```
In [4]: runfile('C:/Users/m.wagener/Documents/QBit - WorkingGroup/zea2git-qc/
devices/ZIMFLI/ZIMFLI-TestScripts/test_zimfli_BufferedParameter.py', wdir='C:/
Users/m.wagener/Documents/QBit - WorkingGroup/zea2git-qc/devices/ZIMFLI/
ZIMFLI-TestScripts')
*** Use SIMULATION mode ***
DBG: lockinBufferedParameter - init buffered_freq1 Osc 1 Frequency () {}
c:\users\m.wagener\qutech\qcodes\qcodes\instrument\parameter.py:251:
UserWarning: Wrapping get method, original get method will not be directly
accessible. It is recommended to define get_raw in your subclass instead.
  warnings.warn('Wrapping get method, original get method will not '
DBG: lockinBufferedArrayParameter - init buffered_demod1 () {}
DBG: lockinBufferedArrayParameter - init buffered_demod1 () {}
DBG: lockinBufferedArrayParameter - init buffered_demod1 () {}
DBG: lockinBufferedArrayParameter - init buffered_demod1 () {}
DBG: sweep ZIMFLI_buffered_freq1 [400000.0, 410000.0, 420000.0, 430000.0,
440000.0, 450000.0] 0
DBG: getMeas
DBG: glob cfg {'index': 6, 'param':
<qcodes.instrument_drivers.ZI.ZIMFLI.lockinBufferedParameter: buffered_freq1
at 2573063213912>, 'sweep': [400000.0, 410000.0, 420000.0, 430000.0, 440000.0,
450000.0], 'layer': 0, 'tmeas': 1.000001, 't_set': 1e-06, 'data': ([0.0,
0.001, 0.002, 0.003, 0.004, 0.005], [0.0, 0.1, 0.2, 0.30000000000000004, 0.4,
0.5], [0.0, 0.2, 0.4, 0.6000000000000001, 0.8, 1.0], [0.0, 1.0, 2.0, 3.0, 4.0,
5.0])}
DBG: measwin {'demod': ([1000.0, 1000002999.9999999, 2000004999.9999998,
3000006999.9999995, 4000008999.9999995, 5000010999.999999],
[1000000999.9999999, 1000000999.9999999, 1000000999.9999999,
1000000999.9999999, 1000000999.9999999, 1000000999.9999999])}
DBG: reset_programs
DBG: arr-reset
Started at 2019-08-08 12:20:01
DBG: sweep ZIMFLI_buffered_freq1 [400000.0, 410000.0, 420000.0, 430000.0,
440000.0, 450000.0] 0
DBG: send 0
DBG: run 0
DBG: ZIMFLIsweeper(): subscribe  /DEV4039/demods/0/sample
DBG: ZIMFLIsweeper(): subscribe  /DEV4039/demods/0/sample
DBG: ZIMFLIsweeper(): subscribe  /DEV4039/demods/0/sample
DBG: ZIMFLIsweeper(): subscribe  /DEV4039/demods/0/sample
DBG: Sweeper execution time = 2.0890655517578125 sec
DBG: ZIMFLIsweeper(): unsubscribe  *
DBG: sweep ZIMFLI_buffered_freq1 [400000.0, 410000.0, 420000.0, 430000.0,
440000.0, 450000.0] 0
DBG: send 0
DBG: run 0
DBG: ZIMFLIsweeper(): subscribe  /DEV4039/demods/0/sample
DBG: ZIMFLIsweeper(): subscribe  /DEV4039/demods/0/sample
DBG: ZIMFLIsweeper(): subscribe  /DEV4039/demods/0/sample
DBG: ZIMFLIsweeper(): subscribe  /DEV4039/demods/0/sample
DBG: Sweeper execution time = 2.0990357398986816 sec
DBG: ZIMFLIsweeper(): unsubscribe  *
DataSet:
   location = 'data/2019-08-08/#019_{name}_12-20-01'
   <Type>   | <array_id>                | <array.name>    | <array.shape>
   Setpoint | __repetition_set          | __repetition    | (2,)
   Setpoint | ZIMFLI_buffered_freq1_set | buffered_freq1  | (2, 6)
   Measured | buffered_demod1           | buffered_demod1 | (2, 6, 4)
```

```
Finished at 2019-08-08 12:20:05
DBG: glob cfg {'index': 6, 'param':
<qcodes.instrument_drivers.ZI.ZIMFLI.lockinBufferedParameter: buffered_freq1
at 2573063213912>, 'sweep': [400000.0, 410000.0, 420000.0, 430000.0, 440000.0,
450000.0], 'layer': 0, 'tmeas': 1.000001, 't_set': 1e-06, 'data': ([0.0,
0.001, 0.002, 0.003, 0.004, 0.005], [0.0, 0.1, 0.2, 0.30000000000000004, 0.4,
0.5], [0.0, 0.2, 0.4, 0.6000000000000001, 0.8, 1.0], [0.0, 1.0, 2.0, 3.0, 4.0,
5.0])}
--- Buffered config ---
  Last data index: 6
  Parameter: ZIMFLI_buffered_freq1
  Sweep values: [400000.0, 410000.0, 420000.0, 430000.0, 440000.0, 450000.0]
  Measurement time per point: 1.000001
  Settling time per point: 1e-06
  Measured data:
    In1 [0.0, 0.001, 0.002, 0.003, 0.004, 0.005]
    X [0.0, 0.1, 0.2, 0.30000000000000004, 0.4, 0.5]
    Y [0.0, 0.2, 0.4, 0.6000000000000001, 0.8, 1.0]
    R [0.0, 1.0, 2.0, 3.0, 4.0, 5.0]
--- Sweeper config ---
ACQUISITION
    bandwidth control mode: fixed
    Fixed bandwidth sweeper bandwidth (NEP): 1000.0 Hz
    Sweeper filter order: 4
    Minimal no. of samples to average at each sweep point: 1
    Minimal averaging time: 0.0 s
    Minimal settling time for the sweeper: 1e-06 s
    Sweep filter settling time: 9.09090909090909e-08
HORIZONTAL
    Start value of the sweep: 400000.0
    Stop value of the sweep: 450000.0
    Units of sweep x-axis: Hz
    Length of the sweep (pts): 6
    Parameter to sweep (sweep x-axis): Osc 1 Frequency
    Sweep mode: sequential
    Sweep timeout: 600
VERTICAL
    Signal 1: Demodulator 1: In1
    Signal 2: Demodulator 1: X
    Signal 3: Demodulator 1: Y
    Signal 4: Demodulator 1: R
DEMODULATORS
    Demodulator 1: Filter time constant: 0.010000 s
    Demodulator 1: Filter order: 4.000000
    Demodulator 1: Sampling rate: 1000.000000 1/s
META
    Expected sweep time: 6.0 s
    Sweep timeout: 600 s
    Sweep built and ready to execute: True
```

In [**5**]: