Observing with the VLA-EVLA Transition Array

Work to find a post-processing solution to the aliasing problem, which primarily affects the narrower spectral line bandwidths, is continuing. Please consult the special aliasing section on the EVLA returns page for the latest news.

Small frequency differences, as encountered when using online Doppler tracking, have been known to cause phase jumps on VLA - EVLA baselines for some time, and we have been strongly advising against the use of Doppler tracking whenever crossed (VLA - EVLA) baselines are required. As reported in the last newsletter, we discovered some time after the Modcomps were retired that, when Doppler tracking, the phase did not remain constant when moving from one source to another - nearby - source. The small frequency change caused by moving from source to nearby source caused a large phase shift, which would make it impos- sible to copy calibrator phase solutions to a nearby source. This affected *all* baselines, and we temporarily had to advise against *any* use of Doppler tracking. As of April 9 2008, this problem was resolved, and Doppler tracking should work again for VLA - VLA and EVLA - EVLA baselines. For crossed baselines, however, use of Doppler tracking remains strongly discouraged.

It was recently discovered that spectral line observations taken at 12.5 MHz bandwidth in most cases show a noise level too high by a factor of at least 2. We are currently busy determining when this problem started to occur. We did discover that by turning off the so-called correlator self- test this problem goes away, and we plan to turn off self-test by default whenever 12.5 MHz bandwidth spectral line observations are requested.

For the latest news on these and other EVLA related items, please consult our EVLA returns web page.

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