

The 7-Steps for the Data analyses of *Suzaku*

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Suzaku processing team

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Before analysis:

~ what you have to check first ~

- **Whether your Observation was done or not**
check observation log page

(http://darts.isas.jaxa.jp/astro/tables/SUZAKU_LOG.html)

- **Important events in the operation**

spacecraft <http://www.astro.isas.jaxa.jp/suzaku/log/operation/> Data Loss, SafeHold

XIS <http://www.astro.isas.jaxa.jp/suzaku/log/xis/> XIS-2

HXD <http://www.astro.isas.jaxa.jp/suzaku/log/hxd/> PIN break, HV operation

- **Limitation of the pipe line products / Calibration**
check notes in <http://www.astro.isas.jaxa.jp/suzaku/process/> .

Careful issues on calibration and processing for your scientific analyses.

- **Announcements from detector teams**

<http://www.astro.isas.jaxa.jp/suzaku/analysis/xxx/> (xxx=hxd, xis, xrt)

Download Datasets

- **Software**

HEASoft (<http://heasarc.gsfc.nasa.gov/docs/software/lheasoft/>)
+ beta release (xisrmfgen)

- **Calibration database files**

ISAS (<http://www.astro.isas.jaxa.jp/suzaku/caldb/>)

GSFC (<http://heasarc.gsfc.nasa.gov/docs/heasarc/caldb/suzaku/>)

- **Data Products**

FTP area (<ftp://darts.isas.jaxa.jp/pub/suzaku/rev1.2/>)

DARTS @ ISAS (<http://www.darts.isas.jaxa.jp/astro/suzaku/>)

HEASARC@GSFC (<ftp://legacy.gsfc.nasa.gov/>)

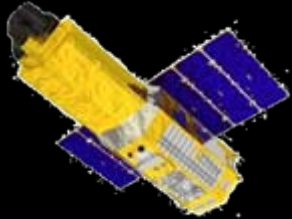
- **Additional products:** not in the archive area now

HXD (NXB: <http://www.astro.isas.jaxa.jp/suzaku/analysis/hxd/hxdnxb/>)

XIS (NXB: <http://www.astro.isas.jaxa.jp/suzaku/analysis/xis/nfe/>)

→ will be archived as HXD/XIS background database (TBD)

Suzaku products



```
% ls
```

```
auxil/
```

```
aeXXXXXXXX.att
```

```
aeXXXXXXXX.orb
```

```
aeXXXXXXXX.tim
```

```
aeXXXXXXXX.hk
```

```
hxd/
```

```
event_cl/
```

```
event_uf/
```

```
hk/
```

```
products/
```

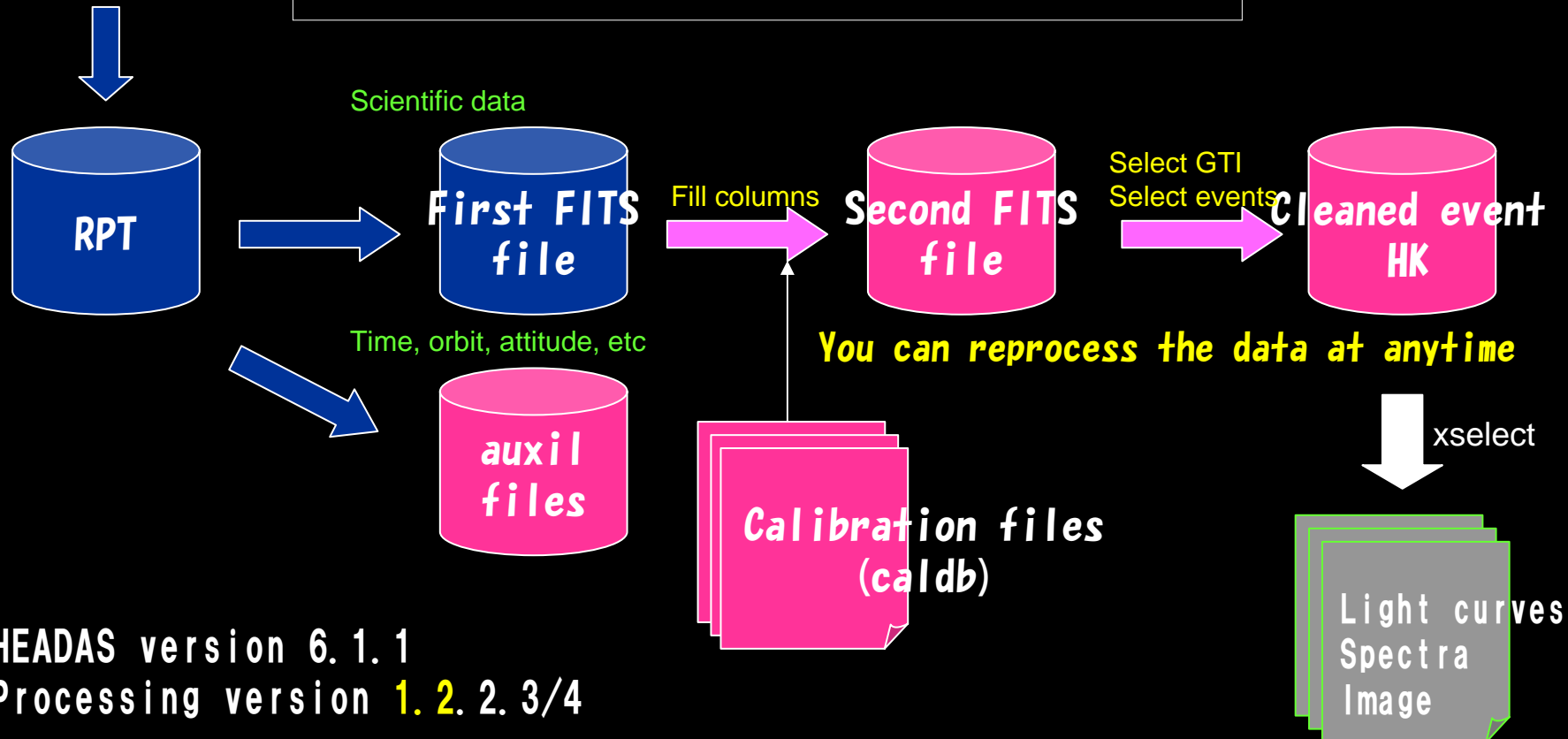
```
xis/
```

```
event_cl/
```

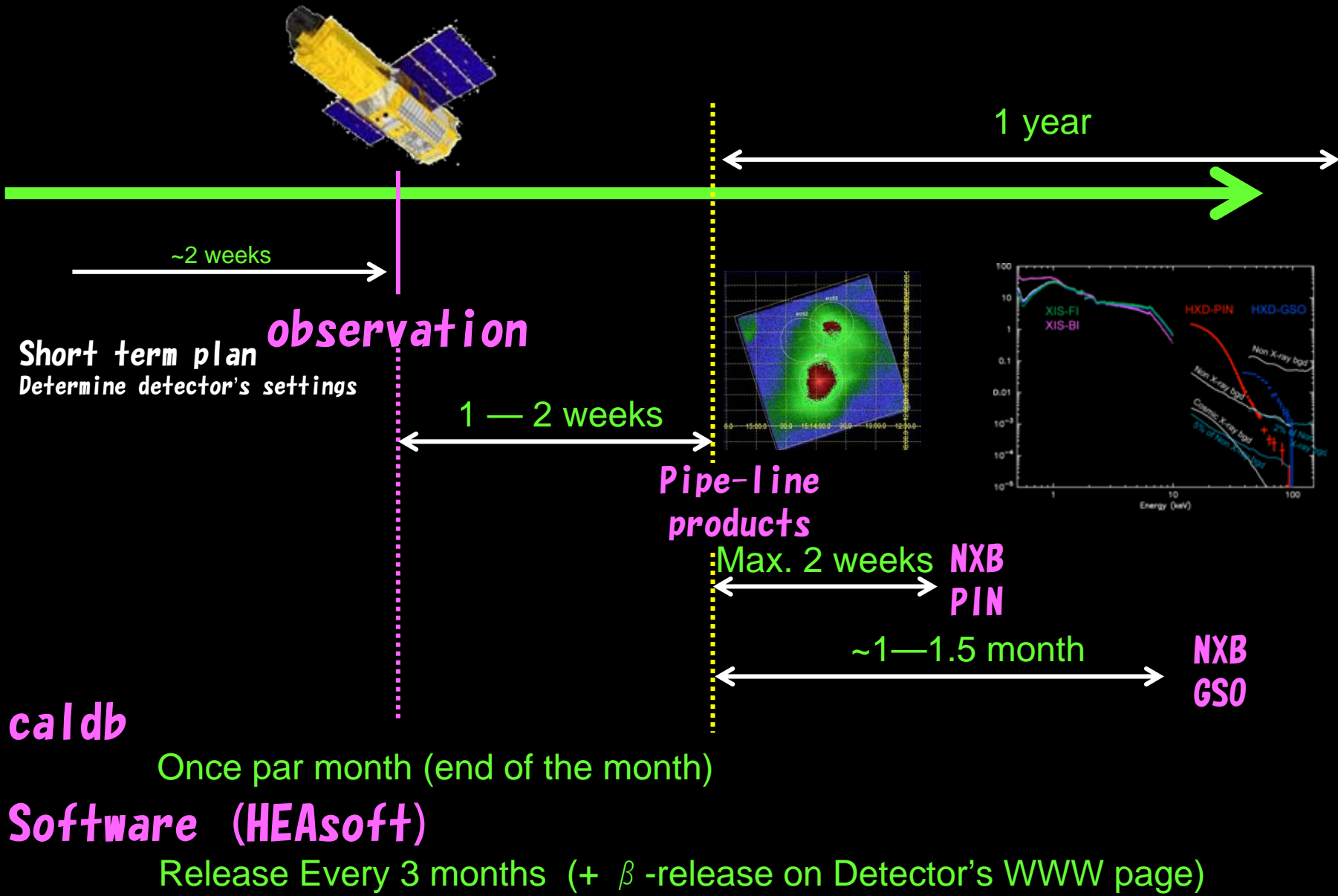
```
event_uf/
```

```
hk/
```

```
products/
```



Time line of the *Suzaku* processing



Log/Plan of Pipe-line processing

- July 2005 Suzaku launch
- Apr. 2006 Guest Observation start
- May 2006 **Version 1.0 process Start / HEADAS 6.0.6**
(June Version 1.1 process, minor update)
test version of the processing
- Sep. 2006 **Version 1.2 process Start / HEADAS 6.1.1**
products for scientific analyses (include latest calibration)
- Dec. 2006 **Suzaku Conference in Kyoto** 😊 *We are here.*
- HEADAS 6.1.2 (minor update)
- Jan. 2007 Version 1.3 process start (minor update)
- Mar. 2007 HEADAS release for version 2.0 process
- Jun. 2007 **Version 2.0 process Start**

- Format is changed from version 1.x products (final version)
- Support observations with Spaced Charge Injection, XIS.
- Improve the pipe-line processing
(on-the-fly gain determination of GSO, timing *etc*)
- Other improvements (auto CALDB access *etc*)

HelpDesks for your analyses



• GSFC Suzaku Help for US GOs

<http://heasarc.gsfc.nasa.gov/cgi-bin/Feedback>

ask questions via www page

• Suzaku Help Japan for Jp/Asian/Europa GOs

<http://cosmic.riken.jp/suzaku/help>

just fill the template and
send E-mail to

suzaku_help@crab.riken.jp

Note: volunteer based system
no special permission to access private data

FAQ page is available in the WWW page

summary

- **Familiar data structure as ASCA data (with standard tools of xselect, xspec, XRONOS etc).**
- **All tools or information are released in the HEAsoft package or CALDB database. There are no informal tools for analyses.**
- **Before your analyses, please check important topics on operation and calibration issues via WWW page**
- **There are three kinds of manuals. For walk-through the analysis, check “7 steps”**
- **Please feel free to ask us via the helpdesk (US/Jp), if you have a question on your analyses.**