

Notebook Summary for HF ApRES Experiments

J.D. Hawkins

Wednesday 23rd February 2022

Contents

1 Database Structure	3
1.1 Table ‘measurements’	3
1.2 Table ‘apres_metadata’	5
1.3 Table ‘data’	7
2 Testing	8

1 Database Structure

1.1 Table ‘measurements’

Table 1: Specification for `measurements` table.

Fieldname	Datatype	Parameters	Description
measurement_id	INTEGER	PRIMARY KEY	Unique identifier for each file.
filename	TEXT	NOT NULL	Filename without path.
path	TEXT	UNIQUE NOT NULL	Path to file in UNIX form, relative to top-level project root.
name	TEXT	-	The name associated with the measurement, used to group sets of measurements together.
timestamp	TEXT	UNIQUE ASC NOT NULL	YYYY-mm-dd HH:MM:SS.fff formatted timestamp according to time and date the measurement was taken.
valid	INTEGER	NOT NULL DEFAULT 0	Boolean indicator of whether file is valid. Assumes invalid by default.
base_visible	INTEGER	NOT NULL DEFAULT 0	Boolean indicator of whether basal reflector is visible in range data.
base_range_min	REAL	NOT NULL DEFAULT -1	Minimum range (in steps of 50m) at which basal reflector can be found.
base_range_max	REAL	NOT NULL DEFAULT -1	Maximum range (in steps of 50m) at which basal reflector can be found.
location	TEXT	-	Measurement location name.
comments	TEXT	-	Description and comments for measurement if relevant.
latitude	REAL	-	Latitude of measurement location if known.

Table 1: Specification for `measurements` table.

Fieldname	Datatype	Parameters	Description
longitude	REAL	-	Longitude of measurement location if known.
elevation	REAL	-	Elevation of measurement location if known (referenced to WGS84).

1.2 Table ‘apres_metadata’

The fields `id` and `burst_id` make a unique pair to ensure that each burst within a `*.dat` file is only represented once.

Table 2: Specification for `apres_metadata` table.

Fieldname	Datatype	Parameters	Description
<code>id</code>	INTEGER	PRIMARY KEY	Unique identifier for metadata. Distinct from <code>measurement_id</code> in that each <code>*.dat</code> file can have multiple bursts.
<code>burst_id</code>	INTEGER	NOT NULL	Identifies the burst within a <code>*.dat</code> the metadata represents.
<code>measurement_id</code>	INTEGER	NOT NULL	Identifies the file record where the metadata originates from.
<i>ApRES Specific Metadata</i>			
<code>timestamp</code>	TEXT	NOT NULL	YYYY-mm-dd HH:MM:SS.fff formatted timestamp as logged in <code>*.dat</code> file.
<code>n_attenuators</code>	INTEGER	NOT NULL CHECK(>0, <5)	Number of attenuator settings used.
<code>n_chirps</code>	INTEGER	NOT NULL CHECK(>0)	Total number of individual chirps in file.
<code>n_subbursts</code>	INTEGER	NOT NULL CHECK(>0)	Number of sub-bursts (repeats) of the burst configuration.
<code>period</code>	REAL	NOT NULL CHECK(>0)	Chirp period in seconds.
<code>f_lower</code>	REAL	NOT NULL CHECK(≥ 0)	Lower bound of chirp ramp in Hertz.
<code>f_upper</code>	REAL	NOT NULL CHECK(≥ 0)	Upper bound of chirp ramp in Hertz.
<code>af_gain</code>	TEXT	NOT NULL	Comma separated values indicating AF gain settings.
<code>rf_attenuator</code>	TEXT	NOT NULL	Comma separated values indicating RF attenuator settings.

Table 2: Specification for `apres_metadata` table.

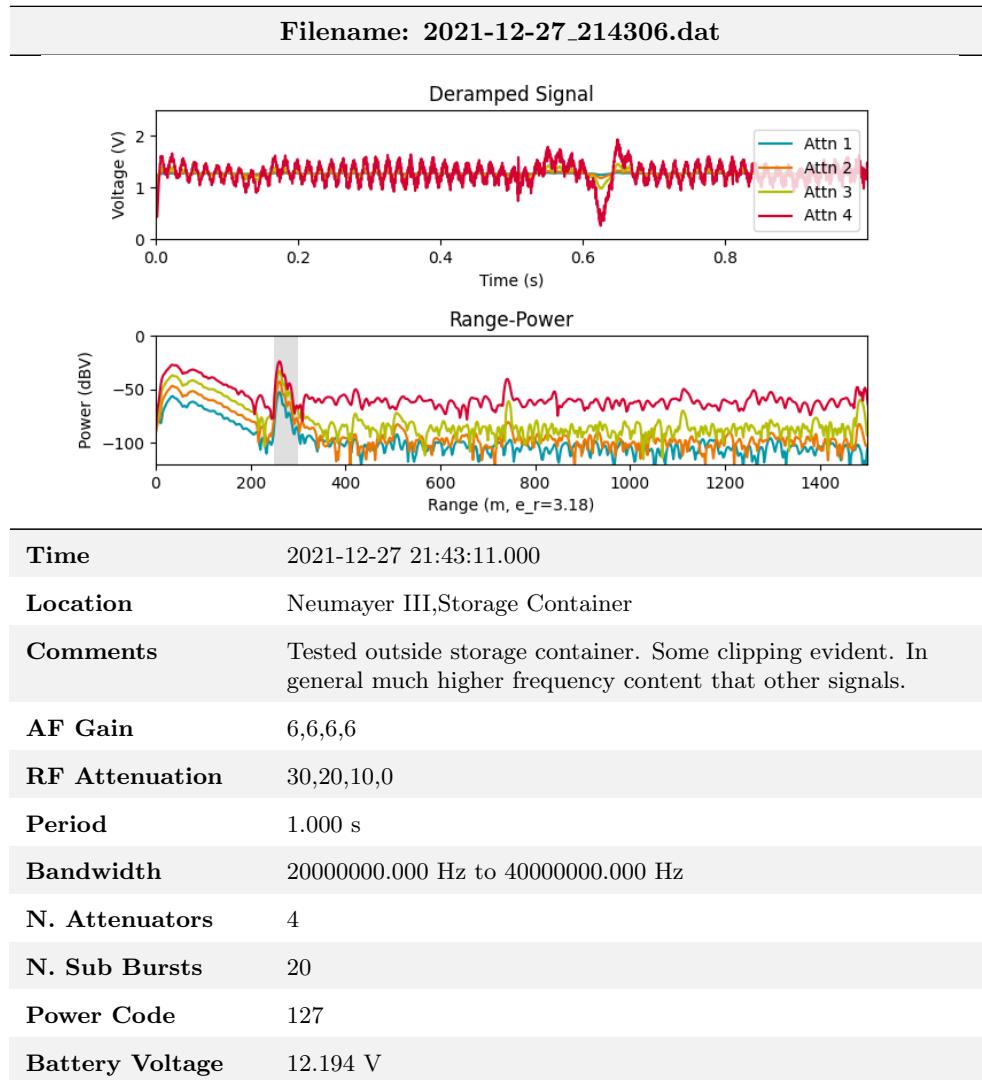
Fieldname	Datatype	Parameters	Description
f_sampling	REAL	NOT NULL CHECK(>0)	Sampling frequency.
tx_antenna	TEXT	NOT NULL	Transmit antenna selection in comma separated value format.
rx_antenna	TEXT	NOT NULL	Receive antenna selection in comma separated value format.
power_code	INTEGER	-	DDS output current power code, if available (dependent on firmware).
battery_voltage	REAL	-	Battery voltage, if available.
temperature_1	REAL	-	Measured board temperature from sensor 1.
temperature_2	REAL	-	Measured board temperature from sensor 2.
rmb_issue	TEXT	-	RMB issue number if available.
vab_issue	TEXT	-	VAB issue number if available.
venom_issue	TEXT	-	Venom issue number if available.
software_issue	TEXT	-	VAB firmware issue number if available.

1.3 Table ‘data’

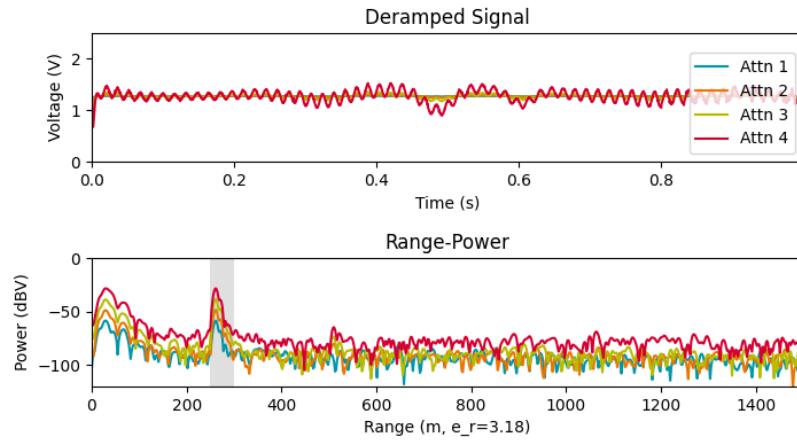
Table 3: Specification for **data** table.

Fieldname	Datatype	Parameters	Description
data_id	INTEGER	PRIMARY KEY	Unique identifier for each data item stored in /Proc.
measurement_id	INTEGER	NOT NULL	Linked identified to measurements table for source of data.
filename	TEXT	NOT NULL	Filename for processed data item stored in /Proc.
path	TEXT	NOT NULL	Path to file in UNIX form, relative to top-level project root.
timestamp	TEXT	ASC NOT NULL	YYYY-mm-dd HH:MM:SS.SSS formatted timestamp corresponding to time at which data was processed.
processing_steps	TEXT	-	Description of processing steps used to produced data file.

2 Testing

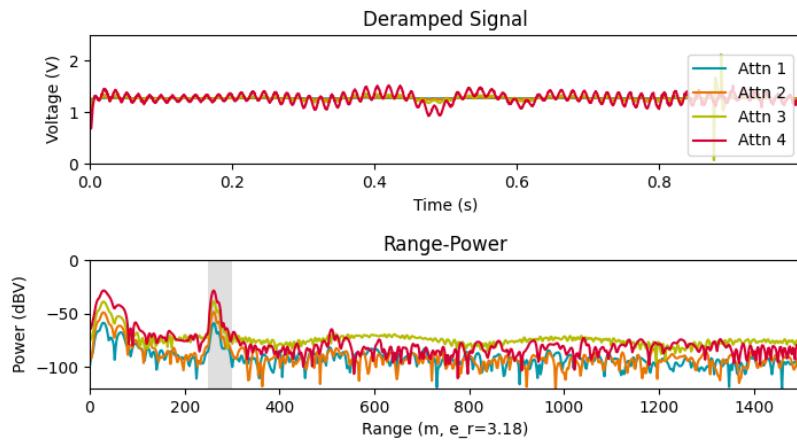


Filename: hf-apres-test-2021-12-28.dat



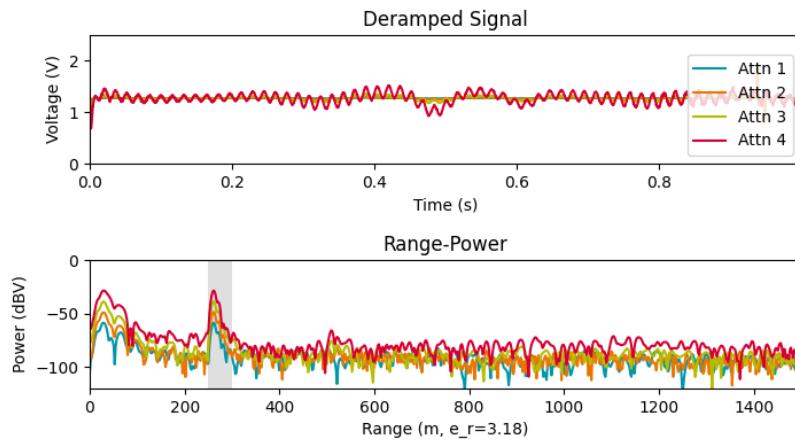
Time	2021-12-28 21:29:22.000
Location	Neumayer III
Comments	Antennas aligned E-W, no receive antenna connected.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.133 V

Filename: 2021-12-28_213612.dat



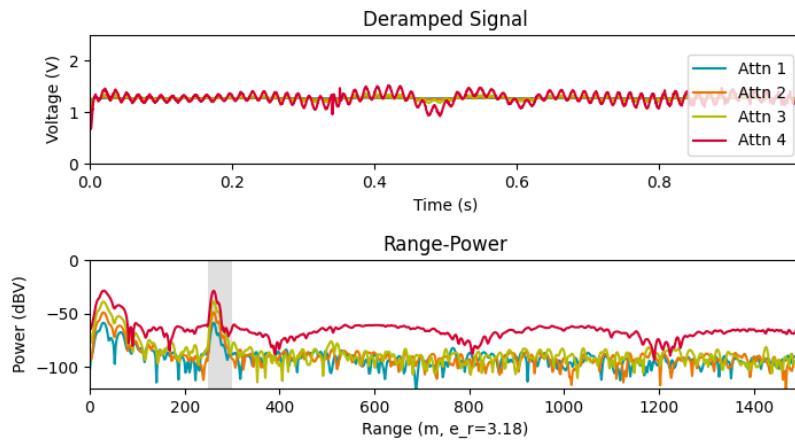
Time	2021-12-28 21:36:13.000
Location	Neumayer III
Comments	Antennas aligned E-W, no receive antenna connected.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.153 V

Filename: 2021-12-28_213633.dat



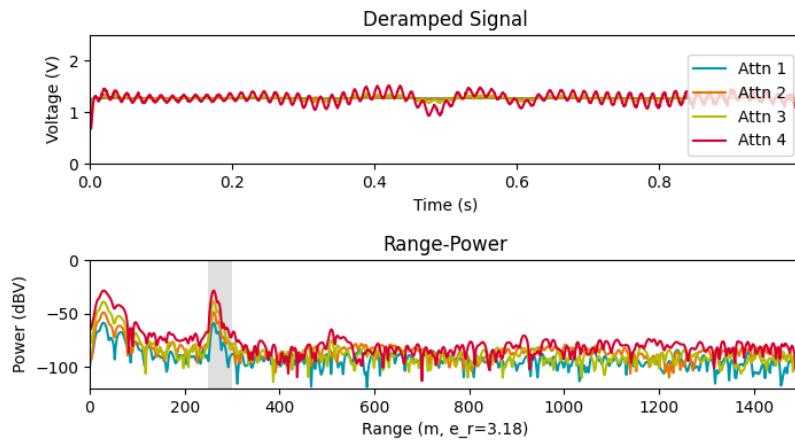
Time	2021-12-28 21:36:34.000
Location	Neumayer III
Comments	Antennas aligned E-W, no receive antenna connected.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.129 V

Filename: 2021-12-28_213647.dat



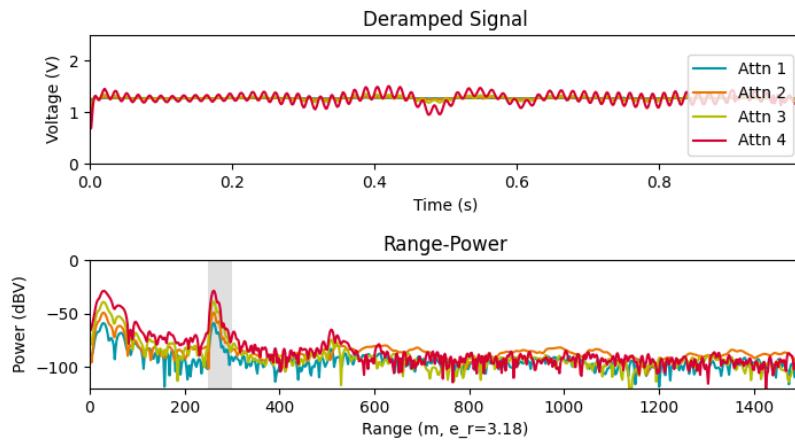
Time	2021-12-28 21:36:48.000
Location	Neumayer III
Comments	Antennas aligned E-W, no receive antenna connected.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.117 V

Filename: 2021-12-28_213710.dat



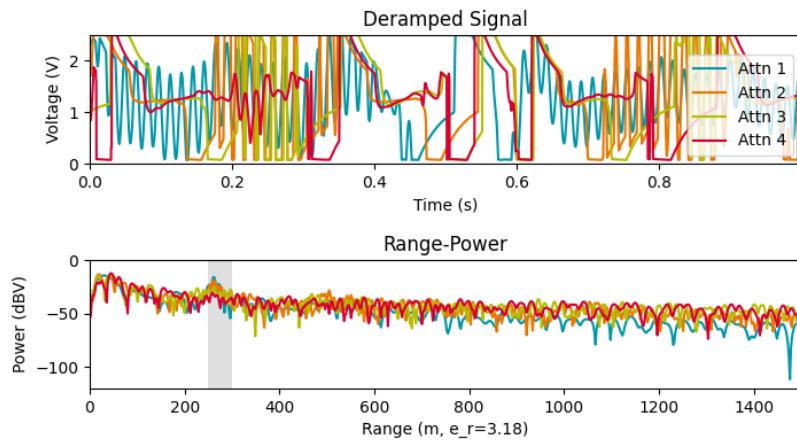
Time	2021-12-28 21:37:10.000
Location	Neumayer III
Comments	Antennas aligned E-W, no receive antenna connected.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.113 V

Filename: 2021-12-28_213752.dat



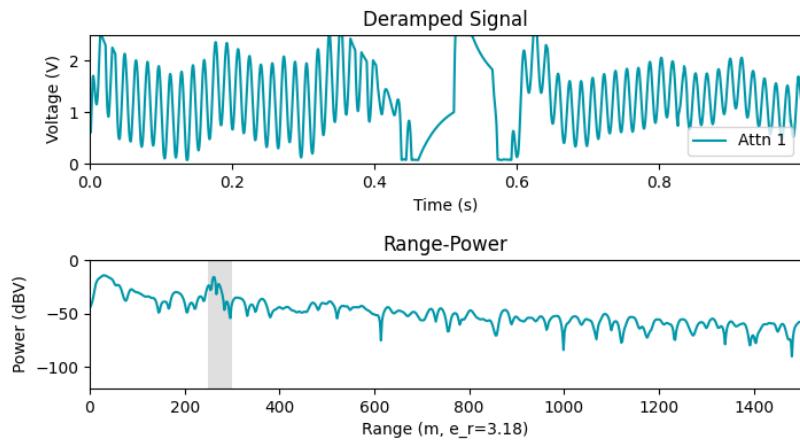
Time	2021-12-28 21:37:53.000
Location	Neumayer III
Comments	Antennas aligned E-W, no receive antenna connected.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.129 V

Filename: 2021-12-28_214326.dat



Time	2021-12-28 21:43:26.000
Location	Neumayer III
Comments	Antennas aligned E-W, connect Rx antenna (labelled #1).
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.158 V

Filename: 2021-12-28_214449.dat



Time 2021-12-28 21:44:49.000

Location Neumayer III

Comments Antennas aligned E-W.

AF Gain 6

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

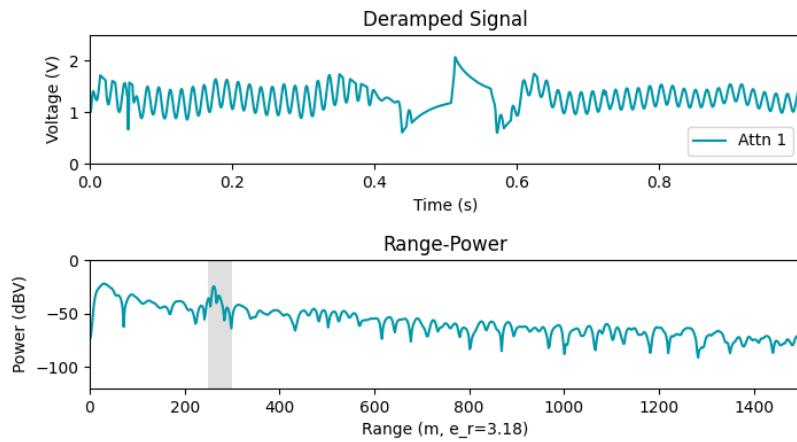
N. Attenuators 1

N. Sub Bursts 10

Power Code 127

Battery Voltage 12.117 V

Filename: 2021-12-28_214537.dat



Time 2021-12-28 21:45:37.000

Location Neumayer III

Comments Antennas aligned E-W.

AF Gain -4

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

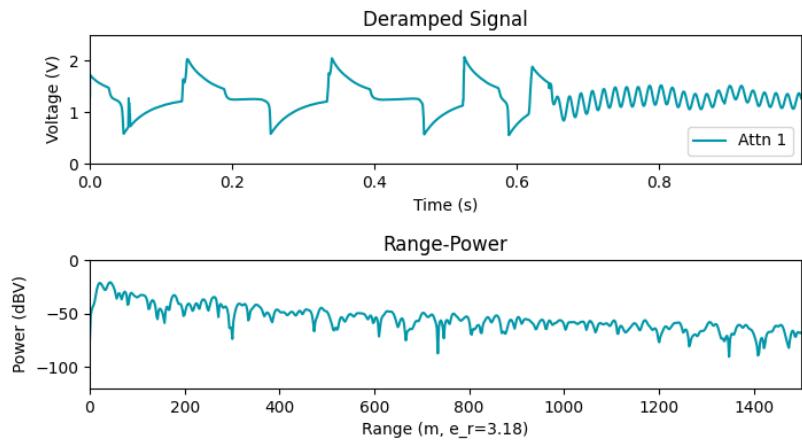
N. Attenuators 1

N. Sub Bursts 10

Power Code 127

Battery Voltage 12.129 V

Filename: 2021-12-28_214702.dat



Time 2021-12-28 21:47:02.000

Location Neumayer III

Comments Antennas aligned E-W.

AF Gain -4

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

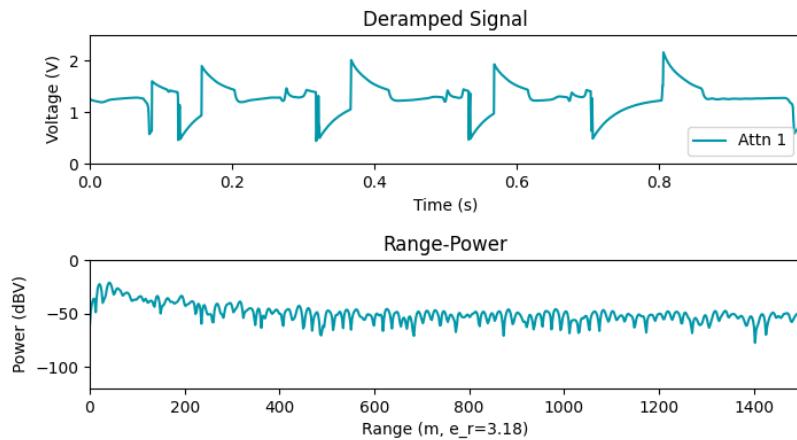
N. Attenuators 1

N. Sub Bursts 10

Power Code 127

Battery Voltage 12.149 V

Filename: 2021-12-28_220421.dat



Time 2021-12-28 22:04:21.000

Location Neumayer III

Comments Antennas aligned E-W.

AF Gain -4

RF Attenuation 1

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

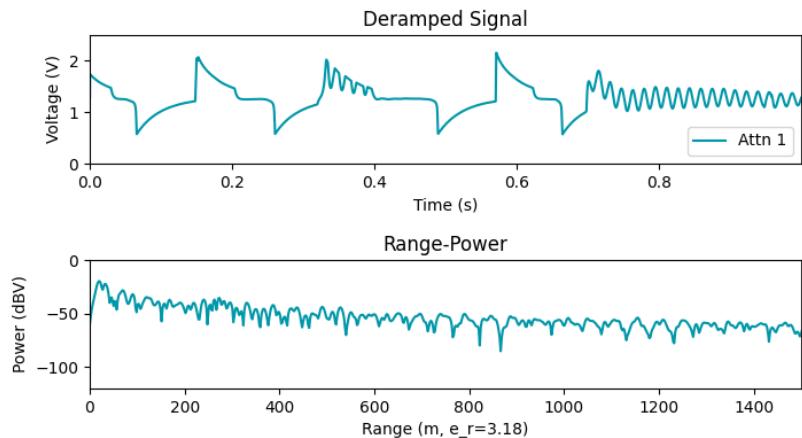
N. Attenuators 1

N. Sub Bursts 10

Power Code 127

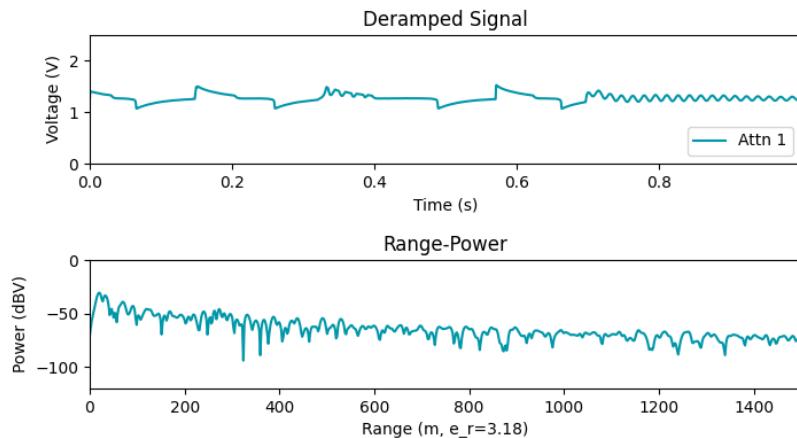
Battery Voltage 12.250 V

Filename: 2021-12-28_220508.dat



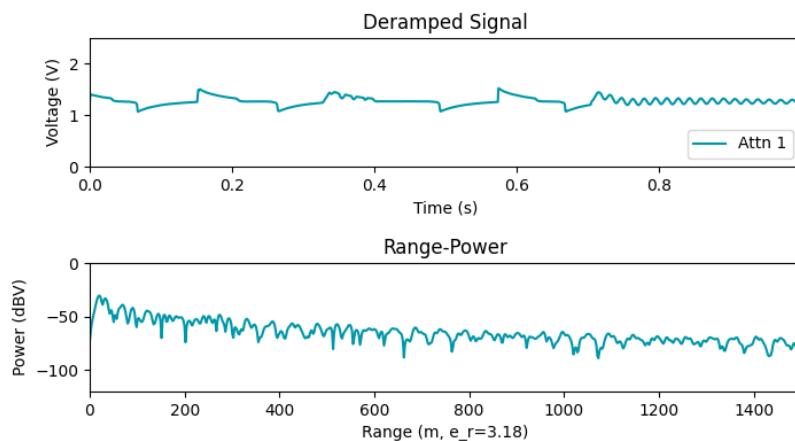
Time	2021-12-28 22:05:08.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.178 V

Filename: 2021-12-28_220547.dat



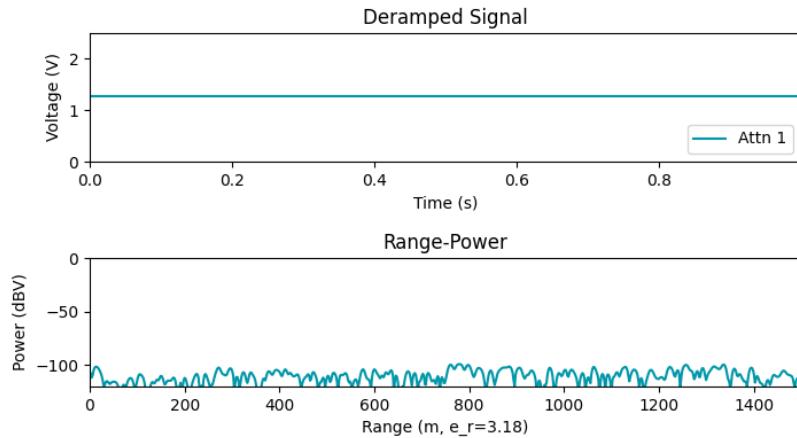
Time	2021-12-28 22:05:47.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.141 V

Filename: 2021-12-28_220726.dat



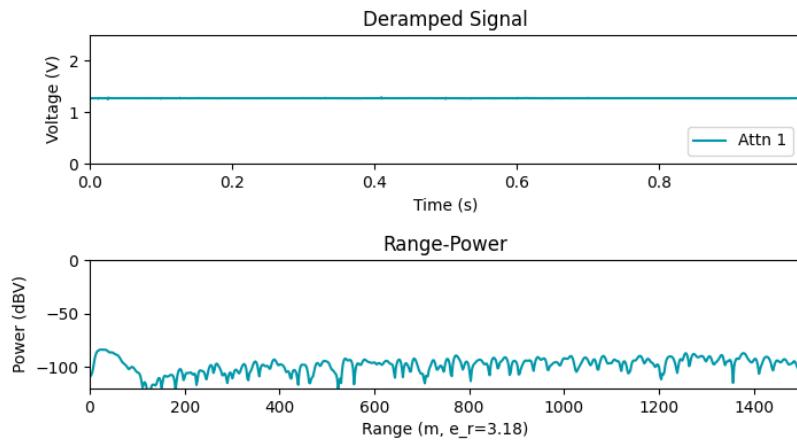
Time	2021-12-28 22:07:27.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.162 V

Filename: 2021-12-28_221042.dat



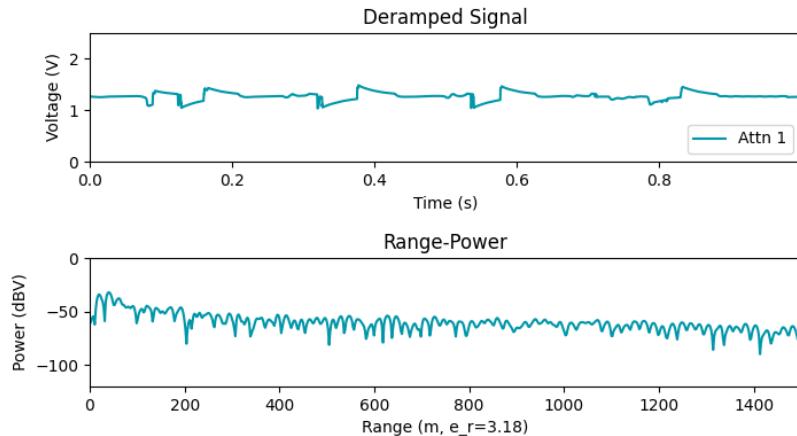
Time	2021-12-28 22:10:43.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	64
Battery Voltage	12.165 V

Filename: 2021-12-28_221153.dat



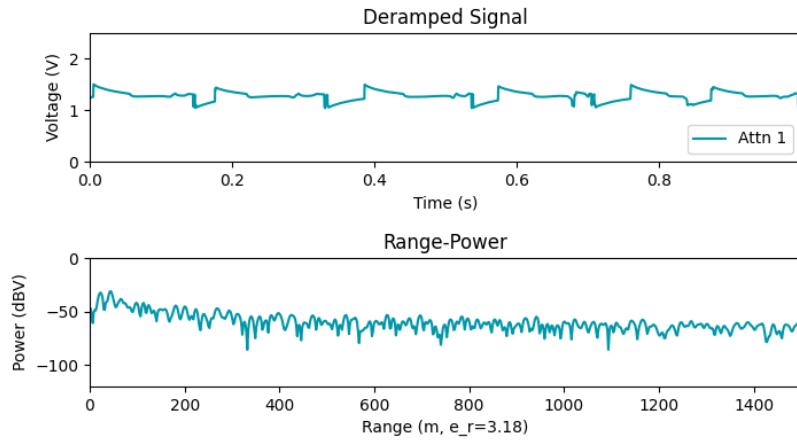
Time	2021-12-28 22:11:54.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	-14
RF Attenuation	0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	64
Battery Voltage	12.170 V

Filename: 2021-12-28_221319.dat



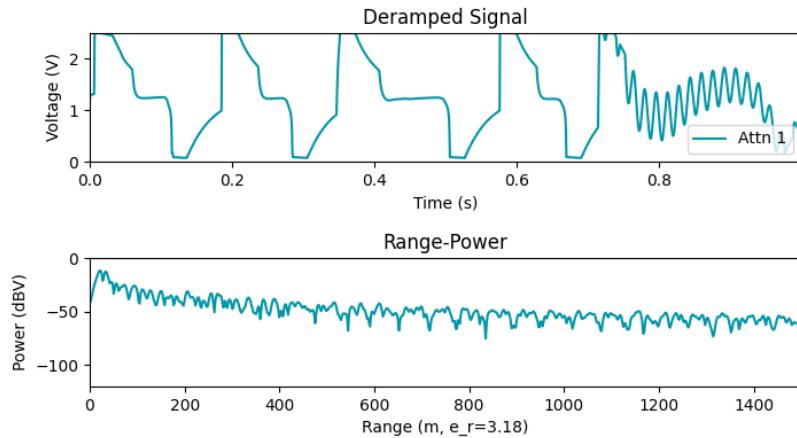
Time	2021-12-28 22:13:19.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	-14
RF Attenuation	0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	64
Battery Voltage	12.162 V

