

Klog 23/3/5

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How to see the tables.

- From the timescale results, I summarised the function form and offset of the error signal at trans power Max.
- The trans power and refl power were also summarised in rough values.
- I commented in color frames on what I noticed.

	11th	12th	14th	17th	17 th 2
QPD1 17MHz	Offset	Offset	✗	✗	✗
QPD1 45MHz	Offset	Offset	✗	✗	✗
QPD2 17MHz	Offset *1)	Offset	✓	✓	✓
QPD2 45MHz	✓ *2) Same result	✓	✓	✓	✓
TRANS POWER (Max)	1	1	1	1	1
REFL POWER	0.16	0.15	0.046	0.046	0.046

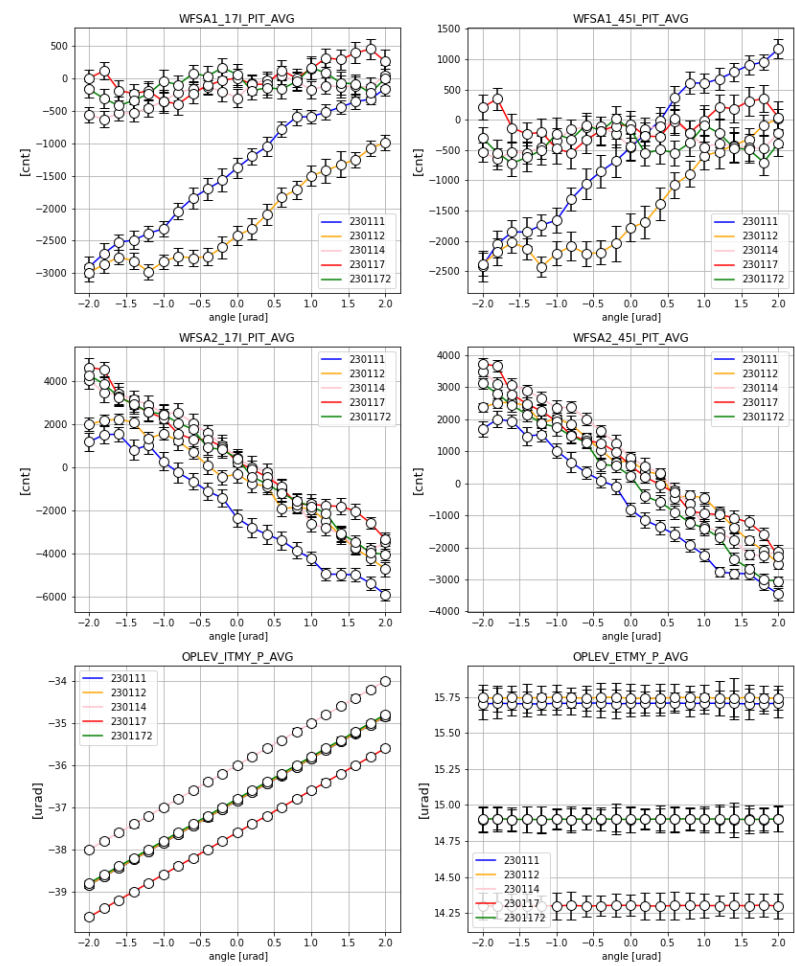
ITMY PIT

*1) The amount of offset for each is unknown from the time scale.
 *2) It means that error signals are same (consistent) results in left figures ([klog23600](#))

	11th	12th	14th	17th	17th 2
QPD1 17MHz	Offset	Offset	✗	✗	✗
QPD1 45MHz	Offset	Offset	✗	✗	✗
QPD2 17MHz	Offset *1)	Offset	✓	✓	✓
QPD2 45MHz	✓	✓	✓	✓	✓
TRANS POWER (Max)	1	1	1	1	1
REFL POWER	0.16	0.15	0.046	0.046	0.046

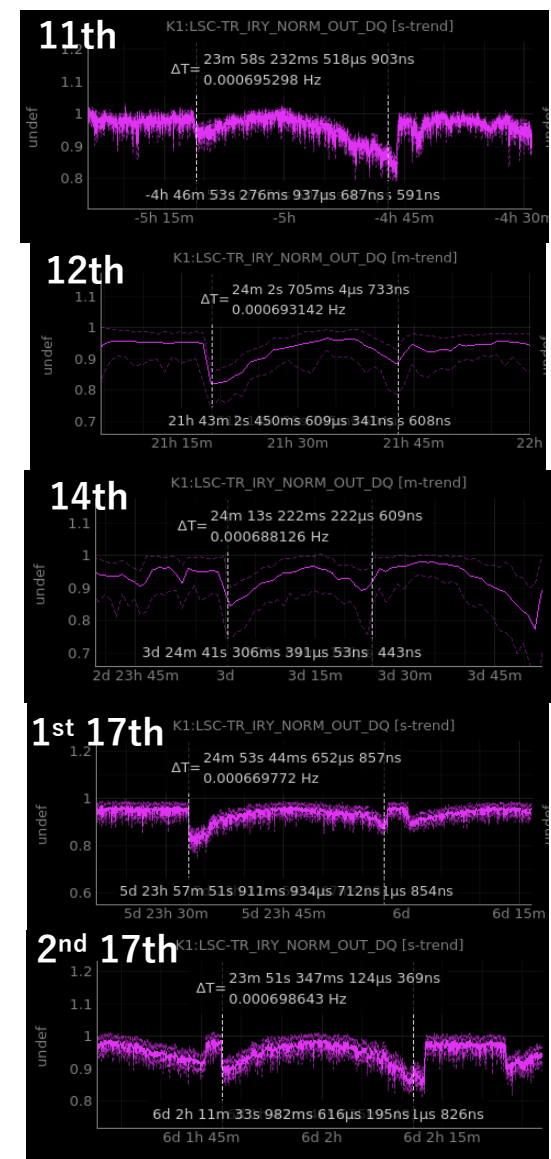
*2) Same result

Clipping?



[klog23600](#)

Trans power
(Two white lines range)



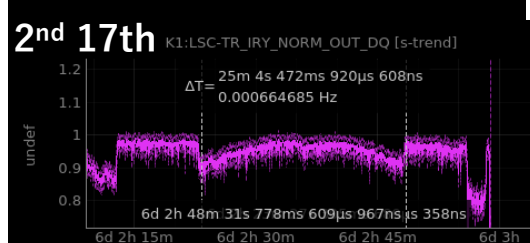
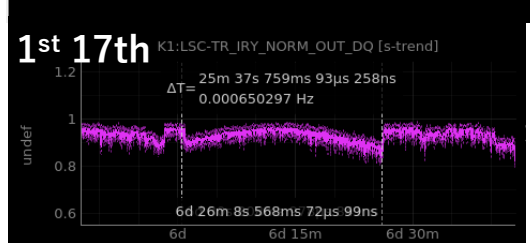
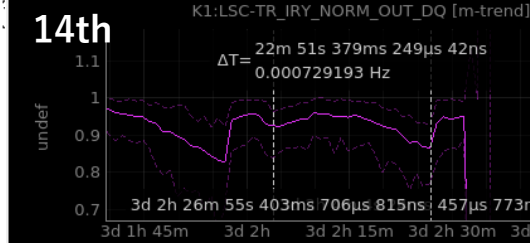
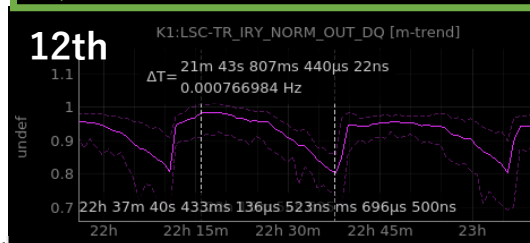
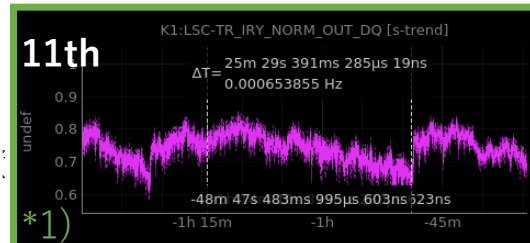
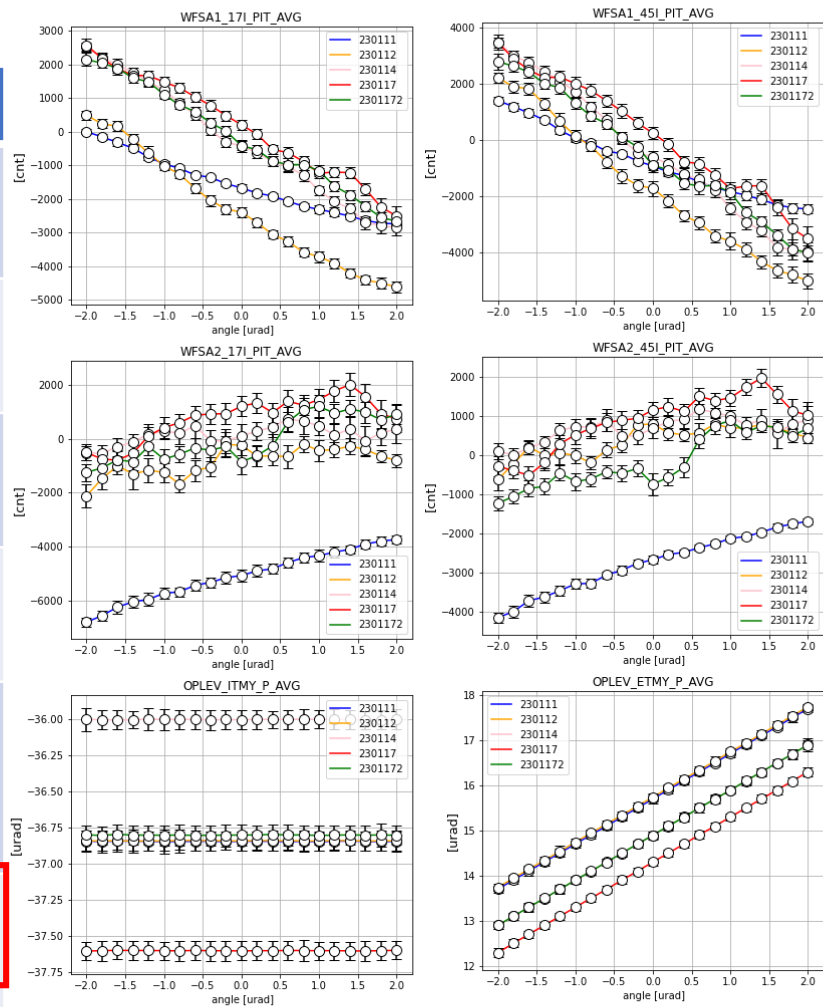
- ✓ ...linear function and NO offset when trans power is Max
- Offset ... linear function and some offset when trans power is Max
- ✗ ... NO linear function when transpower is Max

