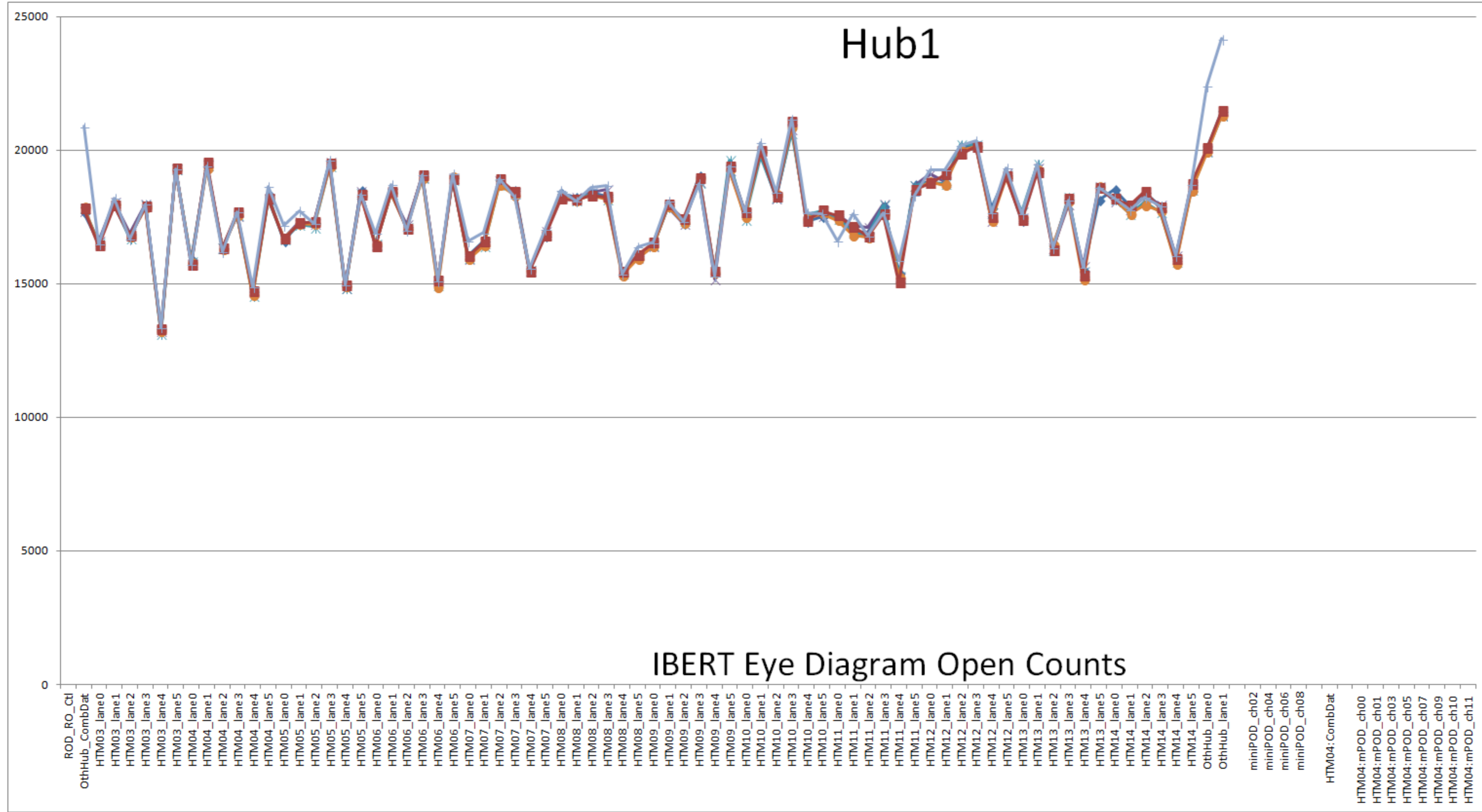


Hub1

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Open Counts

- ◆ O HUB1 19-Feb-2019_a noDFE&EqOFF
- ✕ O HUB1 19-Feb-2019_b noDFE&EqOFF
- ✱ O HUB1 19-Feb-2019_c noDFE&EqOFF
- O HUB1 19-Feb-2019_d noDFE&EqOFF
- O HUB1 20-Feb-2019_a noDFE&EqOFF
- ▲ O
- + O HUB1 03:04-Jan-2019_avg noDFE&EqOFF

Hub1: SN09
FW:IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW:IBERT+IPbus
Test v2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

