

Tentative plan of  
*Data Branch for KAGRA*

2nd Korea - Japan Workshop on KAGRA, 28th May 2012  
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# Ranks and flow of KAGRA data

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## 1. Raw data

derived from the interferometer and any experimental apparatus.

## 2. Calibrated data (pre-processed data)

will be generated on-line at Kamioka site.

- Data consists of  $h(t)$ ,  $h(f)$  and detector characterization results.

Spool storage will be prepared on-site.

Calibrated data will transfer to Kashiwa continuously and smoothly without delay.

## 3. Main mass storage

at Kashiwa.

- Primary archive of raw data and calibrated data

## 4. Low latency distribution

with limited data, e.g.  $h(t)$  and data quality flags.

- This distribution is for transient event searches.

This may include 'Partial distribution' listed below.

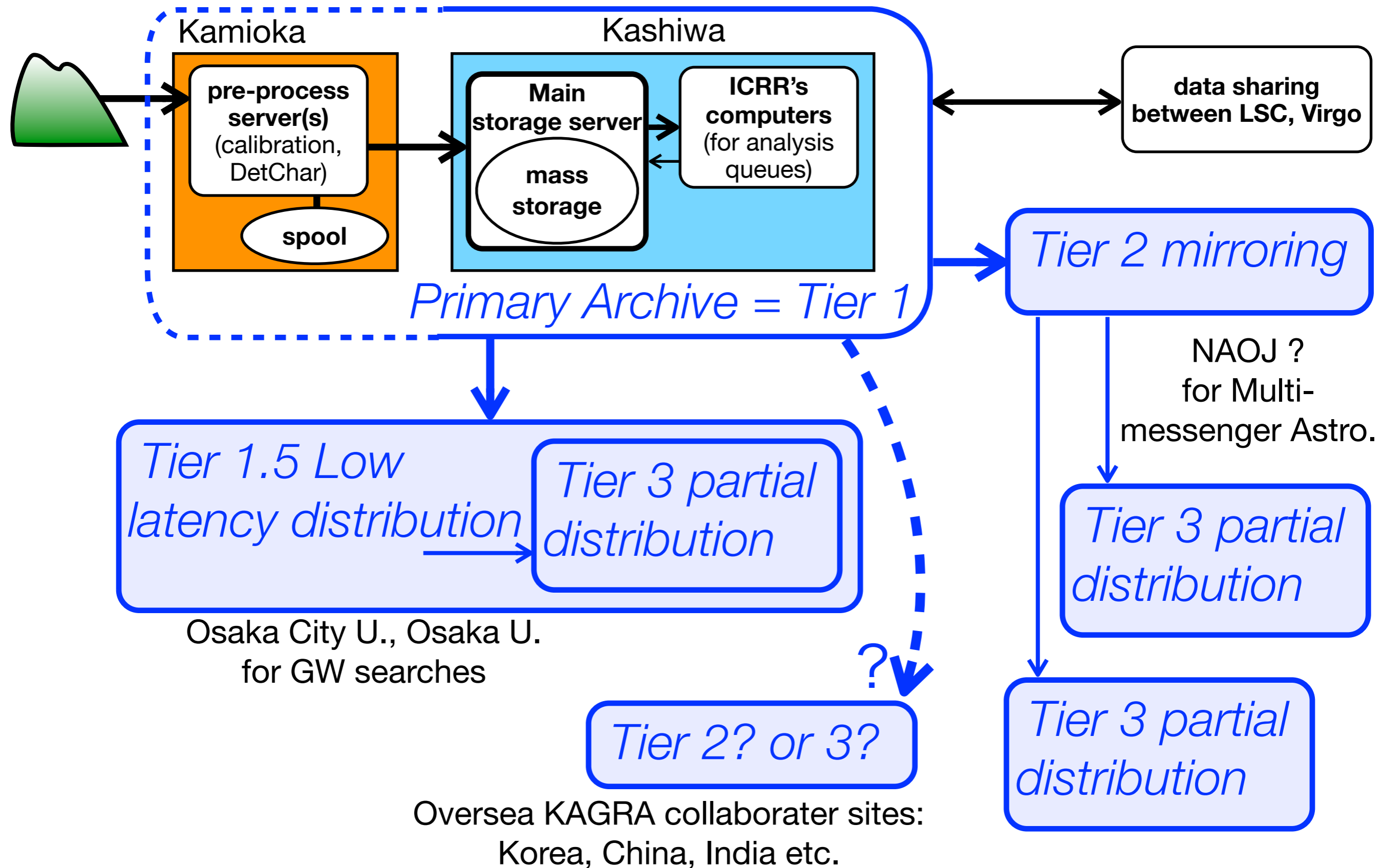
## 5. Mirroring

- Full data including raw data.

## 6. Partial distribution

- GW channel and least channels that need typical searches, without raw data.

# Overview



# Branches (Tier #)

We did not designed the data for n-th Tier yet. This is tentative plan.

Tier	Site(s)	Purpose	Raw	Calibrated	Detector Characterization	Amount of data	event alerts
(0?)	Kamioka	DAQ	partial (spool)	partial (spool)	partial (spool)	500TB	partial
1	Kashiwa	Main Storage	○	○	○	5~30PB	(Not yet discussed)
1.5	Osaka City. Osaka	Low latency	NA or small amount	○	○	<1PB	○
2	NAOJ? Korea Site?	Mirroring	○	○	○	5~30PB	○
3	End users	Development	NA	partial	partial	(Not yet discussed)	NA