ETMY PIT

*1) Unstable trans power

Trans power
(Two white lines range)

	11th	12th	14th	17th	17th 2
QPD1 17MHz	Offset?	✓	✓	✓	✓
QPD1 45MHz	Offset?	Offset	✓	✓	✓
QPD2 17MHz	✗?	✗	✗	✗	✗
QPD2 45MHz	✗?	✗	✗	✗	✗
TRANS POWER (Max)	0.8 *1)	1	1	1	1
REFL POWER	1.5	1.5	0.045	0.046 Clipping?	0.046



- ✓ ...linear function and NO offset when trans power is Max
- Offset ... linear function and some offset when trans power is Max
- ✗ ... NO linear function when trans power is Max

[klog23600](#)

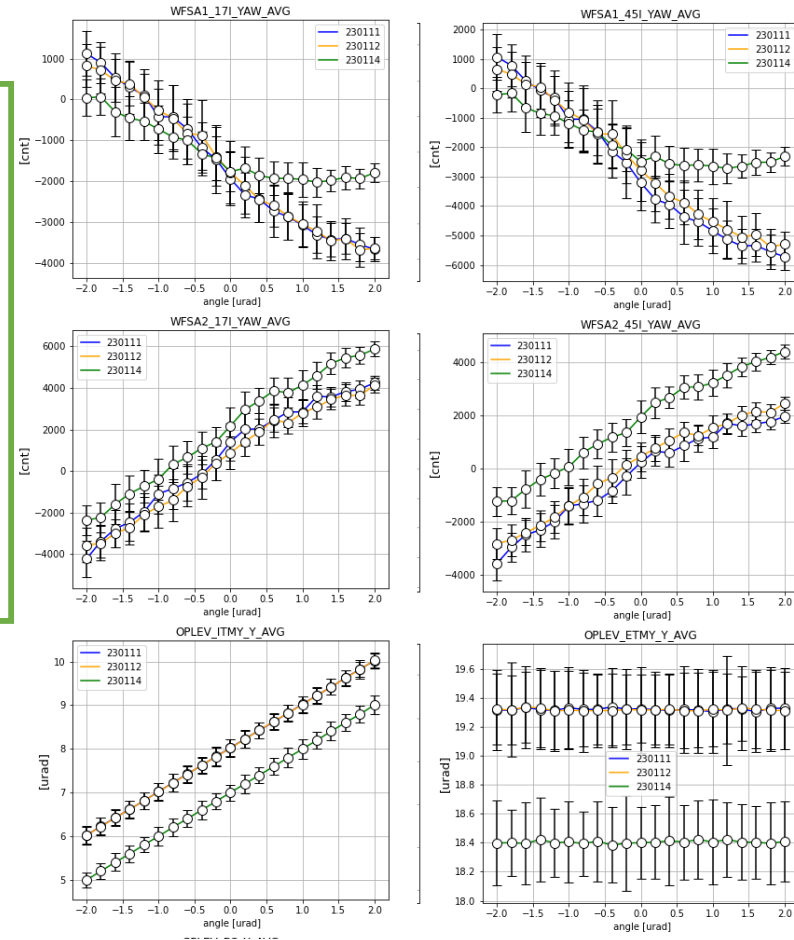
ITMY YAW

*1) They could be seen to go out of range.

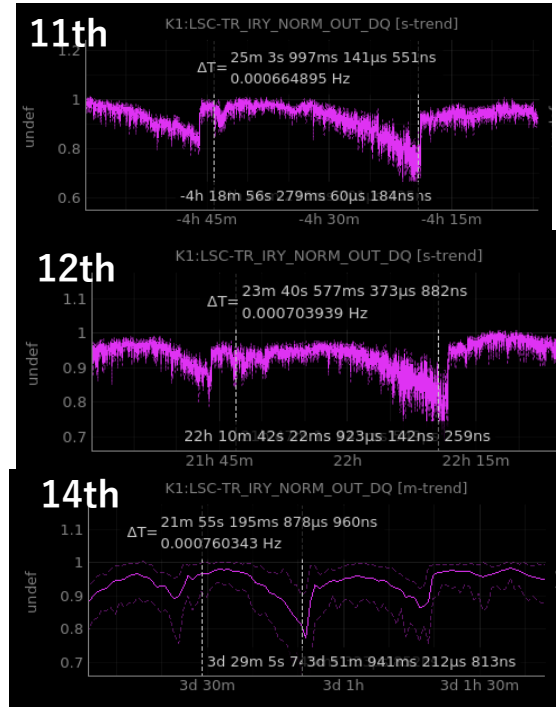
	11th	12th	14th
QPD1 17MHz	✓	✓	✗
QPD1 45MHz	✓	✓	✗
QPD2 17MHz	✓	✓	✓
QPD2 45MHz	✓	✓	✓
TRANS POWER(Max)	1	1	1
REFL POWER	1.6	1.5	0.045 Clipping?

Same result

*1)



Trans power
(Two white lines range)



[klog23569](#)

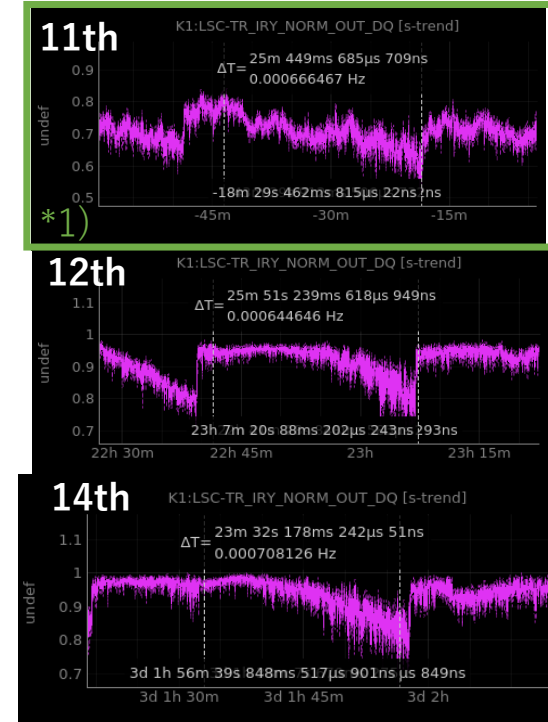
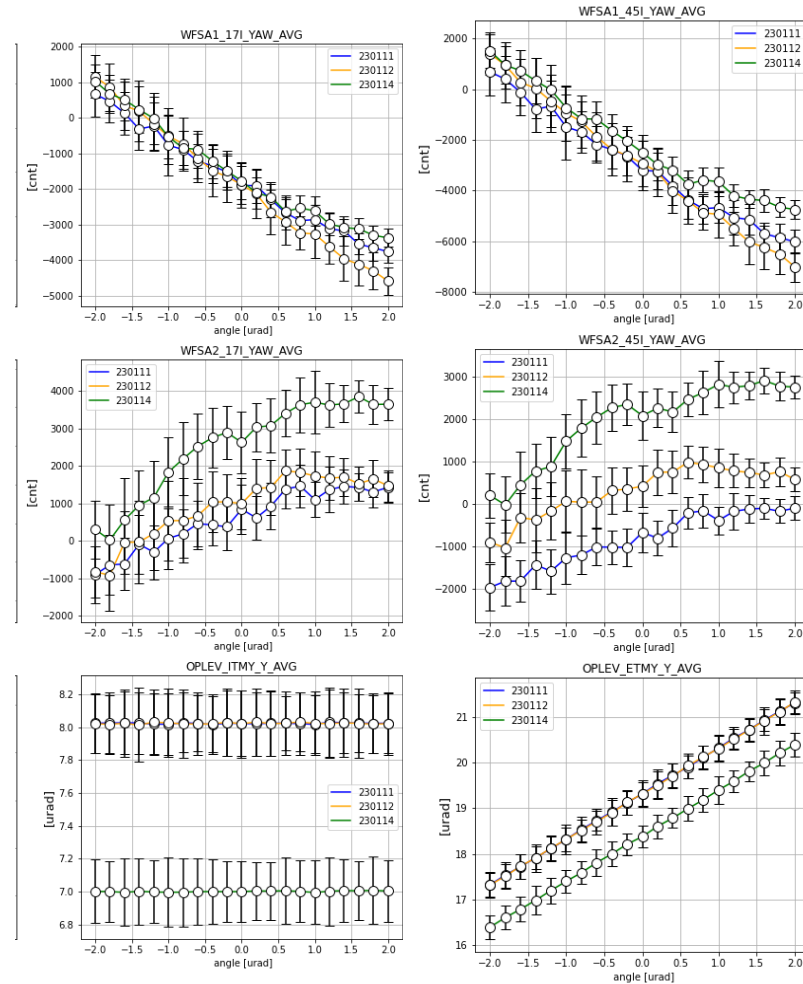
- ✓ ...linear function and NO offset when trans power is Max
- Offset ... linear function and some offset when trans power is Max
- ✗ ... NO linear function when trans power is Max

ETMY YAW

*1) Unstable trans power

Trans power
(Two white lines range)

	11th	12th	14th
QPD1 17MHz	✓	✓	✓
QPD1 45MHz	✓	✓	✓
QPD2 17MHz	✗	✗	✗
QPD2 45MHz	✗	✗	✗
TRANS POWER(Max)	0.8 *1)	0.9	1
REFL POWER	1.5	1.5	0.045 Clipping?



