

ESRF Topcat Plugins

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ESRF
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Metadata Plugin

My Data Browse Search

DIAMOND / Development and application of... / NT20-8 / Dataset

Results: 60

Name	Datfile Count	Create Time	Modified Time
Containing...		From... To...	From... To...
analysed	8 files	2014-04-10 22:36:10	2014-04-10 22:36:10
Kamin-K3_1_dnafiles	1 file	2008-07-24 14:45:54	2010-02-17 19:00:41
Kamin-K3_1_dnafiles~3	1 file	2008-07-24 12:36:01	2010-02-17 19:00:40
trypsin_1_dnafiles~36	1 file	2008-07-23 09:51:50	2010-02-17 19:00:40
trypsin_1_dnafiles~35	1 file	2008-07-22 14:20:34	2010-02-17 19:00:38
Kamin-K1_1_dnafiles	1 file	2008-07-21 12:41:08	2010-02-17 19:00:40
Kamin-K1_1_dnafiles~1	1 file	2008-07-21 12:21:06	2010-02-17 19:00:36
trypsin_1_dnafiles~34	1 file	2008-07-21 12:20:01	2010-02-17 19:00:38
Kamin-K3_1_dnafiles~2	1 file	2008-07-17 12:58:46	2010-02-17 19:00:36
Kamin-K3_1_dnafiles~1	1 file	2008-07-16 17:31:58	2010-02-17 19:00:36
trypsin_1_dnafiles~27	1 file	2008-04-23 13:33:46	2010-02-17 19:00:38
trypsin_10_dnafiles	1 file	2008-04-22 13:20:59	2010-02-17 19:00:41
trypsin_1_dnafiles~26	1 file	2008-04-22 13:20:59	2010-02-17 19:00:38
trypsin_1_dnafiles~25	1 file	2008-04-22 13:20:27	2010-02-17 19:00:38
trypsin_9_dnafiles	1 file	2008-03-19 16:31:30	2010-02-17 19:00:38
trypsin_1_dnafiles~23	1 file	2008-03-19 16:30:56	2010-02-17 19:00:38
trypsin_1_dnafiles~22	1 file	2008-03-19 16:28:59	2010-02-17 19:00:40
trypsin_8_dnafiles	1 file	2008-03-19 16:28:59	2010-02-17 19:00:38
trypsin_1_dnafiles~21	1 file	2008-03-19 16:14:26	2010-02-17 19:00:38
trypsin_7_dnafiles	1 file	2008-03-19 16:14:26	2010-02-17 19:00:38

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I understand

Topcat Standard Presentation

- **Goal**
 - Enhance the value of the metadata
 - Customize the presentation of each type of dataset
 - Quick search (still under development)

https://github.com/antolinos/topcat_metadata_plugin

Metadata Plugin



My Code Search

European Synchrotron Radiation Facility - HC 0000 - RC 00000000 - Details

27 datasets Page 1 of 3

Search Filter

0000

Dataset 00000000 - European S. RC 00000000 - HC 00000000 - Details

Summary Sample Data File Metadata Contact Dataset Actions

Dataset	0000_0000_0000_0000	Workfile mode	Periodic	Size of input	10 GB
Technique	0000	Current	0000	Energy	10000
Sample	vs 0000_0000			Wavelength	100000
Description	vs 0000_0000			E_sport file	0.00
				Subplots	100

Show Details

0000

Dataset 00000000 - European S. RC 00000000 - HC 00000000 - Details

Summary Sample Data File Metadata Contact Dataset Actions

Dataset	0000_0000_0000_0000	Workfile mode	Periodic	Size of input	10 GB
Technique	0000	Current	0000	Energy	10000
Sample	vs 0000_0000			Wavelength	100000
Description	vs 0000_0000			E_sport file	0.00
				Subplots	100

Show Details

0000

Dataset 00000000 - European S. RC 00000000 - HC 00000000 - Details

Summary Sample Data File Metadata Contact Dataset Actions

Metadata Plugin



KNAP

Started on Monday, November 6, 2017 10:11 AM Finished at 11:06 AM (54 minutes)

Summary Sample Optics **Slits** Insertion Device Detectors Metadata

Primary

Blade Front	1.38
Blade Back	2.62
Blade Up	-0.06
Blade Down	1.06
Horizontal Gap	4.00
Horizontal Offset	-0.62

Secondary

Blade Front	7.07
Blade Back	7.93
Blade Up	1.26
Blade Down	2.74
Horizontal Gap	15.00
Horizontal Offset	-0.43

Slits

Blade Front	1.38	0.81	7.07	4.19	0.13	3.42	0.15	2.00
Blade Back	2.62	-0.11	7.93	5.81	1.87	5.97	0.35	0.04
Blade Up	-0.06	-0.23	1.26	1.21	-0.33	4.82	0.25	2.00
Blade Down	1.06	0.93	2.74	3.79	2.33	7.49	0.25	0.02
Horizontal Gap	4.00	0.70	15.00	10.00	2.00	9.40	0.50	2.00
Horizontal Offset	-0.62	0.46	-0.43	-0.81	-0.87	-1.27	-0.10	0.04

[View Datafiles](#)

KNAP

Started on Monday, November 6, 2017 7:53 AM Finished at 10:10 AM (136 minutes)

