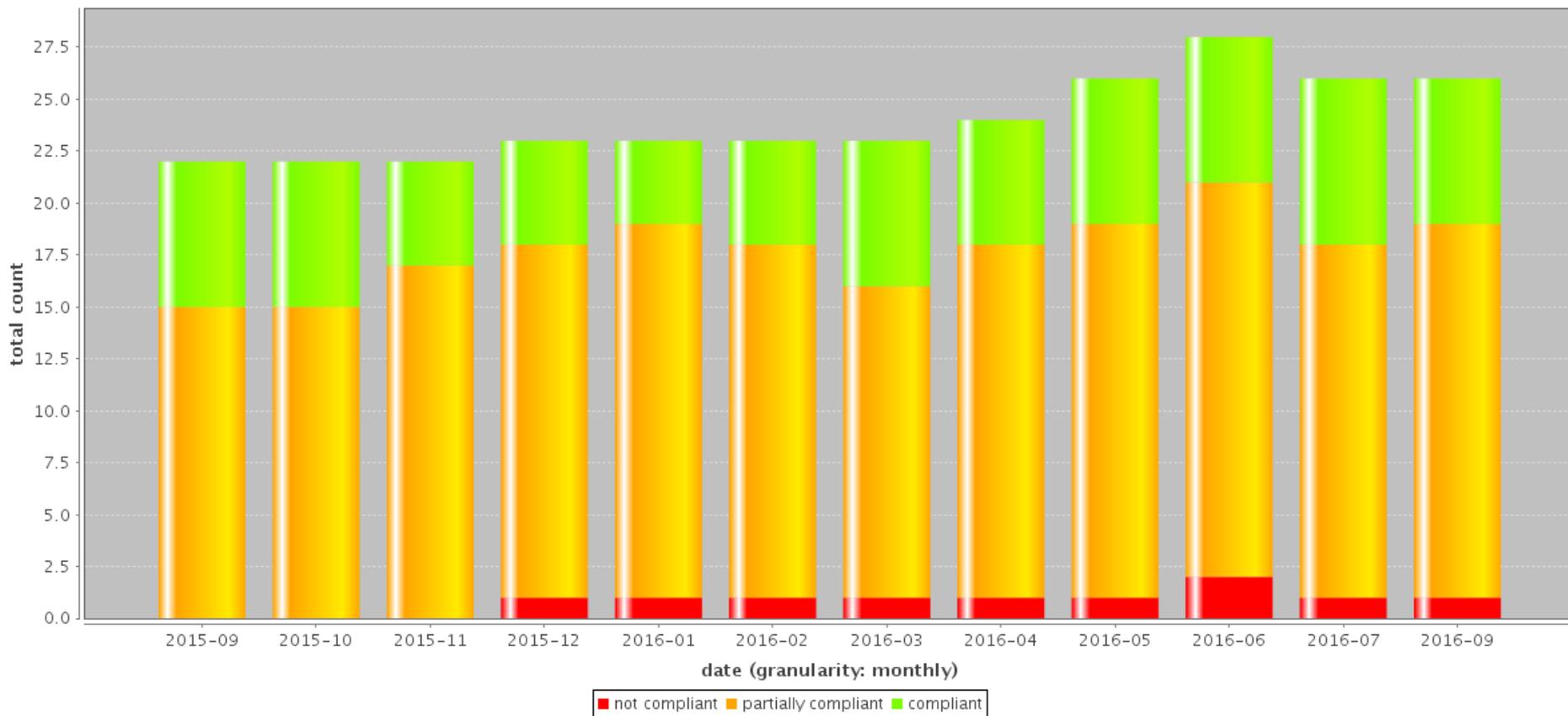
repo 'EuroVO', SCS compliance category distribution over time  
2015-10-01→2016-09-30 (Σ#=4932) (loops:29→145 | 2015-09-29→2016-09-21)  
# total @ earliest timepoint with actual data: 16511, @ latest: 17000