Filename: 2021-12-28_221436.dat



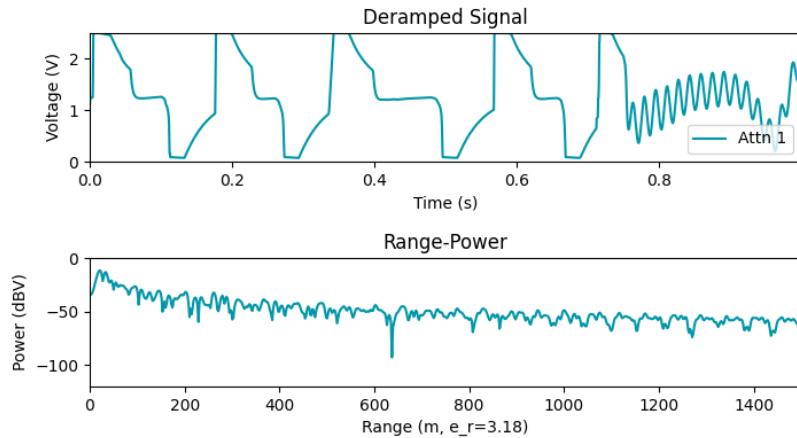
Time	2021-12-28 22:14:36.000
Location	Neumayer III
Comments	Antennas moved fruther from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	-14
RF Attenuation	0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	64
Battery Voltage	12.158 V

Filename: 2021-12-28_221516.dat



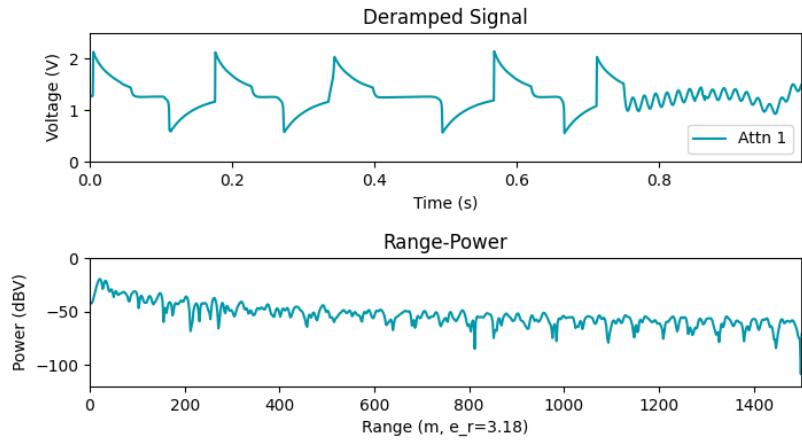
Time	2021-12-28 22:15:17.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	6
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	64
Battery Voltage	12.141 V

Filename: 2021-12-28_221651.dat



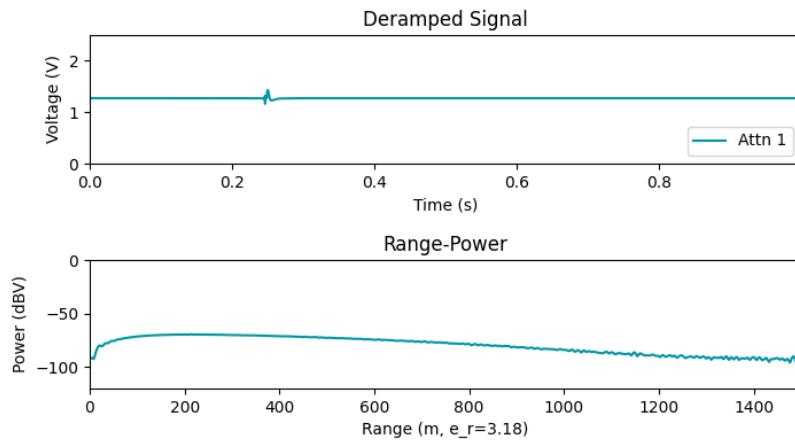
Time	2021-12-28 22:16:51.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	6
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	64
Battery Voltage	12.162 V

Filename: 2021-12-28_221725.dat



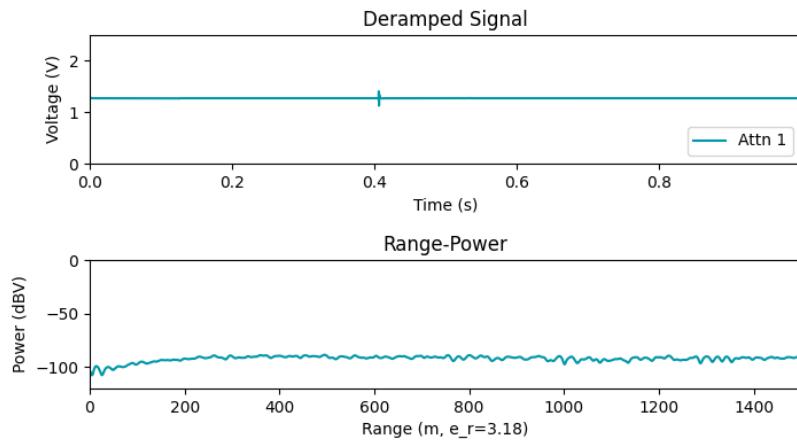
Time	2021-12-28 22:17:25.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	64
Battery Voltage	12.137 V

Filename: 2021-12-28_221834.dat



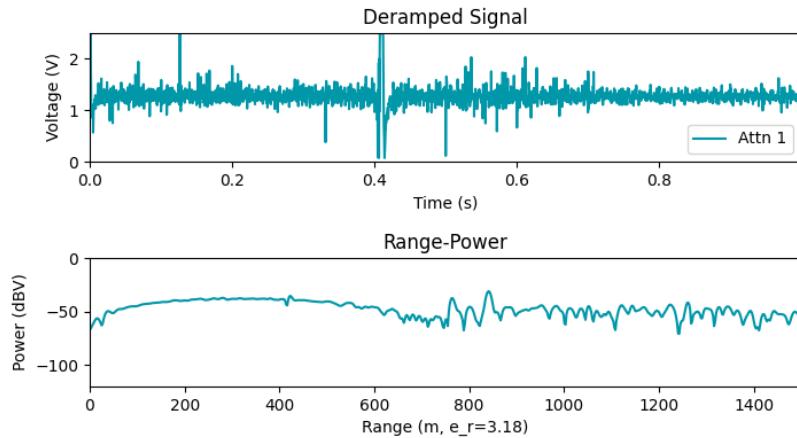
Time	2021-12-28 22:18:34.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	64
Battery Voltage	12.153 V

Filename: 2021-12-28_221937.dat



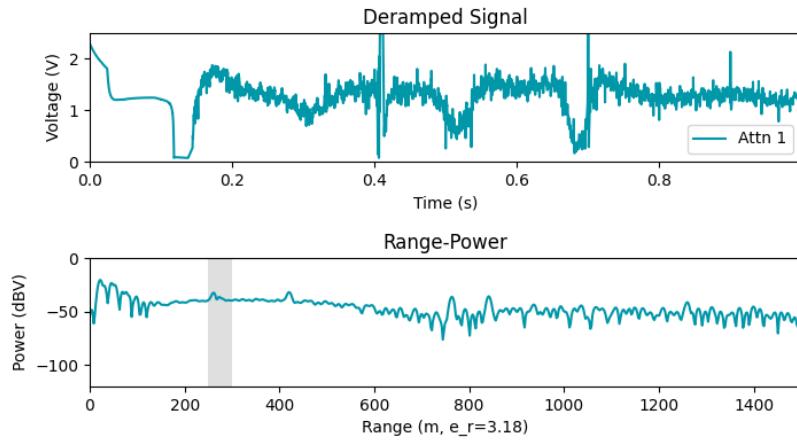
Time	2021-12-28 22:19:37.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	64
Battery Voltage	12.153 V

Filename: 2021-12-28_221958.dat



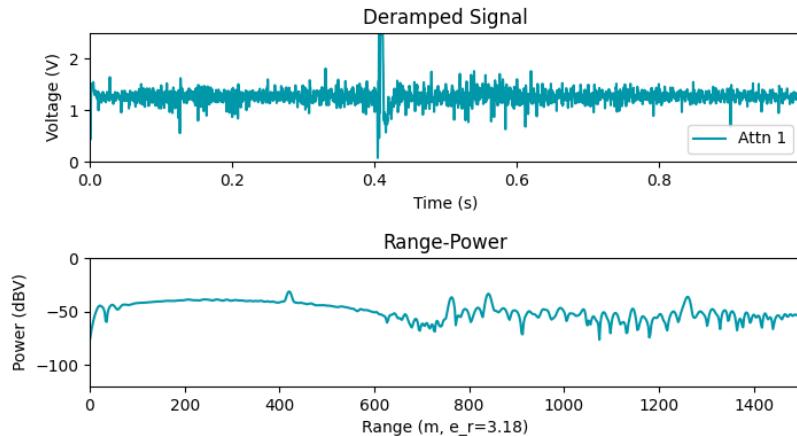
Time	2021-12-28 22:19:58.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	6
RF Attenuation	0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	64
Battery Voltage	12.145 V

Filename: 2021-12-28_222040.dat



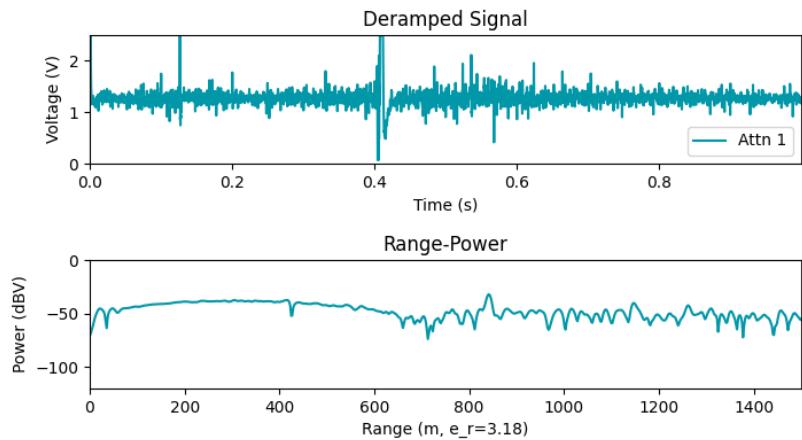
Time	2021-12-28 22:20:40.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected. Note peak of ice shelf appearing at approx 250m.
AF Gain	6
RF Attenuation	0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	64
Battery Voltage	12.158 V

Filename: 2021-12-28_222046.dat



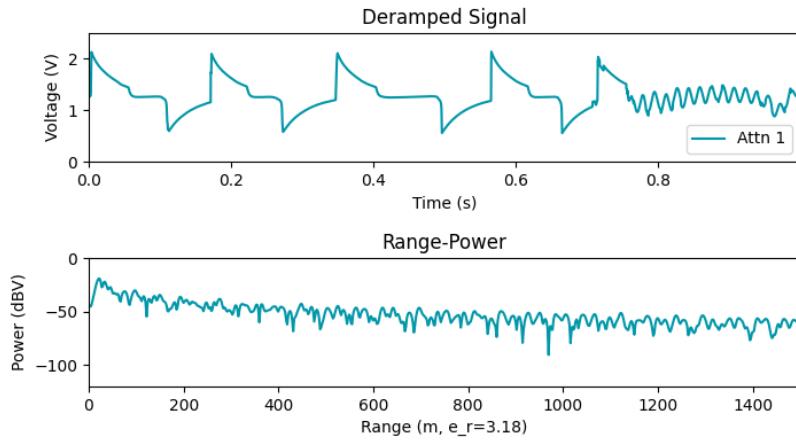
Time	2021-12-28 22:20:47.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	6
RF Attenuation	0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	64
Battery Voltage	12.145 V

Filename: 2021-12-28_222051.dat



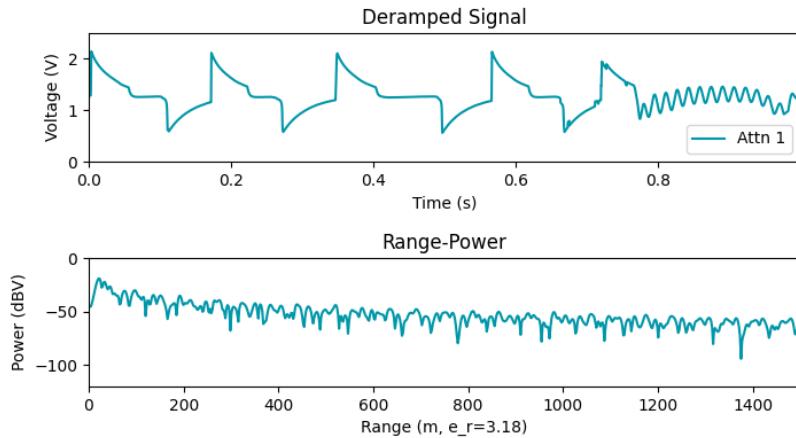
Time	2021-12-28 22:20:51.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Antennas disconnected.
AF Gain	6
RF Attenuation	0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	64
Battery Voltage	12.133 V

Filename: 2021-12-28_223632.dat



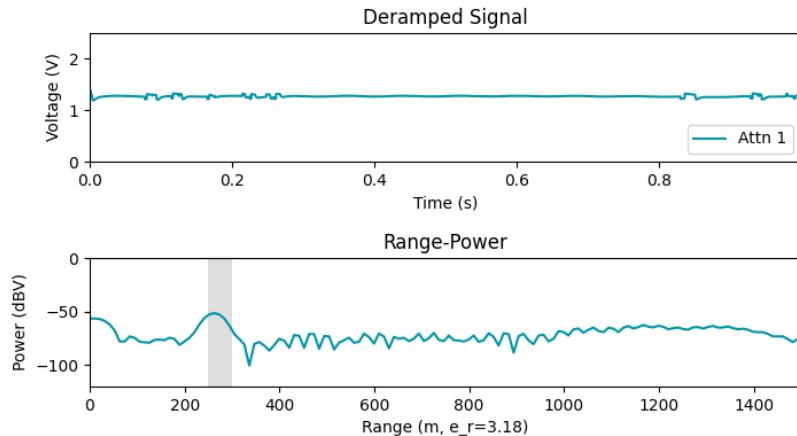
Time	2021-12-28 22:36:32.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Measurement after ApRES powered off for 10 minutes.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.278 V

Filename: 2021-12-28_223835.dat



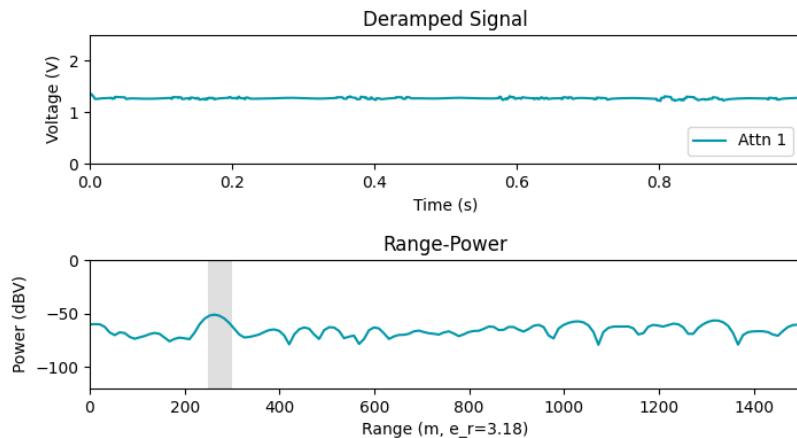
Time	2021-12-28 22:38:36.000
Location	Neumayer III
Comments	Antennas moved further from Neumayer, in line with radio mast. Measurement after ApRES powered off for 10 minutes.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.162 V

Filename: 2021-12-28_224425.dat



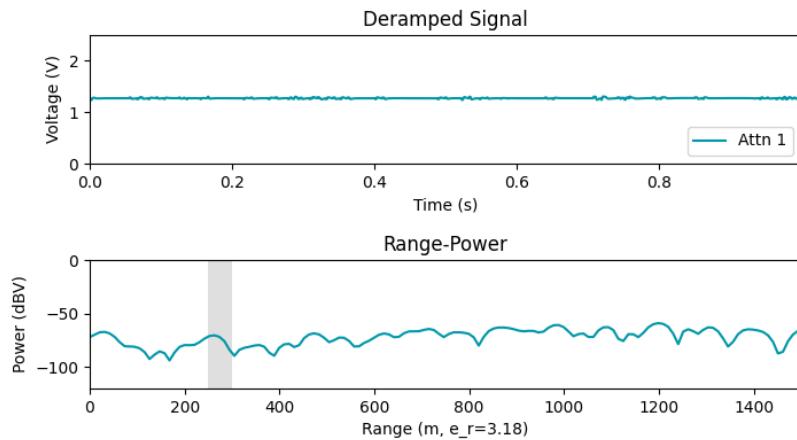
Time	2021-12-28 22:44:25.000
Location	Neuayer III
Comments	Change to 36-40 MHz chirp. Ice shelf base clear but poor resolution. Clipping with one AF/RF setting?
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	36000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.137 V

Filename: 2021-12-28_224607.dat



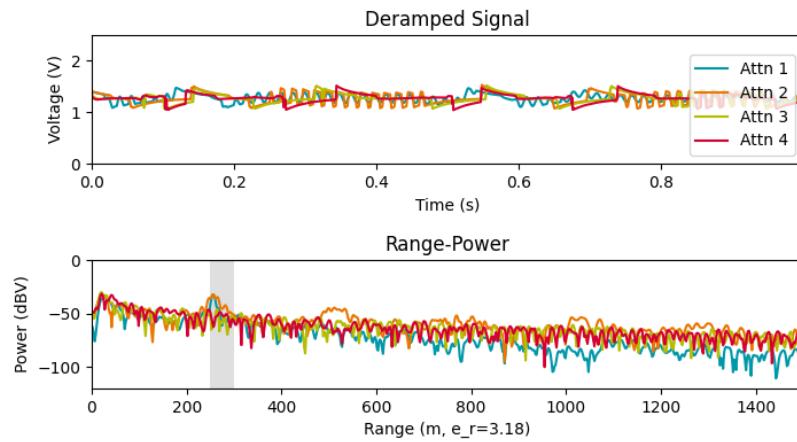
Time	2021-12-28 22:46:08.000
Location	Neumayer III
Comments	Additional chirp with 36-40 MHz bandwidth. Clipping behaviour seen with constant AF/RF gain setting.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	36000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	30
Power Code	127
Battery Voltage	12.129 V

Filename: 2021-12-28_225108.dat



Time	2021-12-28 22:51:08.000
Location	Neumayer III
Comments	As before short bursts of interference. Ice-base still clear.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	36000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	30
Power Code	127
Battery Voltage	12.137 V

Filename: 2021-12-28_233118.dat



Time 2021-12-28 23:31:18.000

Location Neumayer III

Comments No comments noted.

AF Gain -14,-14,-14,-14

RF Attenuation 30,20,10,0

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

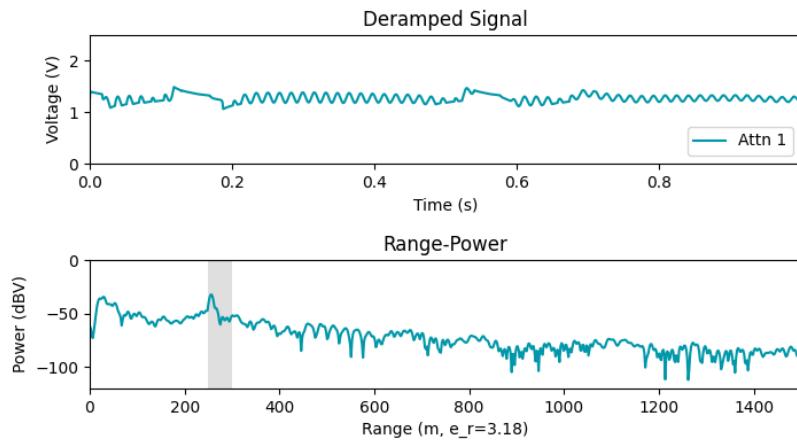
N. Attenuators 4

N. Sub Bursts 10

Power Code 127

Battery Voltage 12.162 V

Filename: 2021-12-28_233345.dat



Time 2021-12-28 23:33:46.000

Location Neumayer III

Comments No comments noted.

AF Gain -14

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

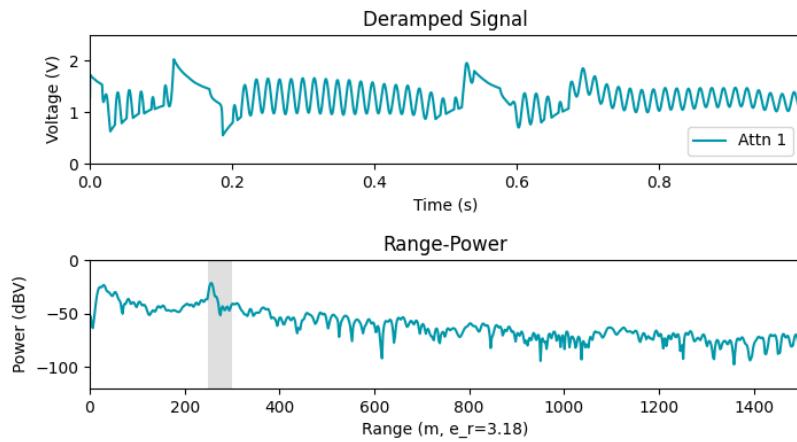
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.085 V

Filename: 2021-12-28_233417.dat



Time 2021-12-28 23:34:17.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

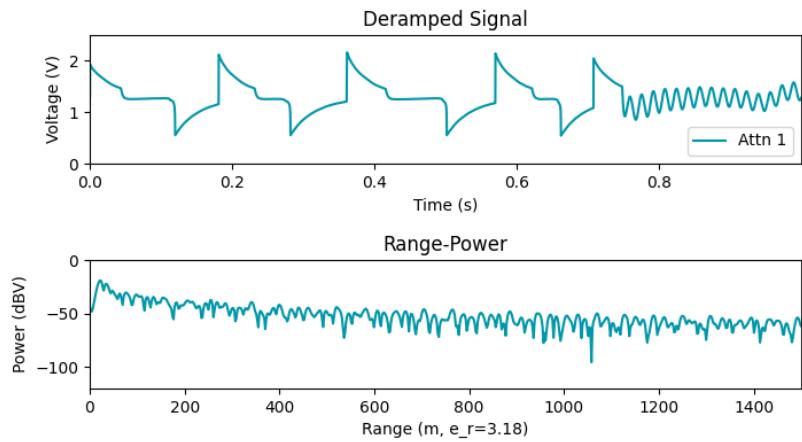
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.097 V

Filename: 2021-12-28_233617.dat



Time 2021-12-28 23:36:18.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

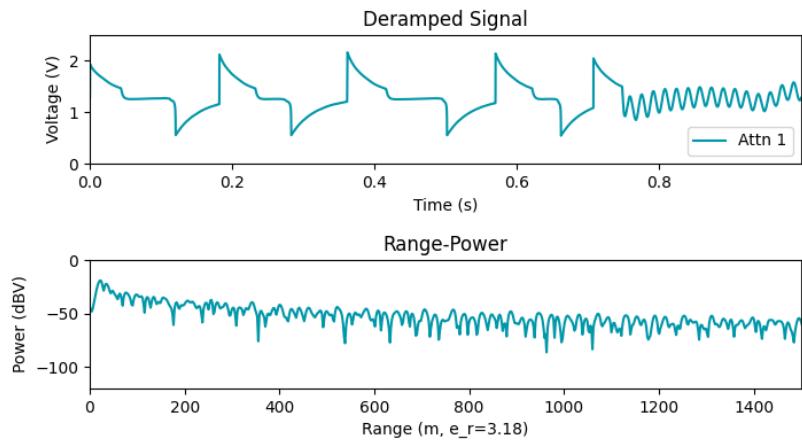
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.117 V

Filename: 2021-12-28_233652.dat



Time 2021-12-28 23:36:53.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

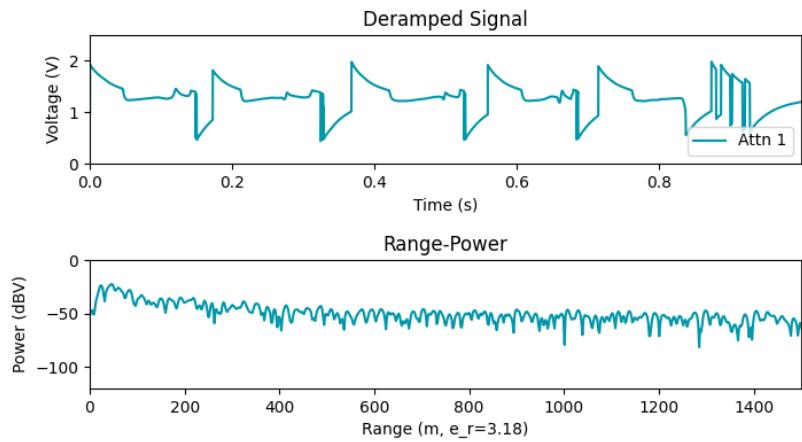
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.117 V

Filename: 2021-12-28_233714.dat



Time 2021-12-28 23:37:14.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 0

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

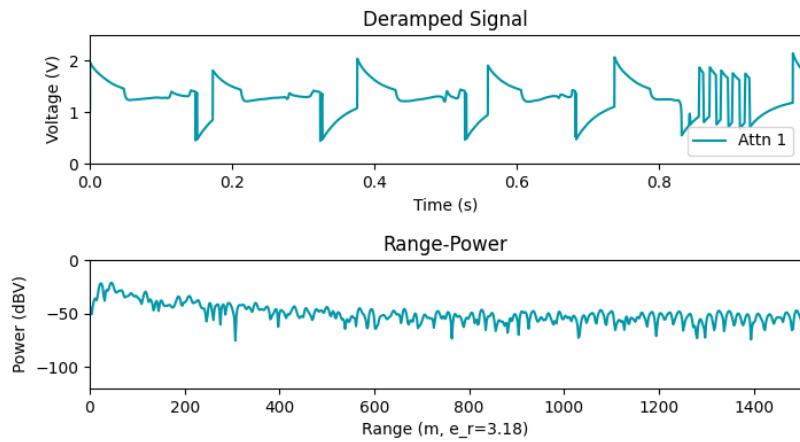
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.109 V

Filename: 2021-12-28_233729.dat



Time 2021-12-28 23:37:30.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 10

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

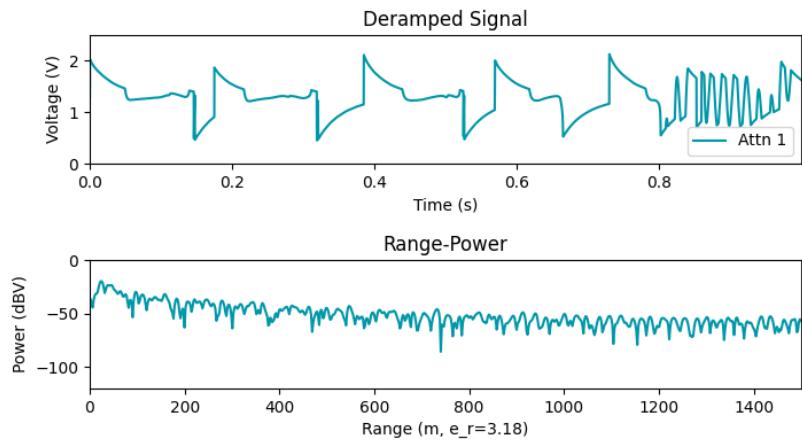
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.109 V

Filename: 2021-12-28_233742.dat



Time 2021-12-28 23:37:43.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 20

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

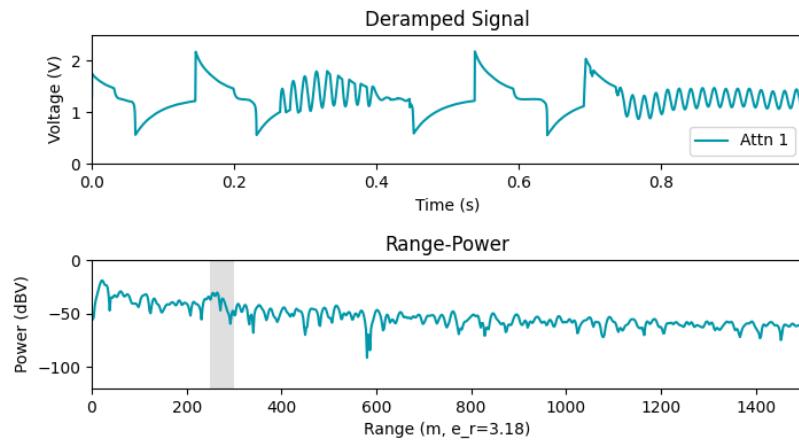
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.105 V

Filename: 2021-12-28_233844.dat



Time 2021-12-28 23:38:44.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

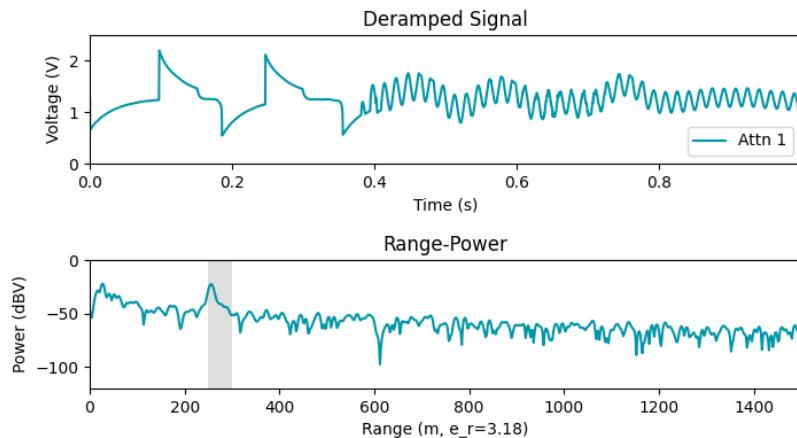
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.101 V

Filename: 2021-12-28_233949.dat



Time 2021-12-28 23:39:49.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

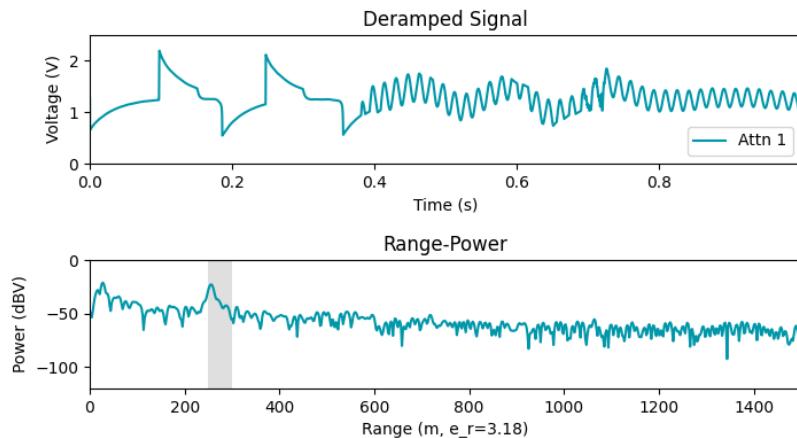
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.101 V

Filename: 2021-12-28_234104.dat



Time 2021-12-28 23:41:04.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

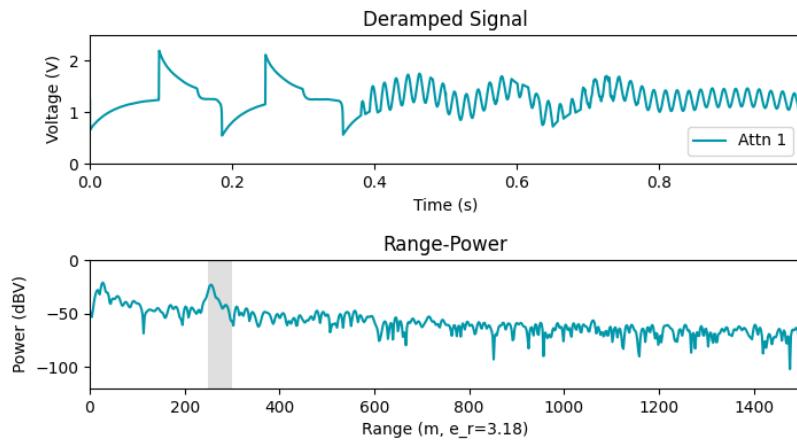
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.109 V

Filename: 2021-12-28_234122.dat



Time 2021-12-28 23:41:23.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

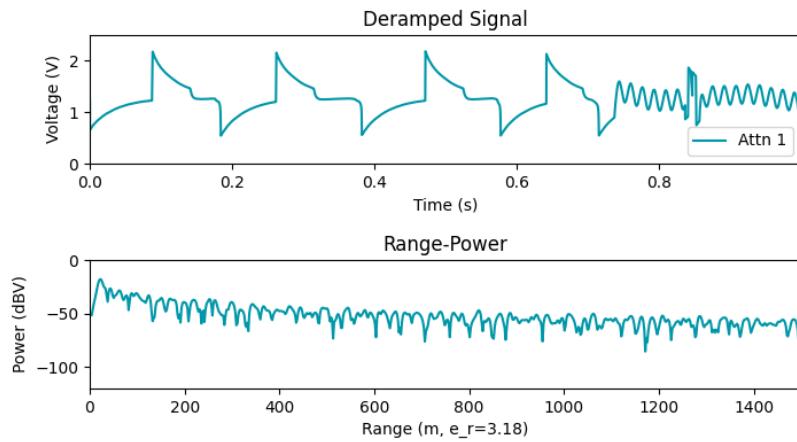
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

Battery Voltage 12.097 V

Filename: 2021-12-28_234222.dat



Time 2021-12-28 23:42:22.000

Location Neumayer III

Comments No comments noted.

