

CONTACT INFORMATION:

- Make sure that the contact information of the director/chief of VLBI, the friend of VLBI, technical friend of VLBI and the scheduler of your telescope is correct, see:
<https://www.evlbi.org/contact/>
<https://www.evlbi.org/using-evn>

EVNtech e-MAIL EXPLODER:

- Make sure that all persons involved in VLBI operations at your station subscribe to EVNtech:
<http://mailman.astron.nl/listinfo/evntech>

TOG-MEETINGS:

- Make sure that relevant personnel from your station participate in TOG-meetings.

THE BLOCK SCHEDULE

- The block schedule should be frequently updated whenever changes or corrections are made. The most recent version of the block schedule can be found via the links in: <https://www.evlbi.org/observing-sessions>. Please note that there are separate disk & e-EVN block schedules.
- Errors in the schedule should be communicated to the EVN Scheduler immediately. The e-mail for the current EVN scheduler can be found in the EVN contacts page: <https://www.evlbi.org/contact>.

BEAM MAPS:

To allow beam corrections for wide-field VLBI imaging observations the stations should provide beam maps to JIVE. All stations, please provide beam-maps at L- and C-band, send them to Aard Keimpema at JIVE and note it https://deki.mpifr-bonn.mpg.de/Working_Groups/EVN_TOG/Beam_maps

EVN DISK-PACK POOL:

- Mark5 stations should spend 7000 €/year on the purchase of disks. Stations that are capable of 2 recording and have a Flexbuff should provide a Flexbuff of at least 250 TB to JIVE and provide additional 250 TB of space at the station.
- **New Goal:** Stations should upgrade their Flexbuff to at least 500 TB at the stations and 500 TB at JIVE by the end of 2021.

DISK-PACK SHIPMENT:

- Stations are to register incoming and outgoing disk packs using PACKTRACK:
<https://ops.vlba.nrao.edu/packtrack>
(Contact Juan Cordova/NRAO to gain access, requires an account at <https://my.nrao.edu>).
- Provide JIVE your preferred shipping company and the address for shipping disk packs.
- Prior to the session, JIVE will circulate a plan for disk-pack shipments to the stations based on (initial versions of) the block schedule and the on-hand disk packs wiki page. This plan will outline the composition of the set of disk packs needed by each station to hold observations going to the various correlators (do not record experiments going to different correlators on a single pack).

- Recorded disk-packs from a session should be sent by a recognised integrated carrier. Because the mapping of experiments to disk packs can be many-to-many, sending recorded packs to the correlators can usually wait until after the session is completed -- but try to send these within a week of the end of the session. There may be special instructions in the disk-pack distribution plan concerning holding onto individual pack in light of possible nearby out-of-session observations.
- Disk packs should be shipped with one European and one US address on covers so they can be easily returned in case a shipment is lost in transit. Put labels on all covers.
- Because of the advent of ftp fringe-test segments within individual experiments, special handling of the disk-packs containing NMEs is no longer required.

RECEIVER FREQUENCY INFORMATION:

- Stations should fill out and review the table with frequency information in the TOG wiki https://deki.mpifr-bonn.mpg.de/Working_Groups/EVN_TOG/Frequency_ranges_for_2%2F%2F4_Gbps This information is very important for 4 Gbps observations since LOs at the different stations should match.

GPS-MASER READING:

- Because of the advent of more frequent e-VLBI observations, station GPS data should be updated on VLBEER preferably on a daily basis. The script many stations uses can be found on the TOG wiki: https://deki.mpifr-bonn.mpg.de/Working_Groups/EVN_TOG. It is especially important to be current just prior to observations that will have (near) real-time correlation, such as e-VLBI or ftp fringe tests.
- The naming convention for GPS data is gps.<station> e.g. for Jodrell Bank the file is to be named: gps.jb
- Make sure that GPS measurements are made during the observations and written in the log.

IN ADVANCE OF SESSION:

- Stations should make sure that the EVN status table is up-to-date: <https://www.evlbi.org/sites/default/files/shared/EVNstatus.txt>
- Stations should make sure that the SCHED catalogue information is up-to-date.
- Stations should keep current their information in the TOG wiki page showing the number and capacities of on-hand disk packs. Contact Rottmann to gain access.