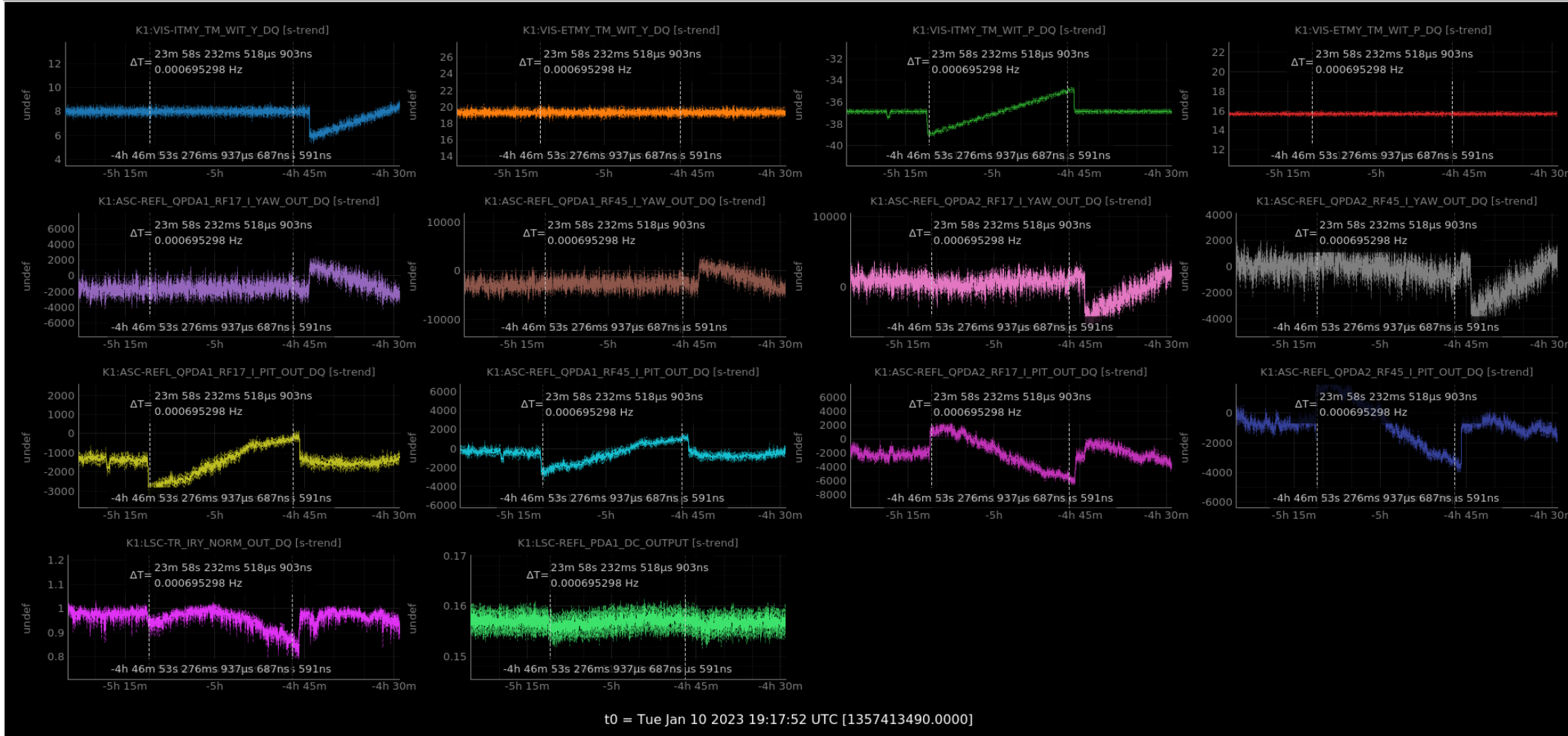
- ✓ ...linear function and NO offset when trans power is Max
- Offset ... linear function and some offset when trans power is Max
- ✗ ... NO linear function when trans power is Max

klog23569

ITMY_PIT

230111 IY_PIT

ndscope: K1:VIS-ITMY_TM_WIT_Y_DQ K1:VIS-ETMY_TM_WIT_Y_DQ K1:VIS-ITMY_TM_WIT_P_DQ K1:VIS-ETMY_TM_WIT_P_DQ PIT_OUT_DQ K1:ASC-REFL_QPDA2_RF45_I_PIT_OUT_DQ K1:LSC-TR_IRY_NORM_OUT_DQ K1:LSC-REFL_PDA1_DC_OUTPUT



start online | trend | window | range | trigger | crosshair | cursors | style | export

stop online | T cursors | Y cursors

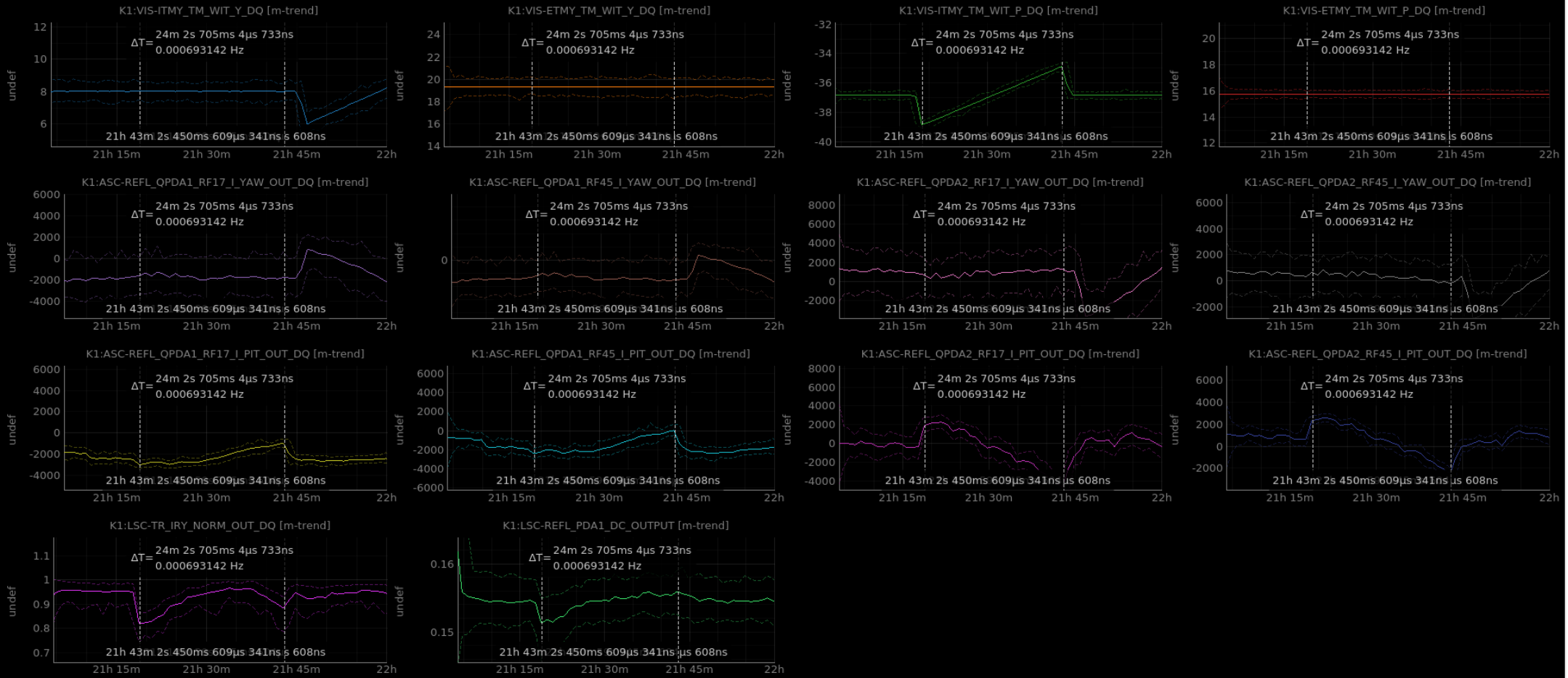
reset range | reset | 0 | reset

reset to

ndscope 0.11.4 NDS server: k1nds0:8088

230112 IY_PIT

ndscope: K1:VIS-ITMY_TM_WIT_Y_DQ K1:VIS-ETMY_TM_WIT_Y_DQ K1:VIS-ITMY_TM_WIT_P_DQ K1:VIS-ETMY_TM_WIT_P_DQ PIT_OUT_DQ K1:ASC-REFL_QPDA2_RF45_I PIT_OUT_DQ K1:LSC-TR_IRY_NORM_OUT_DQ K1:LSC-REFL_PDA1_DC_OUTPUT



t0 = Tue Jan 10 2023 19:17:52 UTC [1357413490.0000]

start online | trend | window | range | trigger | crosshair | cursors | style | export