AF Gain -4

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

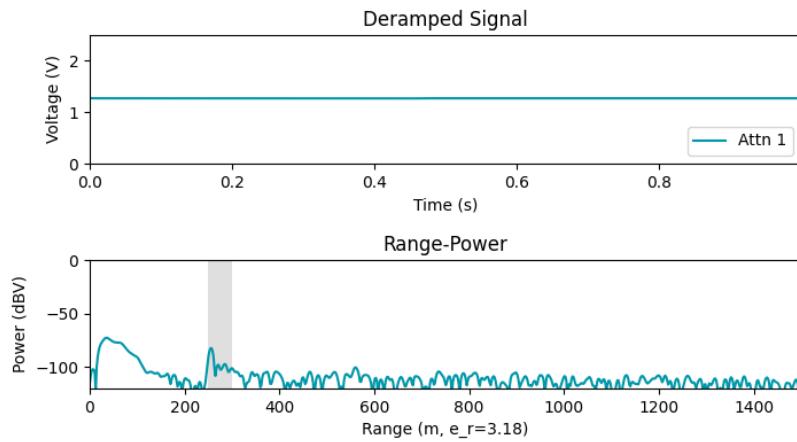
N. Attenuators 1

N. Sub Bursts 1

Power Code 127

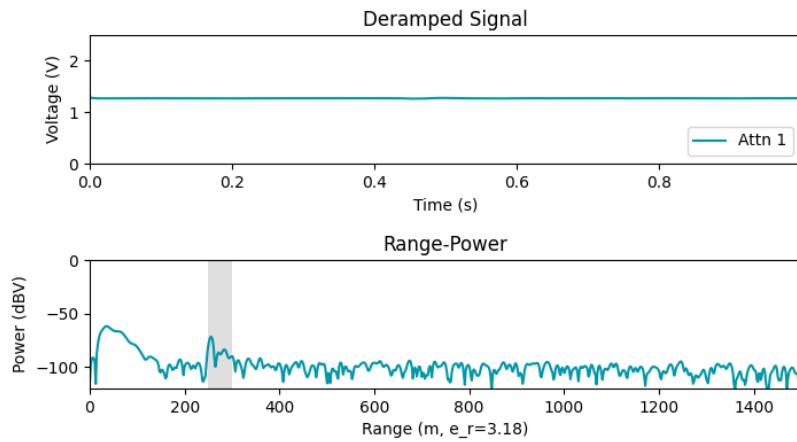
Battery Voltage 12.101 V

Filename: 2021-12-29_130718.dat



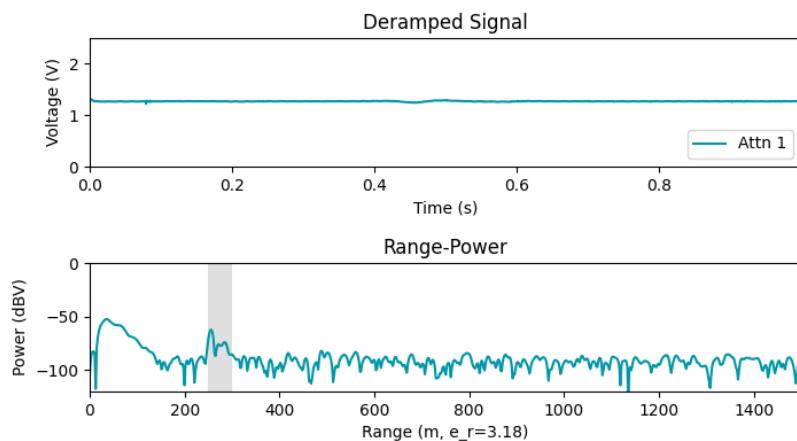
Time	2021-12-29 13:07:19.000
Location	Neumayer III, 500m W of Station
Comments	Base visible but low power. Additional Rx 10dB, Tx 10dB attenuation.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.484 V

Filename: 2021-12-29_130920.dat



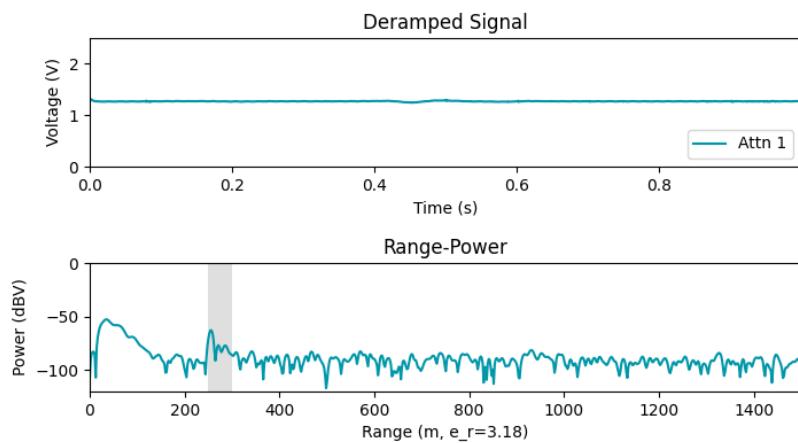
Time	2021-12-29 13:09:21.000
Location	Neumayer III, 500m W of Station
Comments	Base visible but low power. Increased AF gain but otherwise consistent with previous. Additional Rx 10dB, Tx 10dB attenuation.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.468 V

Filename: 2021-12-29_131140.dat



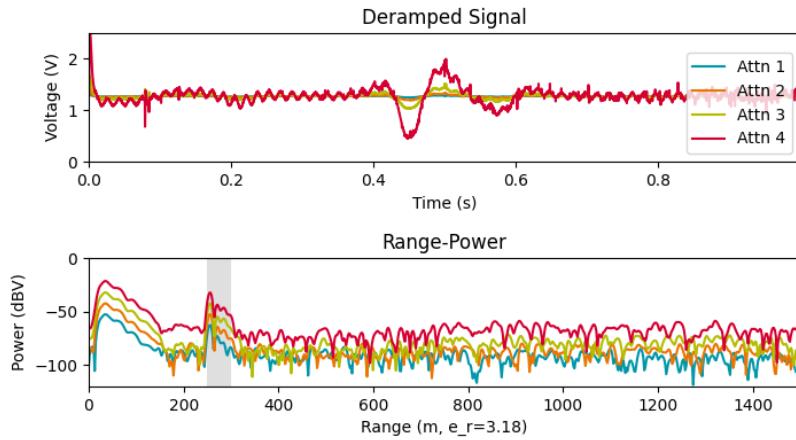
Time	2021-12-29 13:11:40.000
Location	Neumayer III, 500m W of Station
Comments	Base visible but low power. Increased AF gain again to 6dB. High frequency transient at 0.075s. Additional Rx 10dB, Tx 10dB attenuation.
AF Gain	6
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.464 V

Filename: 2021-12-29_131353.dat



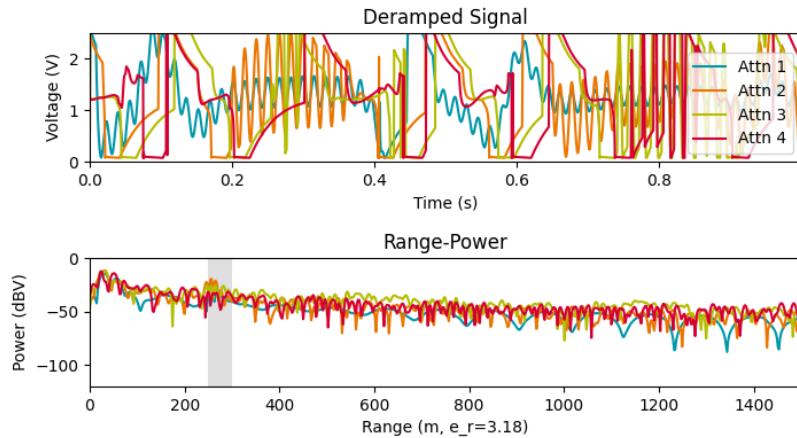
Time	2021-12-29 13:13:53.000
Location	Neumayer III, 500m W of Station
Comments	Base visible but low power. Increased AF gain again to 6dB. Repeat of above, transient reduced. Additional Rx 10dB, Tx 10dB attenuation.
AF Gain	6
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.456 V

Filename: 2021-12-29_131431.dat



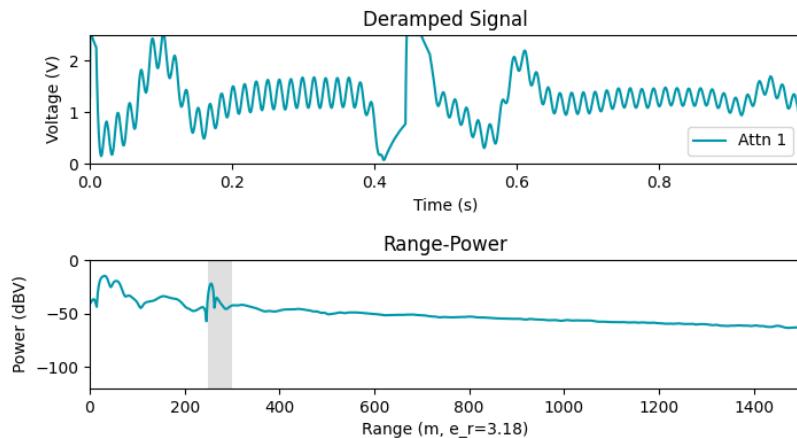
Time	2021-12-29 13:14:31.000
Location	Neumayer III, 500m W of Station
Comments	Keep AF gain at 6dB. Increased noise floor more pronounced at 0dB RF attenuation. Note initial transient (settling?). Additional Rx 10dB, Tx 10dB attenuation.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.440 V

Filename: 2021-12-29_132044.dat



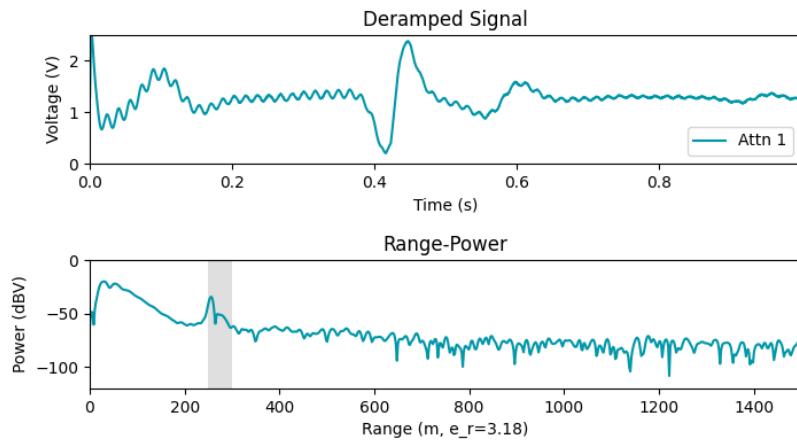
Time	2021-12-29 13:20:44.000
Location	Neumayer III, 500m W of Station
Comments	Significant clipping for all RF gain settings. Additional Rx 10dB. Attenuator at Tx removed.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.447 V

Filename: 2021-12-29_132217.dat



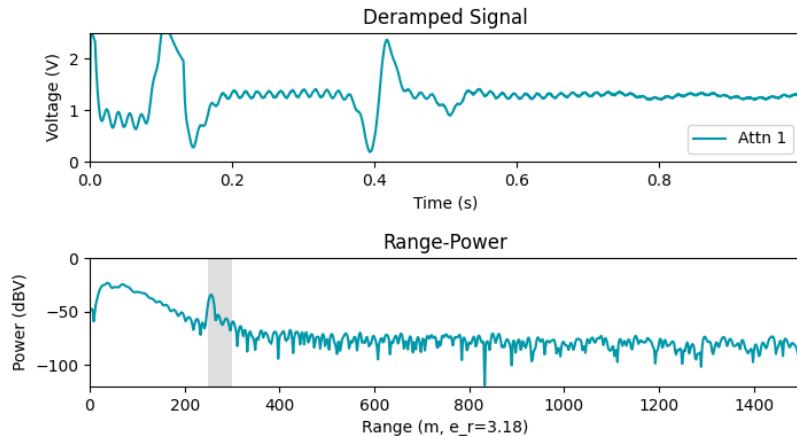
Time	2021-12-29 13:22:17.000
Location	Neumayer III, 500m W of Station
Comments	Reduced power code to 0. Output shows slight clipping near centre of chirp.
AF Gain	6
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.415 V

Filename: 2021-12-29_133008.dat



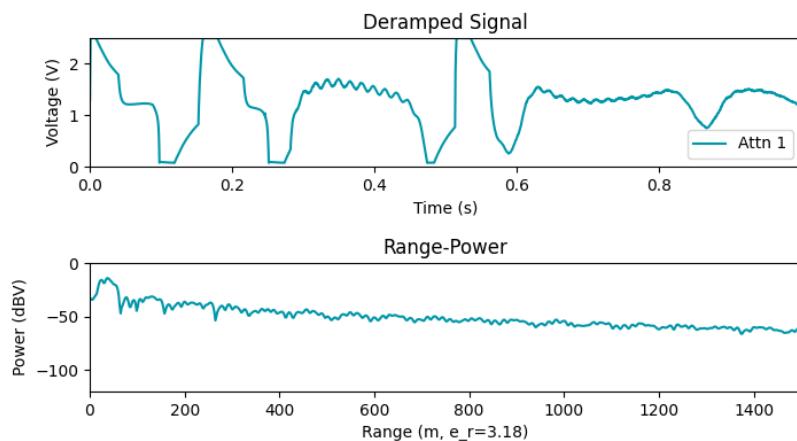
Time	2021-12-29 13:30:31.000
Location	Neumayer III, 500m W of Station
Comments	Reduced power code to 0. Output shows slight clipping near centre of chirp.
AF Gain	6
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.383 V

Filename: 2021-12-29_152201.dat



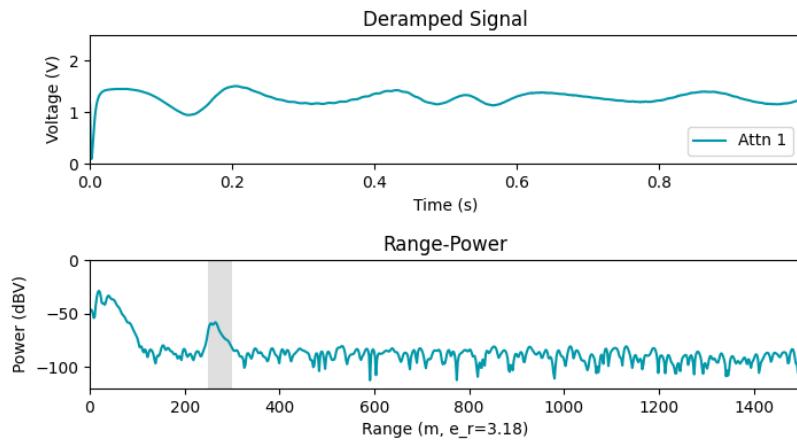
Time	2021-12-29 15:24:27.000
Location	Neumayer III, 500m W of Station
Comments	Measurements taken after 2hour break. Cables sunk into snow. Keep power output at 0. Moved ApRES, battery and operator (JH) into centre of ApRES. Approx 3m from end of each antenna.
AF Gain	6
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.319 V

Filename: 2021-12-29_154120.dat



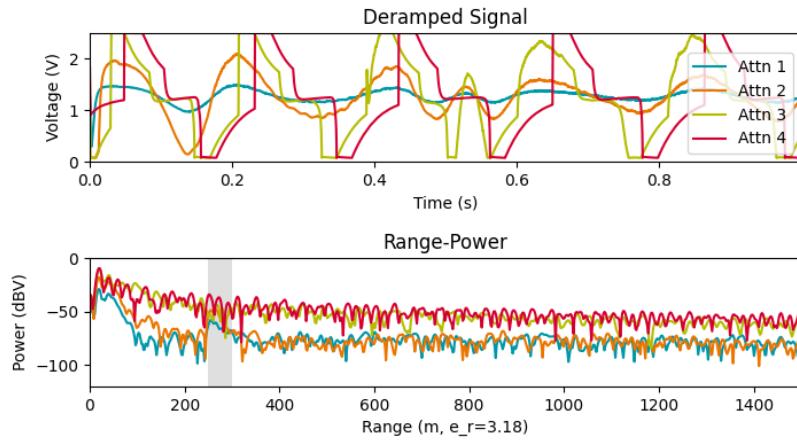
Time	2021-12-29 15:47:23.000
Location	Neumayer III, 500m W of Station
Comments	Move Tx and Rx antennas further 2m apart in each direction. Total separation now 10m. Increased clipping - perhaps Tx or Rx disconnected?
AF Gain	6
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.238 V

Filename: 2021-12-29_160719.dat



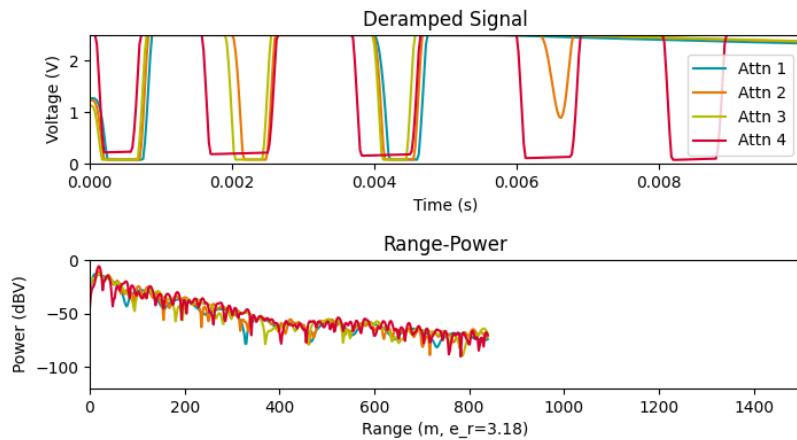
Time	2021-12-29 16:07:36.000
Location	Neumayer III, 500m W of Station
Comments	Add Tx attenuator (10dB). Additional Rx attenuator 10dB. Base reappears with double peak?
AF Gain	6
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	0
Battery Voltage	12.246 V

Filename: 2021-12-29_161210.dat



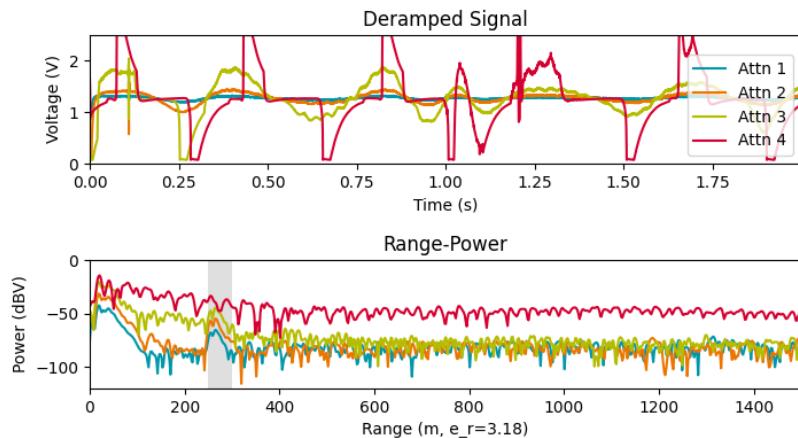
Time	2021-12-29 16:12:35.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Base masked by clipping in low RF attenuation settings.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.230 V

Filename: 2021-12-29_163501.dat



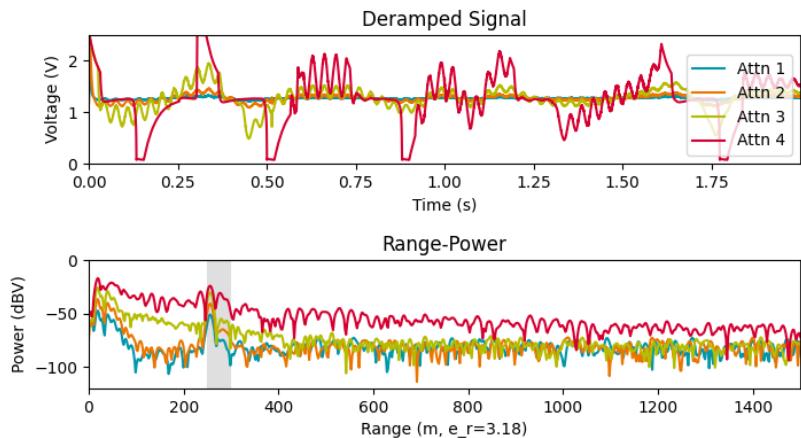
Time	2021-12-29 16:37:31.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Change config to 10ms - base not visible.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	0.010 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.266 V

Filename: 2021-12-29_164540.dat



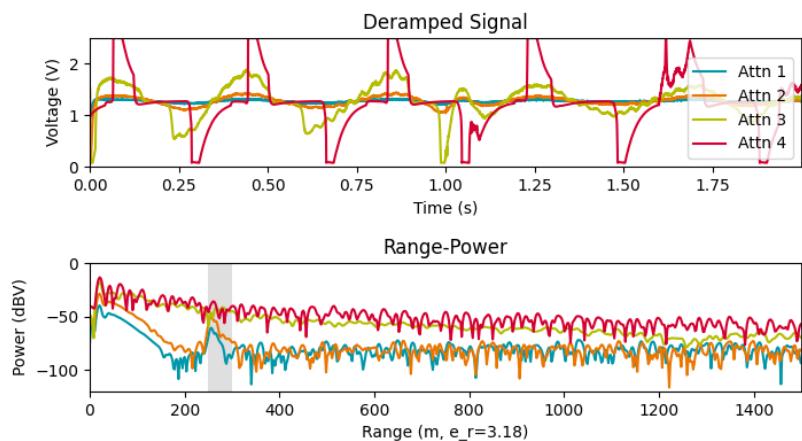
Time	2021-12-29 16:46:38.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Change config to 2s. Clipping still evident in RF Attn=0. Base visible in other settings - with some clipping and increased noise floor.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.274 V

Filename: 2021-12-29_165611.dat



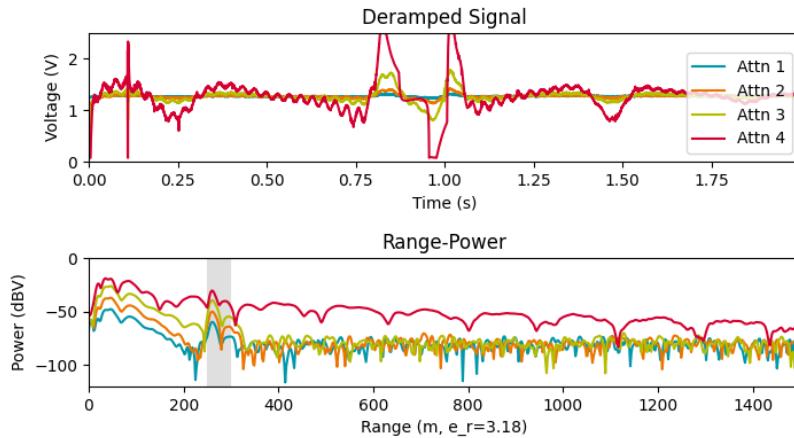
Time	2021-12-29 16:56:35.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Reduce antenna separation to 6m. Config sto;;2s. Clipping still evident in RF Attn=0. Otherwise improved.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.278 V

Filename: 2021-12-29_170625.dat



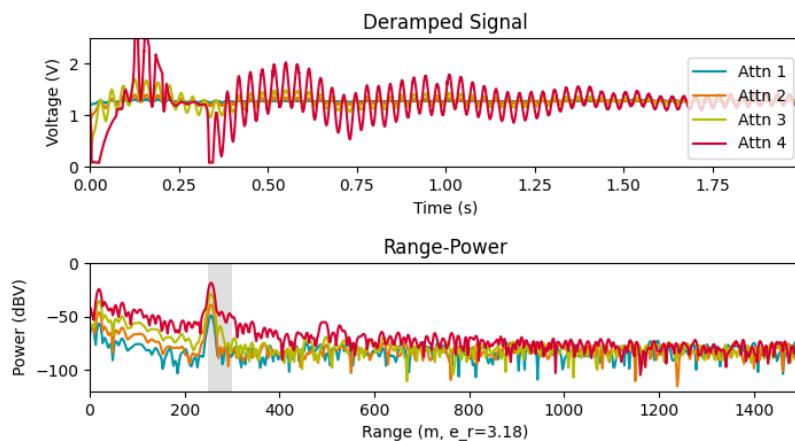
Time	2021-12-29 17:06:36.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Increase antenna separation to 14m. Config Clipping evident in RF Attn=0dB, 10dB. More similar to 10m separation than 6m.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.286 V

Filename: 2021-12-29_171503.dat



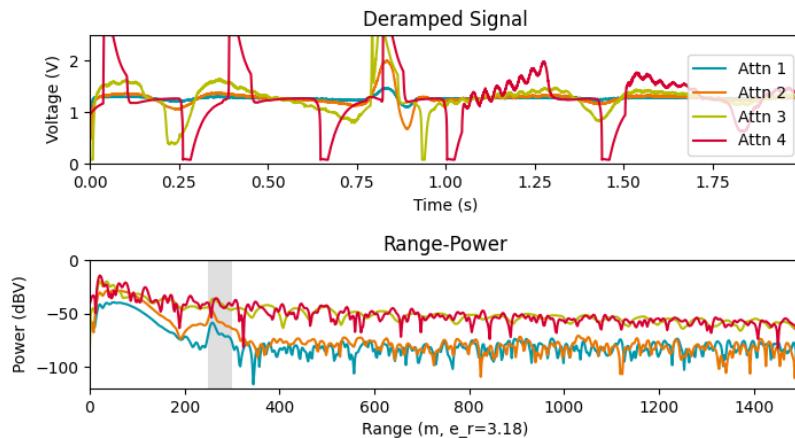
Time	2021-12-29 17:15:22.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Change orientation. Tx (Ant1) on W of ApRES aligned N-S and Tx (Ant2) aligned EW as previous (i.e. Cross-pol). Basal signal present and clipping for all except RF=0dB.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.299 V

Filename: 2021-12-29_172626.dat



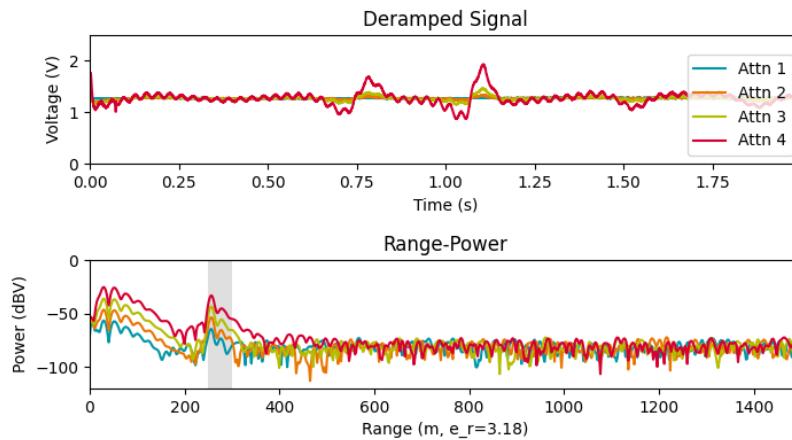
Time	2021-12-29 17:26:30.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Change orientation of Rx (Ant2) aligned N-S as for Tx. Basal signal present all near-field clutter reduced. Strong basal signal.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.306 V

Filename: 2021-12-29_173748.dat



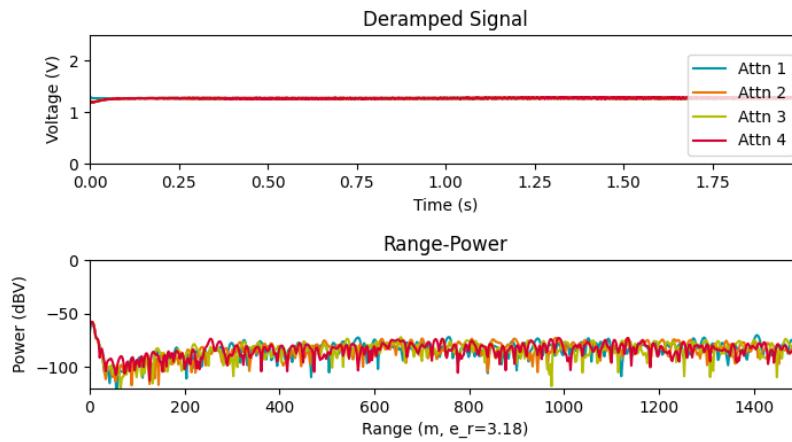
Time	2021-12-29 17:39:16.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Return antennas to E-W configuration. Aligned both with +ve W, -ve E. (Previously Tx was +E, -W and Rx +W -E). Otherwise as above with 14m separation.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.310 V

Filename: 2021-12-29_180059.dat



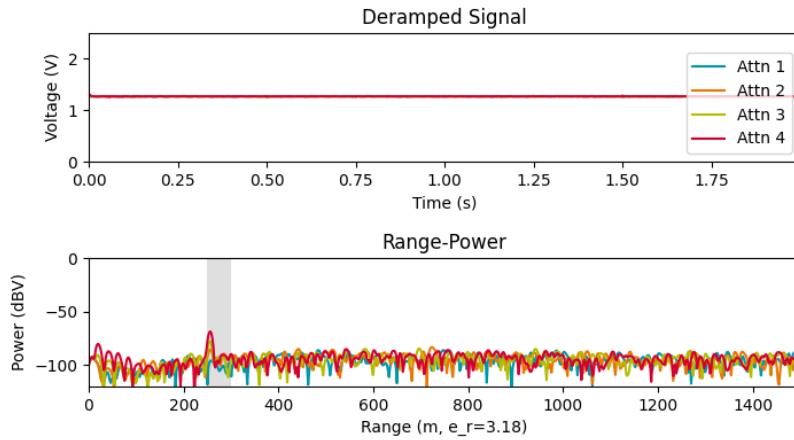
Time	2021-12-29 18:02:00.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Rotate antennas so that they are E-W aligned but are broadside to each other. Hence Tx now N and Rx S. Separation is 14m. One side of each dipole is unattached (presumably from dragging?).
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.310 V

Filename: 2021-12-29_180743.dat



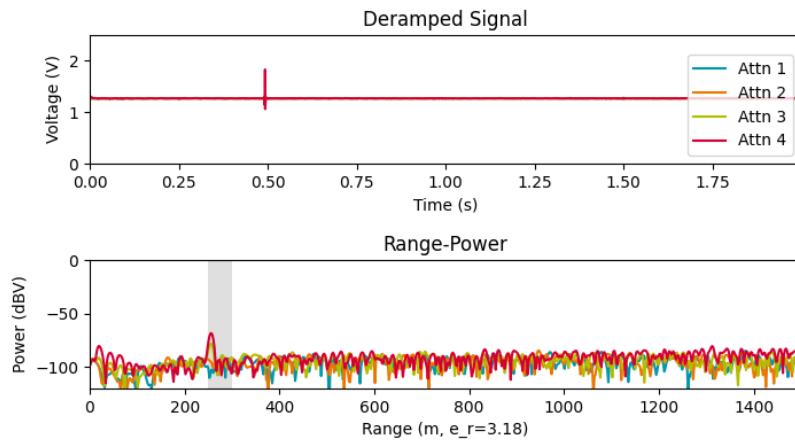
Time	2021-12-29 18:07:47.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Rotate antennas so that they are E-W aligned but are broadside to each other. Hence Tx now N and Rx S. Separation is 14m. Reconnect dipole arms (previously unattached) - no signal now seen.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.331 V

Filename: 2021-12-29_181349.dat



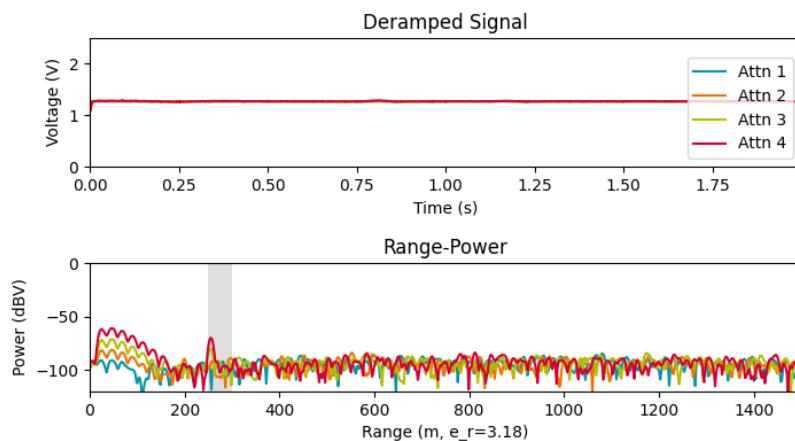
Time	2021-12-29 18:14:31.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Rotate antennas so that they are E-W aligned but are broadside to each other. Hence Tx now N and Rx S. Separation is 14m. Reconnect dipole arms (previously unattached) - no signal now seen with increased power code.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.335 V

Filename: 2021-12-29_181757.dat



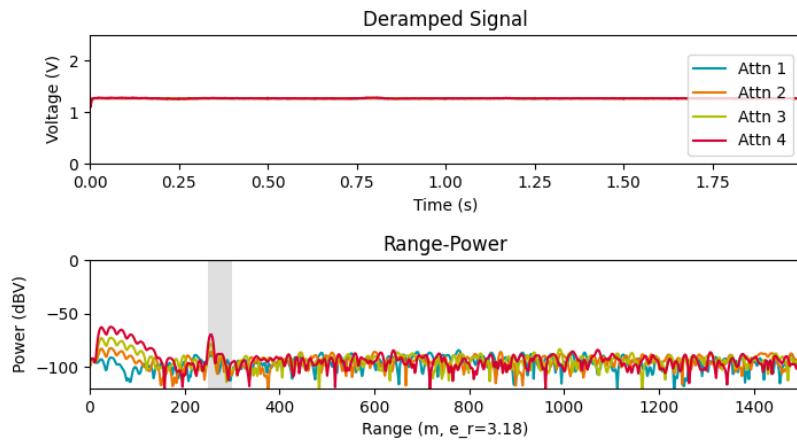
Time	2021-12-29 18:18:06.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Rotate antennas so that they are E-W aligned but are broadside to each other. Hence Tx now N and Rx S. Separation is 14m. Very low power basal return and high-frequency transient.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.331 V

Filename: 2021-12-29_182318.dat



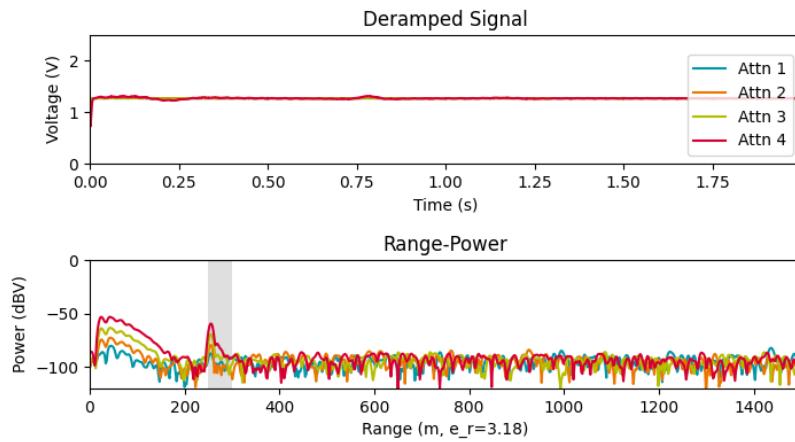
Time	2021-12-29 18:23:29.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.335 V

Filename: 2021-12-29_183509.dat



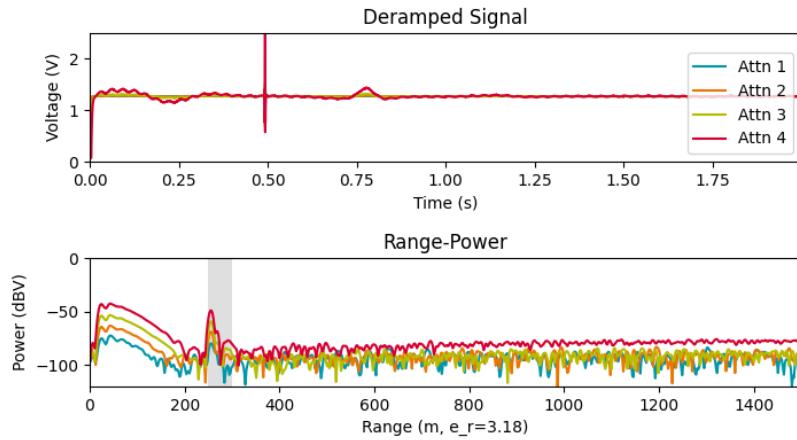
Time	2021-12-29 18:35:38.000
Location	Neumayer III, 500m W of Station
Comments	Additional Tx and Rx attenuator 10dB. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers - repeat of above checking connections and cables. Still very low power.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.391 V

Filename: 2021-12-29_184106.dat



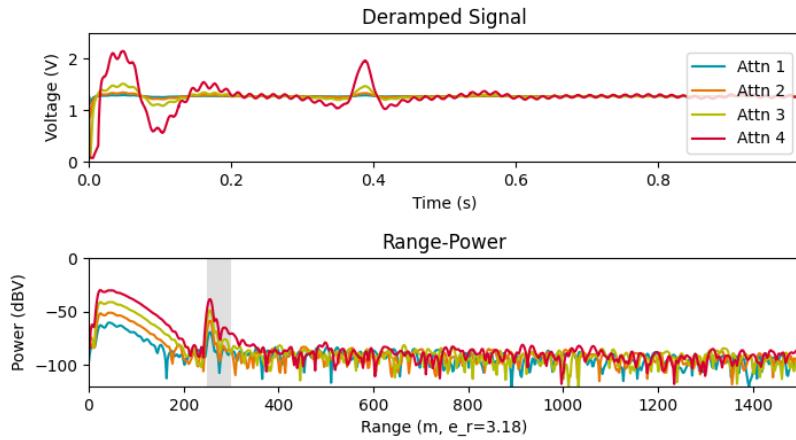
Time	2021-12-29 18:41:40.000
Location	Neumayer III, 500m W of Station
Comments	Additional Rx attenuator 10dB. Remove 10dB Tx attenuator. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers - repeat of above checking connections and cables. Still very low power.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.355 V

Filename: 2021-12-29_184802.dat



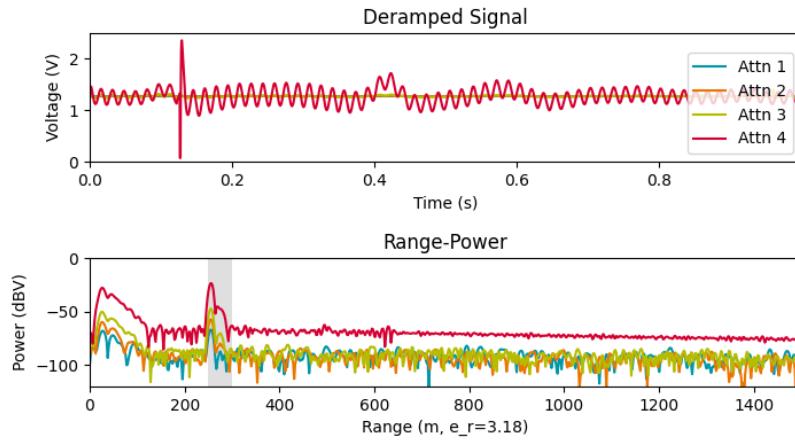
Time	2021-12-29 18:48:39.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers - repeat of above checking connections and cables. Overall increase in power - check consistency with removed attenuator.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	2.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.347 V

Filename: 2021-12-29_185628.dat



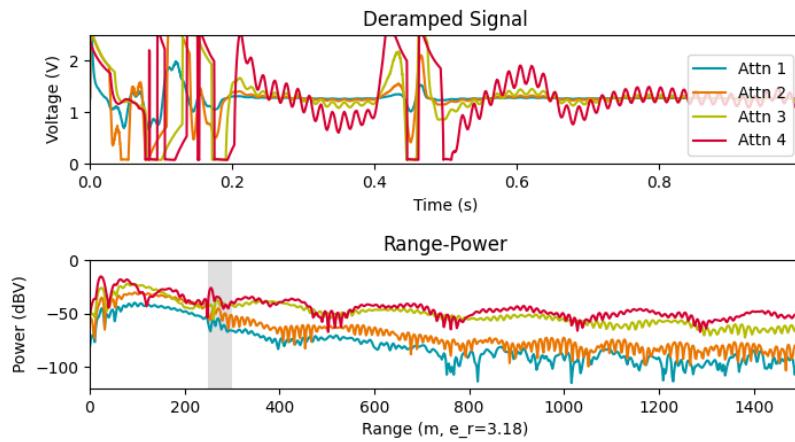
Time	2021-12-29 18:57:01.000
Location	Neumayer III, 500m W of Station
Comments	Reset configuration to 1s. No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.310 V

Filename: 2021-12-29_190341.dat



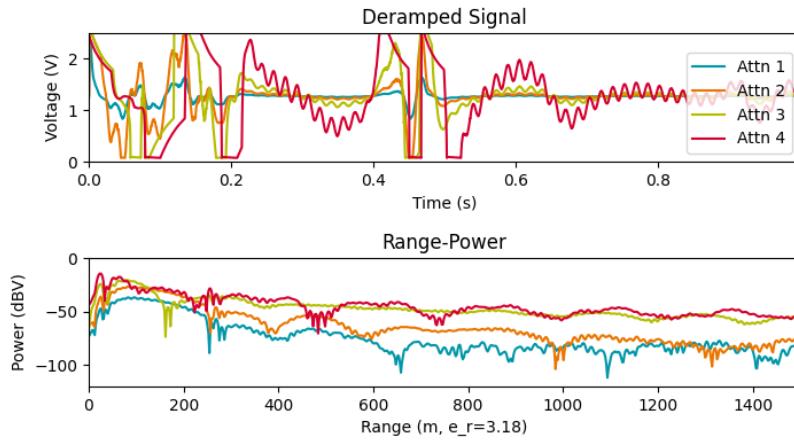
Time	2021-12-29 19:03:47.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. Move antennas closer to 10m separation but notable for RF 0dB.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.303 V

Filename: 2021-12-29_190846.dat



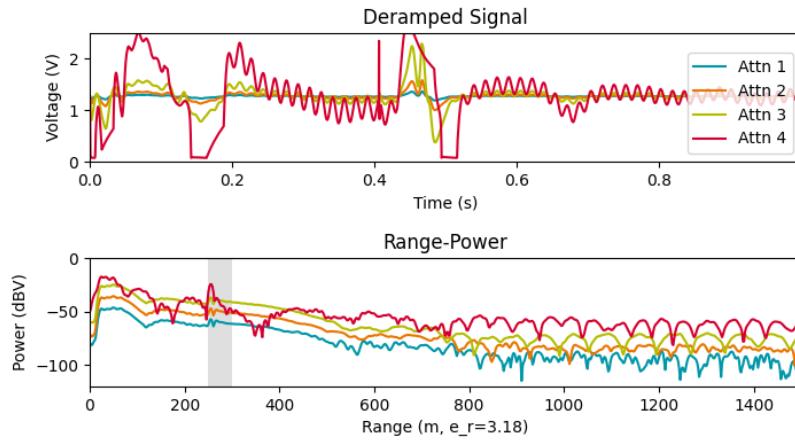
Time	2021-12-29 19:09:08.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. Reset antennas to 15m separation. Otherwise as above. Now clipping again (change in config?).
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.315 V

Filename: 2021-12-29_191455.dat



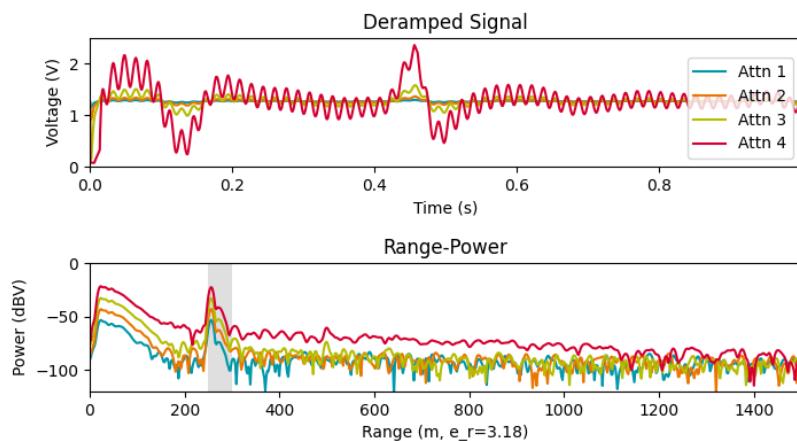
Time	2021-12-29 19:15:00.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. Reset antennas to 15m separation. Shake water from Tx and realign antennas to be more parallel.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.319 V

Filename: 2021-12-29_191933.dat



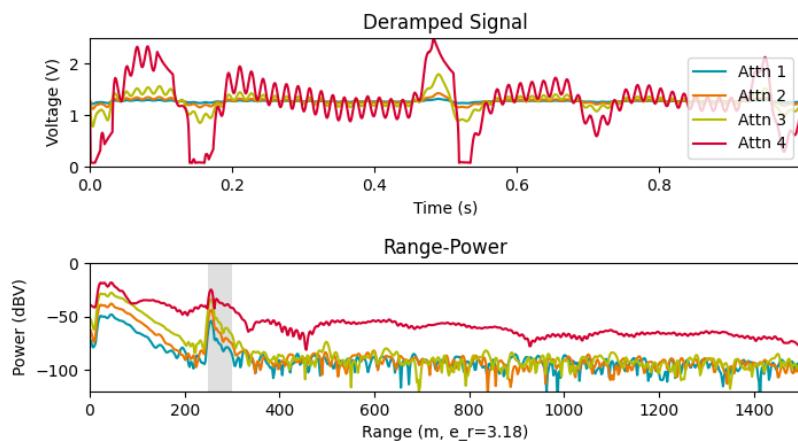
Time	2021-12-29 19:19:39.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. Reset antennas to 9m separation.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.315 V

Filename: 2021-12-29_192217.dat



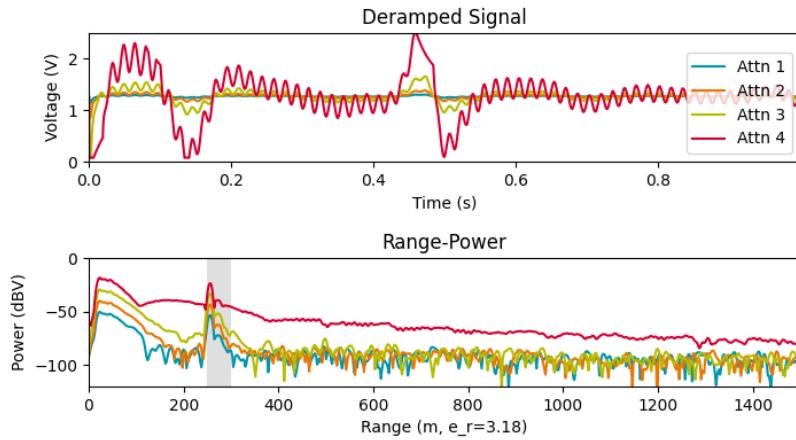
Time	2021-12-29 19:22:34.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. 9m separation. Cable moved from short bent loop to larger, smoother curve. Reduced clipping?
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.315 V

Filename: 2021-12-29_193020.dat



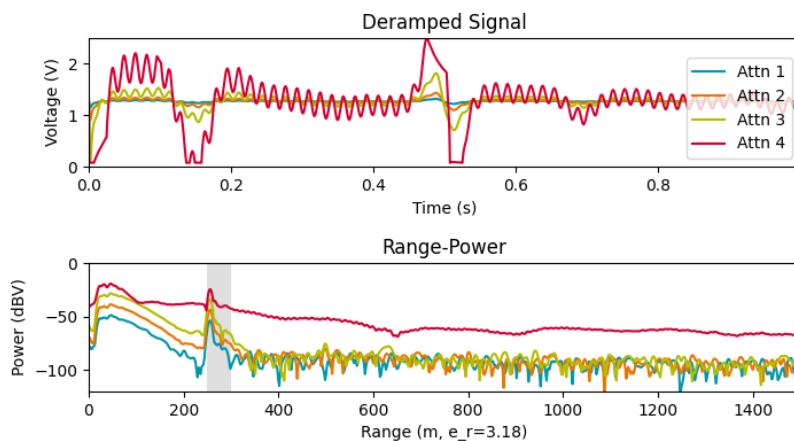
Time	2021-12-29 19:30:33.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. 9m separation. Cable moved returned to sharp loop at end of each antenna.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.315 V

Filename: 2021-12-29_193125.dat



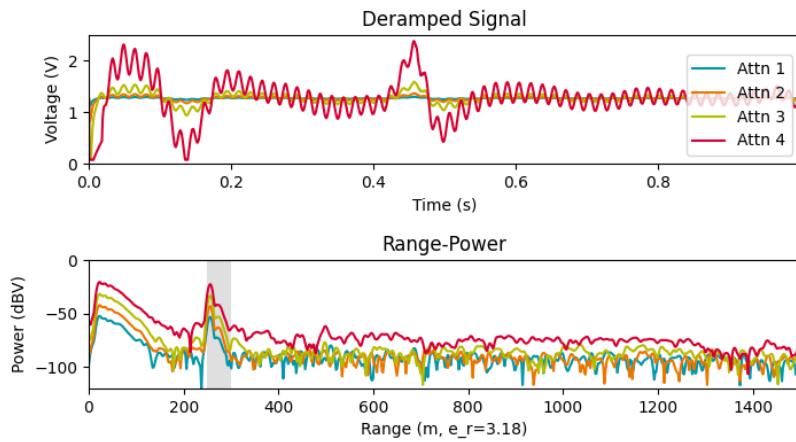
Time	2021-12-29 19:31:29.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. 9m separation. Cable moved to smooth loop.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.306 V

Filename: 2021-12-29_193232.dat



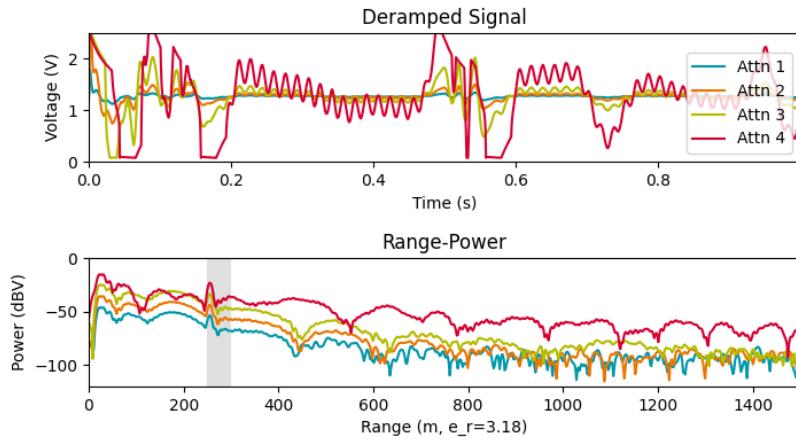
Time	2021-12-29 19:32:50.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. 9m separation. Cable moved to sharp loop.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.315 V

Filename: 2021-12-29_193352.dat



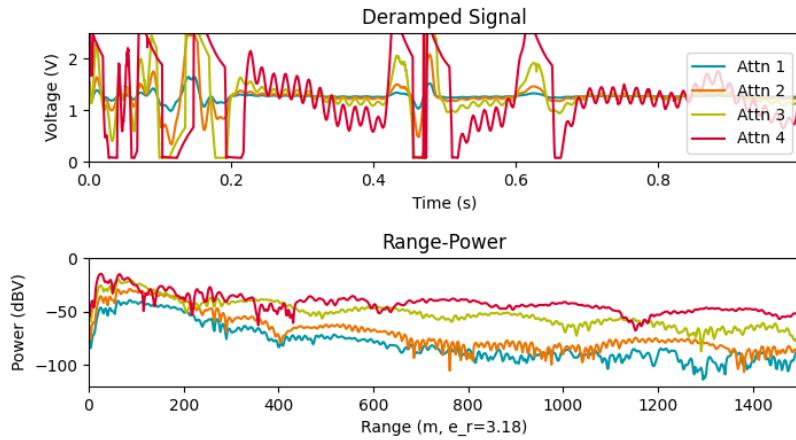
Time	2021-12-29 19:33:59.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. 9m separation. Cable moved to smooth loop.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.306 V

Filename: 2021-12-29_193505.dat



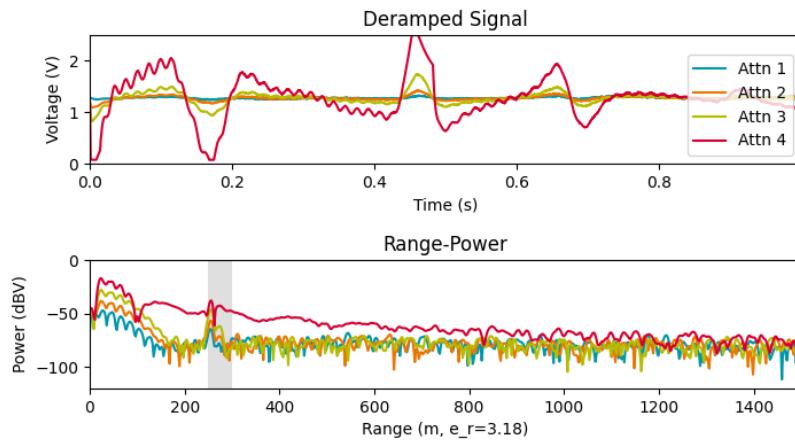
Time	2021-12-29 19:35:11.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. 9m separation. Cable moved to sharp loop.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.310 V

Filename: 2021-12-29_214056.dat



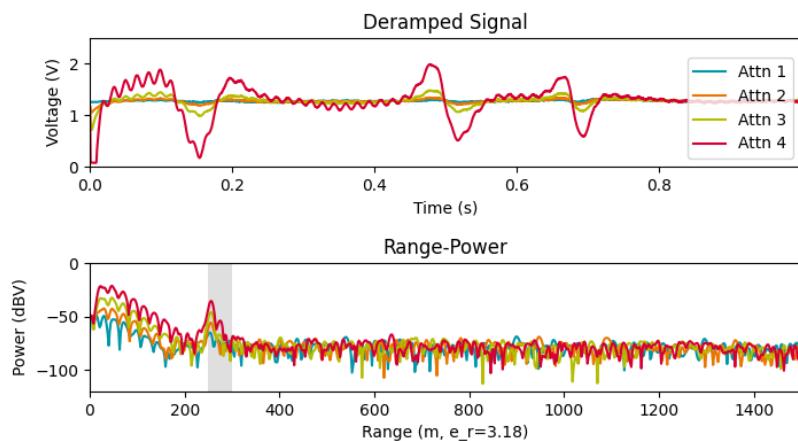
Time	2021-12-29 21:42:04.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. 9m separation. Return to setup after dinner. Otherwise unchanged.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.323 V

Filename: 2021-12-29_214443.dat



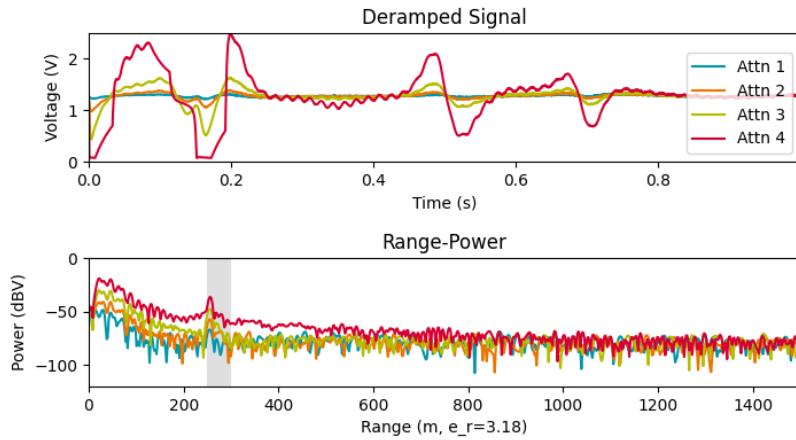
Time	2021-12-29 21:44:51.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. 9m separation. Return to setup after dinner. Reduced power code to 0.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.282 V

Filename: 2021-12-29_215406.dat



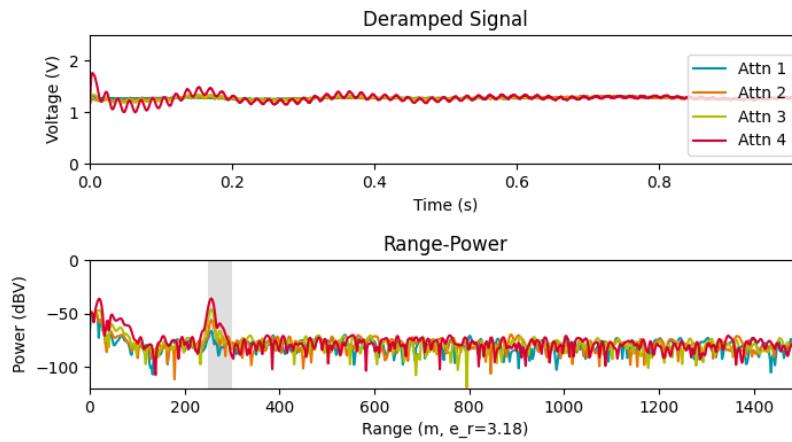
Time	2021-12-29 21:54:27.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. 9m separation. Cables 'smooth'. Reduced power code to 0.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.270 V

Filename: 2021-12-29_215659.dat



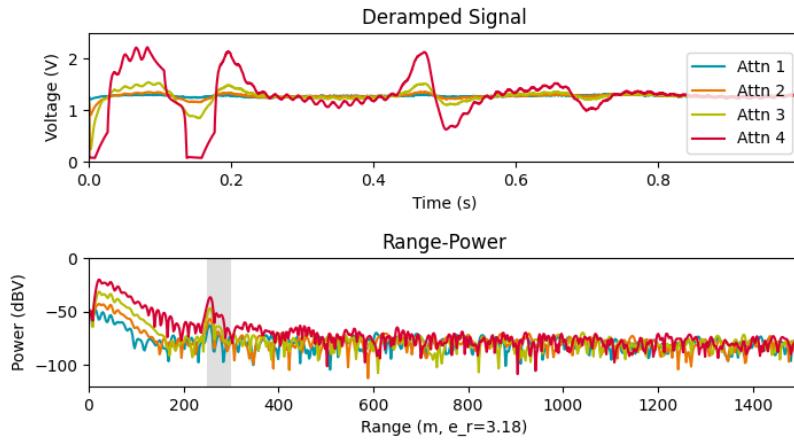
Time	2021-12-29 21:58:31.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S and cables N-S. Similar to above but with noise in upper layers. 14m separation. Cables 'smooth' in line with antennas. Reduced power code to 0.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.266 V

Filename: 2021-12-29_220442.dat



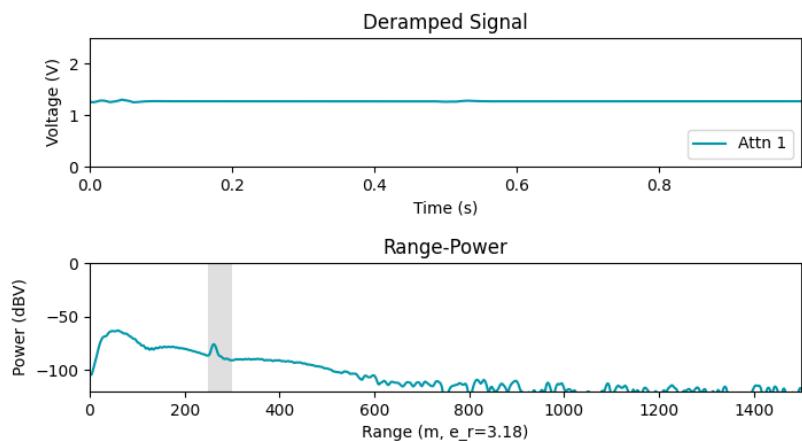
Time	2021-12-29 22:04:45.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned E-W but Tx at N and Rx at S. Similar to above but with noise in upper layers. 14m separation. Cables 'smooth' in line with antennas. Reduced power code to 0.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.258 V

Filename: 2021-12-29_220927.dat



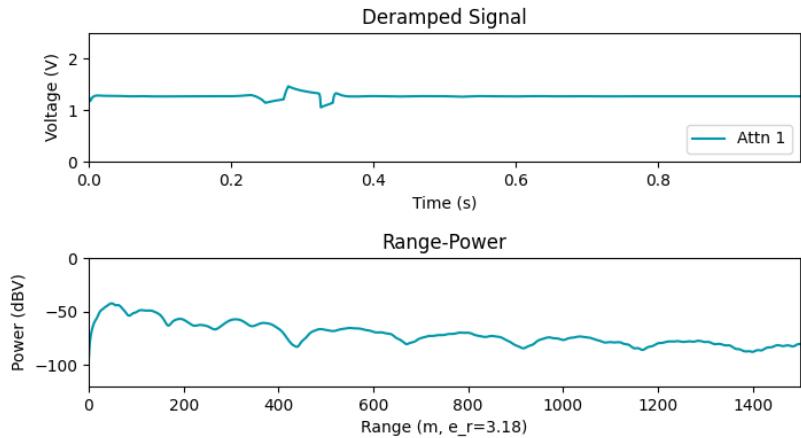
Time	2021-12-29 22:09:34.000
Location	Neumayer III, 500m W of Station
Comments	No additional attenuations. Antennas rotated so they are aligned N-S along N-S profile. Similar to above but with noise in upper layers. 14m separation. Cables 'smooth' in line with antennas. Reduced power code to 0.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	0
Battery Voltage	12.254 V

Filename: 1_SubZero_211150.30_T1HR1H.dat



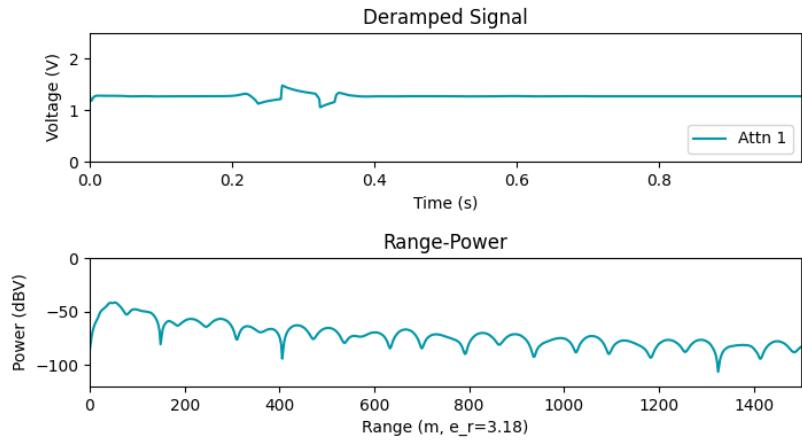
Time	2021-12-30 22:13:11.000
Location	Groundling Line Camp,-71.21423633N,-08.5932860E
Comments	No comments noted.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	5
Power Code	127
Battery Voltage	12.379 V

Filename: 1_SubZero_164126.90_T1HR1H.dat



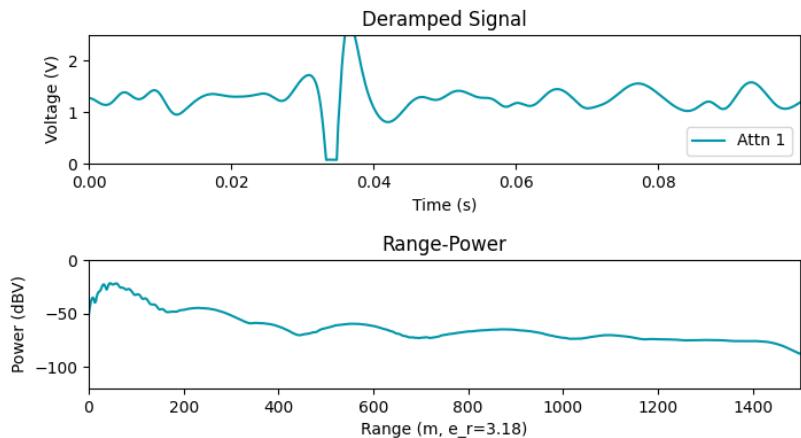
Time	2022-01-02 17:42:48.000
Location	Groundling Line Camp,-71.21423633N,-08.5932860E
Comments	50m from mcamp. No basal reflector - expect to see at around 1050m.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	5
Power Code	127
Battery Voltage	12.222 V

Filename: 1_SubZero_165816.20_T1HR1H.dat



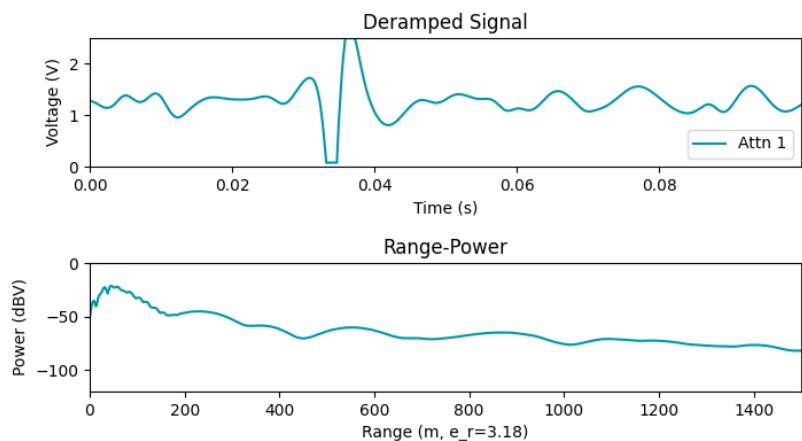
Time	2022-01-02 17:59:38.000
Location	Groundling Line Camp,-71.21423633N,-08.5932860E
Comments	50m from mcamp. No basal reflector - expect to see at around 1050m.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	5
Power Code	127
Battery Voltage	12.363 V