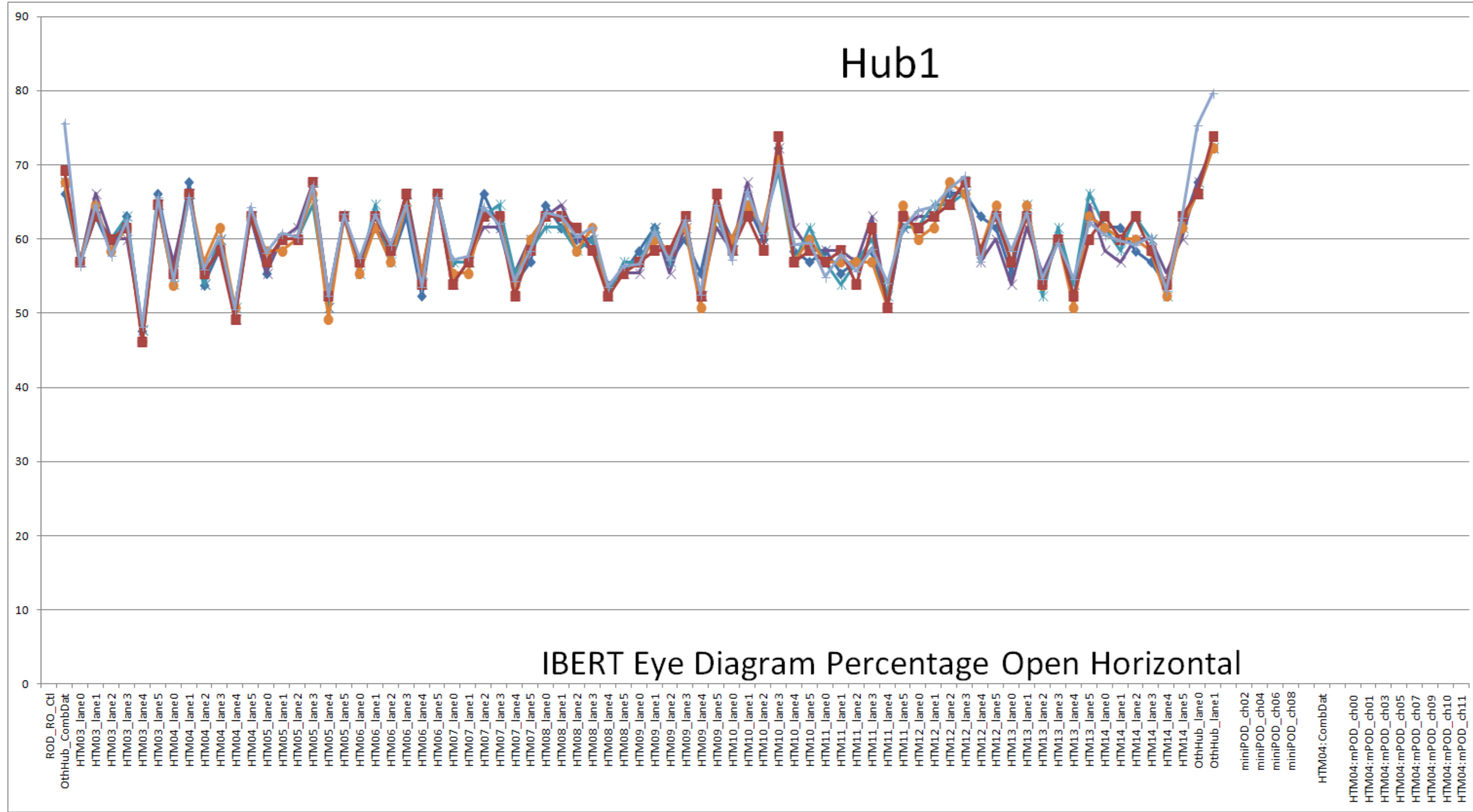
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW:IBERT+IPbus
rev 07-Sep-2018

Hub1

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



- ◆ H% HUB1 19-Feb-2019_a noDFE&EqOFF
- ✕ H% HUB1 19-Feb-2019_b noDFE&EqOFF
- ✱ H% HUB1 19-Feb-2019_c noDFE&EqOFF
- H% HUB1 19-Feb-2019_d noDFE&EqOFF
- H% HUB1 20-Feb-2019_a noDFE&EqOFF
- ▲ H%
- H% HUB1 03:04-Jan-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Tempv3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

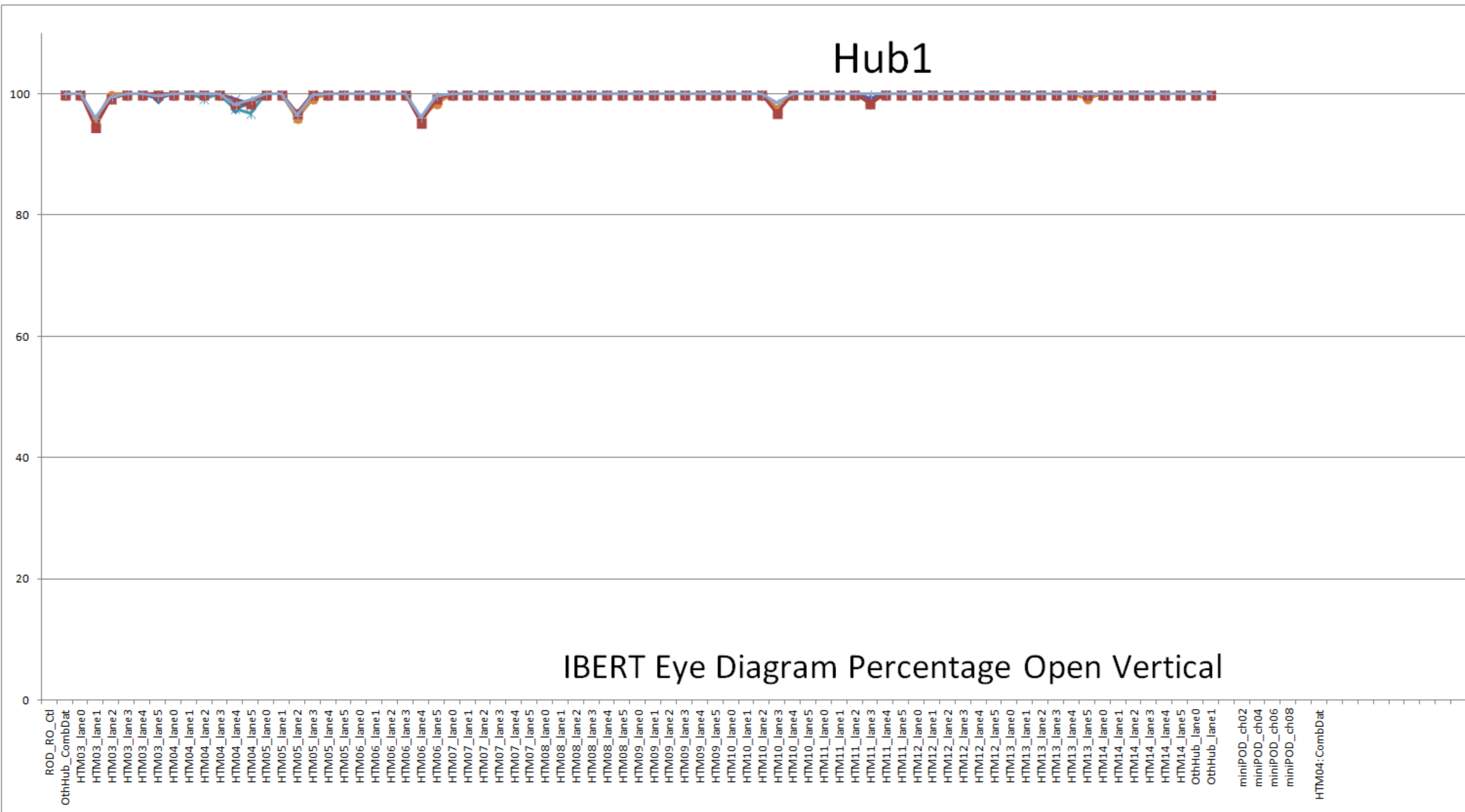
IBERT Eye Diagram Percentage Open Horizontal

Hub1

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Percentage Open Vertical

- V% HUB1 19-Feb-2019_a noDFE&EqOFF
- V% HUB1 19-Feb-2019_b noDFE&EqOFF
- V% HUB1 19-Feb-2019_c noDFE&EqOFF
- V% HUB1 19-Feb-2019_d noDFE&EqOFF
- V% HUB1 20-Feb-2019_a noDFE&EqOFF
- V%
- V% HUB1 03:04-Jan-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Tempv3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