stop online | T cursors | Y cursors

reset range | reset | 0 | reset

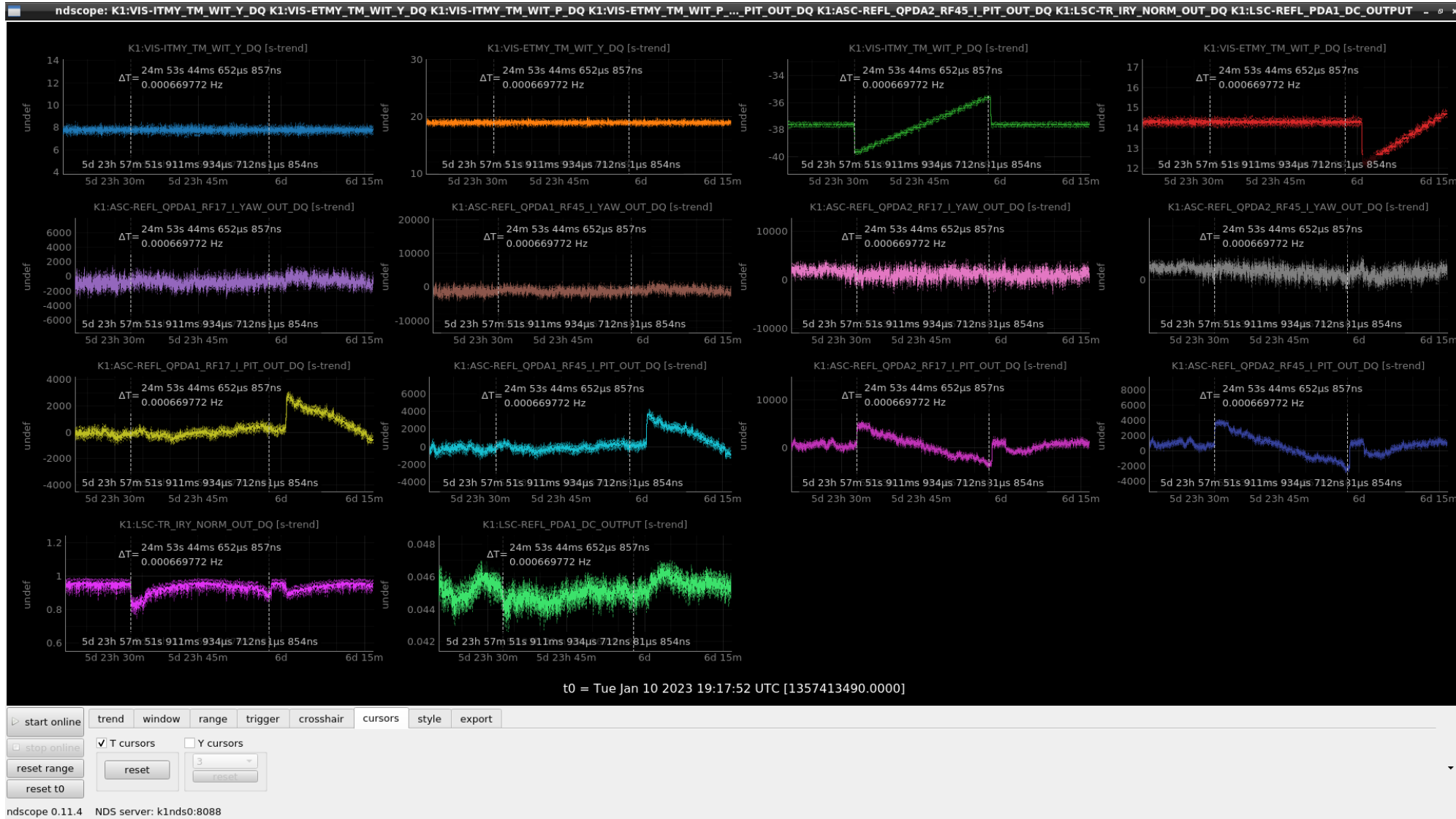
reset t0

Retrieving second trend data...

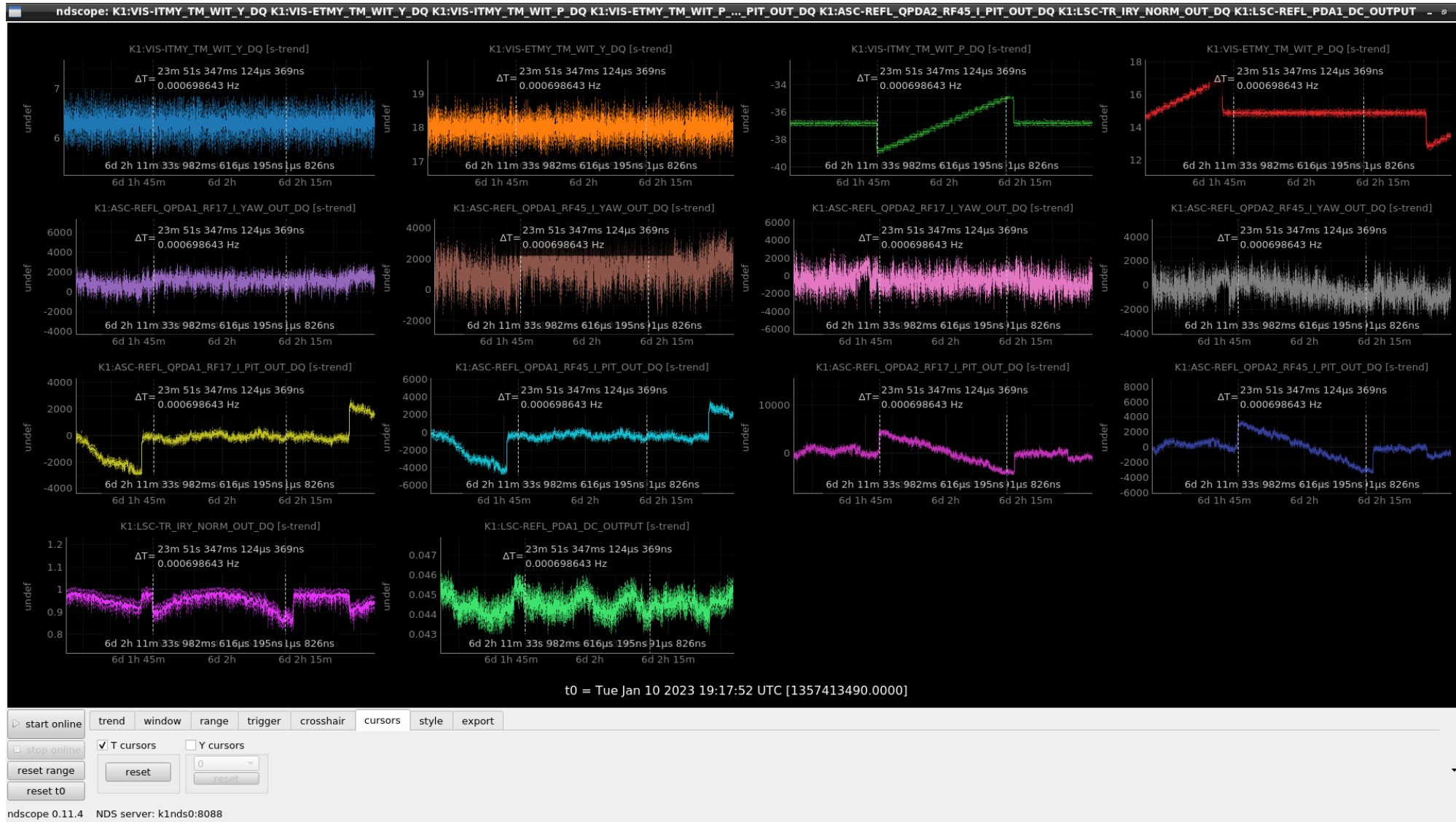
230114 IY_PIT



230117 IY_PIT



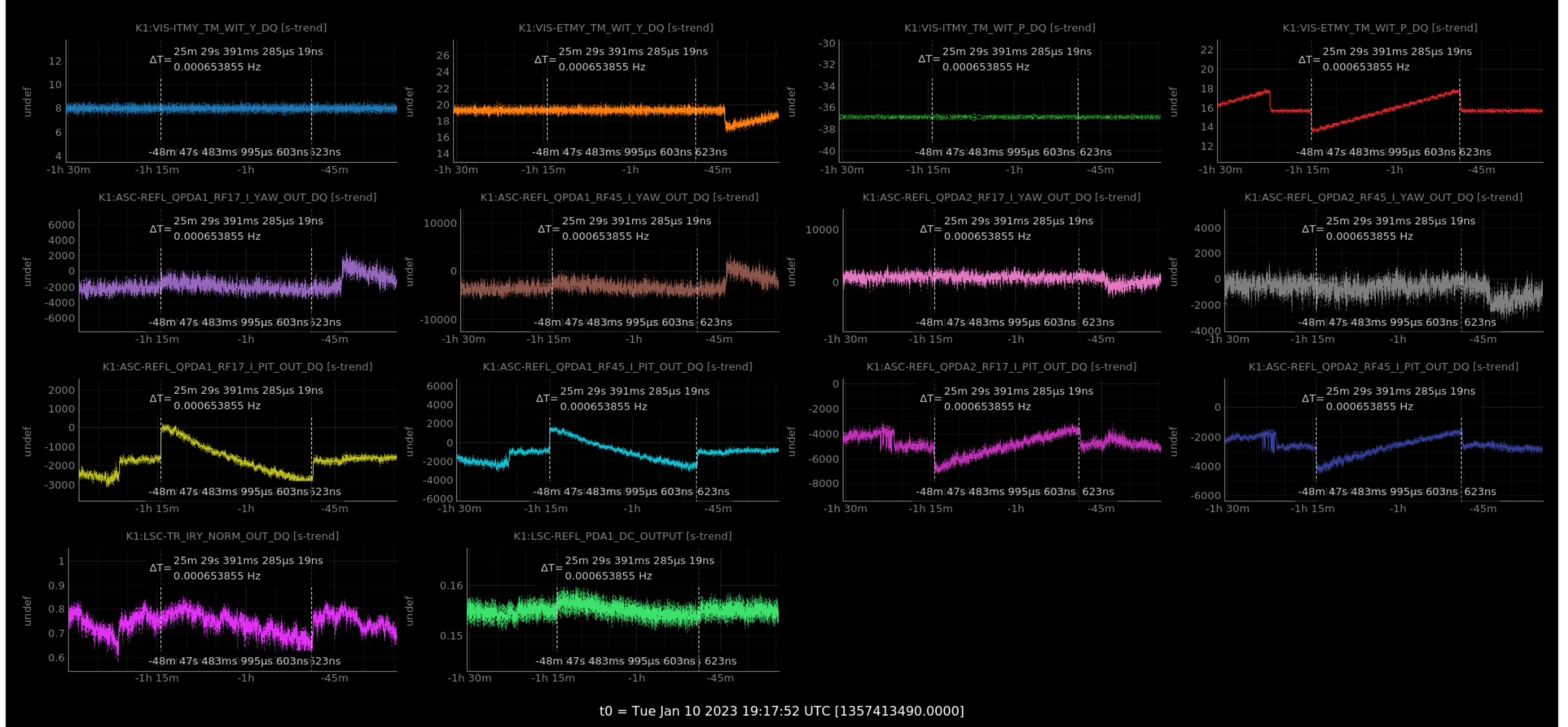
230117_2_IY_PIT



ETMY_PIT

230111 EY_PIT

nscope: K1:VIS-ITMY_TM_WIT_Y_DQ K1:VIS-ETMY_TM_WIT_Y_DQ K1:VIS-ITMY_TM_WIT_P_DQ K1:VIS-ETMY_TM_WIT_P_DQ PIT_OUT_DQ K1:ASC-REFL_QPDA2_RF45_I_PIT_OUT_DQ K1:LSC-TR_IRY_NORM_OUT_DQ K1:LSC-REFL_PDA1_DC_OUTPUT



t0 = Tue Jan 10 2023 19:17:52 UTC [1357413490.0000]

