The notes below were from the time when the data was collected.

Yellow highlighted text are notes from WJ when going through to verify the files and make the reference table: <https://docs.google.com/spreadsheets/d/1Hki-6oMrHLrJmlkQPh3IEz2TxXxNxNOW4HPOJtBO6h4/edit#gid=0>

**this file is a lot larger because it defaults to auto save to ~27 m) -- we don’t need to use this file**

Pulse type: CW-CW-CW

Pulse duration: 128-64-64

Mode: Active-Active-Active

Power: 75-50-45

Ramping: fast-fast-fast

Recording mode: complex samples

Common range: Auto

-------- D20211004-T232653

Pulse type: CW-CW-CW

Pulse duration: 128-64-64

Mode: Active-Active-Active

Power: 75-50-45

Ramping: fast-fast-fast

Recording mode: complex samples

**Common range: 3m**

-------- D20211004-T233115

Pulse type: CW-CW-CW

Pulse duration: 128-64-64

Mode: Active-Active-Active

Power: 75-50-45

Ramping: slow-slow-slow

**Recording mode: complex samples**

Common range: 3m

-------- D20211004-T233214

Pulse type: CW-CW-CW

Pulse duration: 128-64-64

Mode: Active-Active-Active

Power: 75-50-45

Ramping: slow-slow-slow

**Recording mode: power/angle samples**

Common range: 3m

-------- D20211004-T233354

Pulse type: CW-CW-CW

Pulse duration: 128-64-64

Mode: Active-Active-Active

Power: 75-50-45

Ramping: slow-slow-slow

**Recording mode: Reduced sampling rate power/angle samples (Further reduced file size)**

Common range: 3m

-------- D20211004-T233445

**Variable pulse duration, variable recording range for each frequency channel**

Pulse type: CW-CW-CW

Pulse duration: 128-64-64

Mode: Active-Active-Active

Power: 75-50-45

Ramping: slow-slow-slow

Recording mode: complex

Recording range: 5-4-3 m

-------- D20211004-T233630

**Identical pulse duration**

Pulse type: CW-CW-CW

Pulse duration: 256-256-256

Mode: Active-Active-Active

Power: 75-50-45

Ramping: slow-slow-slow

Recording mode: complex

Common recording range: 3m

-------- D20211004-T233831

**Identical pulse duration, variable recording range for each frequency channel**

Pulse type: CW-CW-CW

Pulse duration: 256-256-256

Mode: Active-Active-Active

Power: 75-50-45

Ramping: slow-slow-slow

Recording mode: complex

Recording range: 5-4-3m

-------- D20211004-T233949

**120 on, 70-200 off (all CW)**

Pulse type: CW-CW-CW

Pulse duration: 256-256-256

Mode: Passive-Active-Passive

Power: 75-50-45

Ramping: fast-fast-fast

Recording mode: power/angle

Recording range: 3m

-------- D20211004-T234429

**All channel on (all BB)**

Pulse type: LFM\_up - LFM\_up - LFM\_up

Pulse duration: 512-512-512

Mode: Active-Active-Active

Power: 75-50-45

Ramping: slow-slow-slow

Recording mode: complex

Recording range: 3m

-------- echopype-test-D20211005-T001135

**120 on, 70-200 off (all BB)**

Pulse type: LFM\_up - LFM\_up - LFM\_up

Pulse duration: 512-512-512

Mode: Passive-Active-Passive

Power: 75-50-45

Ramping: slow-slow-slow

Recording mode: complex

Recording range: 3m

-------- echopype-test-D20211005-T001254

**120 on (BB), 70-200 off (CW complex)**

Pulse type: CW - LFM\_up - CW

Pulse duration: 512-512-512

Mode: Passive-Active-Passive

Power: 75-50-45

Ramping: slow-slow-slow

Recording mode: BB complex, CW complex

Recording range: 3m

-------- echopype-test-D20211005-T001353

**120 on (BB), 70-200 off (CW power/angle)**

Pulse type: CW - LFM\_up - CW

Pulse duration: 512-512-512

Mode: Passive-Active-Passive

Power: 75-50-45

Ramping: slow-slow-slow

Recording mode: BB complex, CW power/angle

Recording range: 3m

-------- echopype-test-D20211005-T001525

**120 on (BB), 70-200 off (CW further reduced power/angle)**

Pulse type: CW - LFM\_up - CW

Pulse duration: 512-512-512

Mode: Passive-Active-Passive

Power: 75-50-45

Ramping: slow-slow-slow

Recording mode: BB complex, CW further reduced power/angle

Recording range: 3m

-------- echopype-test-D20211005-T001612