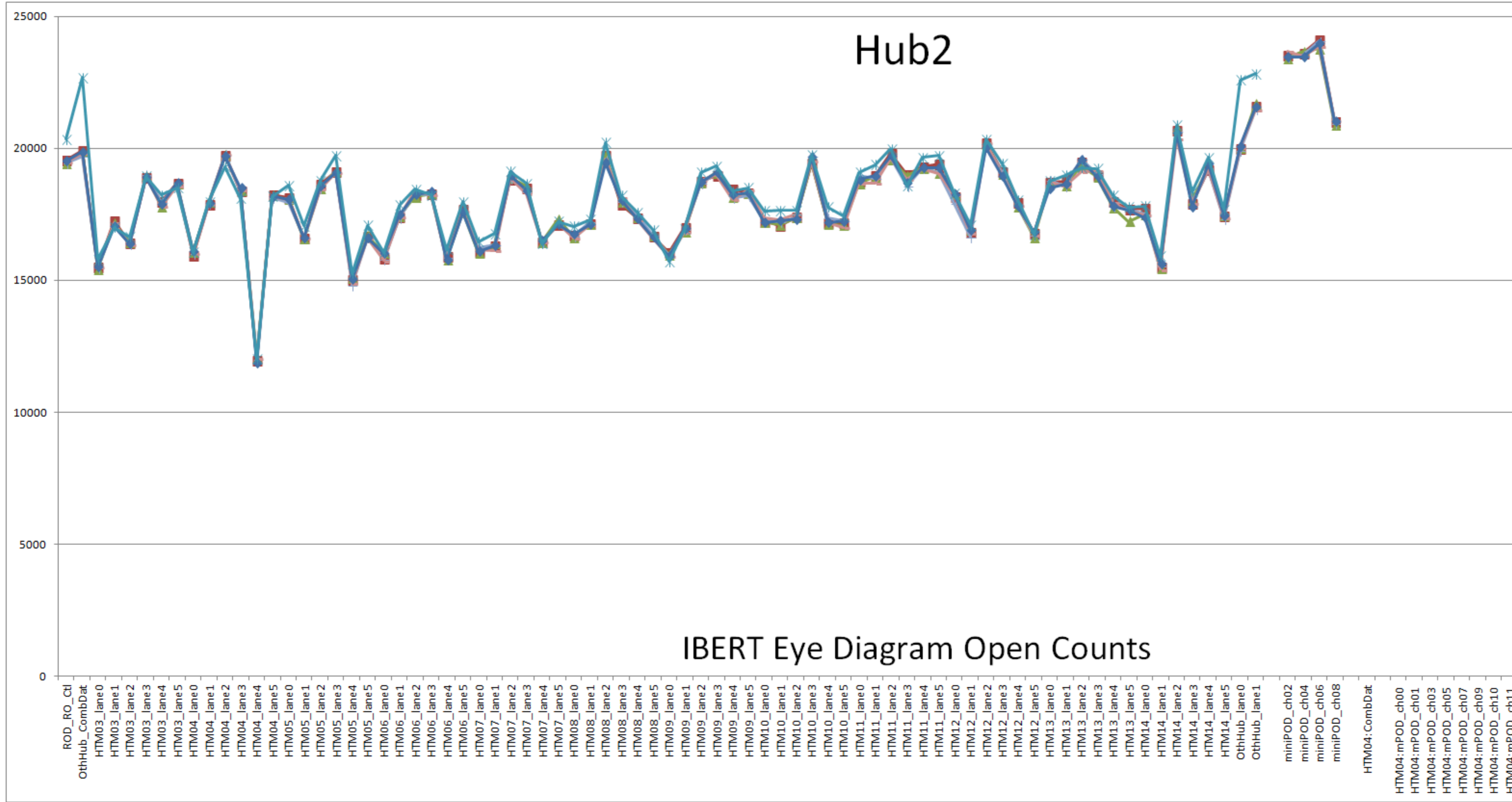
Hub2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT

IBERT Eye Diagram Open Counts



■ O HUB2 19-Feb-2019_a noDFE&EqOFF
■ O HUB2 19-Feb-2019_b noDFE&EqOFF
■ O HUB2 19-Feb-2019_a noDFE&EqOFF
■ O HUB2 19-Feb-2019_d noDFE&EqOFF
■ O HUB2 20-Feb-2019_a noDFE&EqOFF
■ O
■ O HUB2 03:04-Jan-2019_avg noDFE&EqOFF

Hub1: SN09
 FW: IBERT+IPbus+GBT
 Tempv3 19-Dec-2018
ROD1: SN04
 FWIBERT 03/05-Aug-2017

Hub2: SN05
 FW: IBERT+IPbus
 Testv2p2 14-Dec-2018
ROD2: SN00
 FWIBERT 03/05-Aug-2017