Filename: 1_SubZero_180215.40_T1HR1H.dat



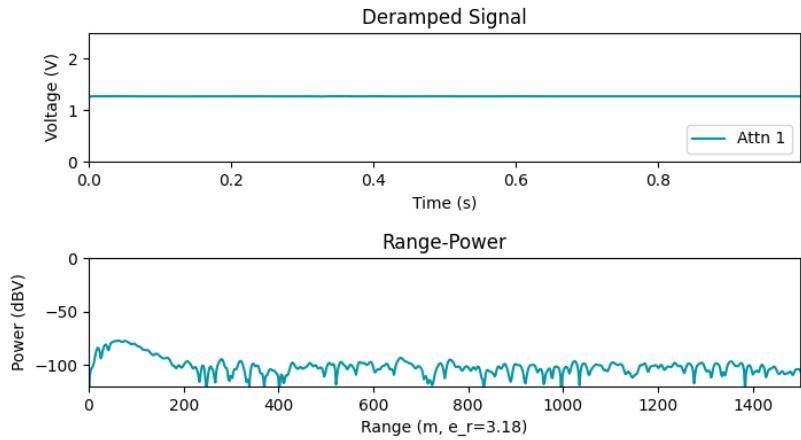
Time	2022-01-02 18:02:20.000
Location	Groundling Line Camp,-71.21423633N,-08.5932860E
Comments	50m from mcamp. No basal reflector - expect to see at around 1050m.
AF Gain	6
RF Attenuation	30
Period	0.100 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	5
Power Code	127
Battery Voltage	12.274 V

Filename: 2_SubZero_180505.20_T1HR1H.dat



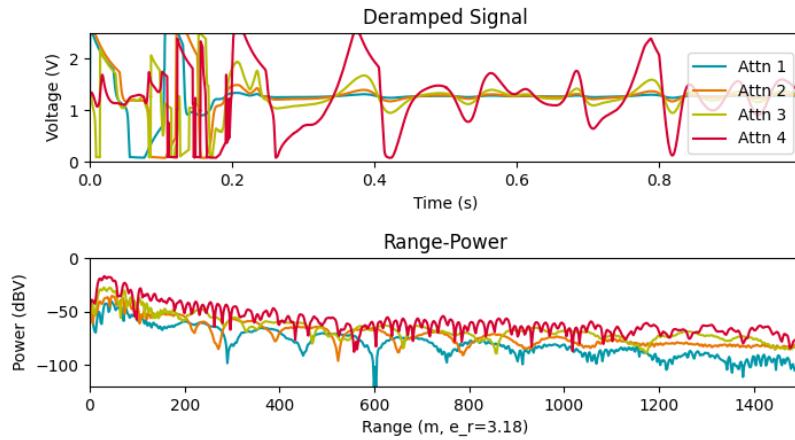
Time	2022-01-02 18:05:09.000
Location	Groundling Line Camp,-71.21423633N,-08.5932860E
Comments	50m from camp. No basal reflector - expect to see at around 1050m.
AF Gain	6
RF Attenuation	30
Period	0.100 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	300
Power Code	127
Battery Voltage	12.274 V

Filename: 1_SubZero_181539.50_T1HR1H.dat



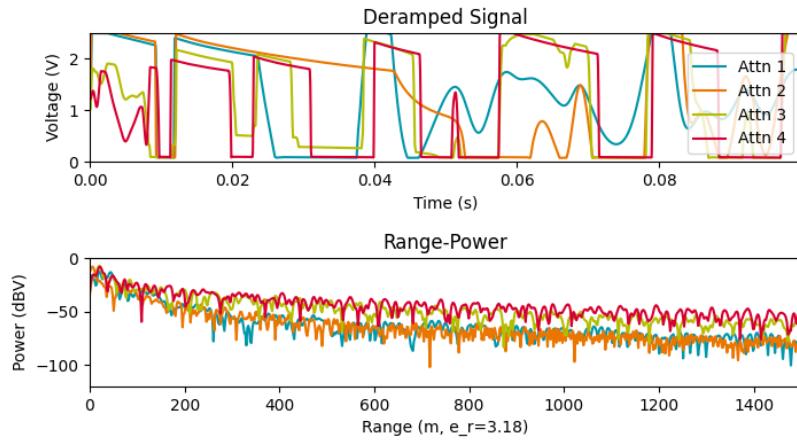
Time	2022-01-02 18:15:40.000
Location	Groundling Line Camp,-71.21423633N,-08.5932860E
Comments	50m from camp. No basal reflector - expect to see at around 1050m. Large amount of transient noise - low power.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	300
Power Code	127
Battery Voltage	12.262 V

Filename: 2022-01-02_182206.dat



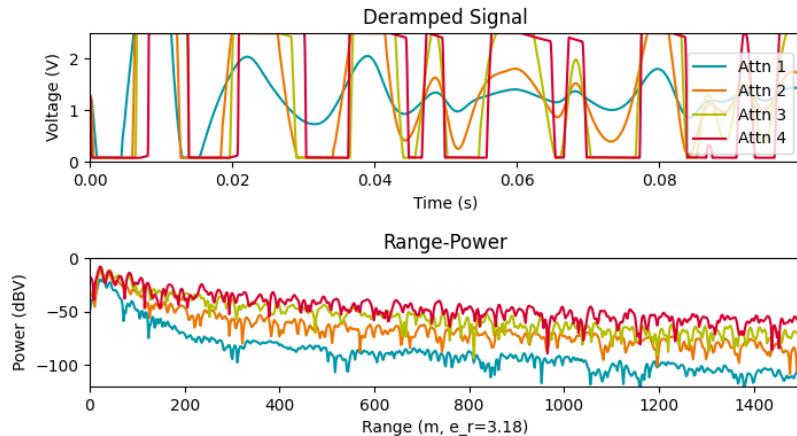
Time	2022-01-02 18:23:08.000
Location	Groundling Line Camp,-71.21423633N,-08.5932860E
Comments	50m from camp. No basal reflector - expect to see at around 1050m. Clipping over lower bandwidth.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	5
Power Code	127
Battery Voltage	12.234 V

Filename: 2022-01-02_182915.dat



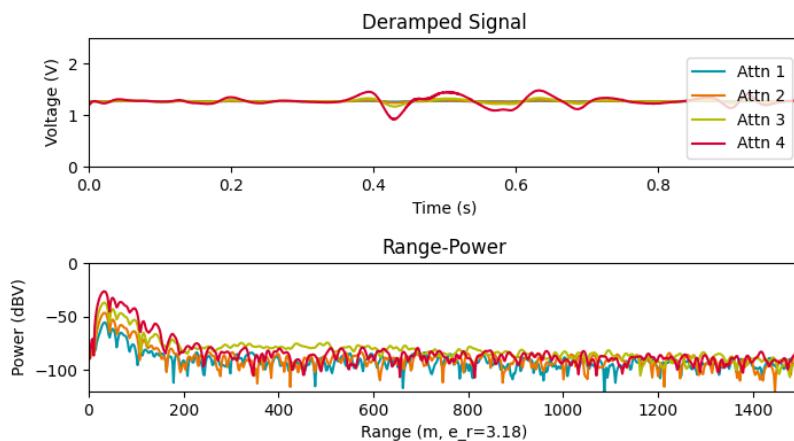
Time	2022-01-02 18:30:04.000
Location	Groundling Line Camp,-71.21423633N,-08.5932860E
Comments	50m from camp. No basal reflector - expect to see at around 1050m. Reduced period - clipping now occupies entire signal - transient effect?
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	0.100 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.254 V

Filename: 2022-01-02_183717.dat



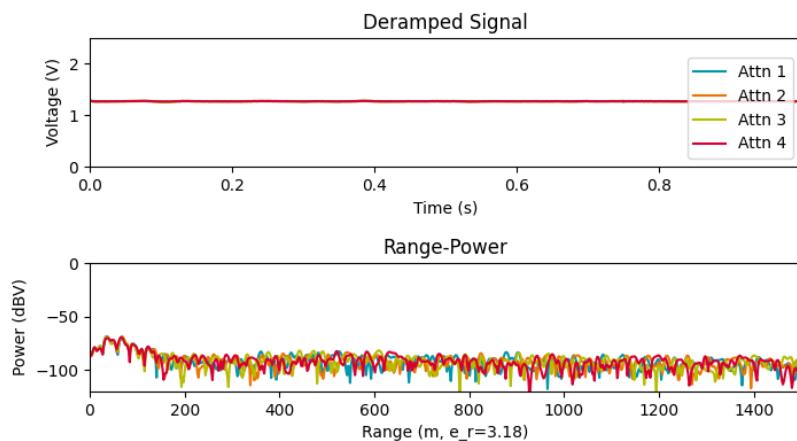
Time	2022-01-02 18:38:08.000
Location	Groundling Line Camp,-71.21423633N,-08.5932860E
Comments	Additional 10dB Rx attenuator. 50m from camp. No basal reflector - expect to see at around 1050m. Reduced period - clipping now occupies entire signal - transient effect?
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	0.100 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.266 V

Filename: 2022-01-02_185552.dat



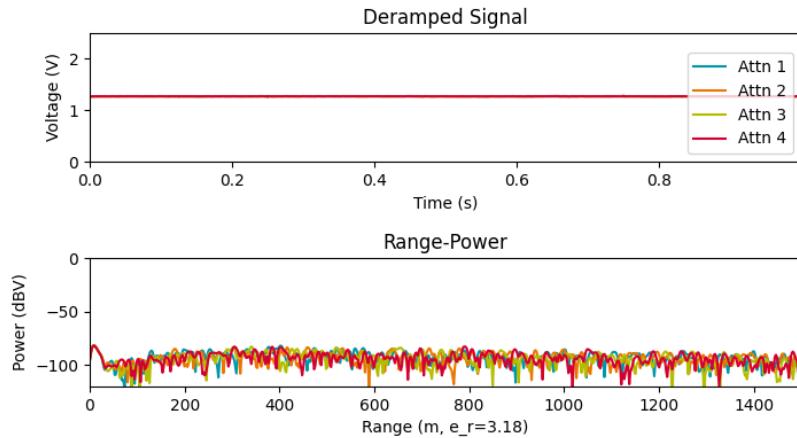
Time	2022-01-02 18:57:56.000
Location	Groundling Line Camp
Comments	Additional 10dB Rx attenuator. 50m from camp. No basal reflector - expect to see at around 1050m. Increased period back to 1s. Antennas pulled and location changed.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.250 V

Filename: 2022-01-02_185854.dat



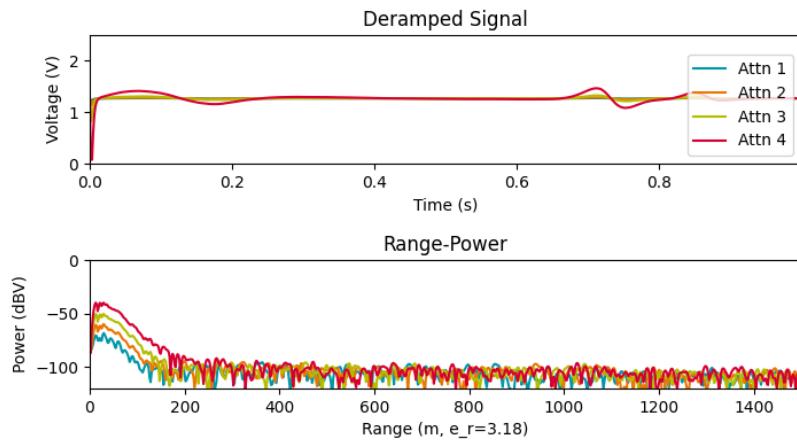
Time	2022-01-02 18:59:14.000
Location	Groundling Line Camp
Comments	Additional 10dB Rx attenuator. 50m from camp. Receive antenna removed.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.246 V

Filename: 2022-01-02_191302.dat



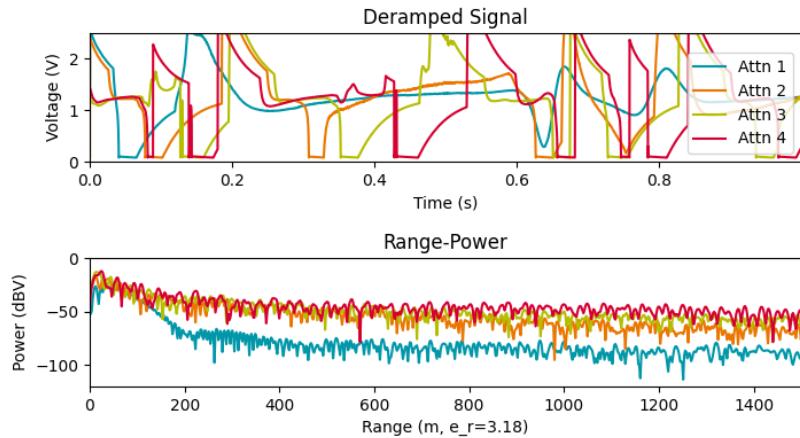
Time	2022-01-02 19:14:08.000
Location	Groundling Line Camp
Comments	Additional 10dB Rx attenuator. 50m from camp. Receive antenna removed and transmit antenna terminated.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.258 V

Filename: 2022-01-03_115005.dat



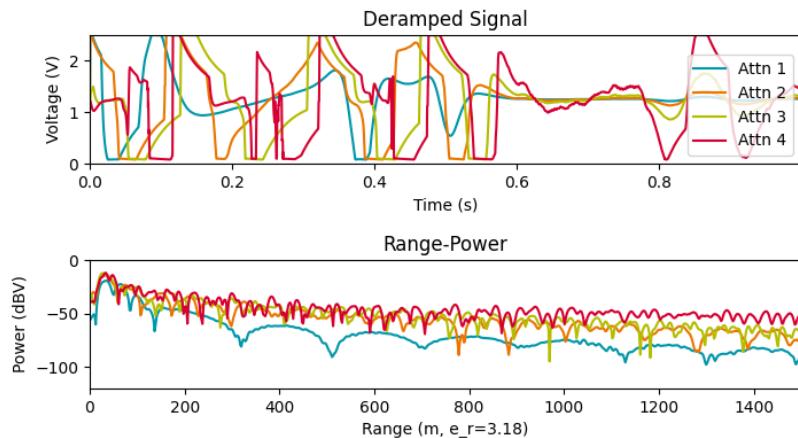
Time	2022-01-03 11:50:45.000
Location	Groundling Line Camp
Comments	Additional 20dB attenuator on Tx. No sign of base.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	20
Power Code	127
Battery Voltage	12.444 V

Filename: 2022-01-03_144007.dat



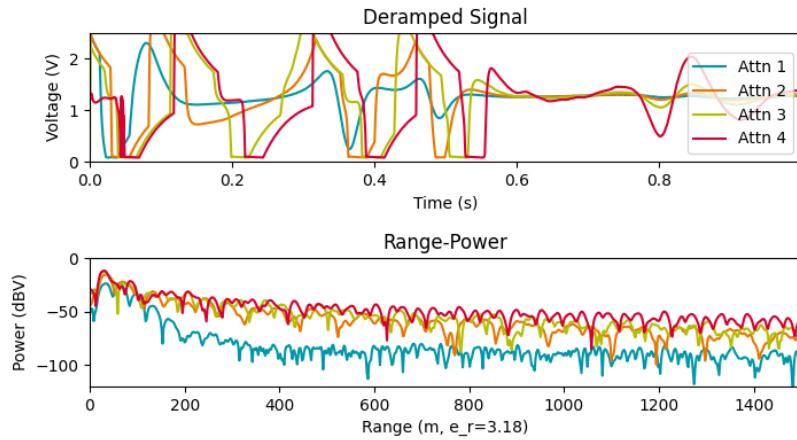
Time	2022-01-03 14:43:43.000
Location	Groundling Line Camp
Comments	Additional 20dB attenuator on Tx. No sign of base. Replace F003 board with F002.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.375 V

Filename: 2022-01-03_152109.dat



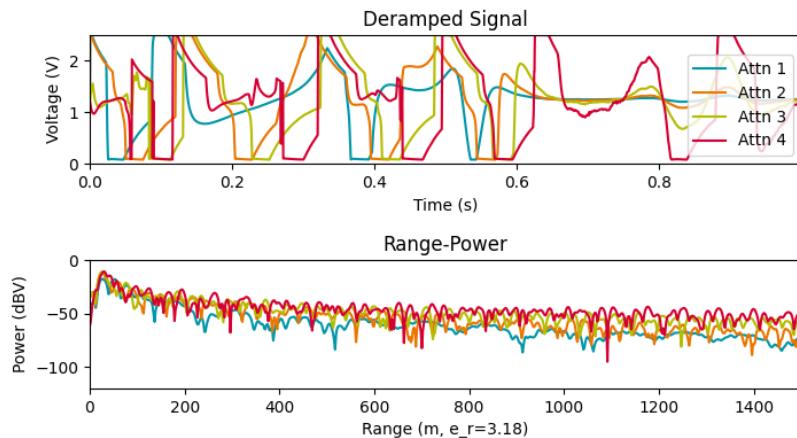
Time	2022-01-03 15:22:23.000
Location	Groundling Line Camp
Comments	Additional 20dB attenuator on Tx. No sign of base. Replace F003 board with F002. Move antennas from 10m to 20m separation.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.306 V

Filename: 2022-01-03_153752.dat



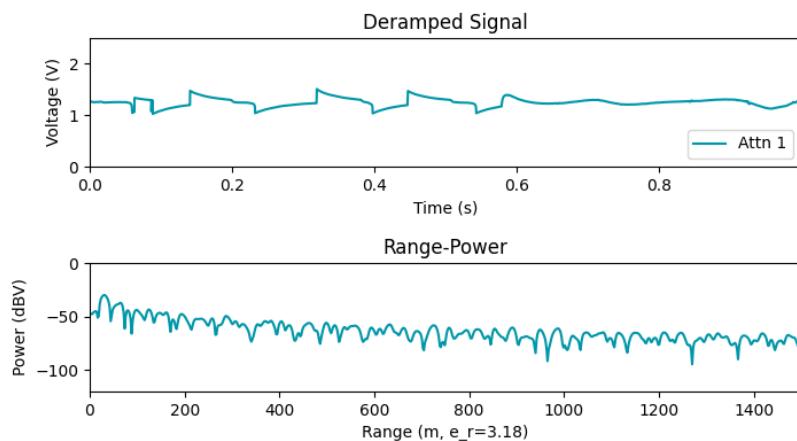
Time	2022-01-03 15:39:10.000
Location	Groundling Line Camp
Comments	Additional 20dB attenuator on Tx. No sign of base. Board F002. Move antennas from 10m to 20m separation. Reduced power code to 0.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	10
Power Code	0
Battery Voltage	12.282 V

Filename: 2022-01-03_161929.dat



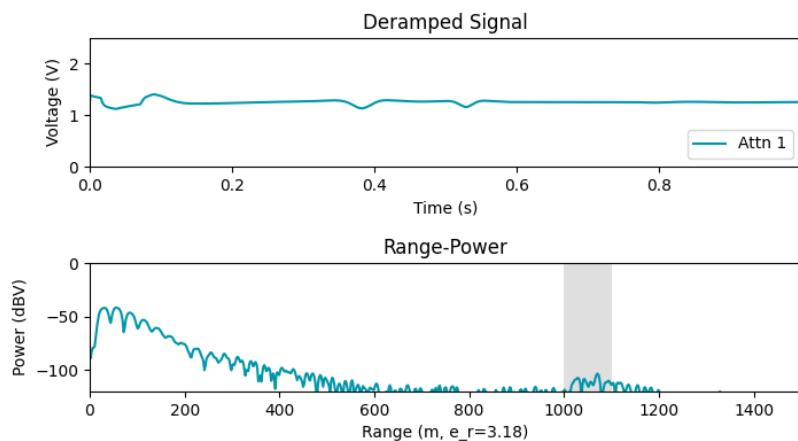
Time	2022-01-03 16:19:56.000
Location	Groundling Line Camp
Comments	Additional 20dB attenuator on Tx. No sign of base. Board F002. Move antennas from 10m to 20m separation. Reduced power code to 0. Move Hilux further away.
AF Gain	6,6,6,6
RF Attenuation	30,20,10,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.395 V

Filename: 2022-01-03_164331.dat



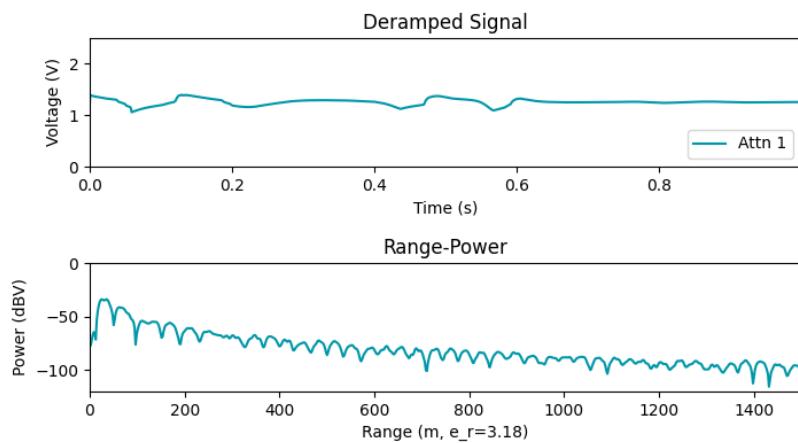
Time	2022-01-03 16:43:55.000
Location	Groundling Line Camp,-71.72445466,-08.59249550,135.2m Elevation
Comments	Additional 20dB attenuator on Tx. No sign of base. Board F002. Move antennas from 10m to 20m separation. Try short survey to find base.
AF Gain	-14
RF Attenuation	10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.226 V

Filename: 2022-01-03_170023.dat



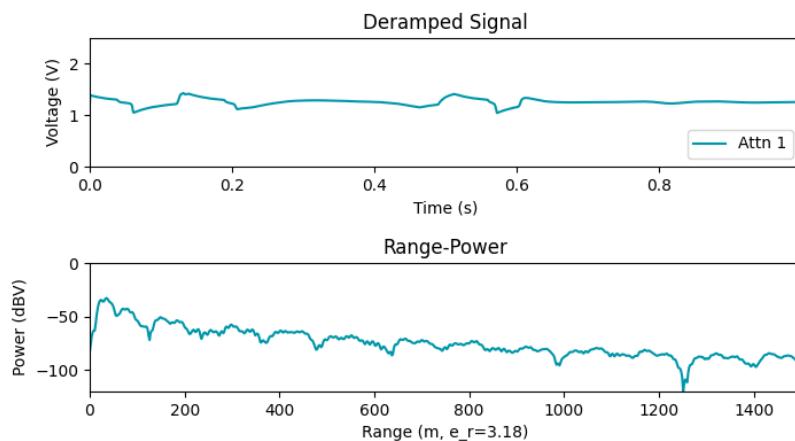
Time	2022-01-03 17:00:45.000
Location	Groundling Line Camp,-71.72445466,-08.59249550,135.2m Elevation
Comments	Additional 20dB attenuator on Tx. See basal reflector with ζ 4 summed chirps.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.218 V

Filename: 2022-01-03_173640.dat



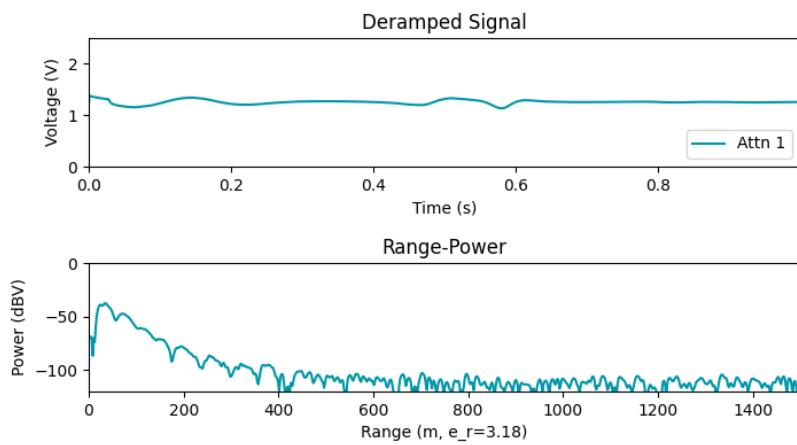
Time	2022-01-03 17:36:56.000
Location	Groundling Line Camp,-71.72444549,-08.59246611,132.2m Elevation
Comments	Additional 20dB attenuator on Tx. Basal reflector disappeared. Moved 1m from previous site.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	20
Power Code	127
Battery Voltage	12.186 V

Filename: 2022-01-03_174337.dat



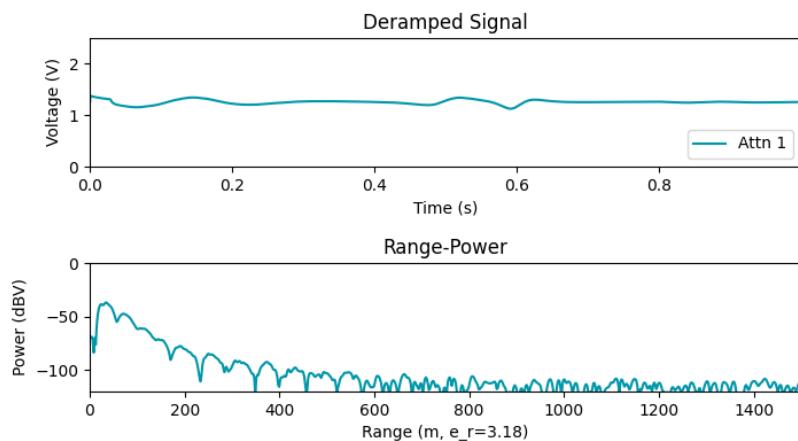
Time	2022-01-03 17:43:56.000
Location	Groundling Line Camp,-71.72443744,-08.59244250,132m Elevation
Comments	Additional 20dB attenuator on Tx. Basal reflector disappeared. Moved 1m from previous site.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	20
Power Code	127
Battery Voltage	12.182 V

Filename: 2022-01-03_174745.dat



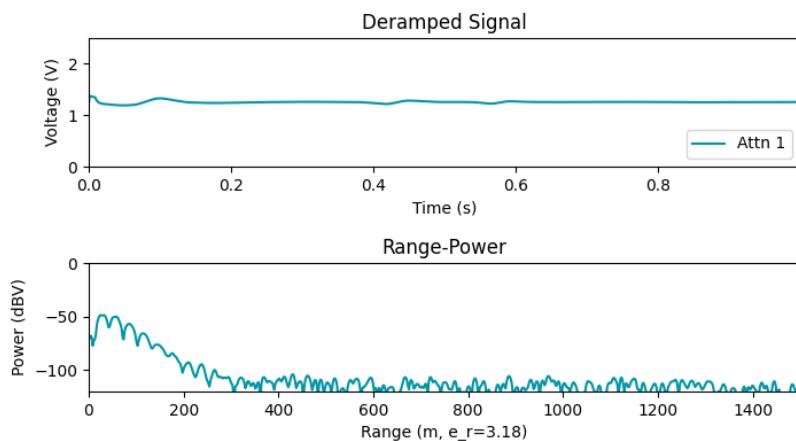
Time	2022-01-03 17:48:19.000
Location	Groundling Line Camp,-71.72443744,-08.59244250,132m Elevation
Comments	Additional 20dB attenuator on Tx. Basal reflector disappeared. As previous site with reduced power code.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	20
Power Code	0
Battery Voltage	12.178 V

Filename: 2022-01-03_175416.dat



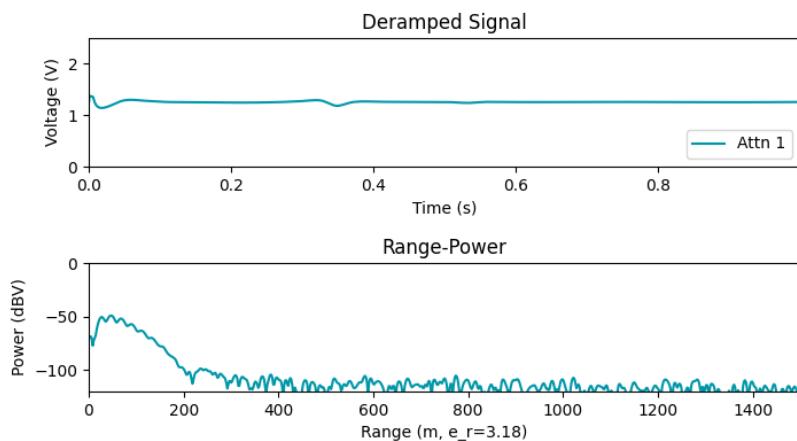
Time	2022-01-03 17:56:13.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Additional 20dB attenuator on Tx. Basal reflector disappeared. Moved 1m from previous position.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	0
Battery Voltage	12.170 V

Filename: 2022-01-03_180431.dat



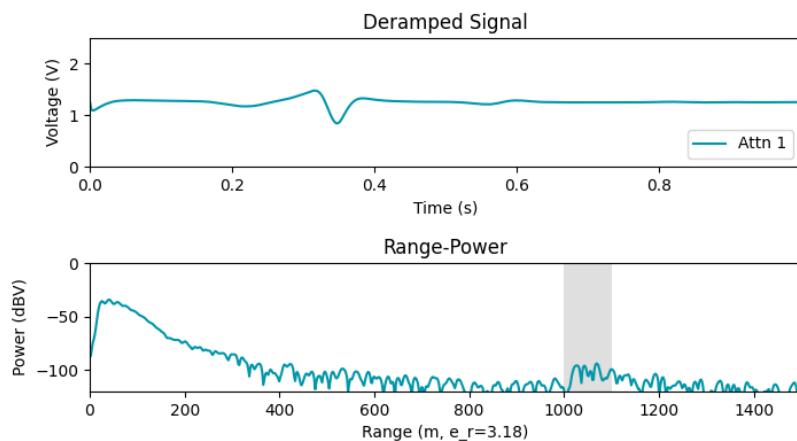
Time	2022-01-03 18:04:41.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Additional 20dB attenuator on Tx. Basal reflector disappeared. In same position - release cables.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	0
Battery Voltage	12.165 V

Filename: 2022-01-03_192615.dat



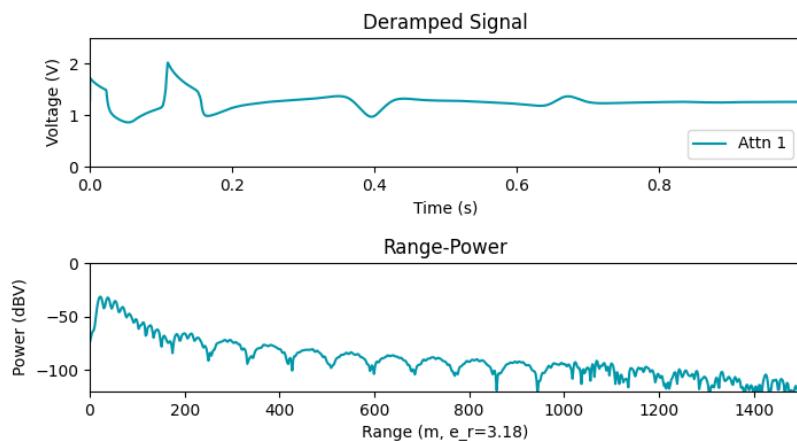
Time	2022-01-03 19:28:49.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Additional 20dB attenuator on Tx. Basal reflector disappeared. Left ApRES for an hour and a half. Ground cooled and cables frozen in.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	0
Battery Voltage	12.162 V

Filename: 2022-01-03_194439.dat



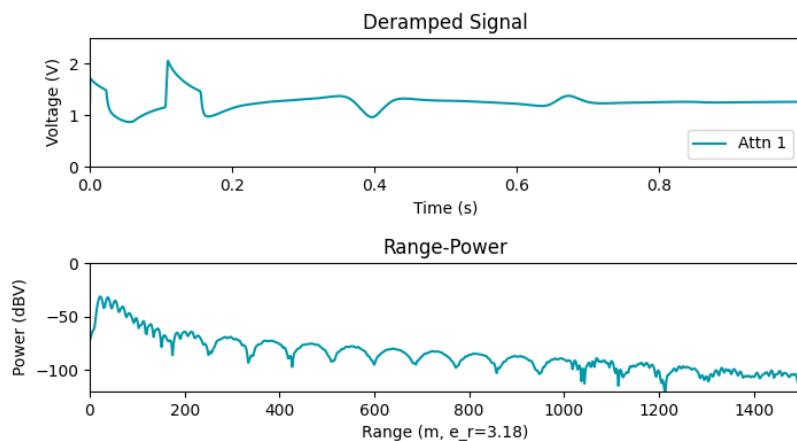
Time	2022-01-03 19:45:03.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Additional 20dB attenuator on Tx. Basal reflector possible to see with some averaging?
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.129 V

Filename: DATA2022-01-03-1957.DAT



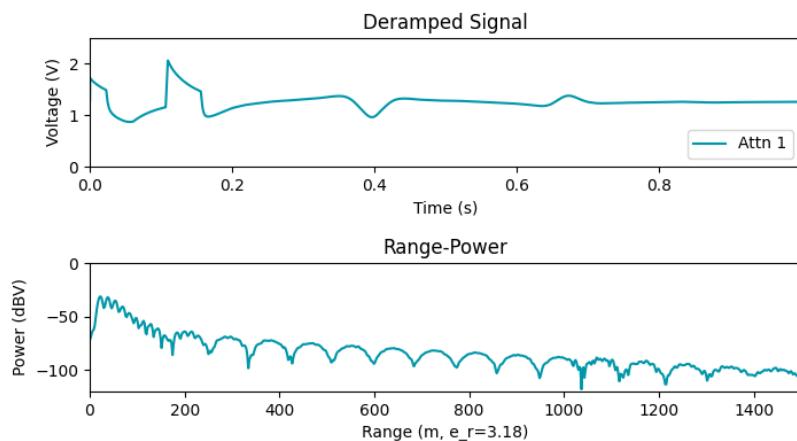
Time	2022-01-03 19:57:41.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.198 V

Filename: DATA2022-01-03-2002.DAT



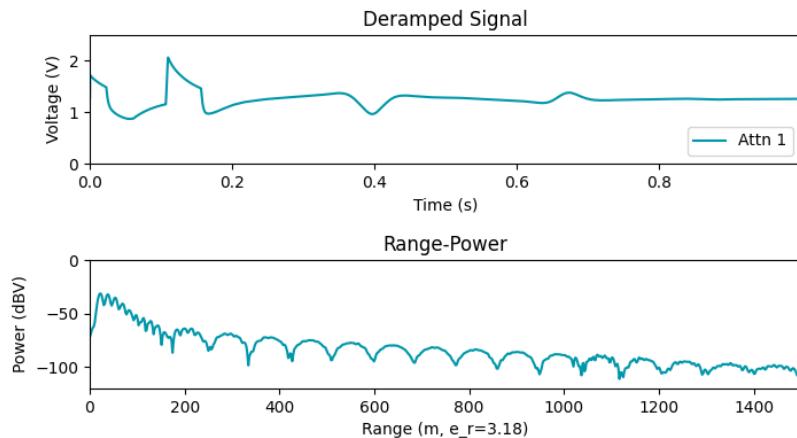
Time	2022-01-03 20:02:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.310 V

Filename: DATA2022-01-03-2007.DAT



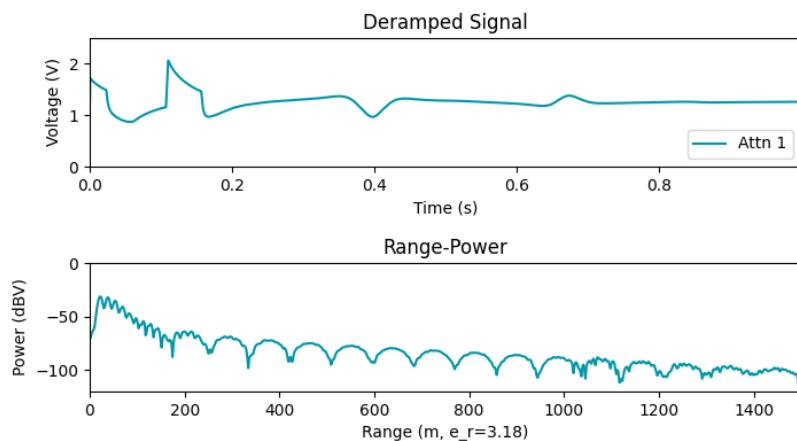
Time	2022-01-03 20:07:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.315 V

Filename: DATA2022-01-03-2012.DAT



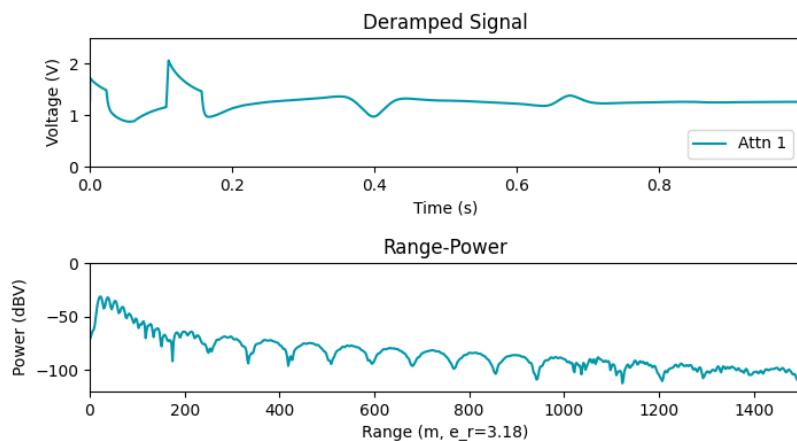
Time	2022-01-03 20:12:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.310 V

Filename: DATA2022-01-03-2017.DAT



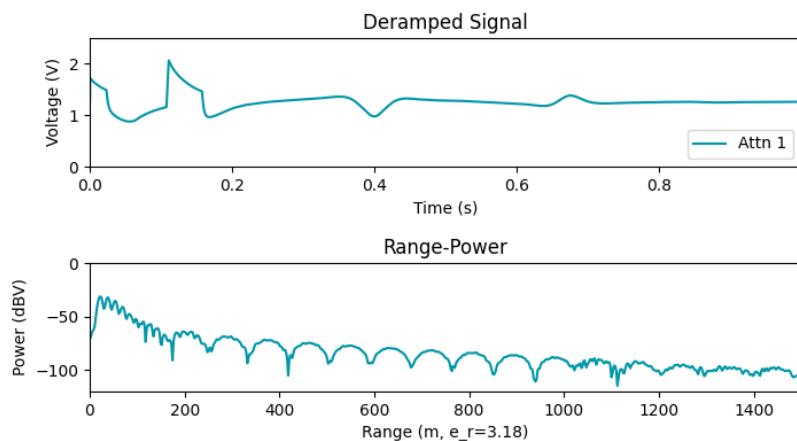
Time	2022-01-03 20:17:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.306 V

Filename: DATA2022-01-03-2022.DAT



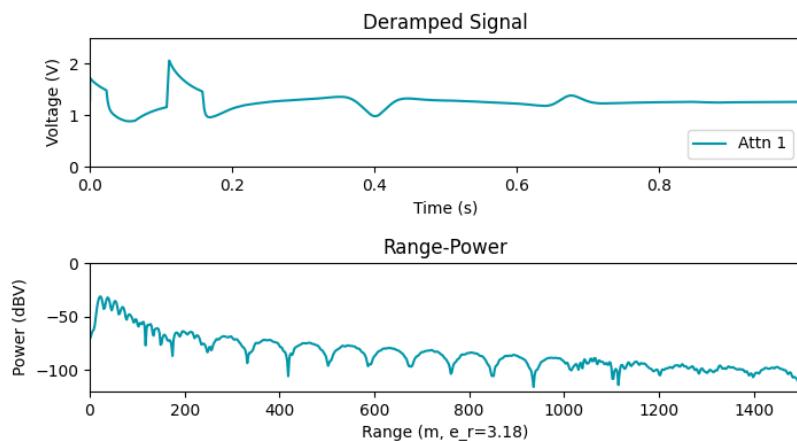
Time	2022-01-03 20:22:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.306 V

Filename: DATA2022-01-03-2027.DAT



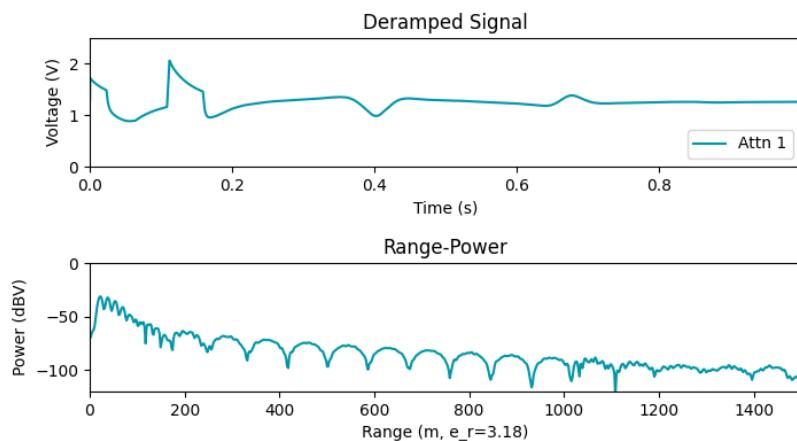
Time	2022-01-03 20:27:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.303 V

Filename: DATA2022-01-03-2032.DAT



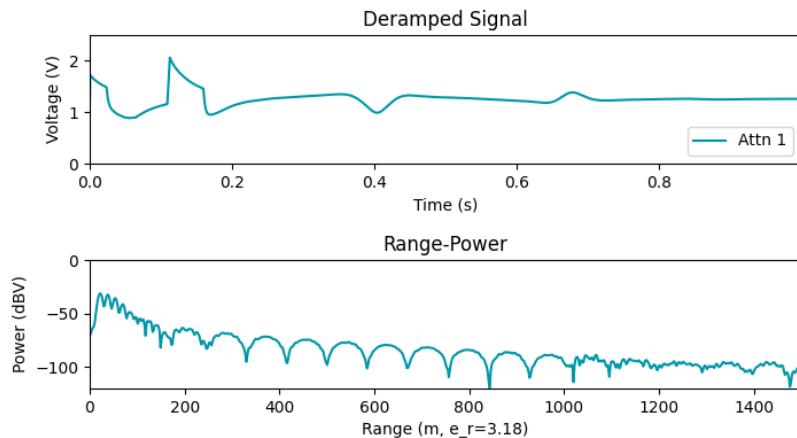
Time	2022-01-03 20:32:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.299 V

Filename: DATA2022-01-03-2037.DAT



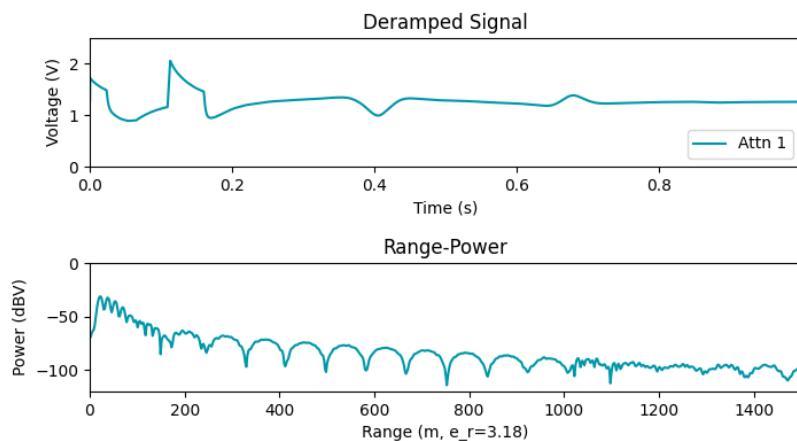
Time	2022-01-03 20:37:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.299 V

Filename: DATA2022-01-03-2042.DAT



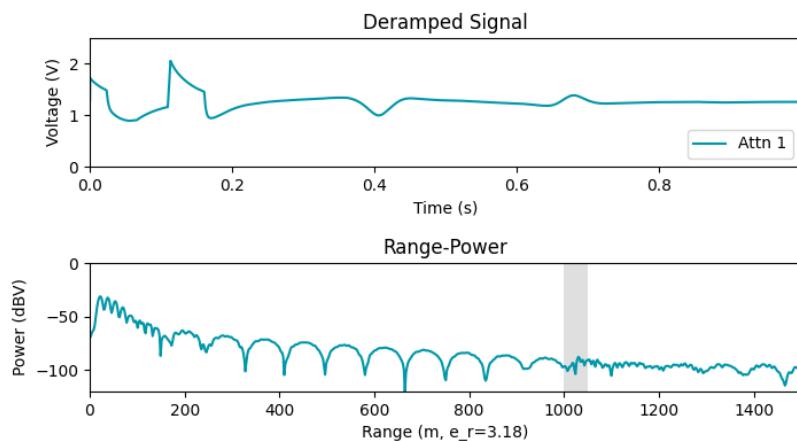
Time	2022-01-03 20:42:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.294 V

Filename: DATA2022-01-03-2047.DAT



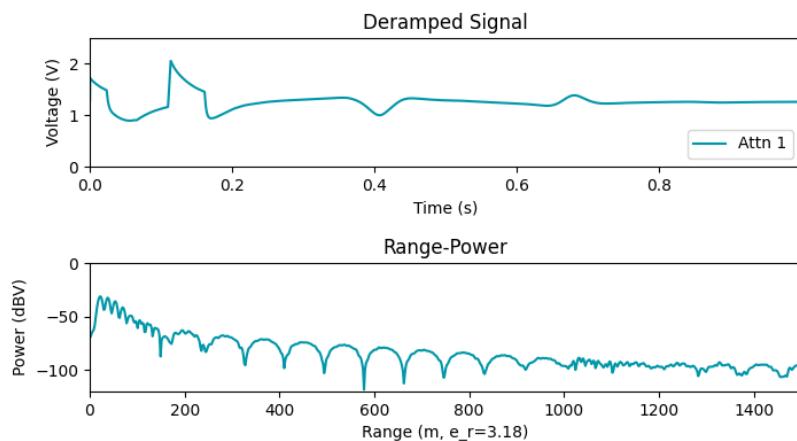
Time	2022-01-03 20:47:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.290 V

Filename: DATA2022-01-03-2052.DAT



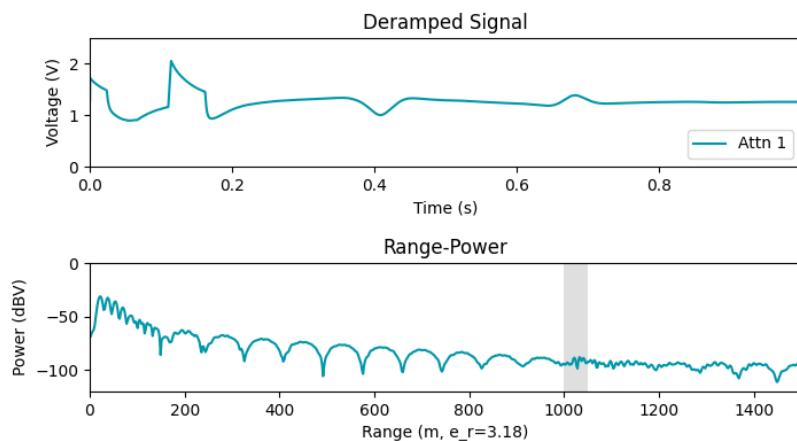
Time	2022-01-03 20:52:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.282 V

Filename: DATA2022-01-03-2057.DAT



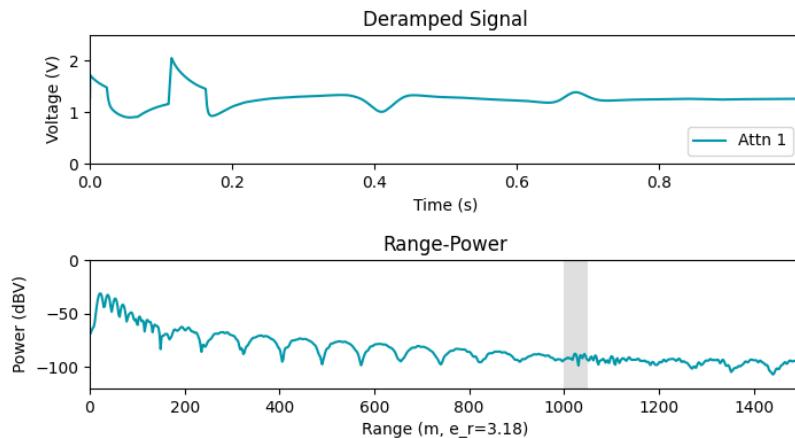
Time	2022-01-03 20:57:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.282 V

Filename: DATA2022-01-03-2102.DAT



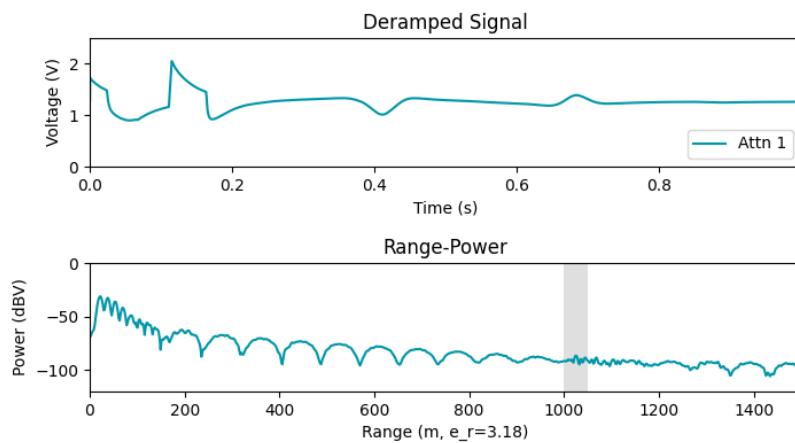
Time	2022-01-03 21:02:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.278 V

Filename: DATA2022-01-03-2107.DAT



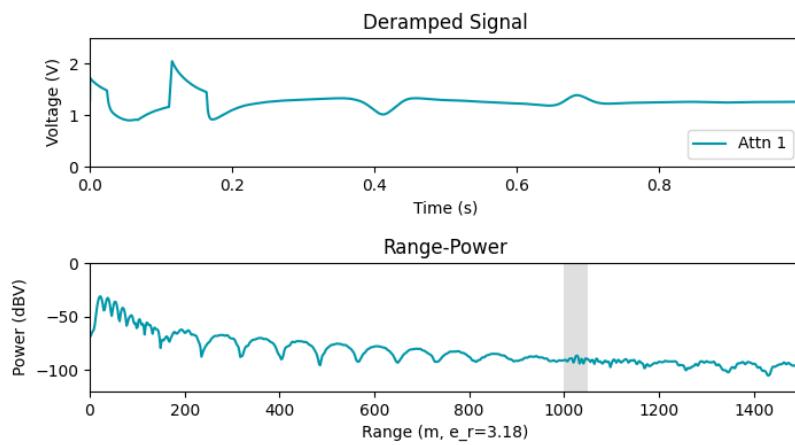
Time	2022-01-03 21:07:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.278 V

Filename: DATA2022-01-03-2112.DAT



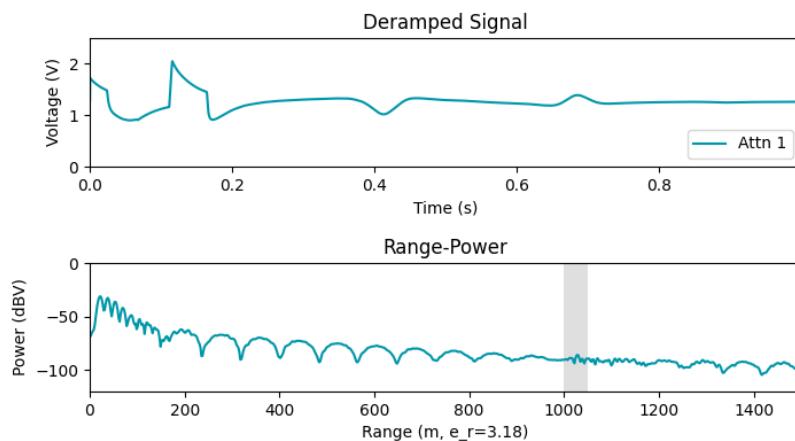
Time	2022-01-03 21:12:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.278 V

Filename: DATA2022-01-03-2117.DAT



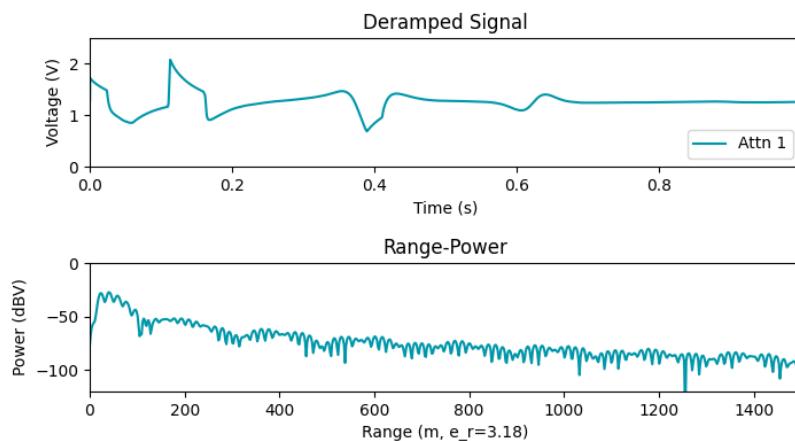
Time	2022-01-03 21:17:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.270 V

Filename: DATA2022-01-03-2122.DAT



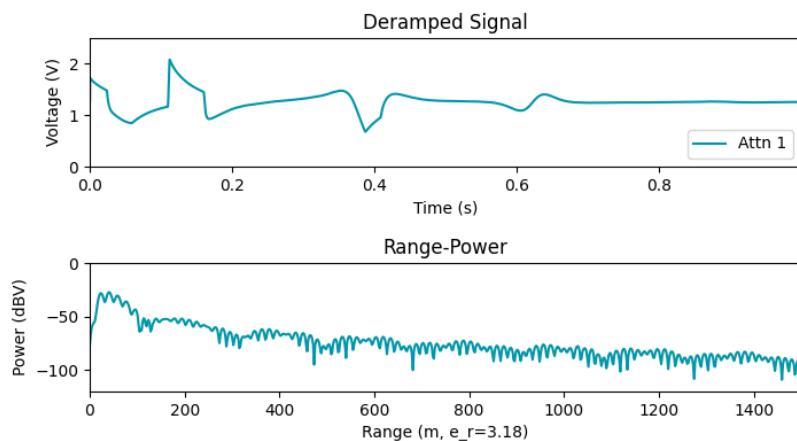
Time	2022-01-03 21:22:26.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.266 V

Filename: DATA2022-01-04-0805.DAT



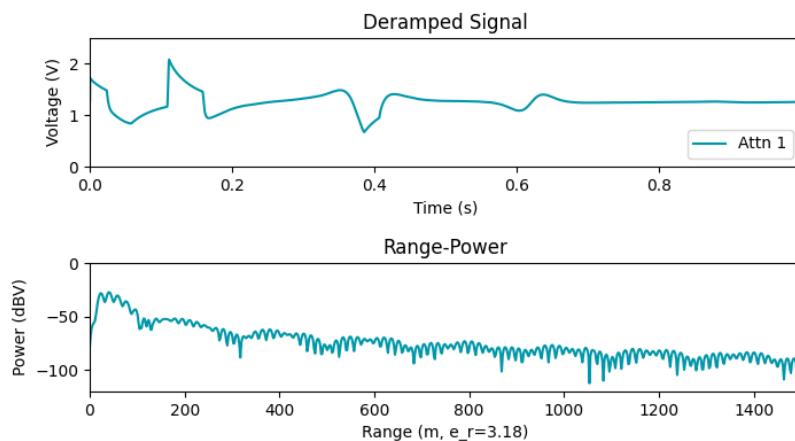
Time	2022-01-04 08:05:35.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.854 V

Filename: DATA2022-01-04-0810.DAT



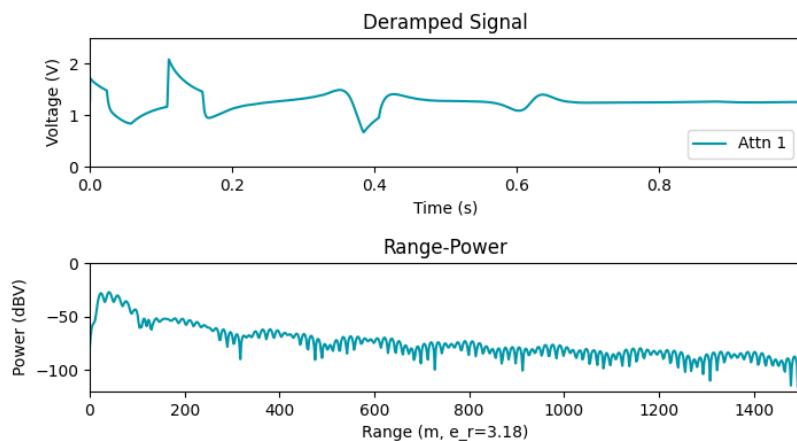
Time	2022-01-04 08:10:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.786 V

Filename: DATA2022-01-04-0815.DAT



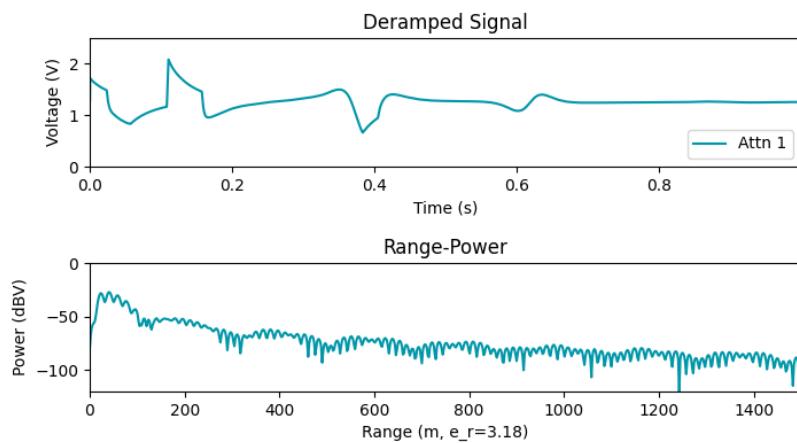
Time	2022-01-04 08:15:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.758 V

Filename: DATA2022-01-04-0820.DAT



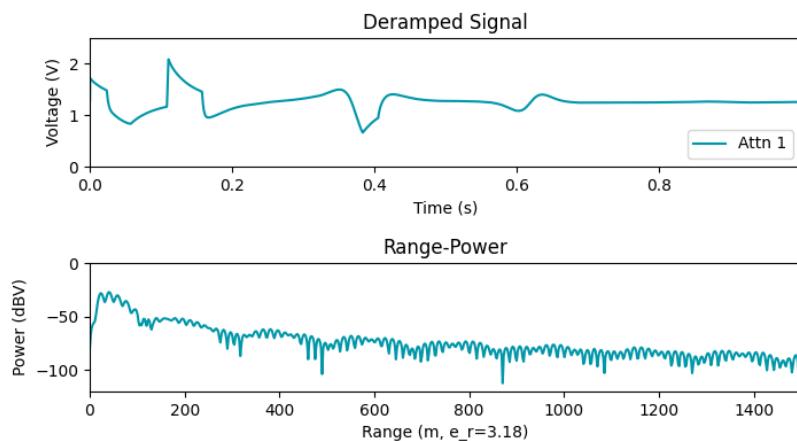
Time	2022-01-04 08:20:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.729 V

Filename: DATA2022-01-04-0825.DAT



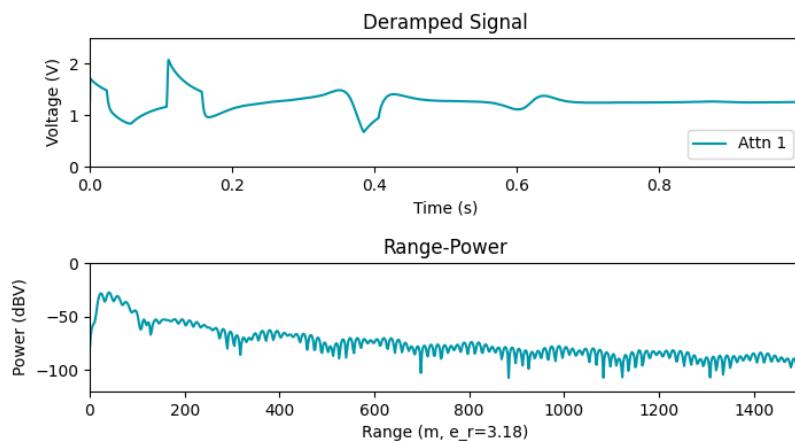
Time	2022-01-04 08:25:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.705 V

Filename: DATA2022-01-04-0830.DAT



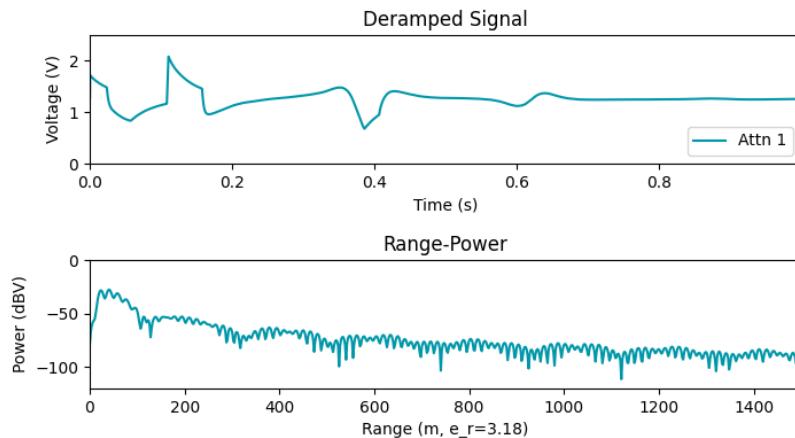
Time	2022-01-04 08:30:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.681 V

Filename: DATA2022-01-04-0835.DAT



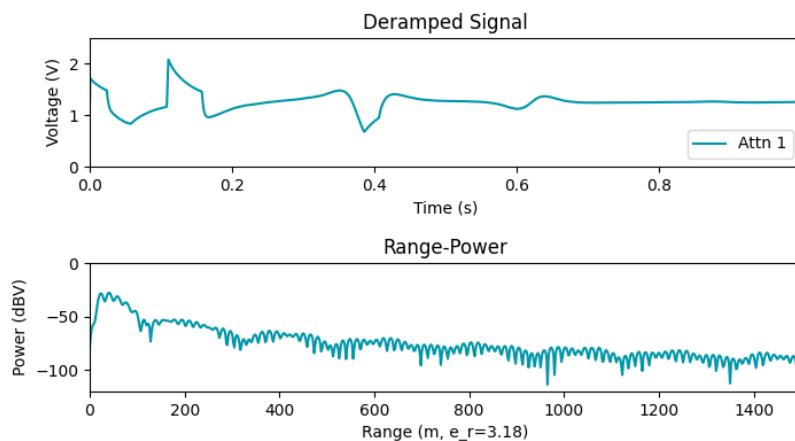
Time	2022-01-04 08:35:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.665 V

Filename: DATA2022-01-04-0840.DAT



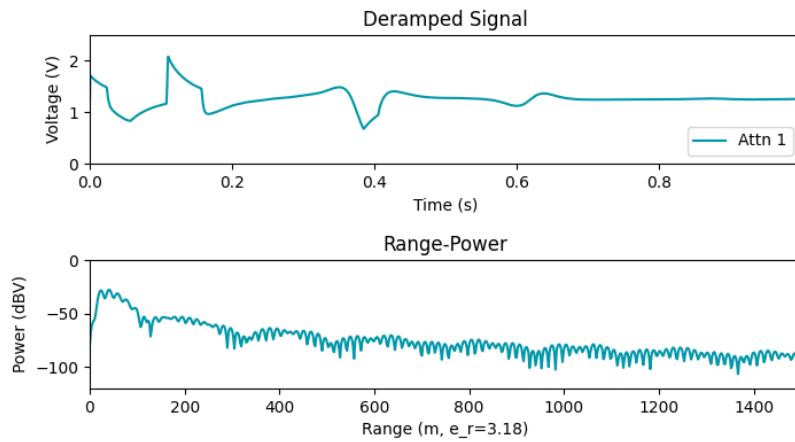
Time	2022-01-04 08:40:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.649 V

Filename: DATA2022-01-04-0845.DAT



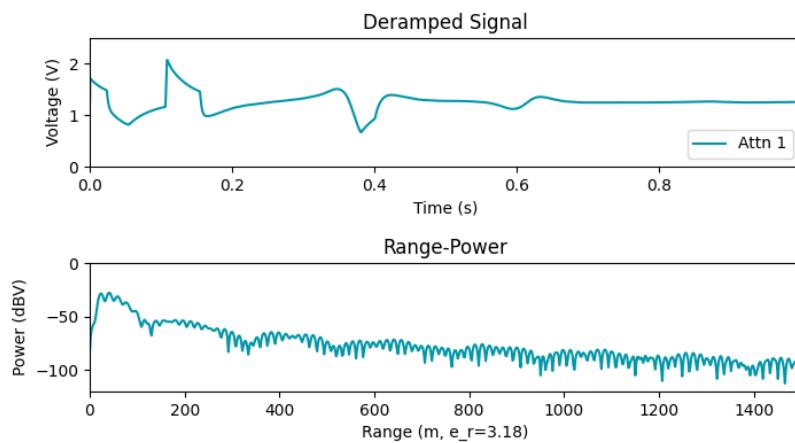
Time	2022-01-04 08:45:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.633 V

Filename: DATA2022-01-04-0850.DAT



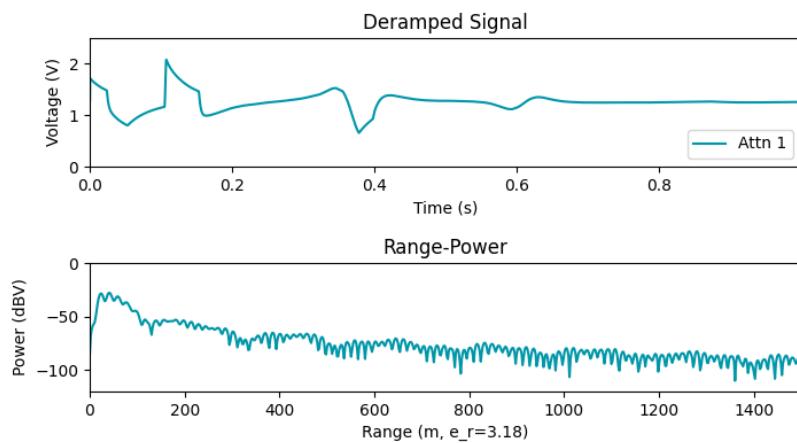
Time	2022-01-04 08:50:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.621 V

