Beginner's Manual of Experiments at SACLA

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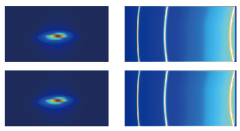
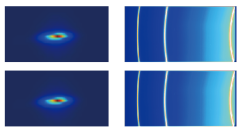
Summary of data handling at SACLA

Run#	Tag#	Simple data ・pulse motor (PM) position ・digitizer readout (PD, BM, etc) ・preamp gain ・shutter status etc	Image data ・MPCCD ・IMPERX ・OPAL
800051	1771706001 1771706002 ・ ・ ・	PM PD shutter・・・ PM PD shutter・・・ ・ ・ ・	 ・ ・ ・
(*)	1771706011 1771706012 1771706013	PM PD shutter・・・ PM PD shutter・・・ PM PD shutter・・・	not available
800052	1771706014 1771706015 ・ ・ ・	PM PD shutter・・・ PM PD shutter・・・ ・ ・ ・	 ・ ・ ・

(*) changing conditions such as motor position

automatic → DB

on-demand → Storage

◆ What is "Tag" and "Run"?

- **Tag**・・・Most data (**except for image data**) are recorded **automatically** on Database (DB) shot-by-shot. Each of the shots is identified by a unique Tag number.

- **Run・・・**An index to handle a lump of shots. Each run is identified by a unique Run number.

◆ Use “**RunControl**”, when you want
- To record image.
- To make Runs.
- To scan with more than 1 axis or to execute complex scans.

◆ To extract data from DB and Storage, refer to the Run numbers to obtain a list of Tag numbers.

Summary of how to make a scan

① **Configure scan parameters**
- Use “ScanConfigEditor” GUI.
- Write the scan conditions into a csv file.

② **Set up RunControl**
- Load the csv file into RunControl
- Select the image detectors.
- Input the number of XFEL shots.

③ **Start scan in RunControl**

④ **Extract data from the DB and the Storage**
- Use “DataConverterGUI”.
- Extract data by referring the Run numbers allocated in ③.

⑤ **Analyze the data**

Good luck with analysis.