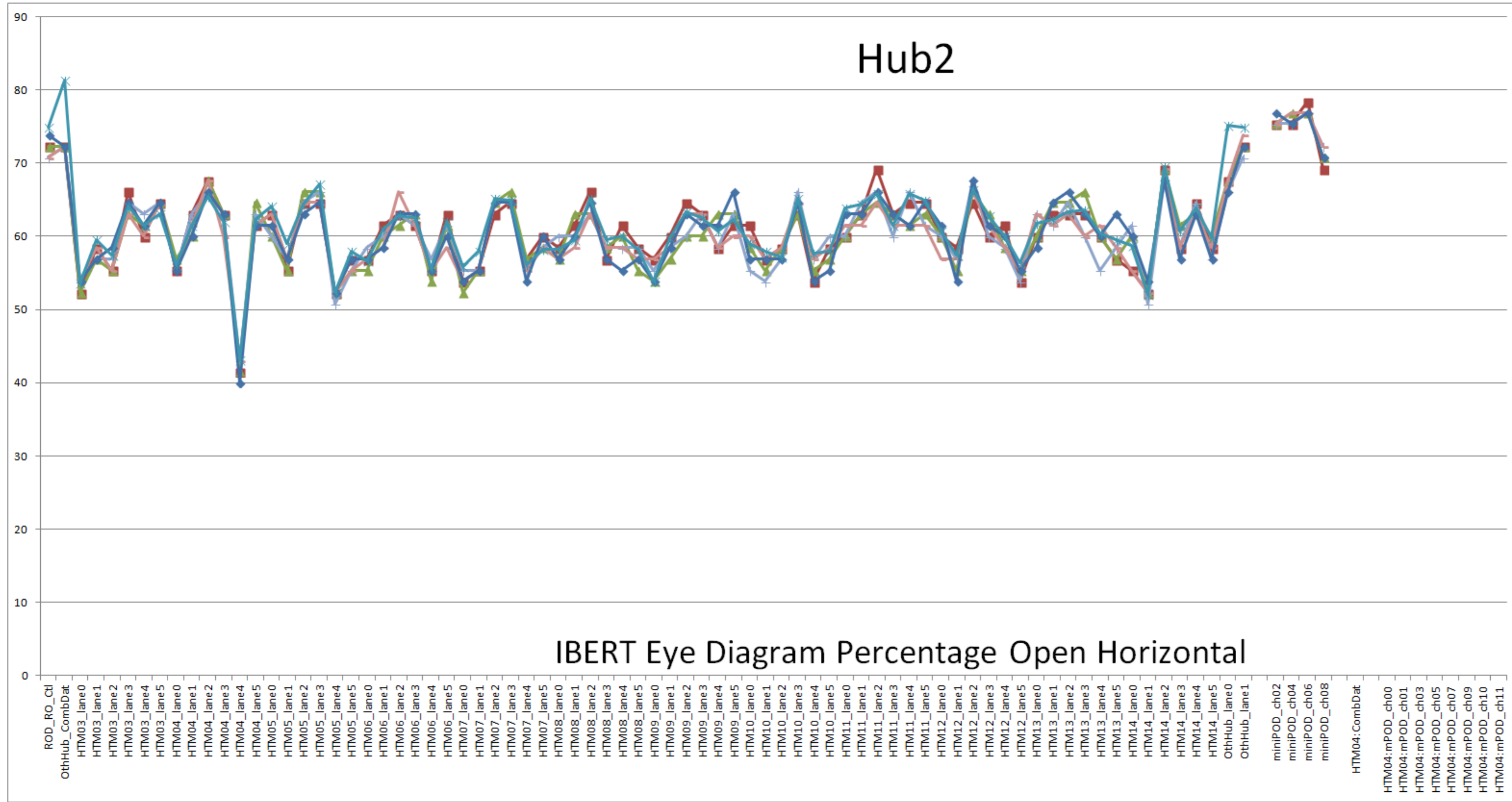
HTM3-14:
 S/N 5,17,1,11,4,12,
 3,13,16,6,9,8
 HTM11 just replaced
 FW: IBERT+IPbus
 rev 07-Sep-2018

Hub2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Percentage Open Horizontal

- H% HUB2 19-Feb-2019_a noDFE&EqOFF
- ▲ H% HUB2 19-Feb-2019_b noDFE&EqOFF
- ◆ H% HUB2 19-Feb-2019_a noDFE&EqOFF
- ▬ H% HUB2 19-Feb-2019_d noDFE&EqOFF
- ◆ H% HUB2 20-Feb-2019_a noDFE&EqOFF
- ✱ H%
- ✱ H% HUB2 03:04-Jan-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Test v2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

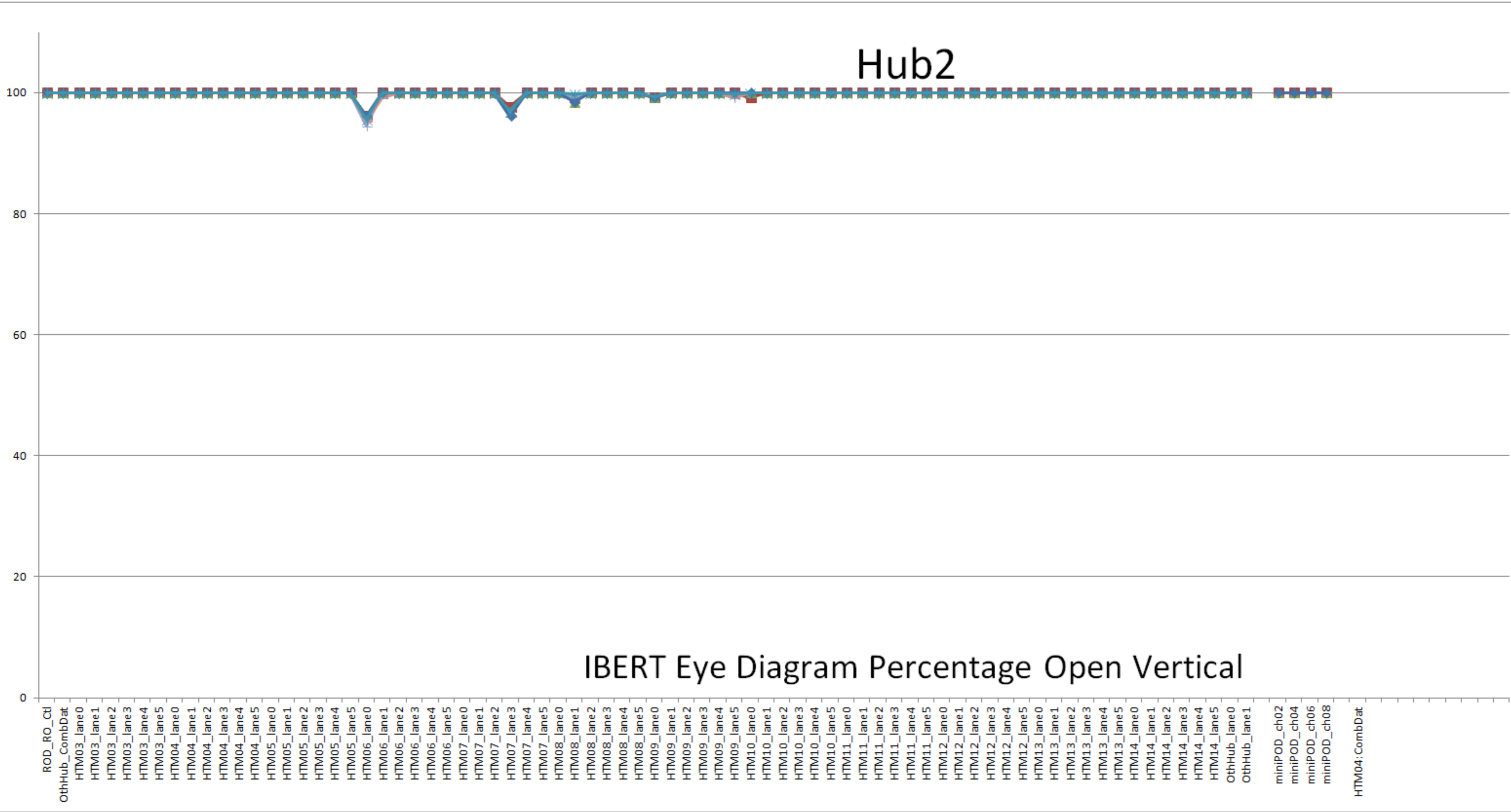
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