Summary Sample Optics **Slits** Insertion Device Detectors Metadata

monobof	mononrj	monoth	mir1rz	mir1rzf	mir2crv	mir2ty	mirboff	mirz	mirty	mirty1	mirty2	mirtz	monotz	monoty	monorz	cc2pit	dcm2pt	dcm2pit	dcm2rff	dcm2rol	dcm2ty	mir1rz	mir1rzf	mm1rz	mm2tx	mm2ty	mmboff	mmrz	mmty	mmty2	mmtz	tl1rz	tl1y	tl1z1	tl1z2
16.40	11.05	10.31	0.01	0.00	1.00	13.00	26.00	0.00	-7.49	-7.49	-7.49	-20.00	5.50	-2.57	175.36	1.90	14.31	1.00	19.73	0.90	8.33	0.01	0.00	0.00	18.41	14.50	29.00	-0.00	9.53	9.53	-4.00	0.69	-0.74	17.18	1.81

[View Datafiles](#)

KNAP

Started on Monday, November 6, 2017 5:34 AM Finished at 7:51 AM (136 minutes)

Summary **Sample** Optics Slits Insertion Device Detectors Metadata

Metadata Plugin



MX

Started on Sunday, November 19, 2017 5:04 AM Finished at 5:07 AM (3 minutes)

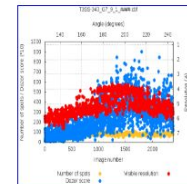
Summary

Positioners

Dataset	[redacted] 9
Technique	OSC
# Images	2380
Template	T3S5-343_G7_9_1_####.cbf
Detector Distance	501.375
Beam Size @Sample	0.05, 0.05

Machine Mode	7/8 multibunch
Oscillation Overlap	0.0
Aperture	50 um
Wavelength	0.966
MX_beamShape	ellipse

Flux	3.93e+11
Current	168.81
Resolution	4.00853173304
Transmission	100



[View Datafiles](#)

MX

Started on Sunday, November 19, 2017 4:50 AM Finished at 4:55 AM (5 minutes)

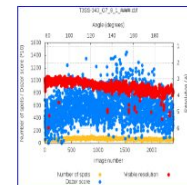
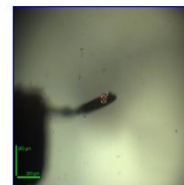
Summary

Positioners

Dataset	[redacted] 4
Technique	OSC
# Images	2400
Template	T3S5-343_G7_8_1_####.cbf
Detector Distance	389.3375
Beam Size @Sample	0.05, 0.05

Machine Mode	7/8 multibunch
Oscillation Overlap	0.0
Aperture	50 um
Wavelength	0.966
MX_beamShape	ellipse

Flux	3.95e+11
Current	169.53
Resolution	3.14539455615
Transmission	100



[View Datafiles](#)

My experience with plugins

Metadata Plugin

- Background
 - No/little experience with Angular
 - No/little experience with TopCAT
- Working on the presentation layer was more or less straight-forward
- Retrieving data from ICAT was a little bit tricky

First Approach query:

```
...  
  
select dataset from Dataset dataset, dataset.investigation as investigation  
where dataset.id = 50878175  
INCLUDE dataset.investigation, dataset.parameters.type, dataset.type  
...
```

It returns for each parameter:

```
{  
  "id":50878197,  
  "createId":"ingester",  
  "createTime":"2017-07-23T19:58:28.492+02:00",  
  "modId":"ingester",  
  "modTime":"2017-07-23T19:58:28.492+02:00",  
  "stringValue":" iodet2",  
  "type":{  
    "id":1168254,  
    "createId":"db/root",  
    "createTime":"2016-11-22T13:15:11.498+01:00",  
    "modId":"db/root",  
    "modTime":"2016-11-22T13:15:11.498+01:00",  
    "applicableToDataCollection":false,  
    "applicableToDatafile":true,  
    "applicableToDataset":true,  
    "applicableToInvestigation":true,  
    "applicableToSample":true,  
    "dataCollectionParameters":{  
    },  
    "datafileParameters":{  
    },  
    "datasetParameters":{  
    },  
    "enforced":false,  
    "investigationParameters":{  
    },  
    "name":"InstrumentDetector01_name",  
    "permissibleStringValue":{  
    },  
    "sampleParameters":{  
    },  
    "units":"NA",  
    "valueType":"STRING",  
    "verified":false,  
    "entityType":"parameterType",  
    "facility":{  
      "entityType":"facility"  
    }  
  }  
}
```

When I am interested on:

```
"InstrumentDetector01_name": "iodet2"
```

Second Approach query:

```
"SELECT dataset.id, dataset.name, parameterType.name, parameter.stringValue, parameter.numericValue ",  
"FROM DatasetParameter as parameter ",  
"JOIN parameter.dataset dataset ",  
"JOIN parameter.type parameterType ",  
"JOIN dataset.investigation investigation ",  
"where investigation.id = ? limit ?, ?", investigationId, (page - 1) * pageSize, pageSize
```

It returns for each dataset:

```
[[21580, "scan1", "machineMode", "4", null, "None"], [21580, "scan1", "cameraName", "test camera", null, "None"], [21580, "scan1", "machineCurrentStart", null, 25.0, "mA"]]
```

Then some post-processing is need

Metadata Plugin

- Writing plugins on TopCAT is easy and powerful
- It allows configure and customize TopCAT for each facility
- It does not guarantee that users will enjoy the experience of using TopCAT
 - Intuitive
 - Fast
 - Attractive
 - Responsive
- Worries about to put more efforts on this version of TopCAT
 - Get the right framework
 - Convention vs Configuration