1. The supercontinuum generation is optimized by eight reflections on a chirped mirror pair. What is the criterion for selecting such specific number of reflections during the experiments?

Answer: The broadening of the supercontinuum and also its power were studied with different numbers of reflections. We concluded that eight reflections on the chirped mirror pair give us the best condition of both broadening and power for the supercontinuum spectrum. The paragraph related to this was therefore modified in the following way:

The output of the femtosecond laser is coupled into a photonic crystal fiber (PCF, PSS 2620 MenloSystems) to extend the spectrum of the OFC to more than one octave span. To determine the best coupling conditions for conversion efficiency and spectral broadening, three microscope objectives (10X, 20X, 40X) were tested; the 20X objective, mounted on a three-axis translation stage for fine spatial alignment between the beam and the fibre core, gave the best coupling performance. Also, the wavelength dispersion introduced by the objective is pre-compensated with two chirped mirrors (CM) placed before the objective, preserving the peak power needed to efficiently drive the fibre nonlinearities. We also studied the optimum number of reflections on the CM pair. Eight reflections, combined with the 900 mW PCF input power reported above, gave the best compromise between total output power and the power available at the wavelengths used for the f-2f interferometer. The system exhibits low power degradation in the SC after several hours of operation and is realigned manually on a daily basis to maintain performance.

2. The f0 lock is reported to be limited to ~1 hour due to thermal drifts causing the feedback signal to saturate. What are the specific free-running fluctuation amplitudes of f0 observed over typical timescales?

Answer: The free running deviations of f0 are in the order of 50 kHz at 1 second. We took the reviewer's concern and to clarify this, we corrected the text in the following way:.

The output of the P2I is sent to an acousto-optic modulator (AOM) which allows us to correct the fast free-running fluctuations of f0 (deviations of 50 kHz at timescales of 1 second) by acting on the pump intensity.

3. The supercontinuum generation relies on coupling the ~900 mW, 30 fs pulses into a PCF. How is the long-term coupling efficiency and alignment stability maintained during the experiments? Is the coupling setup enclosed and actively stabilized, or is it manually re-optimized periodically?

Answer: The system is maintained with daily manual alignment. The system shows a good performance with no power degradation after several hours working. We took the reviewer's comment and we added the following sentence:

"The system exhibits low power degradation in the SC after several hours of operation and is realigned manually on a daily basis to maintain performance.**"**

4. For the Ti:Sa fs oscillator, is there any active stabilization of the carrier-envelope offset frequency's free-running value beyond the slow pump control? Over the 16-hour frequency lock, does the laser operating in a single mode family (i.e., no mode-hops), or was any monitoring of the mode index performed?

Answer: We took the reviewer's comment and would like to clarify both points.

About the active stabilisation of the CEO frequency there is no additional actuator apart from the AOM. Based on the reviewer's concern and based on a previous question we decided to modify part of the text. We corrected the related text in the following way: "The output of the P2I is sent to an acousto-optic modulator (AOM) which allows us to correct the fast free-running fluctuations of f0 (deviations of 50 kHz at timescales of 1 second) by acting on the pump intensity." **clarifying that this is a fast, not a slow, actuator.**

Regarding the mode index and the cycle slips rate: the SNR of the f rep beatnote exceeds 50 dB in a 300 kHz resolution bandwidth, and the SNR of the f 0 beatnote is approximately 35 dB in the same bandwidth. These values guarantee, in principle, that the rate of cycle slips is negligible even over long-term operation. In addition, both beatnotes were continuously monitored with frequency counters throughout the measurement, and no discontinuous jumps consistent with a cycle slip or mode-index change were observed during the 16-hour f rep lock or the 1-hour f 0 lock.