Hub2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Percentage Open Vertical

- V% HUB2 19-Feb-2019_a noDFE&EqOFF
- V% HUB2 19-Feb-2019_b noDFE&EqOFF
- V% HUB2 19-Feb-2019_a noDFE&EqOFF
- V% HUB2 19-Feb-2019_d noDFE&EqOFF
- V% HUB2 20-Feb-2019_a noDFE&EqOFF
- V%
- V% HUB2 03:04-Jan-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Tempv3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

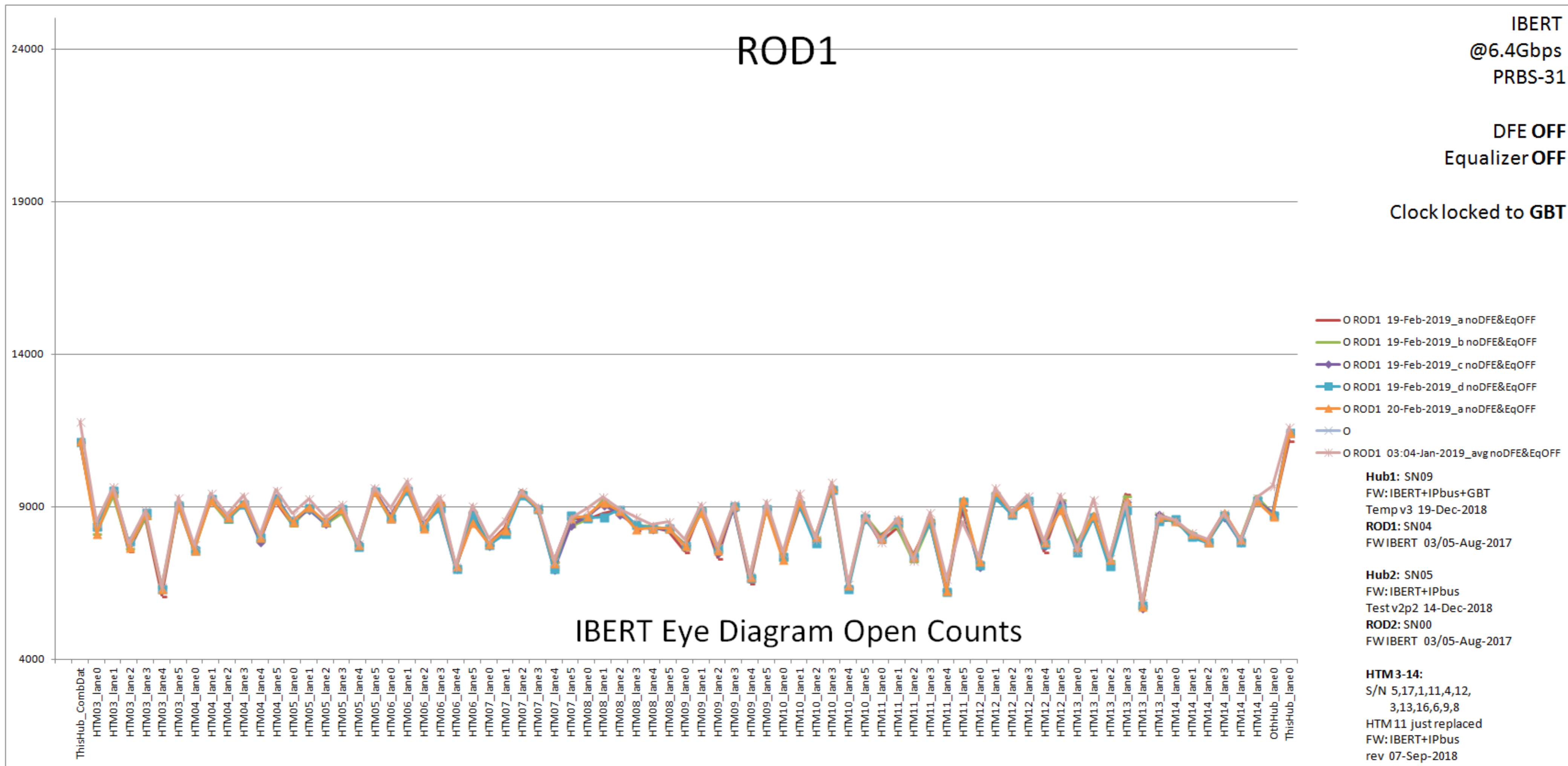
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