Filename: DATA2022-01-04-0855.DAT



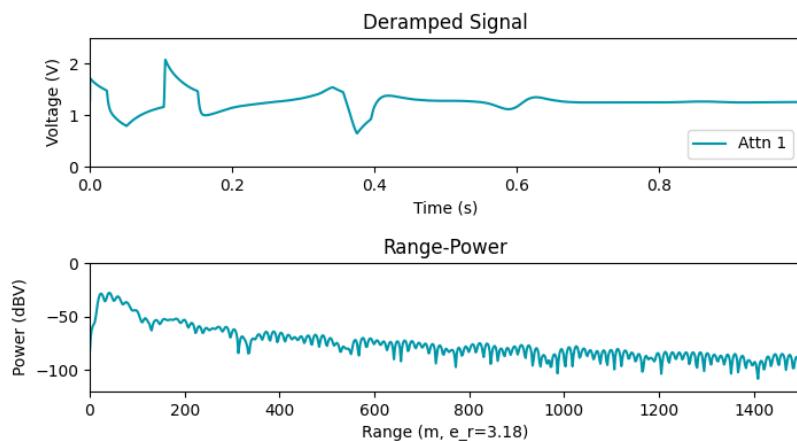
Time	2022-01-04 08:55:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.609 V

Filename: DATA2022-01-04-0900.DAT



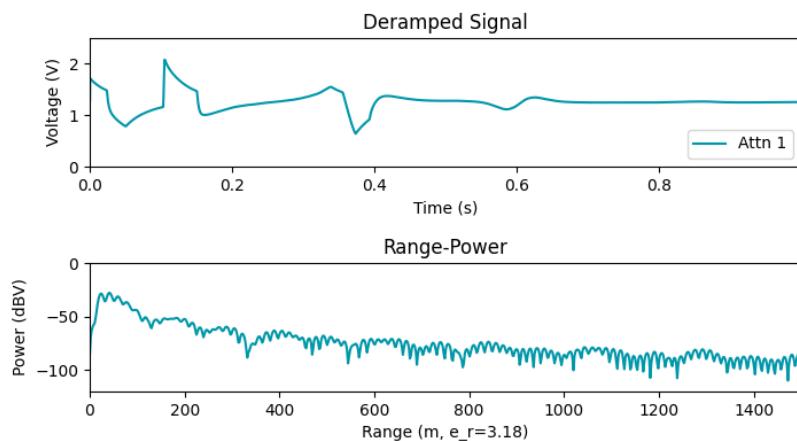
Time	2022-01-04 09:00:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.605 V

Filename: DATA2022-01-04-0905.DAT



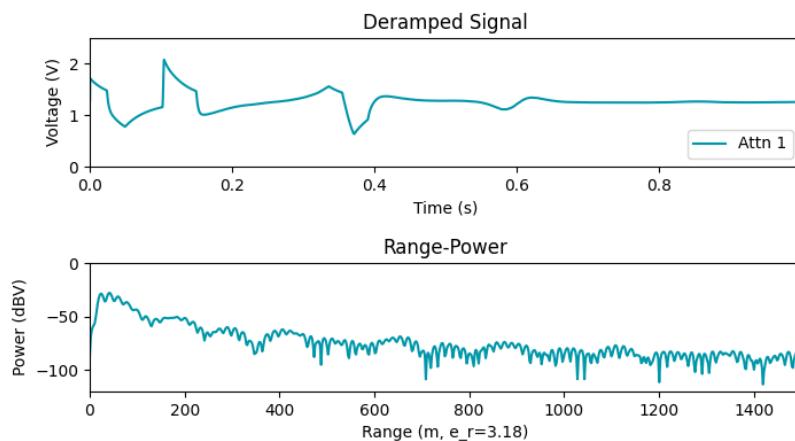
Time	2022-01-04 09:05:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.605 V

Filename: DATA2022-01-04-0910.DAT



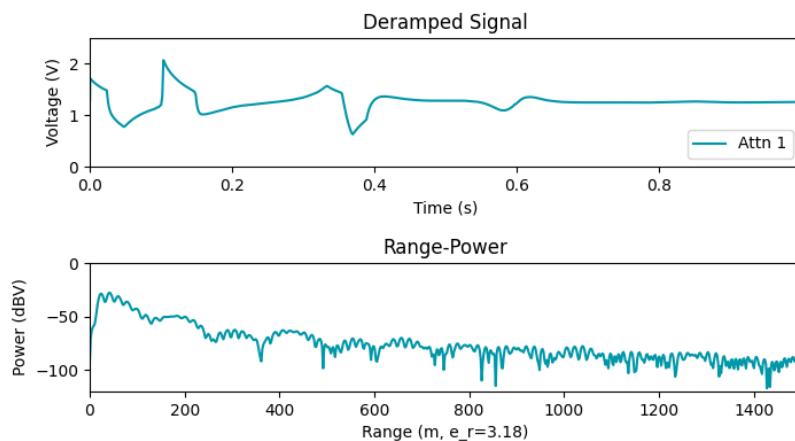
Time	2022-01-04 09:10:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.597 V

Filename: DATA2022-01-04-0915.DAT



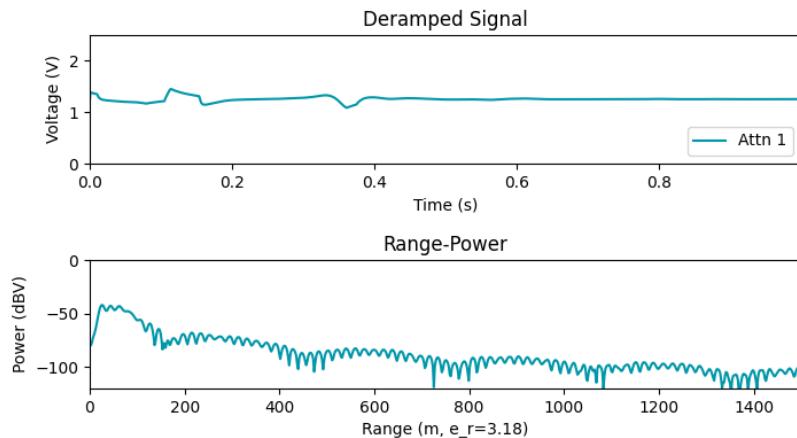
Time	2022-01-04 09:15:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.597 V

Filename: DATA2022-01-04-0920.DAT



Time	2022-01-04 09:20:20.000
Location	Groundling Line Camp,-71.7244400,-08.59241450,132m Elevation
Comments	Averaging every 5 minutes every 1 hours.
AF Gain	-4
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	60
Power Code	127
Battery Voltage	12.592 V

Filename: 2022-01-04_110118.dat



Time 2022-01-04 11:01:32.000

Location Groundling Line Camp

Comments No comments noted.

AF Gain -14

RF Attenuation 30

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

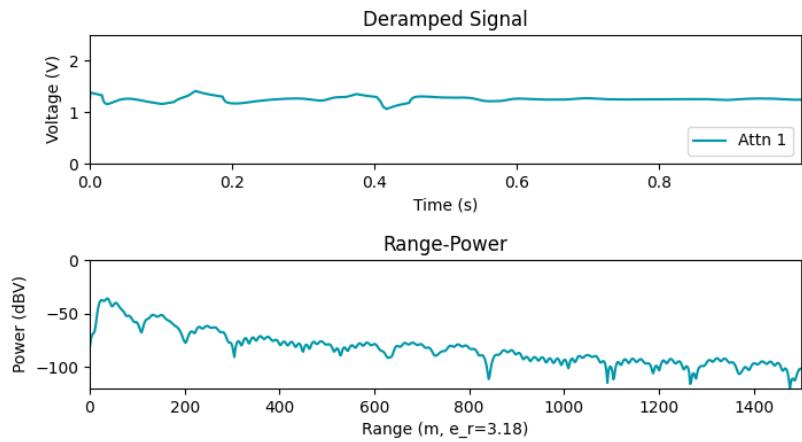
N. Attenuators 1

N. Sub Bursts 40

Power Code 127

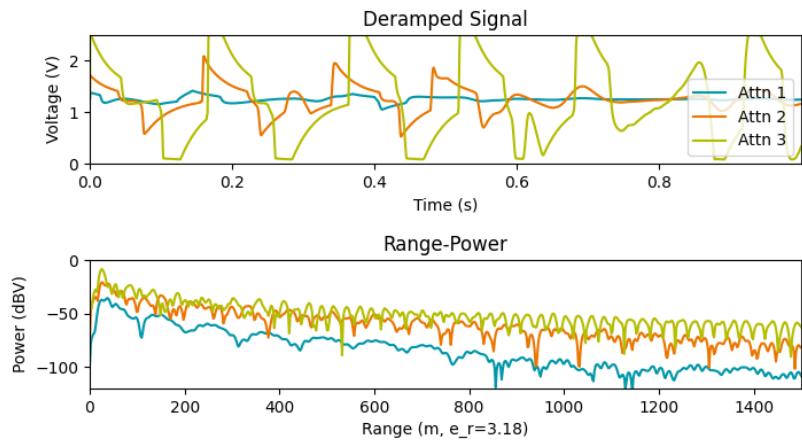
Battery Voltage 12.427 V

Filename: 2022-01-04_133425.dat



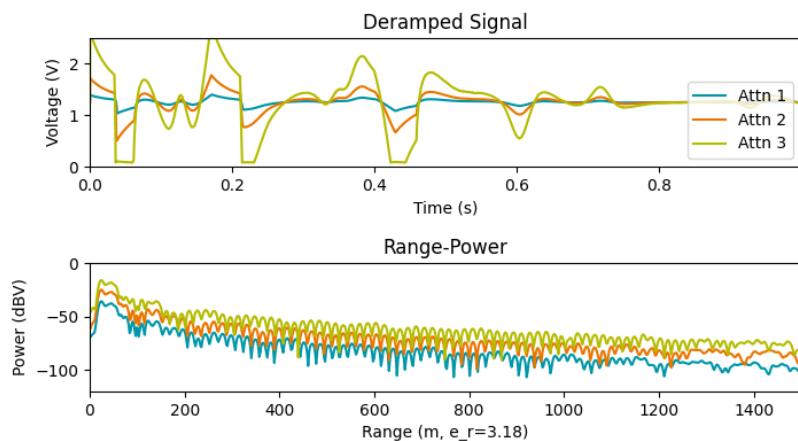
Time	2022-01-04 13:34:59.000
Location	Groundling Line Camp
Comments	20dB Tx attenuation. Sled moved by 15m from position. Mount antennas on tractor tyres.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.371 V

Filename: 2022-01-04_133729.dat



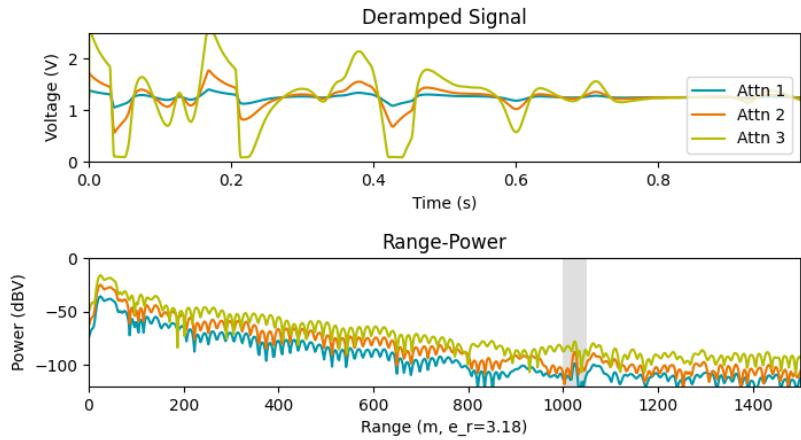
Time	2022-01-04 13:37:59.000
Location	Groundling Line Camp
Comments	20dB Tx attenuation. Sled moved by 15m from position. Mount antennas on tractor tyres.
AF Gain	-14,-4,6
RF Attenuation	30,20,10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.355 V

Filename: 2022-01-04_142639.dat



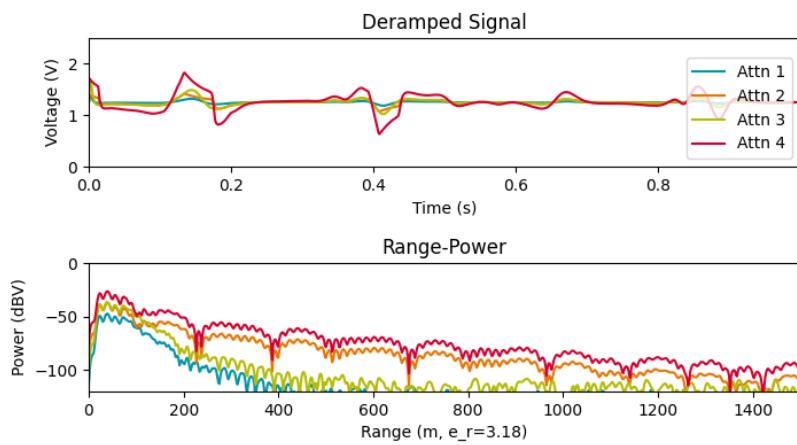
Time	2022-01-04 14:27:09.000
Location	Groundling Line Camp
Comments	20dB Tx attenuation. Sled moved by 30m from last position. Mount antennas on tractor tyres.
AF Gain	-14,-4,6
RF Attenuation	30,30,30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.246 V

Filename: 2022-01-04_142723.dat



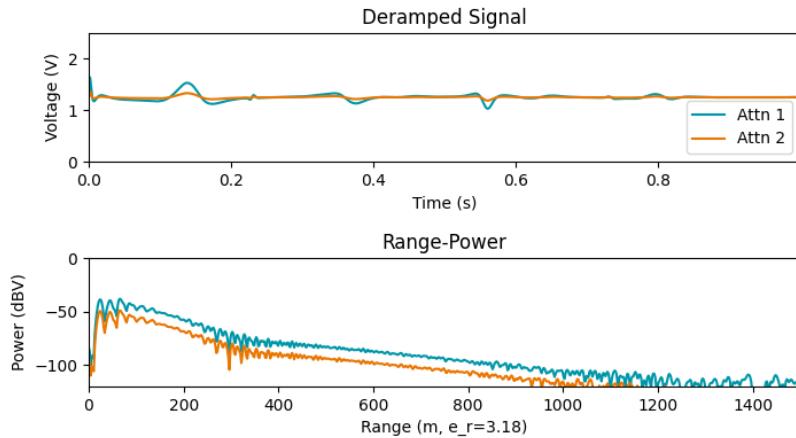
Time	2022-01-04 14:27:35.000
Location	Groundling Line Camp
Comments	20dB Tx attenuation. Sled moved back to original position of the morning. Tyres removed. Power code reset to 127.
AF Gain	-14,-4,6
RF Attenuation	30,30,30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.218 V

Filename: 2022-01-04_153231.dat



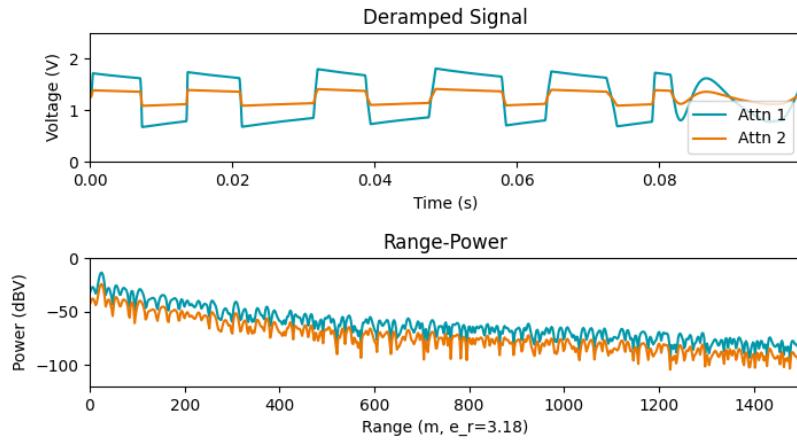
Time	2022-01-04 15:33:31.000
Location	Groundling Line Camp
Comments	20dB Tx attenuation. Sled moved back to original position of the morning. Tyres removed. Power code reset to 127.
AF Gain	-14,-14,-4,-4
RF Attenuation	30,20,30,20
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.198 V

Filename: 2022-01-05_113341.dat



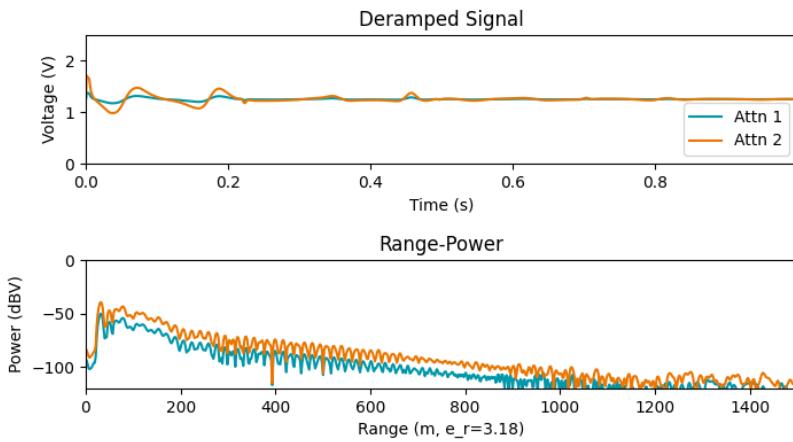
Time	2022-01-05 11:34:36.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 10dB Tx. Antenna separation 20m still (phase-centres)?
AF Gain	-4,-14
RF Attenuation	30,30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	2
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.468 V

Filename: 2022-01-05_121151.dat



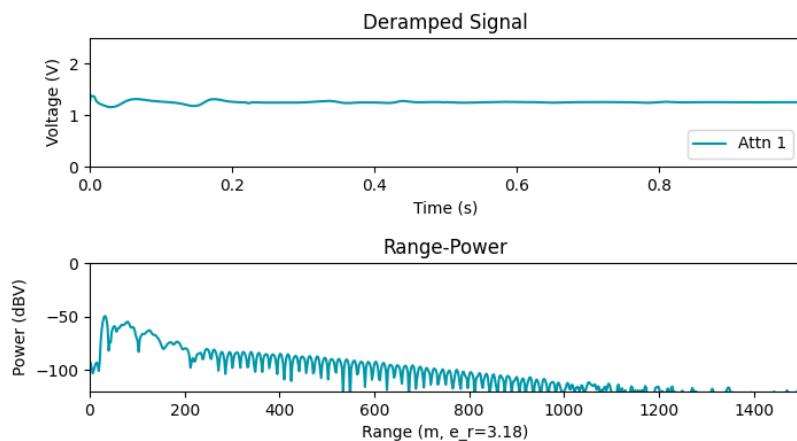
Time	2022-01-05 12:12:33.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 10dB Tx. Antenna separation 20m still (phase-centres)? Reduced period shows clipping again is a transient effect?
AF Gain	-4,-14
RF Attenuation	30,30
Period	0.100 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	2
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.460 V

Filename: 2022-01-05_122713.dat



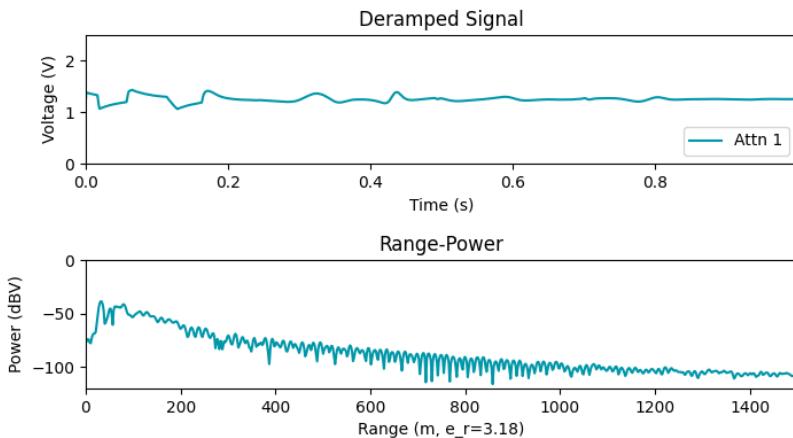
Time	2022-01-05 12:28:07.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 10dB Tx. Increase Tx cable to 25m and separate antennas to maximum length (35m?). Reset period tot 1s.
AF Gain	-14,-4
RF Attenuation	30,30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	2
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.427 V

Filename: 2022-01-05_123749.dat



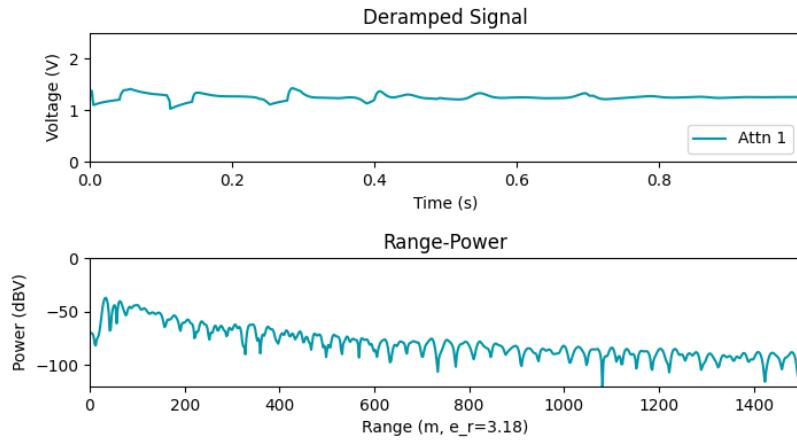
Time	2022-01-05 12:38:03.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 10dB Tx. Increase Tx cable to 25m and separate antennas to maximum length (35m?). Repeat of previous.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.419 V

Filename: 2022-01-05_124357.dat



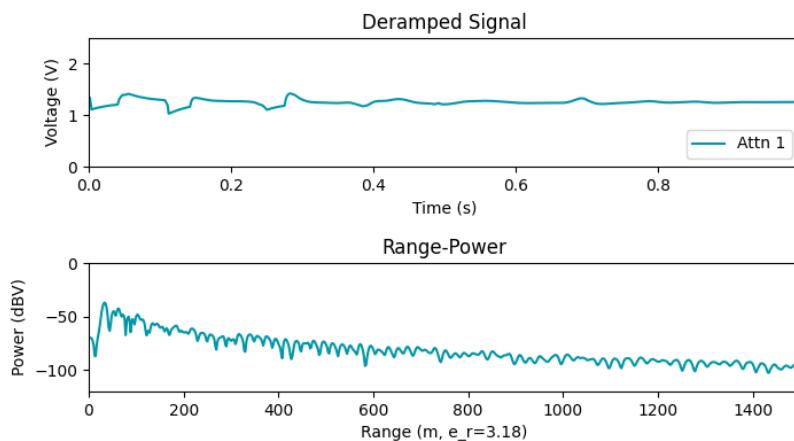
Time	2022-01-05 12:46:01.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m and separate antennas to maximum length (35m?). Repeat of previous. Possible bed signal?
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.411 V

Filename: 2022-01-05_140022.dat



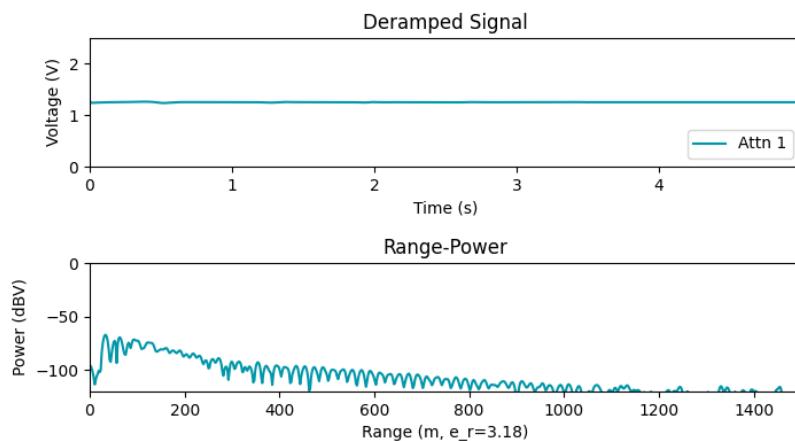
Time	2022-01-05 14:00:42.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m and separate antennas to maximum length (35m?). Repeat of previous after lunch. PulseEKKO skiddoo at end of line of profile (maybe 50m away - clipping in RF stage?)
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.262 V

Filename: 2022-01-05_141217.dat



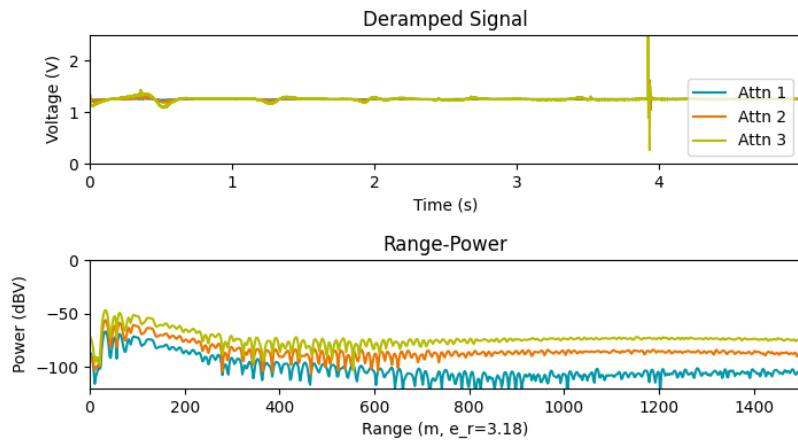
Time	2022-01-05 14:13:12.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m and separate antennas to maximum length (35m?). Repeat of previous after lunch. Skiddoo moved to within camp and repeated.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.359 V

Filename: 2022-01-05_142157.dat



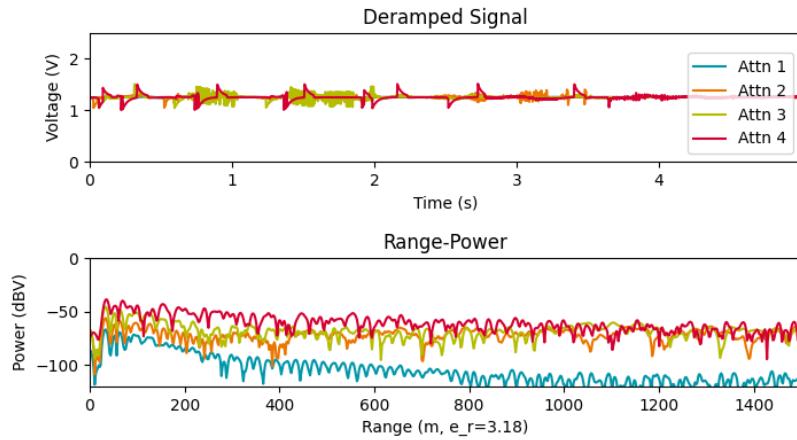
Time	2022-01-05 14:22:24.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m and separate antennas to maximum length (35m?). Try longer duration (5s), again base possible to see, maybe...
AF Gain	-14
RF Attenuation	30
Period	5.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	8
Power Code	127
Battery Voltage	12.347 V

Filename: 2022-01-05_142609.dat



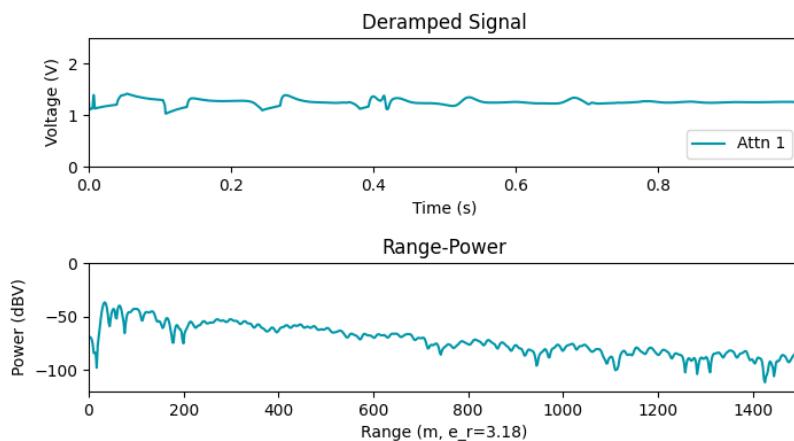
Time	2022-01-05 14:26:43.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m and separate antennas to maximum length (35m?). Should have used more subbursts.
AF Gain	-14,-4,6
RF Attenuation	30,30,30
Period	5.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.339 V

Filename: 2022-01-05_142942.dat



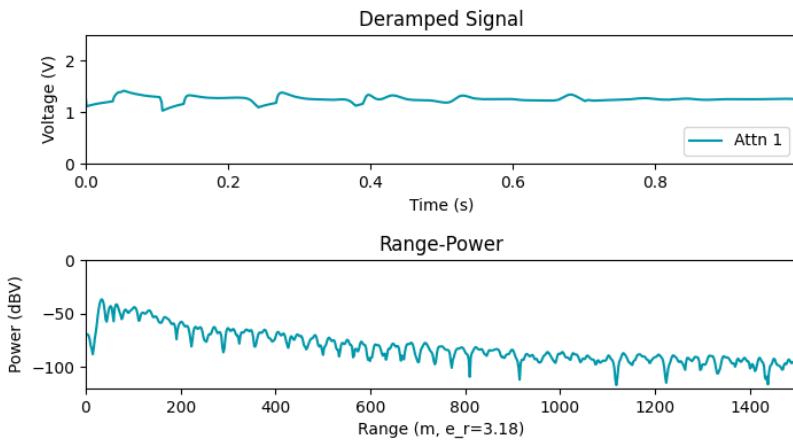
Time	2022-01-05 14:30:53.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m and separate antennas to maximum length (35m?). High frequency noise evident in signal - radio operation? Later note that skiddo is nearby? Could be PulseEKKO?
AF Gain	-14,-14,-14,-14
RF Attenuation	30,20,10,0
Period	5.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	4
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.335 V

Filename: 2022-01-05_145817.dat



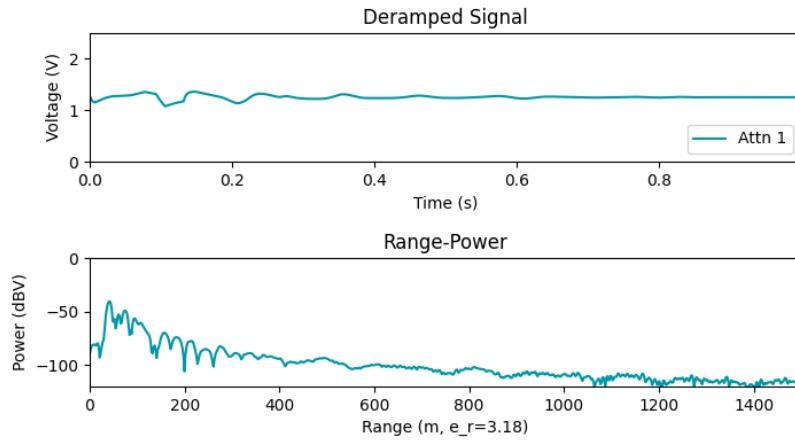
Time	2022-01-05 14:58:45.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Reset config to 1s. High frequency noise disappears. Skiddoo moving nearby and cable in middle of antennas.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.282 V

Filename: 2022-01-05_150400.dat



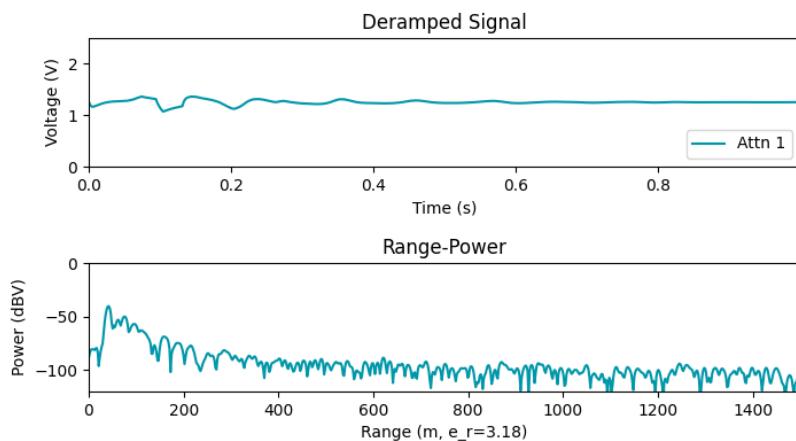
Time	2022-01-05 15:04:25.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Reset config to 1s. High frequency noise disappears. Skiddoo back in camp and cable moved.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.274 V

