Why must I justify data rates higher than 40 MB/s in my Cycle 4 Technical Justification?

Data from the correlator, together with monitor and weather data, are sent via dedicated optical fiber links (1-10 Gbit/s) to the OSF, where they are archived. A peak data rate of 66.6 MB/s can be sustained for short periods of time, i.e. days. This peak rate is a technical limitation of the data capturing and data flow systems and will be imposed by the Observing Tool at the proposal validation stage.

The maximum allowed data rate is 60 MB/s. If the data rate computed for your Science Goal setup by the OT exceeds 40 MB/s the OT will issue a warning, and you will be asked to justify it in the Technical Justification. This warning will *not* prevent you from submitting your proposal, and if the high data rate is adequately justified this will not affect the probability of your observations being scheduled.

PIs are asked to justify high data rates so that we can assess whether these are really necessary for the observations to fulfil the scientific aims. In many cases it will be possible to substantially lower the data rate using spectral averaging (see KB article How can I reduce my data rates for an observation? for details), without compromising the scientific return of the observations. For any spectral setup requiring an average data rate of more than 40 MB/s PIs will be contacted during Phase 2 to discuss the possibility to reduce the data rate.