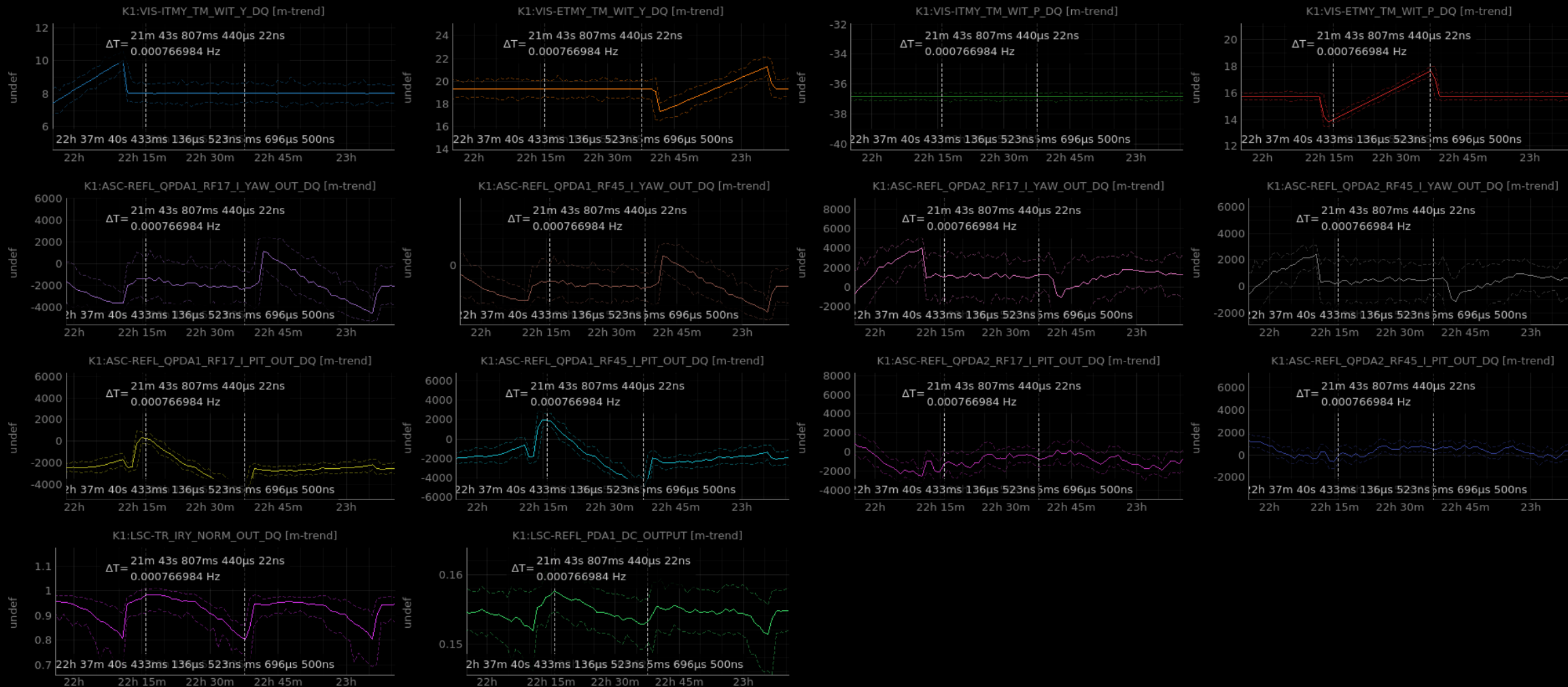
start online trend window range trigger crosshair cursors style export

stop online T cursors Y cursors

reset range

230112 EY_PIT

ndscope: K1:VIS-ITMY_TM_WIT_Y_DQ K1:VIS-ETMY_TM_WIT_Y_DQ K1:VIS-ITMY_TM_WIT_P_DQ K1:VIS-ETMY_TM_WIT_P_DQ ... PIT_OUT_DQ K1:ASC-REFL_QPDA2_RF45_I_PIT_OUT_DQ K1:LSC-TR_IRY_NORM_OUT_DQ K1:LSC-REFL_PDA1_DC_OUTPUT



t0 = Tue Jan 10 2023 19:17:52 UTC [1357413490.0000]

start online trend window range trigger crosshair cursors style export

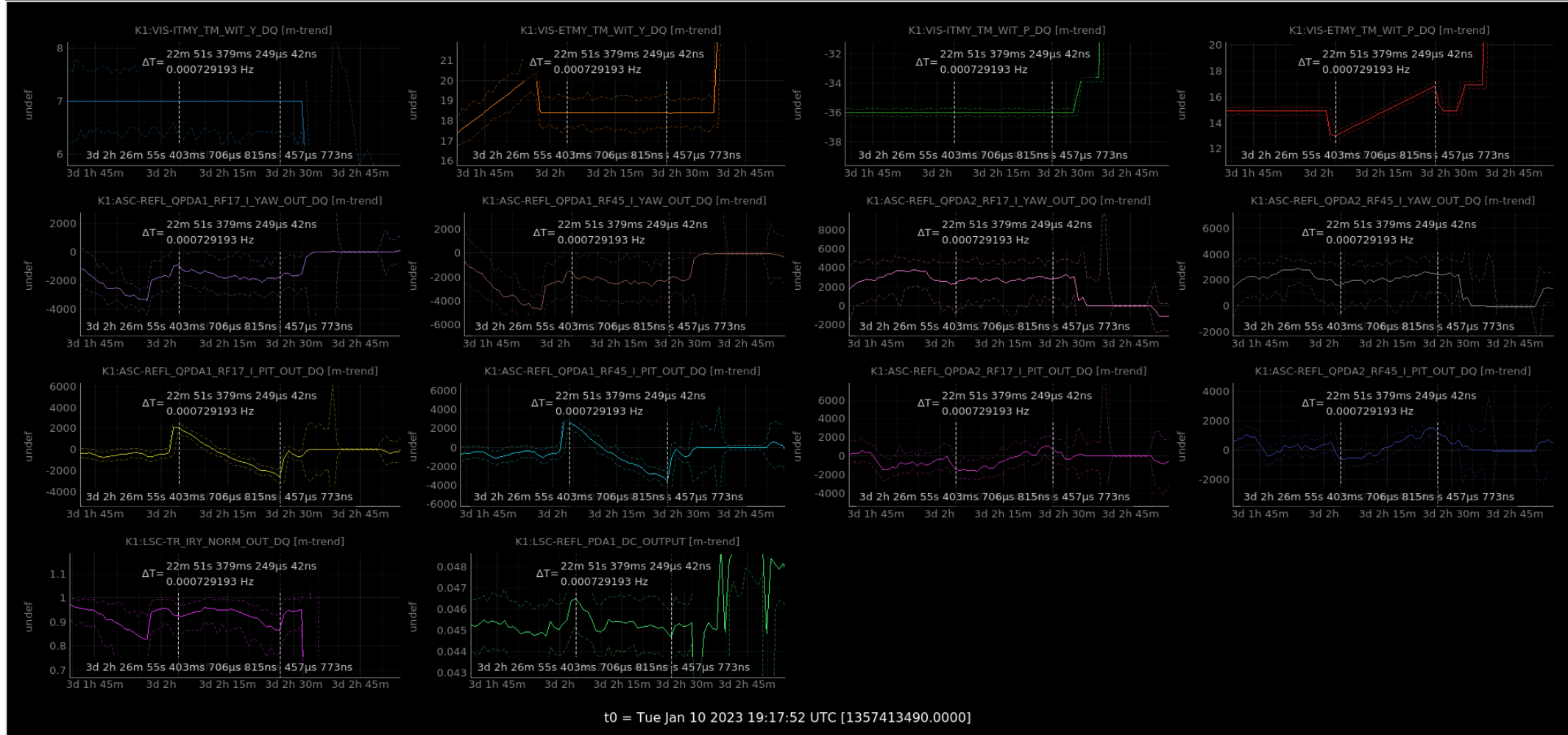
stop online T cursors Y cursors

reset range reset 0 reset

reset t0

230114 EY_PIT

ndscope: K1:VIS-ITMY_TM_WIT_Y_DQ K1:VIS-ETMY_TM_WIT_Y_DQ K1:VIS-ITMY_TM_WIT_P_DQ K1:VIS-ETMY_TM_WIT_P_DQ PIT_OUT_DQ K1:ASC-REFL_QPDA2_RF45_I_PIT_OUT_DQ K1:LSC-TR_IRY_NORM_OUT_DQ K1:LSC-REFL_PDA1_DC_OUTPUT



start online | trend | window | range | trigger | crosshair | cursors | style | export