Filename: 2022-01-05_152208.dat



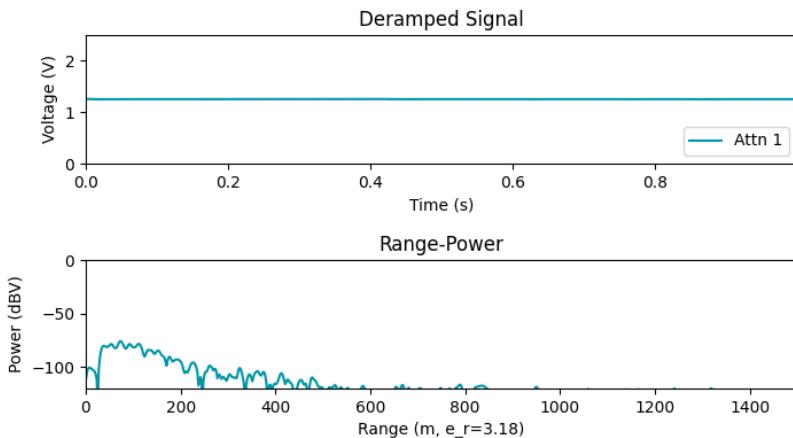
Time	2022-01-05 15:23:23.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Reset config to 1s. Assembly moved further from camp. Rx connection loose.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.234 V

Filename: 2022-01-05_153218.dat



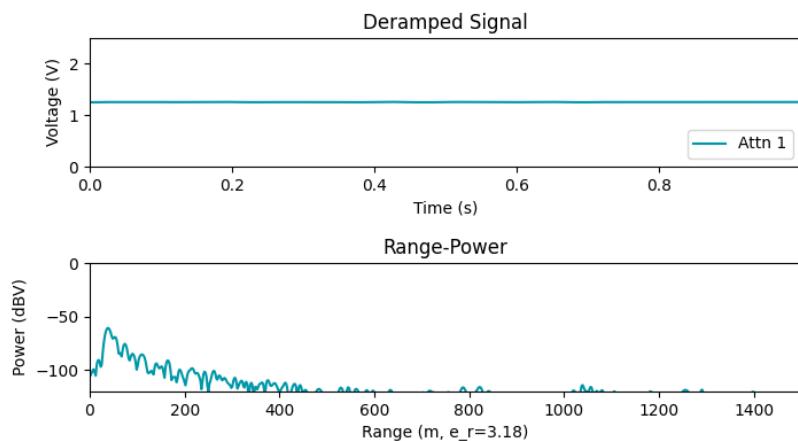
Time	2022-01-05 15:33:05.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Reset config to 1s. Assembly moved further from camp. Rx connection replaced.
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.218 V

Filename: 2022-01-05_155959.dat



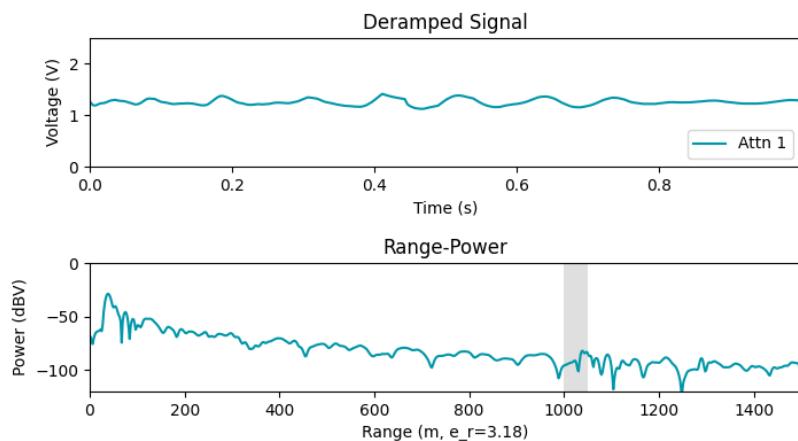
Time	2022-01-05 16:00:36.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Checking cabling - battery voltage fallen to 12.1?
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.178 V

Filename: 2022-01-05_163611.dat



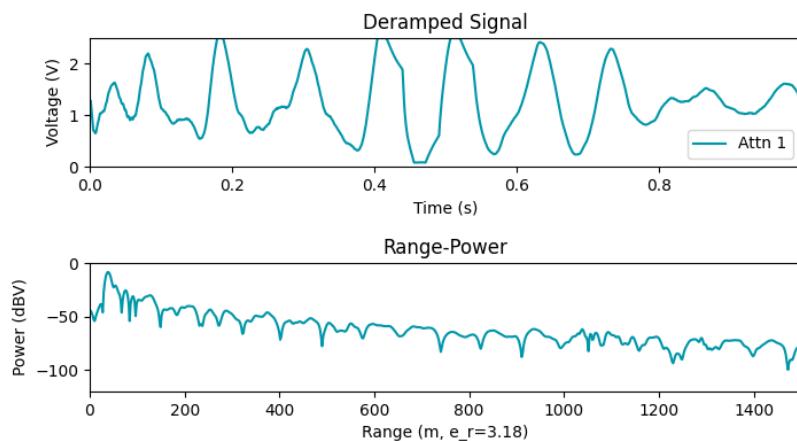
Time	2022-01-05 16:36:52.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Maybe bed possible to see here?
AF Gain	-14
RF Attenuation	30
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.286 V

Filename: 2022-01-05_164353.dat



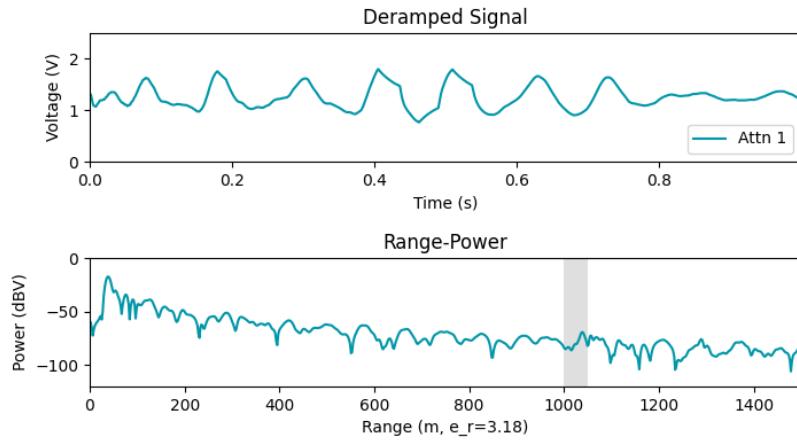
Time	2022-01-05 16:44:58.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Antennas rotated broadside. Bed clearer (higher SNR)?
AF Gain	-14
RF Attenuation	0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.258 V

Filename: 2022-01-05_164908.dat



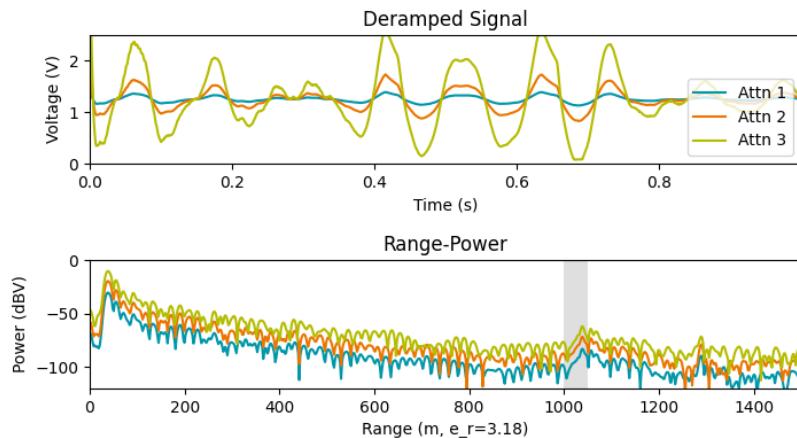
Time	2022-01-05 16:49:21.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Antennas rotated broadside. Clipping in Tx with increased AF gain.
AF Gain	6
RF Attenuation	0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.254 V

Filename: 2022-01-05_165236.dat



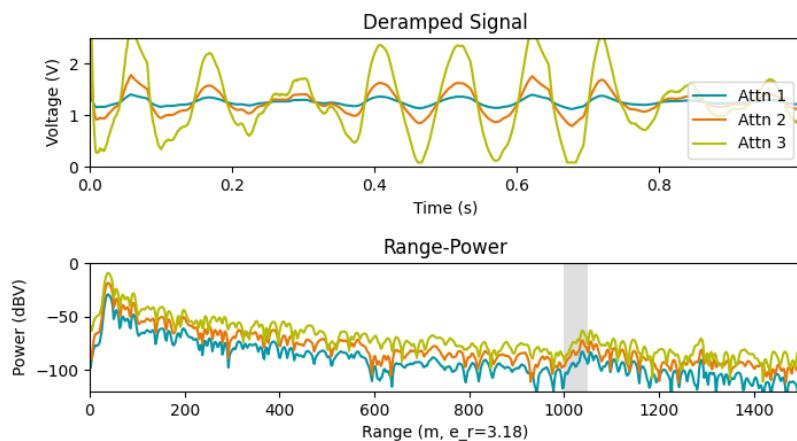
Time	2022-01-05 16:53:50.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Antennas rotated broadside. Bed clearer (higher SNR)? Clipping in Tx with increased AF gain - at earlier stages in RF chain?
AF Gain	-4
RF Attenuation	0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.246 V

Filename: 2022-01-05_165821.dat



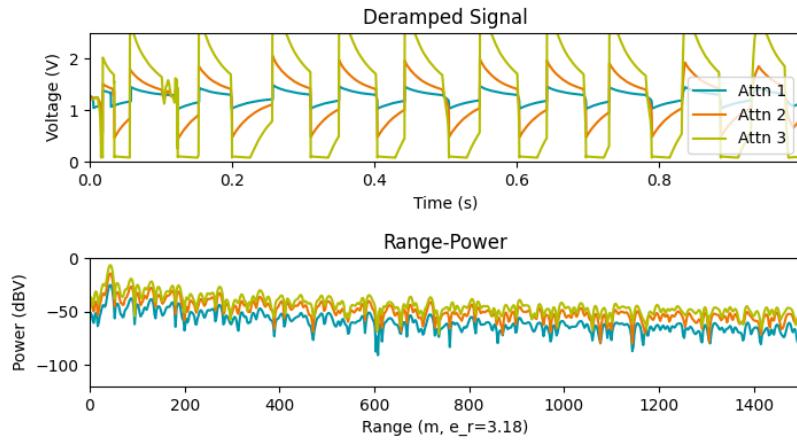
Time	2022-01-05 16:59:32.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Antennas rotated broadside. Bed clearer (higher SNR)? Some clipping in signal. Cabled moved from last measurement - ringing?
AF Gain	-14,-4,6
RF Attenuation	0,0,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.246 V

Filename: 2022-01-05_171029.dat



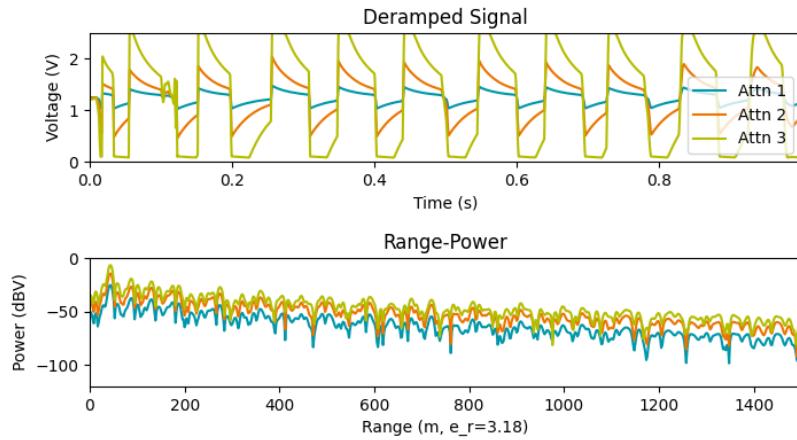
Time	2022-01-05 17:10:51.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Increase Tx cable to 25m (Rx 5m) and separate antennas to maximum length (30m). Antennas rotated broadside. Bed clearer (higher SNR)? Some clipping in signal. Repeated as before - ringing reduced?
AF Gain	-14,-4,6
RF Attenuation	0,0,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.238 V

Filename: 2022-01-05_174143.dat



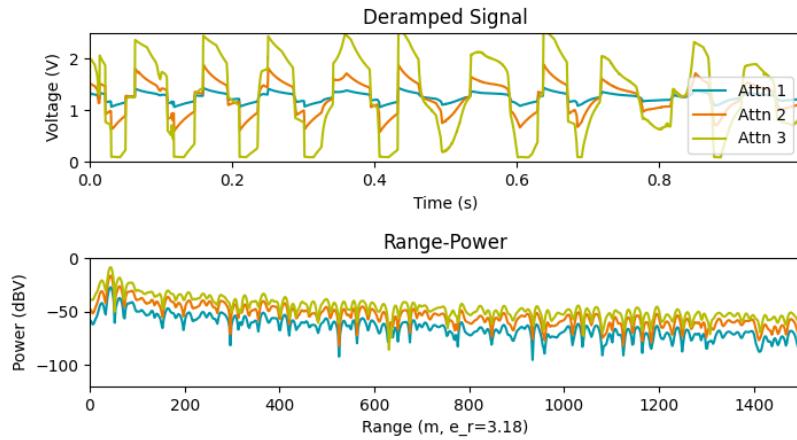
Time	2022-01-05 17:42:41.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (30m). Antennas return to endfire. Clipping across all AF settings.
AF Gain	-14,-4,6
RF Attenuation	0,0,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	1
Power Code	127
Battery Voltage	12.254 V

Filename: 2022-01-05_174254.dat



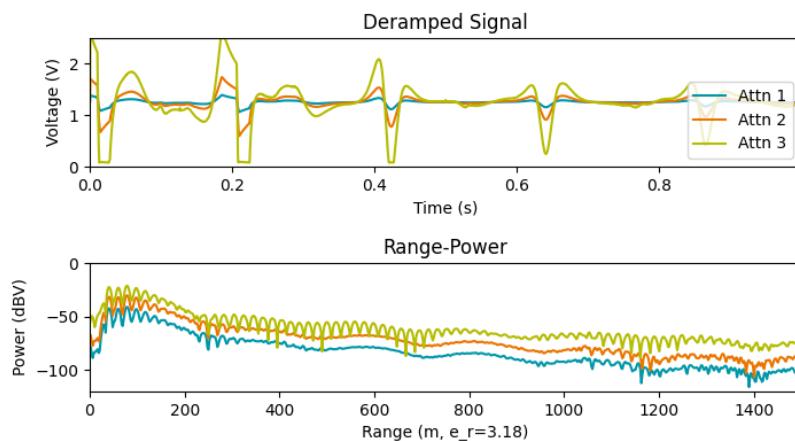
Time	2022-01-05 17:43:31.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (30m). Antennas return to endfire. Clipping across all AF settings. No clear basal return.
AF Gain	-14,-4,6
RF Attenuation	0,0,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.238 V

Filename: 2022-01-05_175045.dat



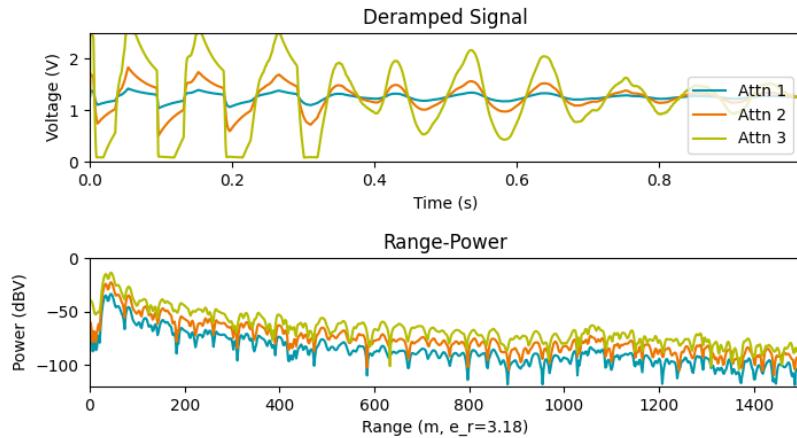
Time	2022-01-05 17:55:13.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (30m). Antennas return to endfire. Clipping across all AF settings. No clear basal return.
AF Gain	-14,-4,6
RF Attenuation	0,0,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.230 V

Filename: 2022-01-05_184909.dat



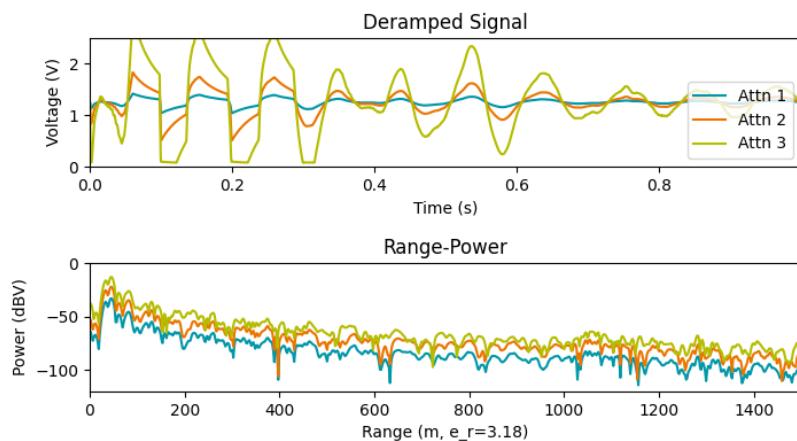
Time	2022-01-05 18:51:05.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside. Reduced clipping through signal.
AF Gain	-14,-4,6
RF Attenuation	0,0,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.218 V

Filename: 2022-01-05_190323.dat



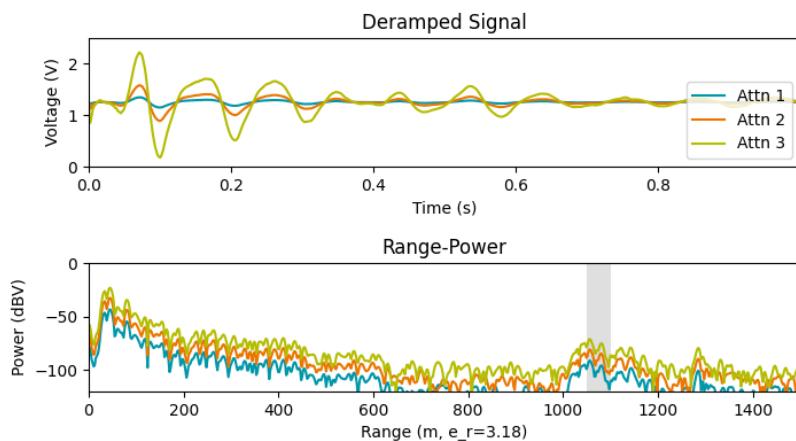
Time	2022-01-05 19:03:59.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside. Repeat as previous - base visible again?
AF Gain	-14,-4,6
RF Attenuation	0,0,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.218 V

Filename: 2022-01-05_234755.dat



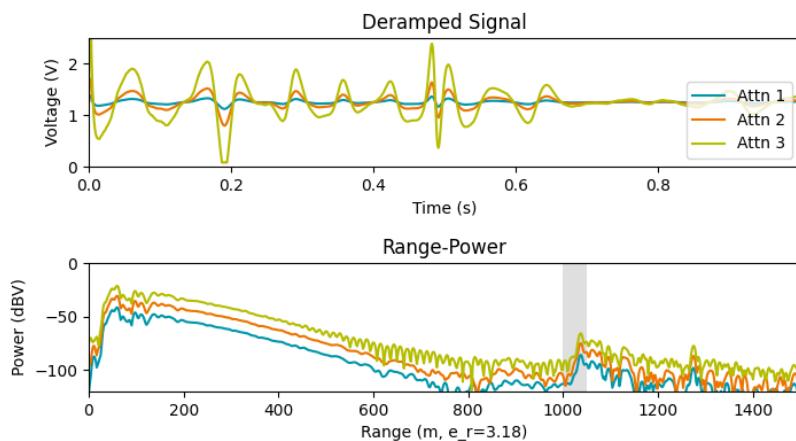
Time	2022-01-05 23:48:28.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside. Repeat as previous - base visible again? Generator still on?
AF Gain	-14,-4,6
RF Attenuation	0,0,0
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.669 V

Filename: 2022-01-05_235346.dat



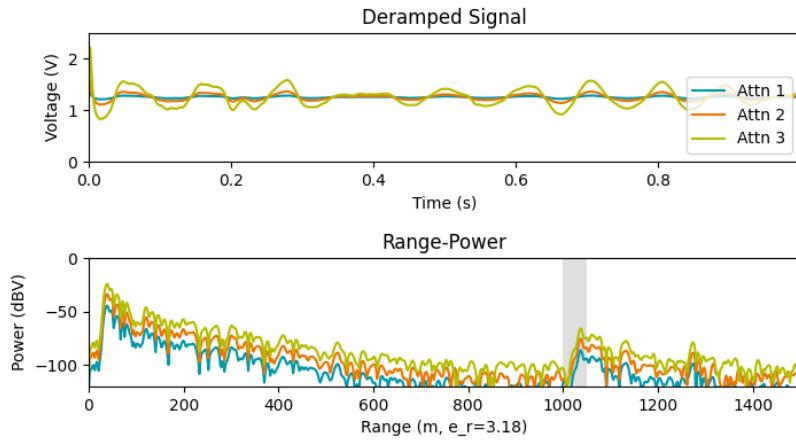
Time	2022-01-05 23:53:59.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside. Repeat as previous - base visible again? Generator turned off.
AF Gain	-14,-4,6
RF Attenuation	10,10,10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.572 V

Filename: 2022-01-06_142359.dat



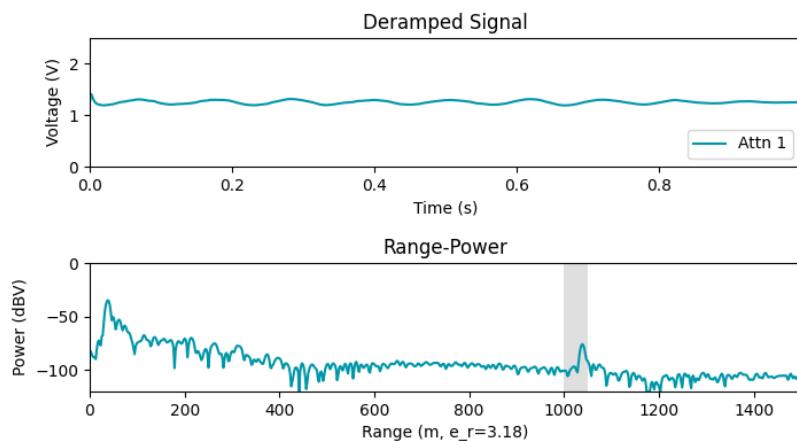
Time	2022-01-06 14:24:52.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside. Reconfigured to be towed in broadside configuration. Basal return clear.
AF Gain	-14,-4,6
RF Attenuation	10,10,10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.613 V

Filename: 2022-01-06_154601.dat



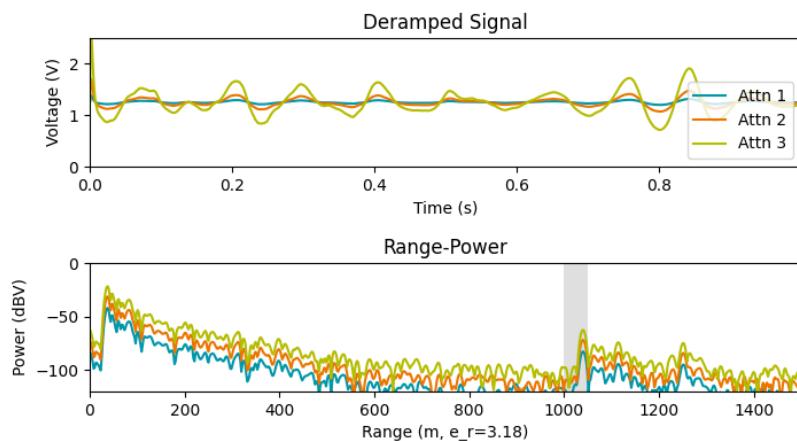
Time	2022-01-06 15:47:50.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside. Reconfigured to be towed in broadside configuration. Basal return clear.
AF Gain	-14,-4,6
RF Attenuation	10,10,10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.431 V

Filename: 2022-01-06_155137.dat



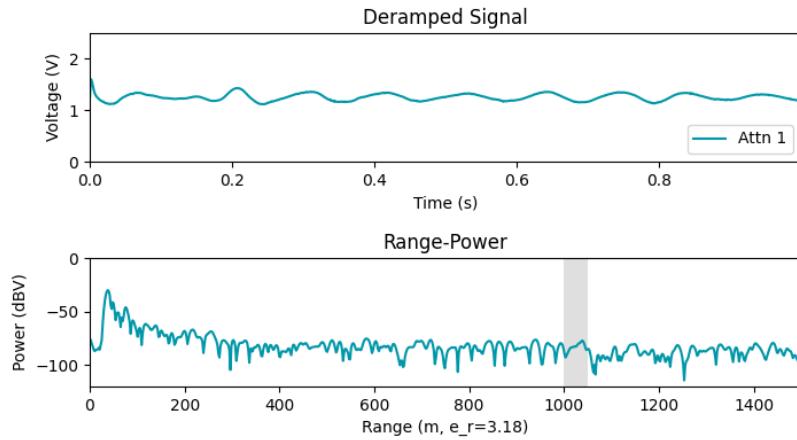
Time	2022-01-06 15:54:01.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside. Reconfigured to be towed in broadside configuration. Basal return clear. Measurement with high number of subbursts.
AF Gain	-4
RF Attenuation	10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	120
Power Code	127
Battery Voltage	12.423 V

Filename: 2022-01-06_164102.dat



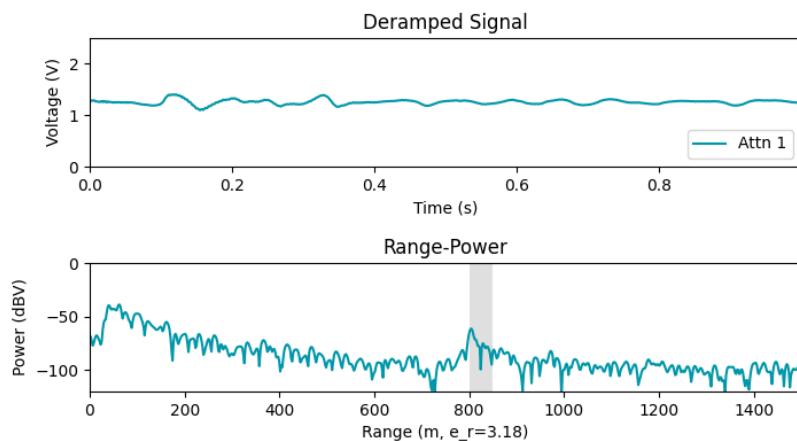
Time	2022-01-06 16:41:41.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside. Reconfigured to be towed in broadside configuration. Tx connector split and replaced. Tx/Rx distance reduced and slack added between Tx/Rx. Basal return clear.
AF Gain	-14,-4,6
RF Attenuation	10,10,10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	3
N. Sub Bursts	40
Power Code	127
Battery Voltage	12.347 V

Filename: 2022-01-06_164609.dat



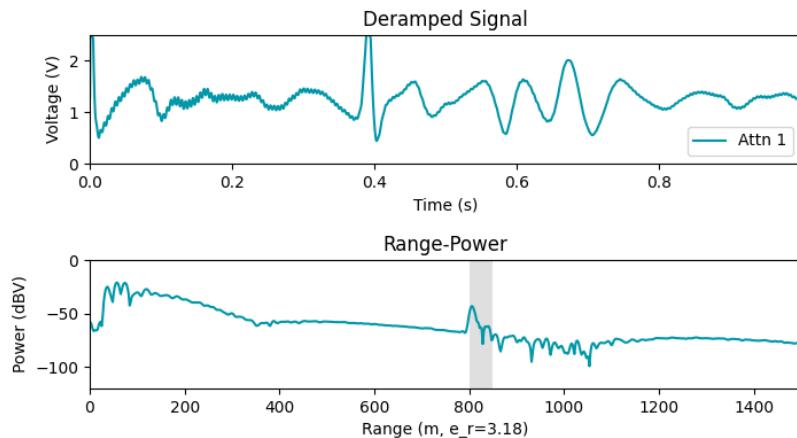
Time	2022-01-06 16:48:45.000
Location	Grounding Line Camp
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside. Reconfigured to be towed in broadside configuration. Moving survey of 80 subbursts covering approx 30m or so?
AF Gain	-4
RF Attenuation	10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	80
Power Code	127
Battery Voltage	12.363 V

Filename: 2022-01-07_171120.dat



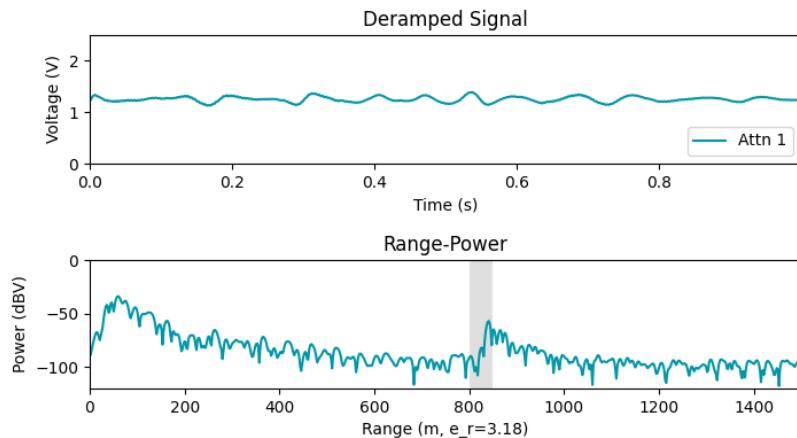
Time	2022-01-07 17:11:29.000
Location	Bulge Location
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside.
AF Gain	6
RF Attenuation	10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.306 V

Filename: 2022-01-07_180900.dat



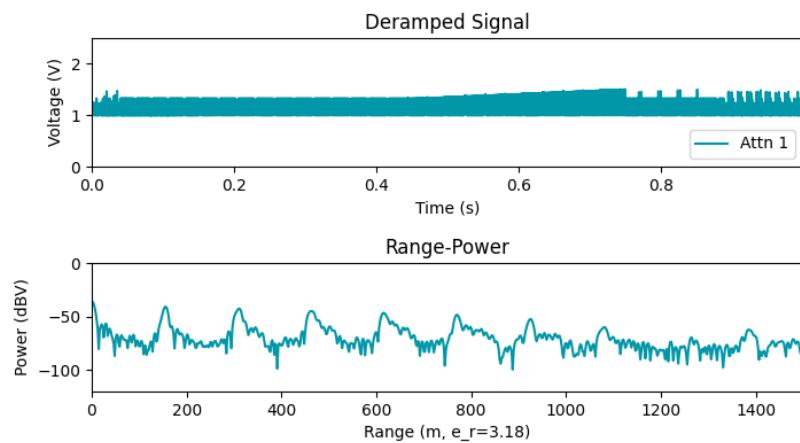
Time	2022-01-07 18:09:21.000
Location	Bulge Location
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside.
AF Gain	6
RF Attenuation	10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	20
Power Code	127
Battery Voltage	12.423 V

Filename: 2022-01-08_173538.dat



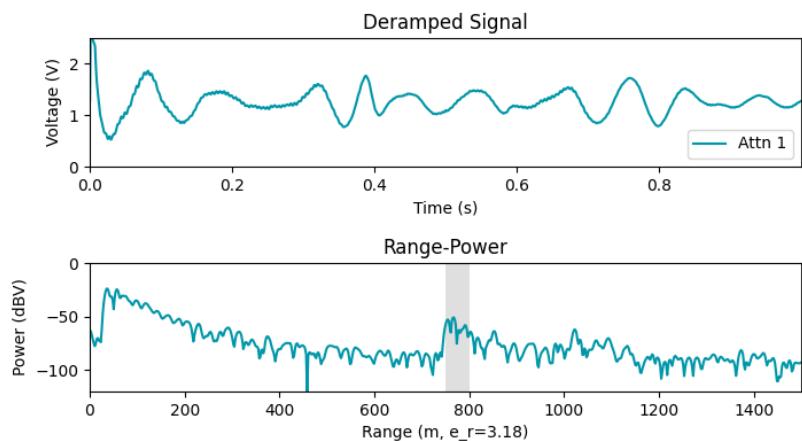
Time	2022-01-08 17:37:19.000
Location	Bulge Location
Comments	Additional attenuator 10dB Rx, 0dB Tx. Cable length Tx 25m, Rx 25m and separate antennas to maximum length (40m). Antennas broadside.
AF Gain	6
RF Attenuation	10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	10
Power Code	127
Battery Voltage	12.061 V

Filename: bursttest.dat



Time	2022-01-08 18:19:46.000
Location	Bulge Location
Comments	Need to investigate this - looks like a read or write error?
AF Gain	6
RF Attenuation	10
Period	1.000 s
Bandwidth	20000000.000 Hz to 40000000.000 Hz
N. Attenuators	1
N. Sub Bursts	5
Power Code	127
Battery Voltage	11.980 V

Filename: testburst2.dat



Time 2022-01-08 18:22:17.000

Location Bulge Location

Comments Attenuator 10dB Rx, 0dB Tx

AF Gain 6

RF Attenuation 10

Period 1.000 s

Bandwidth 20000000.000 Hz to 40000000.000 Hz

N. Attenuators 1

N. Sub Bursts 5

Power Code 127

Battery Voltage 12.065 V