

Status of Near Real Time Processing of GONG Data

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and

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What do we have so far..

QR real time low-resolution Dopplergrams

What is next..

Fully calibrated near real time (NRT) high-resolution images

Towards a “Near Real Time” GONG

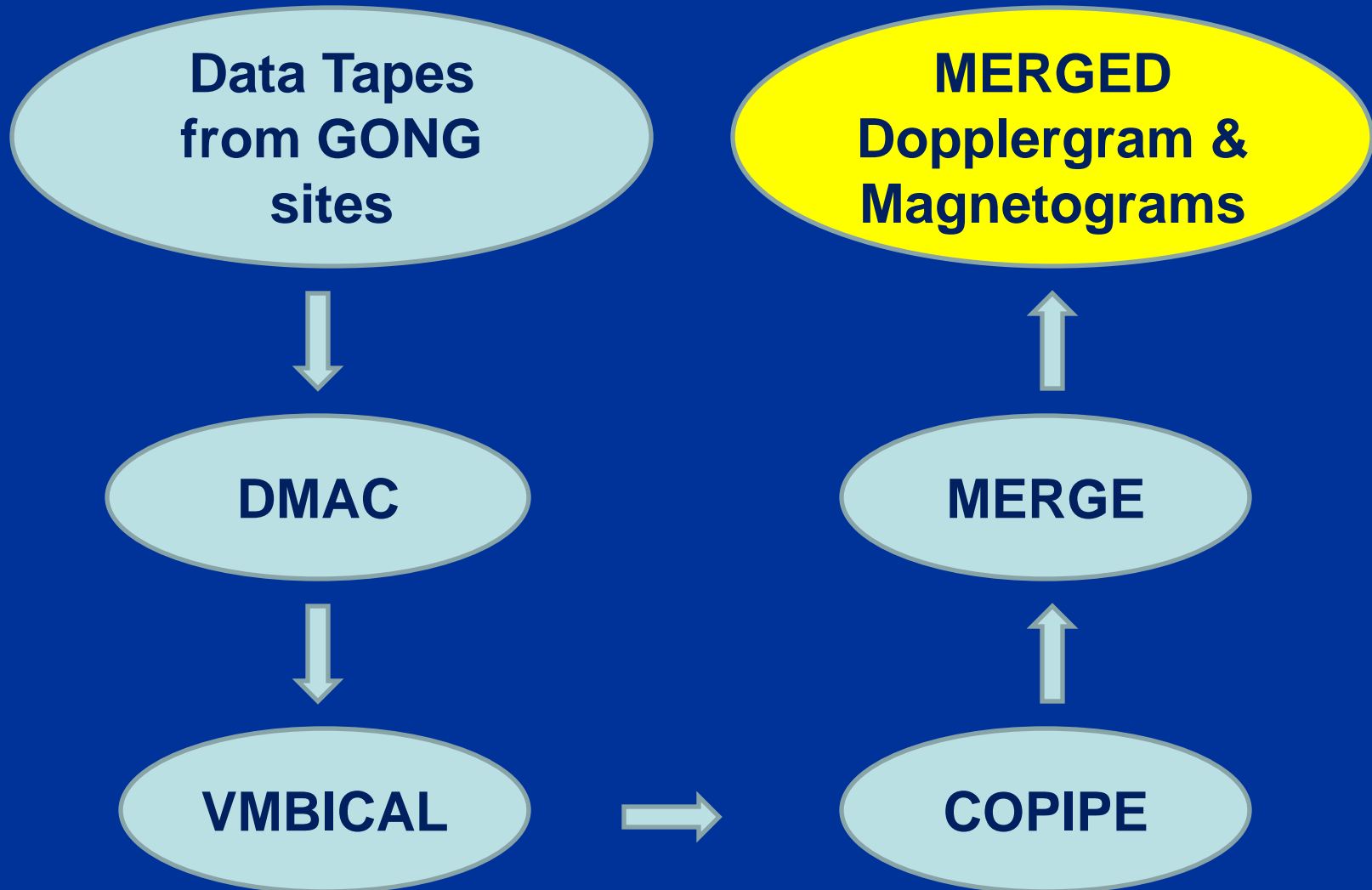
Why is the need?

- Comparison with other data sets, e.g. estimates of acoustic mode parameters and flows.

HMI – GONG Comparison

- Space weather forecasting, e.g. Far-side imaging, Flare prediction.

Current Procedure



For NRT Images...

- GONG has started transferring QR high-resolution Dopplergrams every day from five sites (UD, TD, CT, BB and ML).
- Image rotation code has been modified (by Sean Mcmanus), and now it uses data for ± 7 days.

New code has been tested on QR images for May 2008 (difference $\leq 0.03^\circ$).

- Image Calibration Code needs to be modified (in progress).

HMI and GONG Comparison

- We have received data on tapes from four sites (TD, CT, BB and ML) until April 5, and daily QR Dopplergrams.
- Data tapes have been processed through VMBICAL to obtain calibrated images.
- Image rotation was calculated with QR uncalibrated images and applied these corrections to fully calibrated Dopplergrams.

Flows

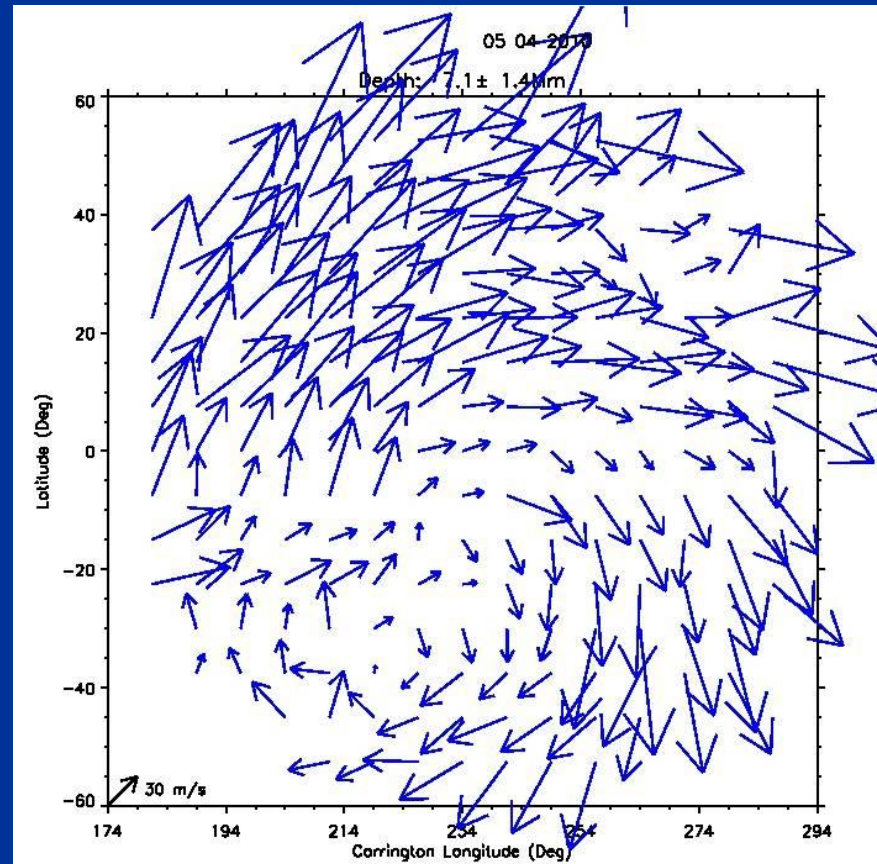
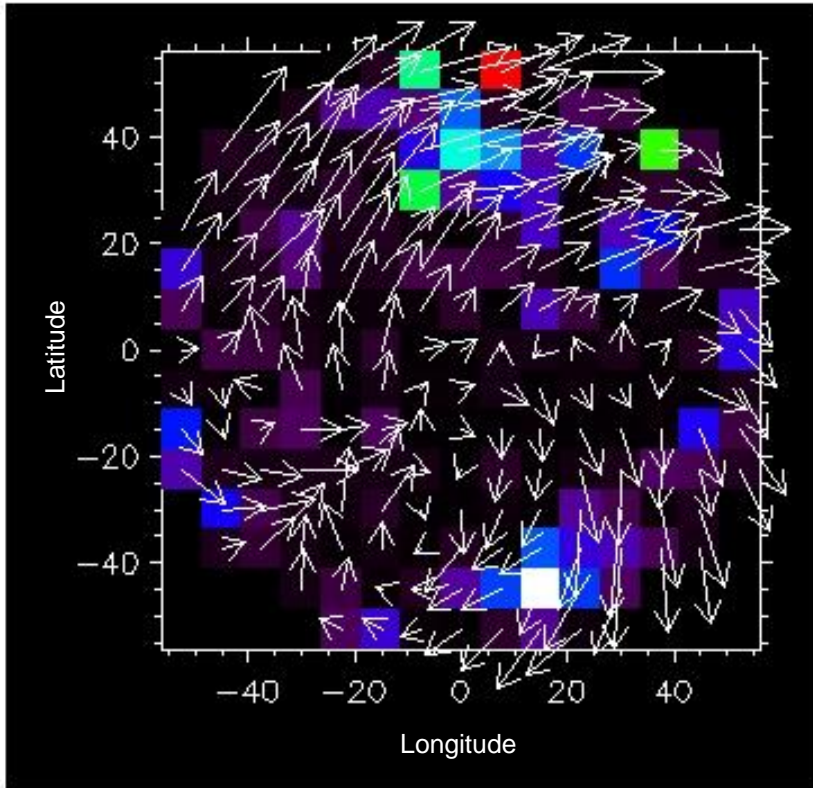


Image rotation needs to be fixed

In progress....

Determination of precise image rotation angles using

- fully calibrated images
- updated drift scans
- modified code

Using existing codes, GONG may be able to provide data for comparison after about two weeks of observations.