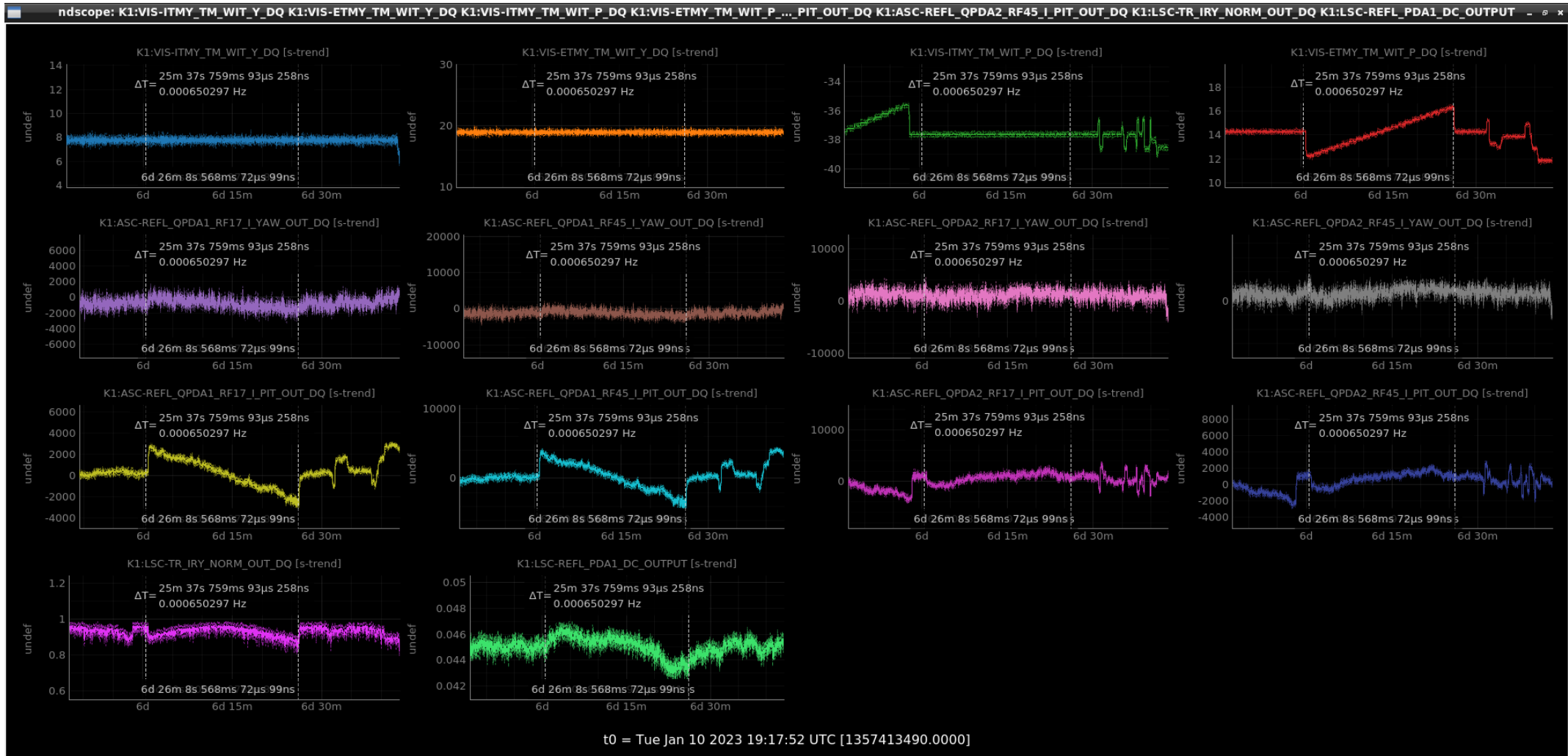
stop online | T cursors | Y cursors

reset range | reset | 0

reset t0

ndscope 0.11.4 NDS server: k1nds0:8088

230117 EY_PIT



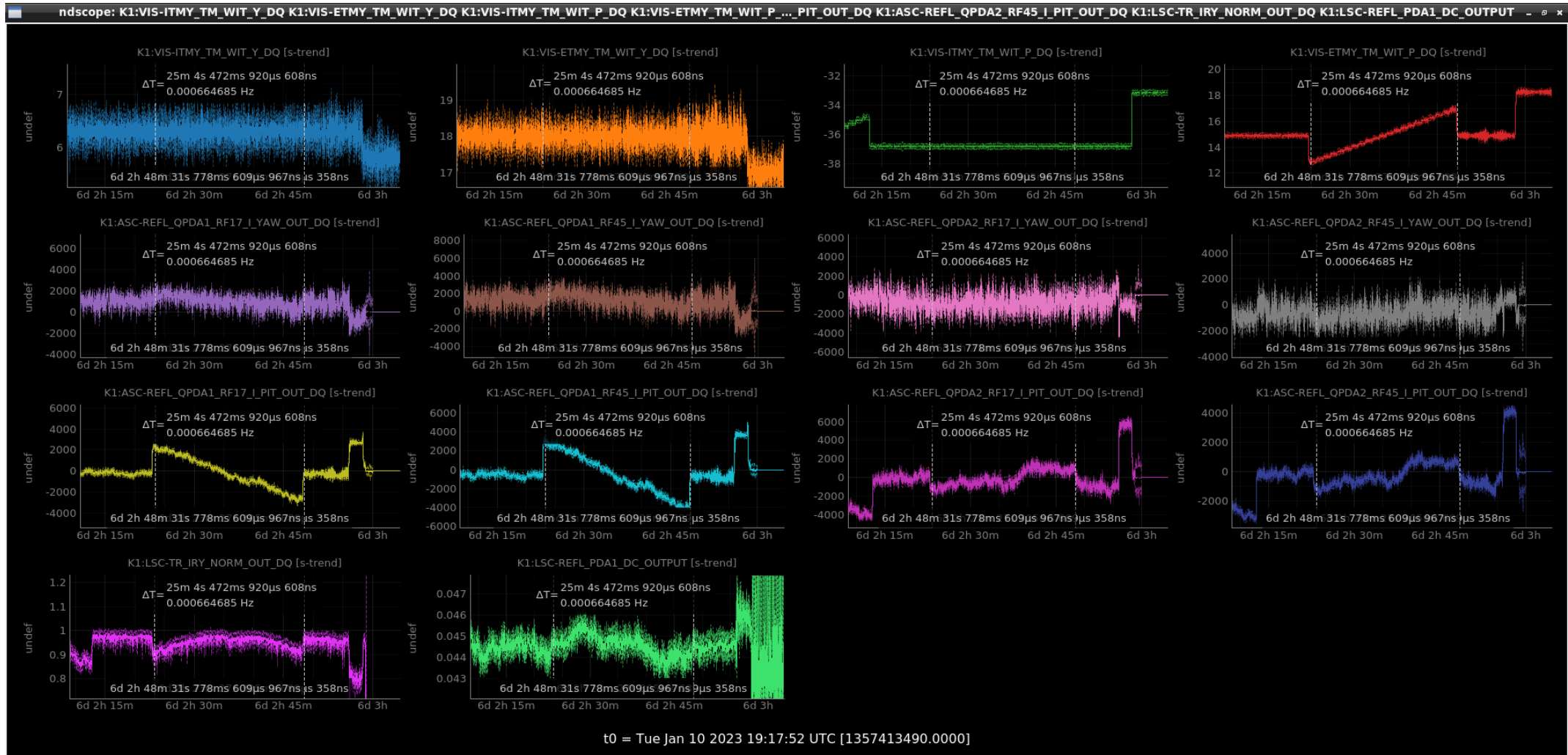
start online trend window range trigger crosshair cursors style export

