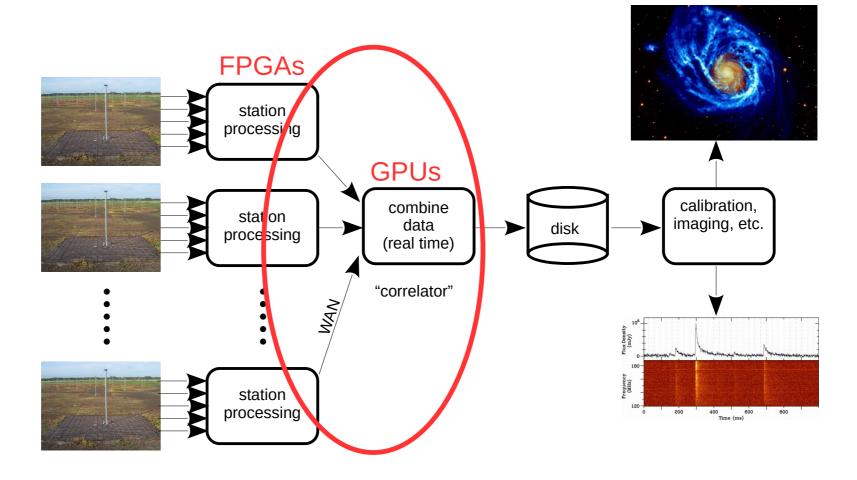
BLOCKS



WP4: data transport & correlation





WP4 Goals

- develop/apply methods for 400+ Gb/s FPGA → GPU communication
 - successfully demonstrated 1200 Gb/s
- develop common "radio blocks" (e.g., GPU filter, tensor-core beam former, ...)
 - code reuse between applications
 - less code maintenance

BLOCKS

- innovative techniques → high (energy) efficiency
- integrate I/O techniques & radio blocks into correlator / beam-former applications

February 5th, 2025 IAB meeting 2



Industry involvement

- WP4: focus on network and GPU technology (hw + sw)
 - advise
 - use of GPU and network tools/libraries
 - next-gen technologies
 - possibly: access to specific hardware
- reuse of radio blocks outside radio astronomy
 - many radio blocks → standard signal processing
- open to collaboration