

Sampled data in FITS format



Initialization Module

Read input data

Initialization of output grid and HEALPix grid

Initialize output grid

- *Resolution of observation*
- *Sample coordinates*
- *Output resolution*

Initialize HEALPix

- N_{side}
- *Total number of Bloks*
- *Total number of rings*



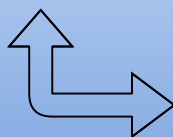
Gridding Module

CPU

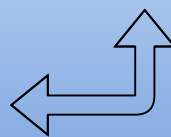
- Establish two-level lookup table
- Multi-thread pre-ordering

GPU

Gather-based, multi-thread
GPU gridding



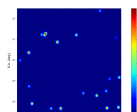
Data migration



Result Processing Module

**Correctness
verification**

Gridding results visualization



FITS file Storage