stop online T cursors Y cursors

reset range reset

reset t0

230117_2_EY_PIT



start online trend window range trigger crosshair cursors style export

stop online T cursors Y cursors

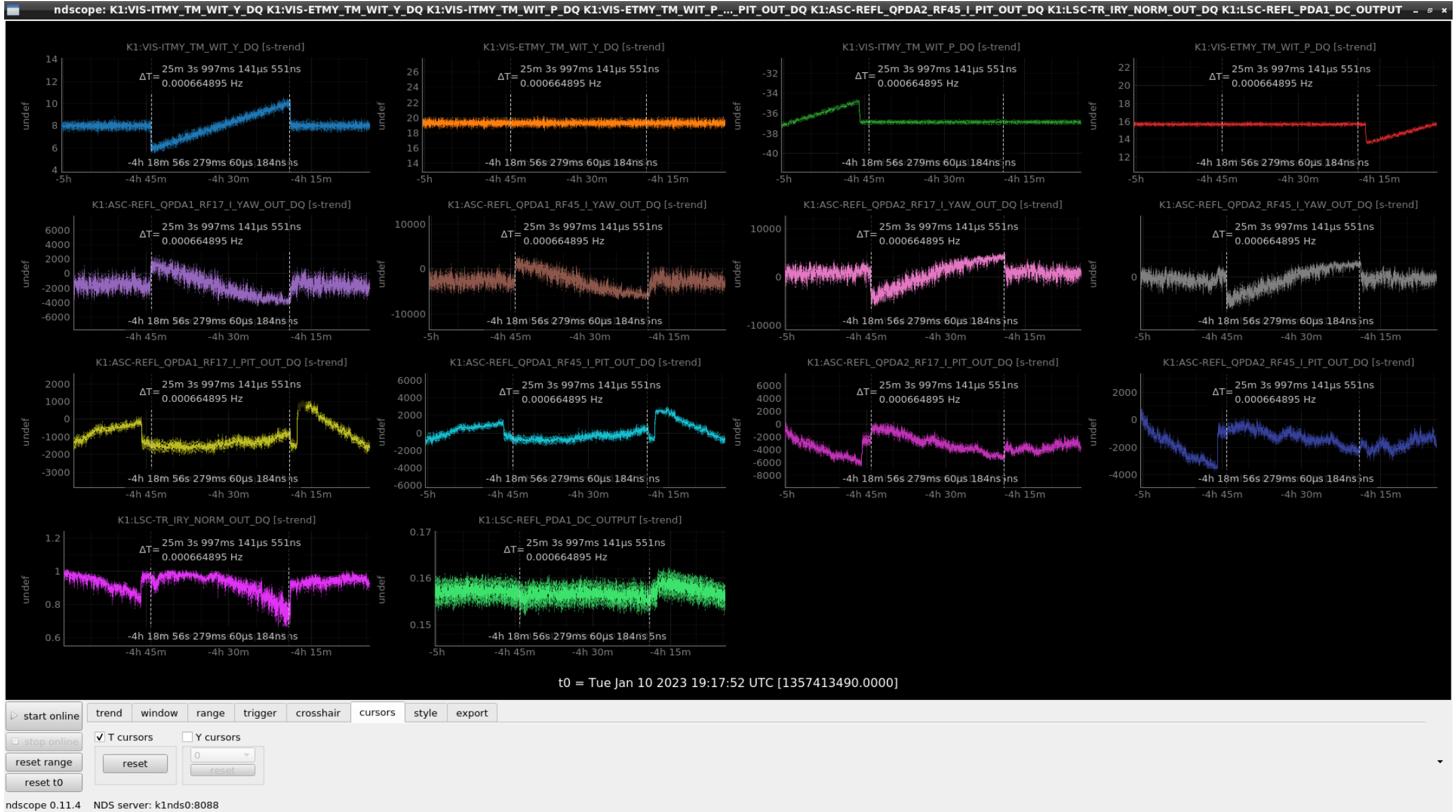
reset range reset 0

reset t0 reset

ndsscope 0.11.4 NDS server: k1nds0:8088

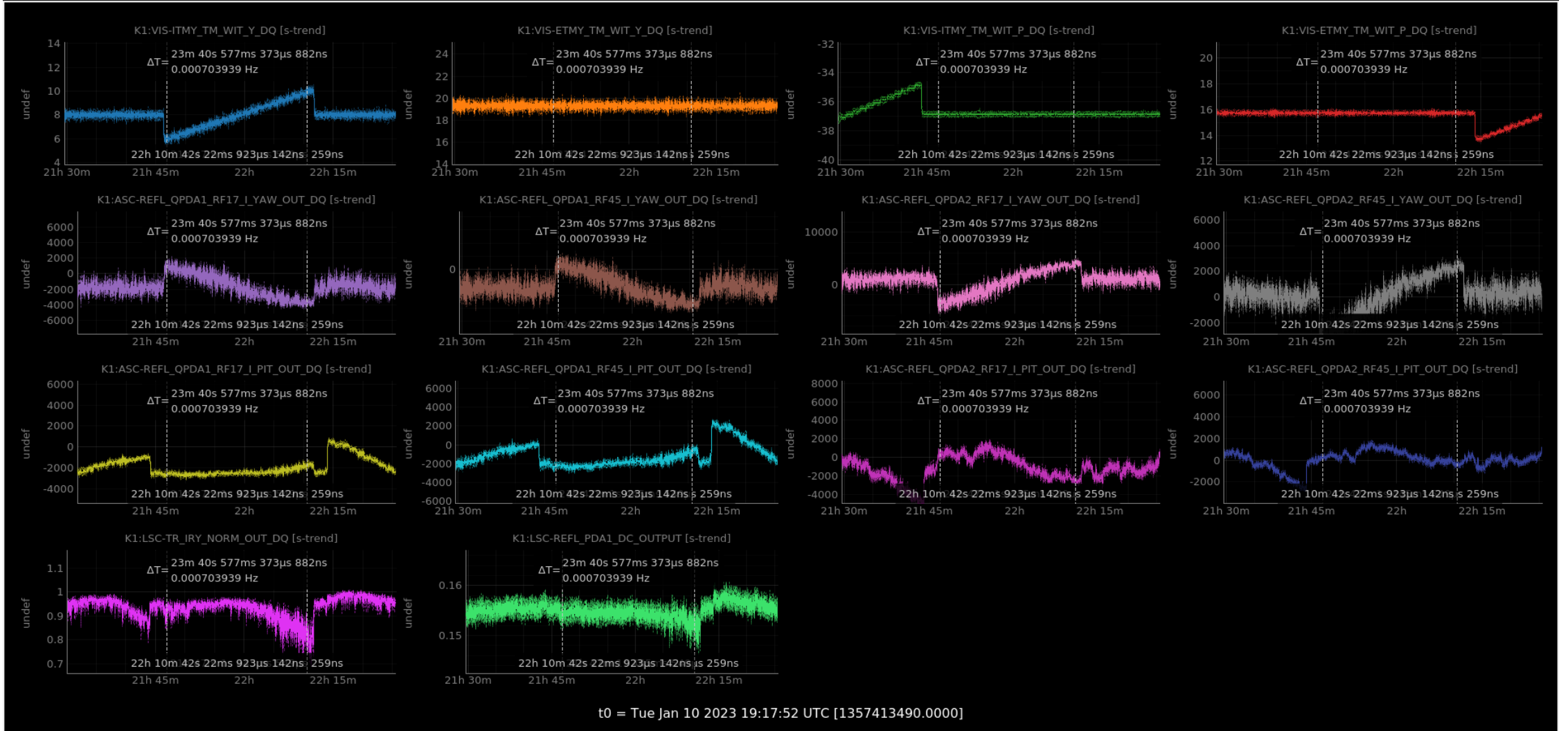
ITMY_YAW

230111 IY_YAW



230112 IY_YAW

ndscope: K1:VIS-ITMY_TM_WIT_Y_DQ K1:VIS-ETMY_TM_WIT_Y_DQ K1:VIS-ITMY_TM_WIT_P_DQ K1:VIS-ETMY_TM_WIT_P_DQ ... PIT_OUT_DQ K1:ASC-REFL_QPDA2_RF45_I_PIT_OUT_DQ K1:LSC-TR_IRY_NORM_OUT_DQ K1:LSC-REFL_PDA1_DC_OUTPUT



t0 = Tue Jan 10 2023 19:17:52 UTC [1357413490.0000]

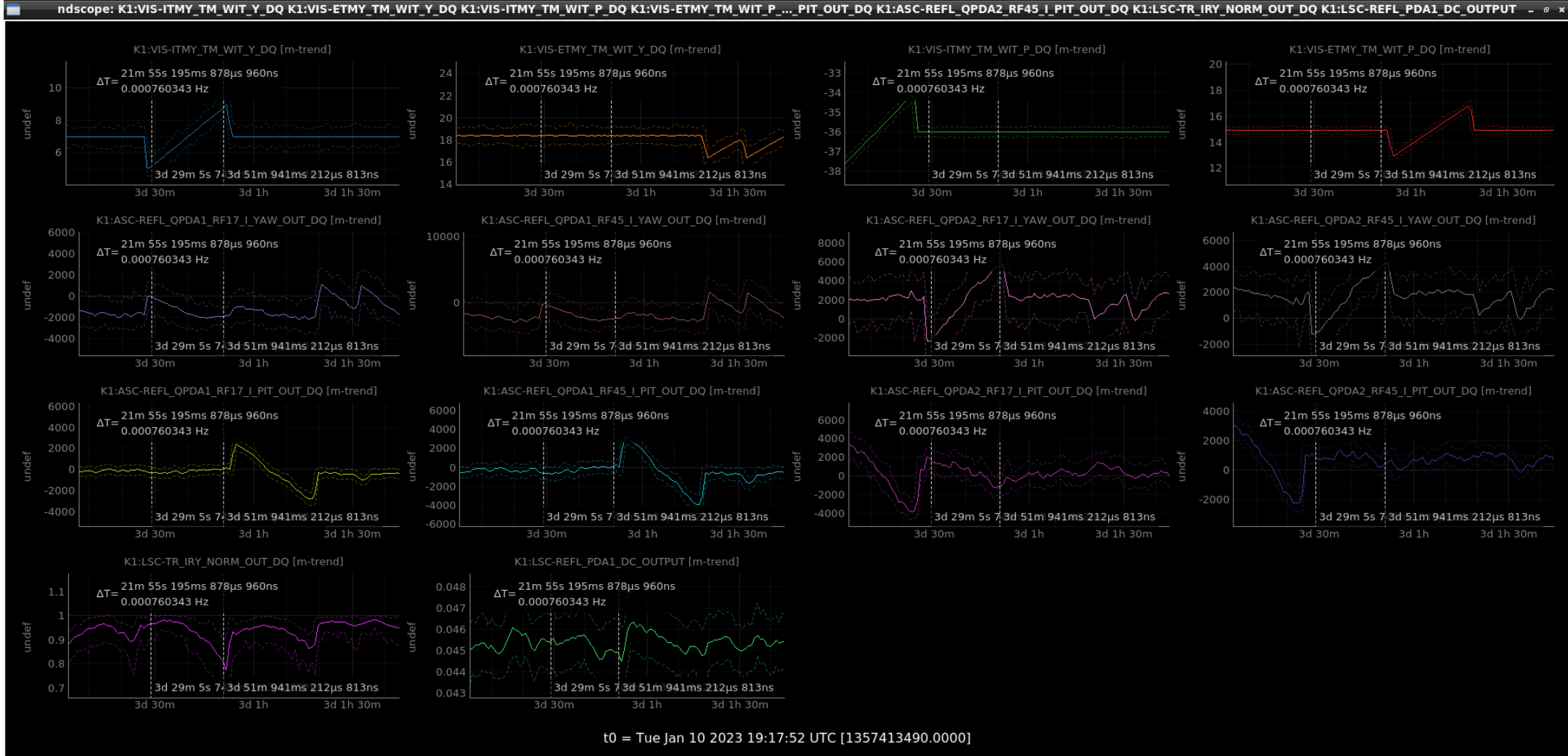
start online | trend | window | range | trigger | crosshair | cursors | style | export