# Euro-VO Registry Simple Image Access



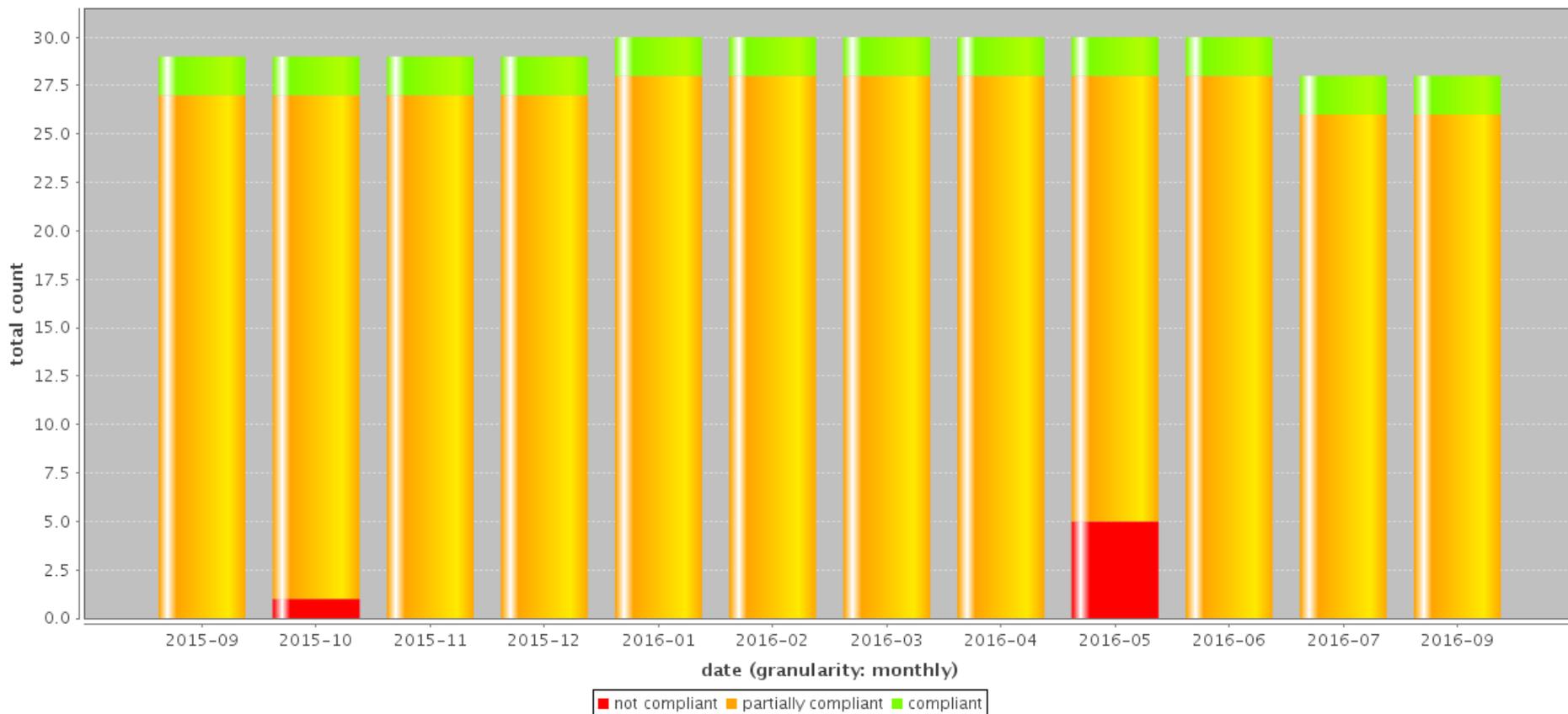
repo 'EuroVO', SIA compliance category distribution over time  
2015-10-01→2016-09-30 (Σ#=2680) (loops:29→145 | 2015-09-29→2016-09-21)  
# total @ earliest timepoint with actual data: 216, @ latest: 226



# Euro-VO Registry Simple Spectral Access



repo 'EuroVO', SSA compliance category distribution over time  
2015-10-01→2016-09-30 (Σ#=3388) (loops:29→145 | 2015-09-29→2016-09-21)  
# total @ earliest timepoint with actual data: 55, @ latest: 47



# Euro-VO Registry TAP



repo 'EuroVO', TAP compliance category distribution over time  
2015-10-01→2016-09-30 (Σ#=1014) (loops:29→145 | 2015-09-29→2016-09-21)  
# total @ earliest timepoint with actual data: 35, @ latest: 34

