

Diagnosing ZEVON

- **Are data being taken?** The online display works on events written to RAW and DAQ files, not DAQTEST events.
- **Are RAW events being delivered to the online reconstruction?** Login to zenith46 and check the tail of the file /flink/event_loop.log
 - If it ends in a line containing “releasing new event”, the online system is waiting for events to be taken since the time given in the timestamp. Check with data-taking if this is plausible.
 - If it has been saying “waiting for removal of old event” many times in a row (without “releasing” in between), check the last timestamp
 - if the timestamp is older than a few minutes, the online system may have stopped
 - if the timestamp is recent, this may indicate that the reconstruction chain is not working
 - If the “releasing new event” line comes regularly, verify the nature of the data again:
 - Look at the latest file name of the pattern zenith46:/diskmnt/zevon/log/rNNNNNeMMMMM.gz, where NNNNN indicates the run number. If this run number is “1”, DAQTEST is running which does not lead to events useable by the online display.
- **Is the reconstruction working?** Check the directory zenith46:/diskmnt/zevon/tmp for the timestamp of the files raw_event.fz and latest.cz . These are the input/output files of the last successful reconstruction step.
- **Is the ROOT conversion working?** Check for the latest file in the directory zenith46:/diskmnt/root/data. The file name pattern is rNNNNNeMMMMM.root.
- **Is the link to the latest ROOT file updated?** Check the symbolic link zenith46:/diskmnt/root/latest.root . Does it point to the most recent ROOT file in zenith46:/diskmnt/root/data ?
 - If not, is the most recent ROOT file a real (non-DAQTEST) event? In this case, the run number should be >40000 and not “1”. Zevon does not set the link to a DAQTEST event.
- **Is the ZeVis web server working?** Switch client to online mode. If no event is loaded (not even an empty one), the server may be hanging.

Please report all observations & address questions to zevis@mail.desy.de