ROD1

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Open Counts

Hub1: SN09
FW:IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW:IBERT+IPbus
Test v2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

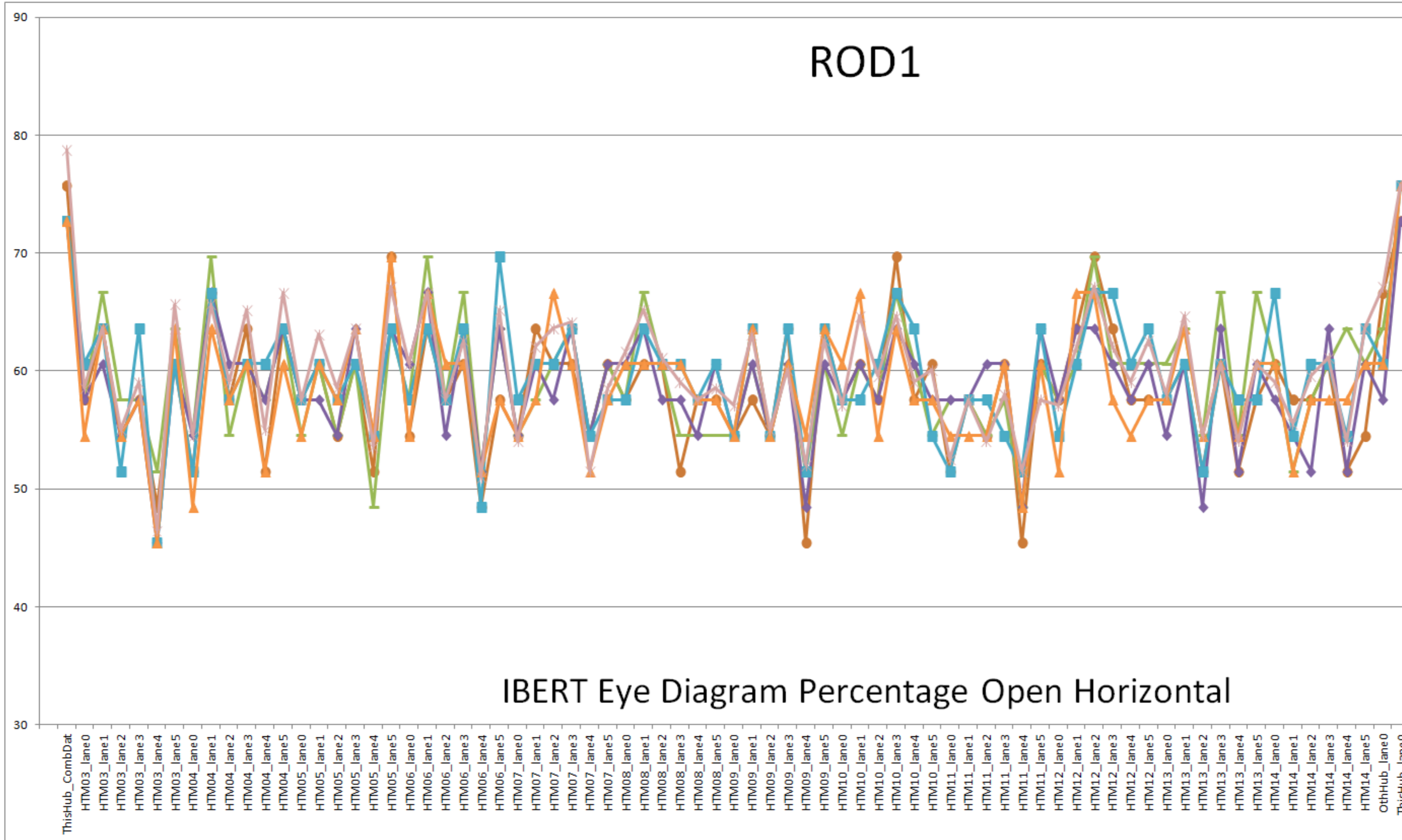
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM 11 just replaced
FW:IBERT+IPbus
rev 07-Sep-2018