SESSION PREPARATION:

- Gunn to send email before each session when the final versions of all schedules are ready for download.
- All should check that Mk5 modules are placed squarely on a flat surface when received; otherwise connectors are easily damaged when bent 8 packs get inserted in Mark 5 units.
- All stations should condition disk packs if time permits, especially those which are to be used for 1 Gbps recording.
- All stations that do both astronomy and geodesy should clearly distinguish between astronomical and geodetic 8 packs and ensure there is no "leakage" into the wrong pool, as mixing pools can create problems for scheduling.
- Make sure that your local FS procedures (station.prc, equip,ctl, etc) are correct and up to date.

- All stations should try to run the FS diagnostic tests (see /usr2/fs/systests/systests.txt) and investigate the results. Details can be found in the presentation by Brian Corey and Ed Himwich: <http://ivscc.gsfc.nasa.gov/pub/TOW/tow2013/notebook/Corey.MW3.pdf>.

DURING SESSIONS:

- All stations should monitor Tcal during sessions. This can be done by using ONOFF.
- All stations should forward FS error log files to Himwich in the event of a crash, including details of what the FS was doing when the crash occurred.
- All stations should provide feedback on individual observations via the EVN Feedback facility ([Feedback System | EVLBI](#)), by following links to the session and then experiment. Feedback should be provided as soon as possible after an experiment, but at the most within 7 days of its completion. *The reports should be short, accurate and quantitative. Comments should focus on any failures during the run that may lead (or have led) to loss of data.*
- Observing logs are to be deposited on the VLBEER server (vlbeer.ira.inaf.it) within 72 hours after the completion of an experiment, as soon as possible (< 24 hours after the experiment) in the case of eVLBI observations.
- If a station fails to observe a given experiment for which it is scheduled, a dummy log should be posted on VLBEER (see <http://www.oso.chalmers.se/evn/dummy.log> for an example).
- Log name convention. All log names should be in lower-case. For observing logs the naming convention is: <project><station>.log, The name of an EVN experiment or project is defined within the block schedule. For example, the observing log from Noto (nt) for project number "GY001B" is to be named: gy001bnt.log
- All stations: report Mark5C bugs to Ruszczyk,

POST SESSION FEEDBACK:

- All stations should look at pipeline results available from the EVN data archive pages at JIVE, in particular amplitude corrections found by selfcal on strong, compact calibrators. JIVE support scientists should include a comment on the quality of amplitude calibration results, especially to indicate cases where a problem may have occurred and the amplitude correction factors are unreliable.
- NME calibration files should be made available as early as possible. All stations should look at NME reports sent by JIVE. NMEs should be pipelined as early as possible and email sent to EVNtech when the results are available, to ensure feedback is provided well in advance of the next session.
- Stations must aim to produce ANTABFS-, RXG-files within 2 weeks after the end of a session. JIVE should inform the TOG Chair of any problems, so that Directors can be asked to prioritise calibration if insufficient time is available at stations. The naming convention for the ANTABFS-file is: <project><station>.antabfs e.g. gy001bwb.antabfs
- For eVLBI, RXG-files from the previous session can often be used. LOG- and ANTABFS-files for eVLBI experiments should be made available at vlbeer as soon as possible (< 24 hours after the experiment) as rapid analysis is often a high priority for these experiments.

POST-PROCESSING:

- ANTAB and UVFLG files produced by the JIVE Support Scientist (after post-processing of calibration and log files from stations) should be made available on VLBEER 1 week after correlation of the corresponding project (1 day after correlation for the case of e-VLBI projects).

The naming convention for these files is <project.antab> and <project.uvflg>, e.g. gy001b.antab and gy001b.uvflg.

e-VLBI:

- If you plan to participate in e-VLBI. Make sure that your station follows the “e-VLBI Station Recommendations”: <http://www.jive.nl/e-vlbi-station-recommendations>

EVN SPARE PARTS:

- Make sure that your station invest in EVN spare parts. Directors agreed that each institute should invest ~3000 € in spare parts (see minutes from TOG-meeting at Arecibo Observatory, Puerto Rico, USA, 29/30 Aug 2011). The list of spare parts can be found here: https://deki.mpifr-bonn.mpg.de/Working_Groups/EVN_TOG/EVN_spare_parts