



Figure 4. (a) Evolution of the dual-comb absorption spectrum of the $P(27)$ line of the n_1+n_3 band of $^{12}\text{C}_2\text{H}_2$ over a 10-s time window. The spectral span is 15 GHz, the spectral resolution is 100 MHz and the time resolution is 100 μs . (b) Expanded portion of (a). showing an intensity map of a 20-ms time window at around 5 s, containing 2000 spectra. (c) Time-resolved pressure of $^{12}\text{C}_2\text{H}_2$ retrieved from a fit of the spectra in (a). The error bars are the 95% confidence intervals (2 standard deviations).