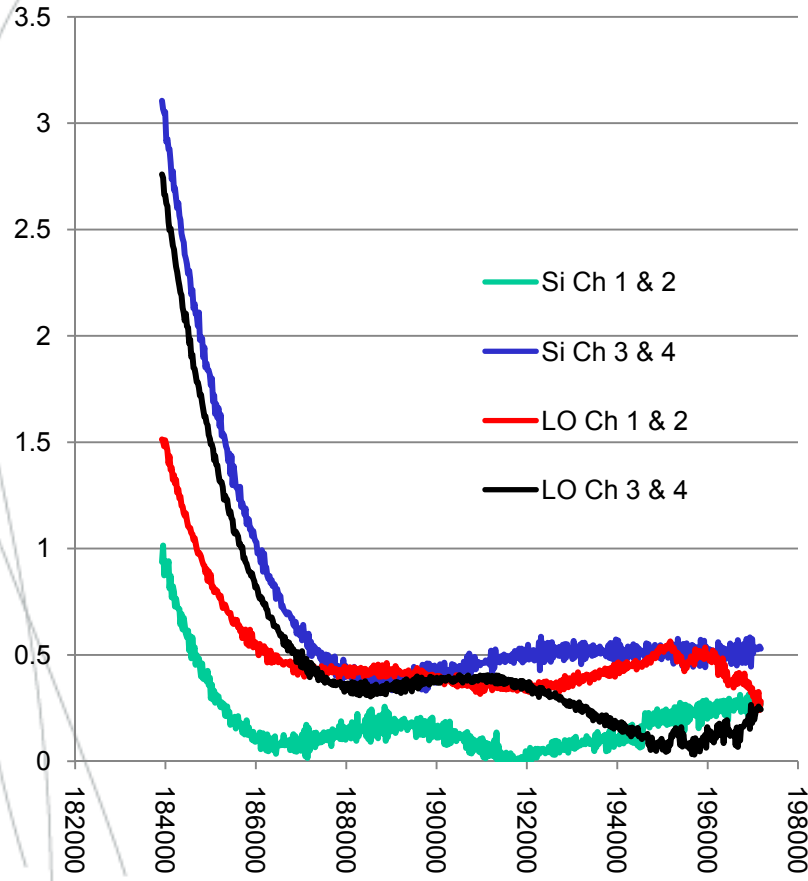
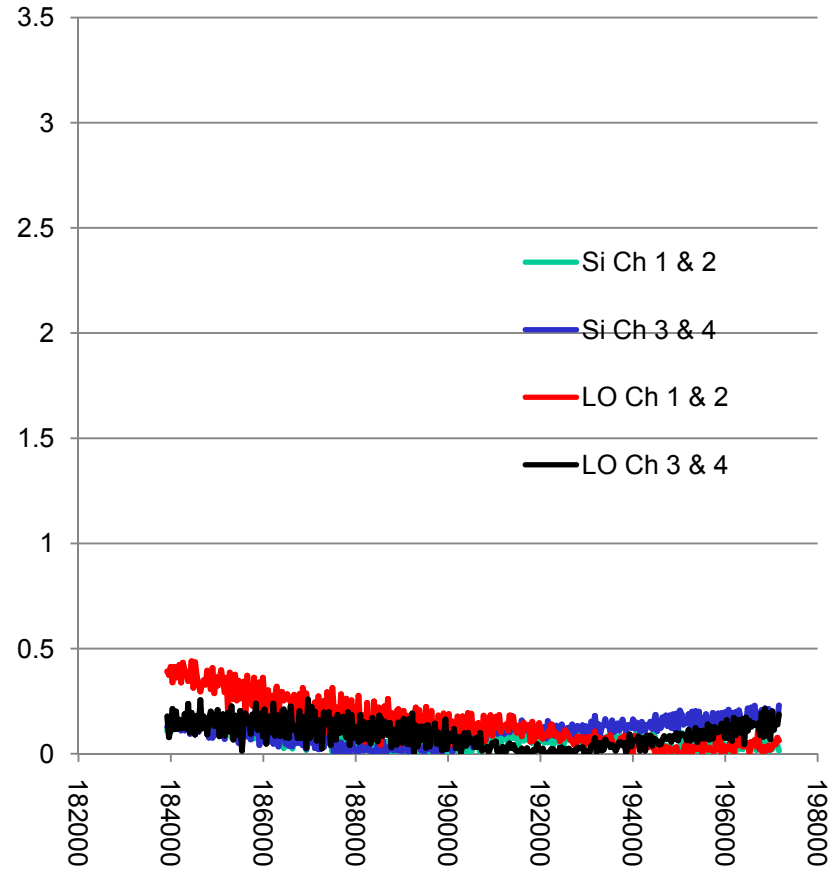


New generation Coherent receiver

Improved operating range and dual uniformity C+L band operation



Old generation hybrids



New generation hybrids

• OLD GENERATION

- wavelength range C-band
- phase difference $90^\circ \pm 5^\circ$
- excess IL 2.5 dB
- Dual uniformity 1.0 dB
- total uniformity 2.0 dB
- return loss 40 dB
- Skew 1.0 ps
- OTR 0° to 70°
- storage temperature range -40° to 85°

• NEW GENERATION

- **wavelength range** **C+L band**
- phase difference $90^\circ \pm 5^\circ$
- excess IL 2.5 dB
- **Dual uniformity** **0.5 dB**
- **total uniformity** **1.0 dB**
- return loss 40 dB
- Skew 1.0 ps
- OTR 0° to 70°
- storage temperature range -40° to 85°

Tunable 90° Hybrid (optionnal)

- Tuning
 - » 1-Dual balancing of each dual output
 - » 2-Attenuation on each output
 - » Enabling perfect power balancing.
 - » Compensation for photodiodes non-uniformities