stop online | T cursors | Y cursors

reset range | reset | 0 | reset

reset t0

230114 IY_YAW



start online trend window range trigger crosshair cursors style export

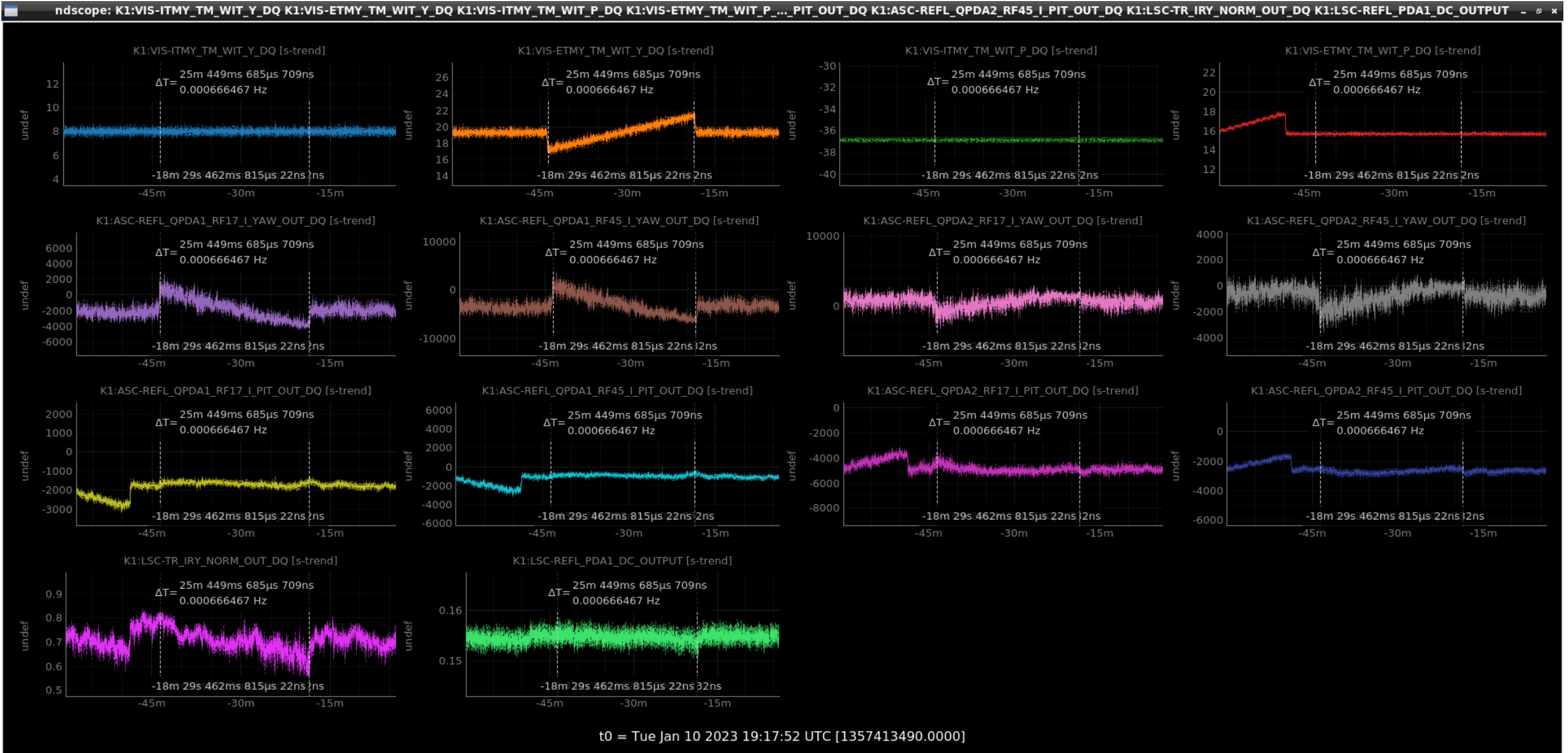
stop online T cursors Y cursors

reset range reset 0 reset

reset t0

ETMY_YAW

230111 EY_YAW



t0 = Tue Jan 10 2023 19:17:52 UTC [1357413490.0000]

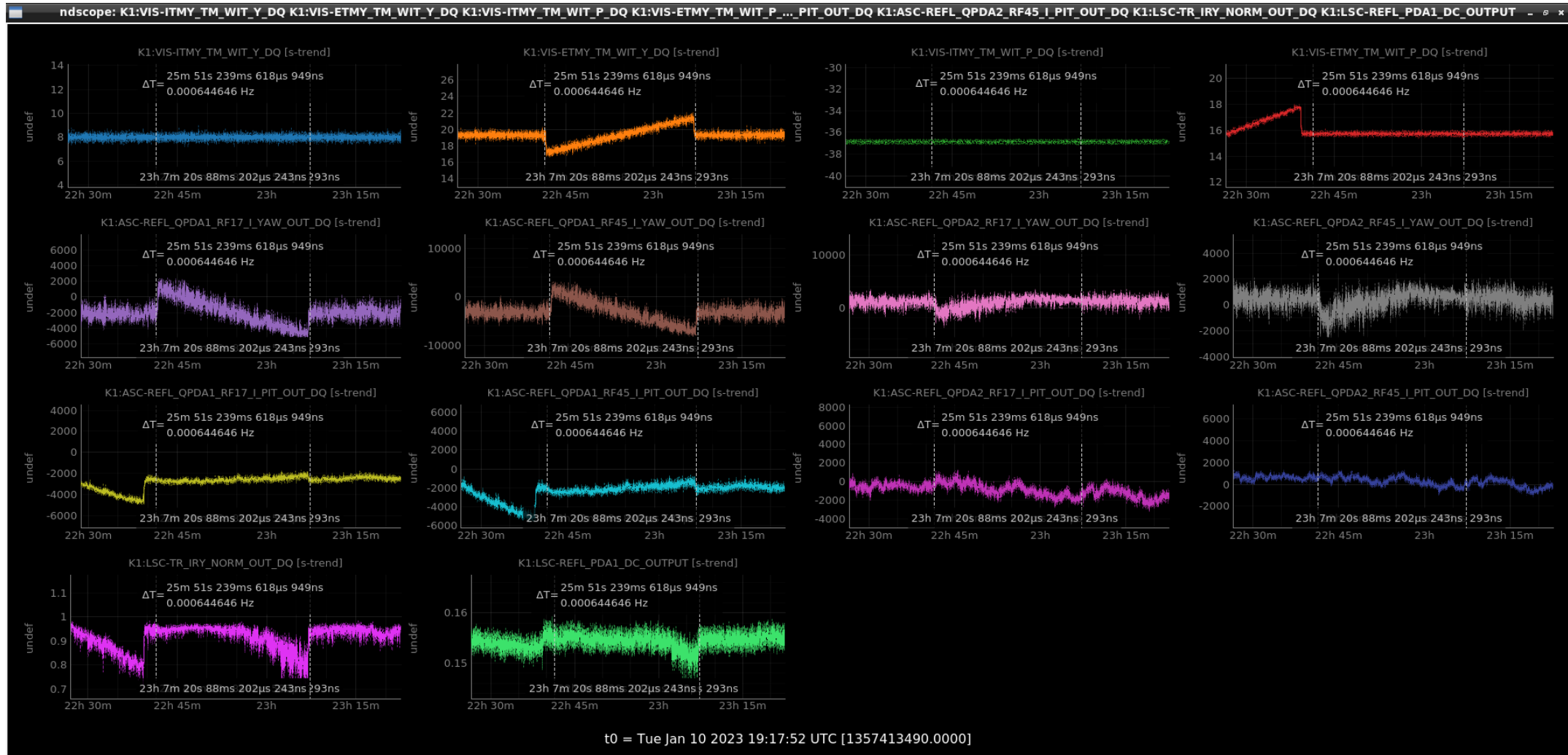
start online trend window range trigger crosshair cursors style export

stop online T cursors Y cursors

reset range reset 0 reset

reset t0

230112 EY_YAW



start online trend window range trigger crosshair cursors style export

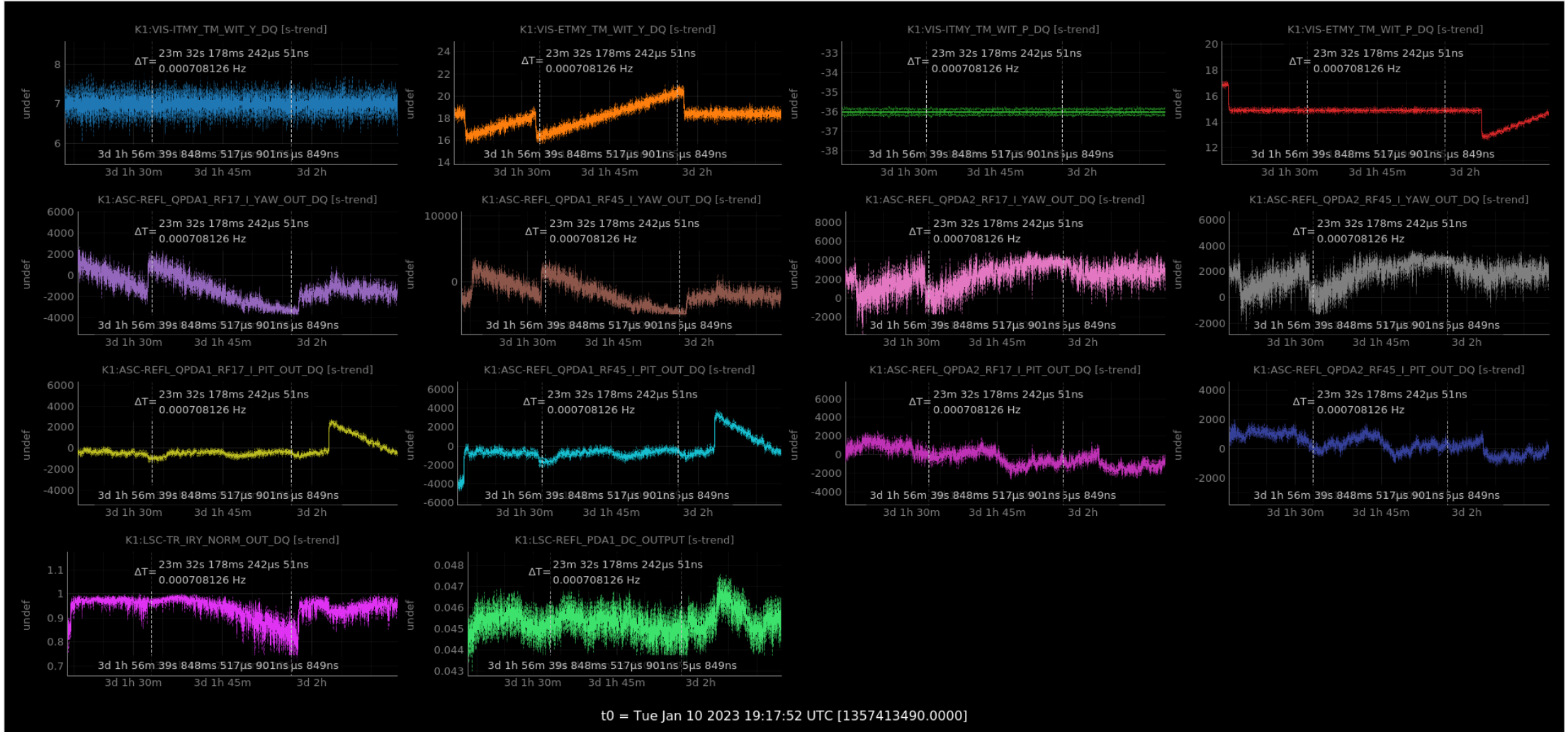
stop online T cursors Y cursors

reset range reset

reset t0

230114 EY_YAW

ndscope: K1:VIS-ITMY_TM_WIT_Y_DQ K1:VIS-ETMY_TM_WIT_Y_DQ K1:VIS-ITMY_TM_WIT_P_DQ K1:VIS-ETMY_TM_WIT_P_DQ PIT_OUT_DQ K1:ASC-REFL_QPDA2_RF45_I_PIT_OUT_DQ K1:LSC-TR_IRY_NORM_OUT_DQ K1:LSC-REFL_PDA1_DC_OUTPUT



t0 = Tue Jan 10 2023 19:17:52 UTC [1357413490.0000]

start online trend window range trigger crosshair cursors style export

stop online T cursors Y cursors

reset range reset 0 reset

reset t0