**All passive, test parsing filename prefix**

Pulse type: CW-CW-CW

Pulse duration: 256-256-256

Mode: Passive-Passive-Passive

Power: 75-50-45

Ramping: fast-fast-fast

Recording mode: power/angle

Recording range: 3m

-------- echopype-test-D20211004-T234656

**120 BB (complex), 70-200 CW (complex)**

Pulse type: CW-LFM\_up-CW

Pulse duration: 256-512-256

Mode: Active-Active-Active

Power: 75-50-45

Ramping: fast-fast-fast

Recording mode: complex-complex-complex

Recording range: 3m

-------- echopype-test-D20211004-T235625

**120-200 BB (complex), 70 CW (power/angle)**

Pulse type: CW - LFM\_up - LFM\_up

Pulse duration: 256-512-512

Mode: Active-Active-Active

Power: 75-50-45

Ramping: fast-fast-fast

Recording mode: power/angle - complex - complex

Recording range: 3m

-------- echopype-test-D20211004-T235714

==== below ramping x resolution combination, with different pulse length in the first channel ===

**All BB recorded complex: fast ramping, standard resolution**

Pulse type: LFM\_up

Pulse duration: 2048-512-512

Mode: Active

Power: 75-50-45

Ramping: fast

Recording mode: complex

Recording range: 3m

-------- echopype-test-D20211004-T235930

**All BB recorded complex: slow ramping, standard resolution**

Pulse type: LFM\_up

Pulse duration: 2048-512-512

Mode: Active

Power: 75-50-45

Ramping: slow

Recording mode: complex

Recording range: 3m

-------- echopype-test-D20211005-T000012

**All BB recorded complex: fast ramping, short resolution**

Pulse type: LFM\_up

Pulse duration: 2048-512-512

Mode: Active

Power: 75-50-45

Ramping: fast

Recording mode: complex

Recording range: 3m

-------- echopype-test-D20211005-T000104

**All BB recorded complex: slow ramping, short resolution**

Pulse type: LFM\_up

Pulse duration: 2048-512-512

Mode: Active

Power: 75-50-45

Ramping: slow

Recording mode: complex

Recording range: 3m

-------- echopype-test-D20211005-T000235

======= below the same ramping x resolution combination, but **identical pulse length** ======

**All BB recorded complex: fast ramping, standard resolution**

Pulse type: LFM\_up

Pulse duration: 512

Mode: Active

Power: 75-50-45

Ramping: fast

Recording mode: complex

Recording range: 3m

-------- echopype-test-D20211005-T000706

**All BB recorded complex: slow ramping, standard resolution**

Pulse type: LFM\_up

Pulse duration: 512

Mode: Active

Power: 75-50-45

Ramping: slow

Recording mode: complex

Recording range: 3m

-------- echopype-test-D20211005-T000737

**All BB recorded complex: fast ramping, short resolution**

Pulse type: LFM\_up

Pulse duration: 512

Mode: Active

Power: 75-50-45

Ramping: fast

Recording mode: complex

Recording range: 3m

-------- echopype-test-D20211005-T000810

**All BB recorded complex: slow ramping, short resolution**

Pulse type: LFM\_up

Pulse duration: 512

Mode: Active

Power: 75-50-45

Ramping: slow

Recording mode: complex

Recording range: 3m

-------- echopype-test-D20211005-T000843

- complex BB data, all channel on:

- complex CW data, all channel on

- Power / angle data, all channel on

- Power / angle , reduces, all channel on

- Complex BB data, only 1 channel on

- Power / angle data, 2 channels on

- Power data only, no angles, all channels on

- BB and CW with different

--- ramping

--- filter

- BB complex and CW power/angle with

--- same sampling interval (1024 usec)

--- different sampling interval

--- same sampling interval but different total range

- BB data with and without cal data recorded

CW data with and without cal data recorded -- can this be turned off? Probably not

- collect BB and CW files with the following changes in the middle:

--- sample interval (pulse length)

--- power level

--- filter

--- fast or slow ramping

- BB 1 channel and CW 2 channels:

--- all complex

--- CW power / angle only

- passive and active data from BB and CW