

CALLISTO status report 2003-08-13

FPU

Software status frozen for our own test-FPU. Minor changes expected due to individual humidity sensor coefficients. Actual setup changed to work with parallel mode (as required for Green Bank observatory). Electronic schematics now available on <http://www.astro.phys.ethz.ch/instrument/callisto/fpu/fpu.htm>

RCU

Both measurement modes (parallel=Green Bank, alternating=PHOENIX-2) in test phase. Electronic interface to control the FPU tested not only in manual but also in memory scan mode. Integration measurement mode now in test phase. Software watchdog implemented and tested successfully. Manufacturing of two new boards (FM) finished, they are now being tested and qualified together with the new receivers.

RX

Manufacturing of four receivers (FM) finished, they are now being tested together with two new RCU's by our apprentice.

Host

Communication with RCU operational, buffer sizes to be optimized
Communication with FPU operational (Option)
Communication with GPS operational (Option)
Communication with environmental temperature- and humidity sensor operational (Option)
Data storage of raw-files operational
Memory scan up to 500 channels/sweep realized, 200 channels/sweep tested.

Server

The designated server for creating and first tests of backend software (data transfer, calibration, FITS-generating, archiving etc.) shall be "hercules.ethz.ch".

AOB

Metal case to accommodate one FM CALLISTO spectrometer ordered. Delivery date expected 21.08.2003. First ALLEN variance measured with a DM-receiver on a breadboard-FPU (no thermal stabilization, no metal case, no special shielding, low cost power supply etc.), see attached picture below. All applicable documents are now available on <http://www.astro.phys.ethz.ch/instrument/callisto/Appdocs/applicabledocs.htm> We -of course - try to keep it as up to date as possible.

A Power Point Show is in preparation to be presented at ERAC (European Radio Astronomers Club) congress 4-9-2003 in Heppenheim Germany, see also <http://erac.wegalink.com/>

Passport for Christian Monstein available. Passport for Hansueli Meyer ordered, should be available until end of September.

New results concerning radio quiet areas in Switzerland are available on <http://www.astro.phys.ethz.ch/instrument/callisto/RFSPEC2/spectrum2.htm>