ROD1

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



- H% ROD1 19-Feb-2019_a noDFE&EqOFF
- H% ROD1 19-Feb-2019_b noDFE&EqOFF
- H% ROD1 19-Feb-2019_c noDFE&EqOFF
- H% ROD1 19-Feb-2019_d noDFE&EqOFF
- H% ROD1 20-Feb-2019_a noDFE&EqOFF
- H%
- H% ROD1 03:04-Jan-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Tempv3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM 11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

IBERT Eye Diagram Percentage Open Horizontal

ROD1

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT

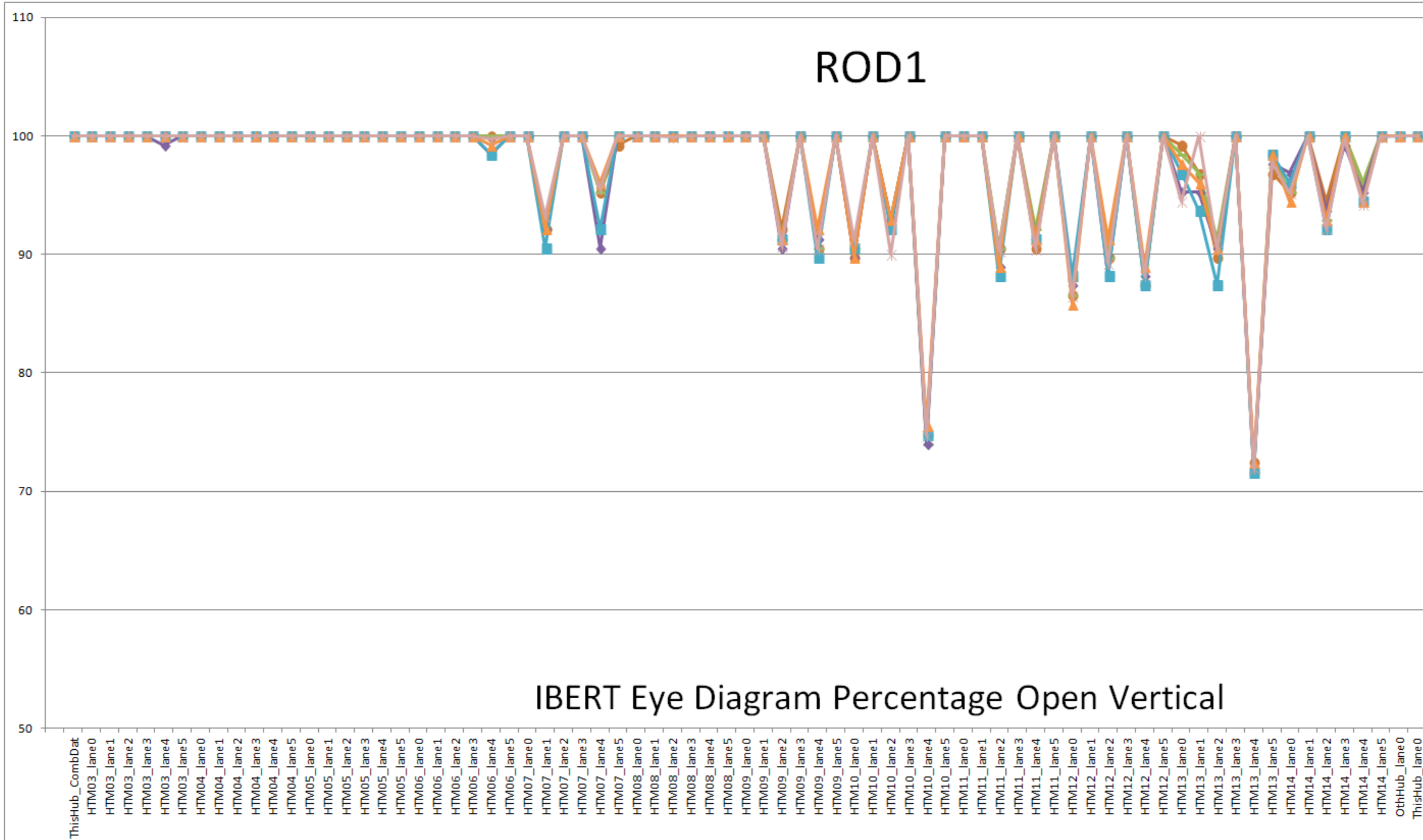
- V% ROD1 19-Feb-2019_a noDFE&EqOFF
- V% ROD1 19-Feb-2019_b noDFE&EqOFF
- V% ROD1 19-Feb-2019_c noDFE&EqOFF
- V% ROD1 19-Feb-2019_d noDFE&EqOFF
- V% ROD1 20-Feb-2019_a noDFE&EqOFF
- V%
- V% ROD1 03:04-Jan-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FW IBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FW IBERT 03/05-Aug-2017

HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

IBERT Eye Diagram Percentage Open Vertical

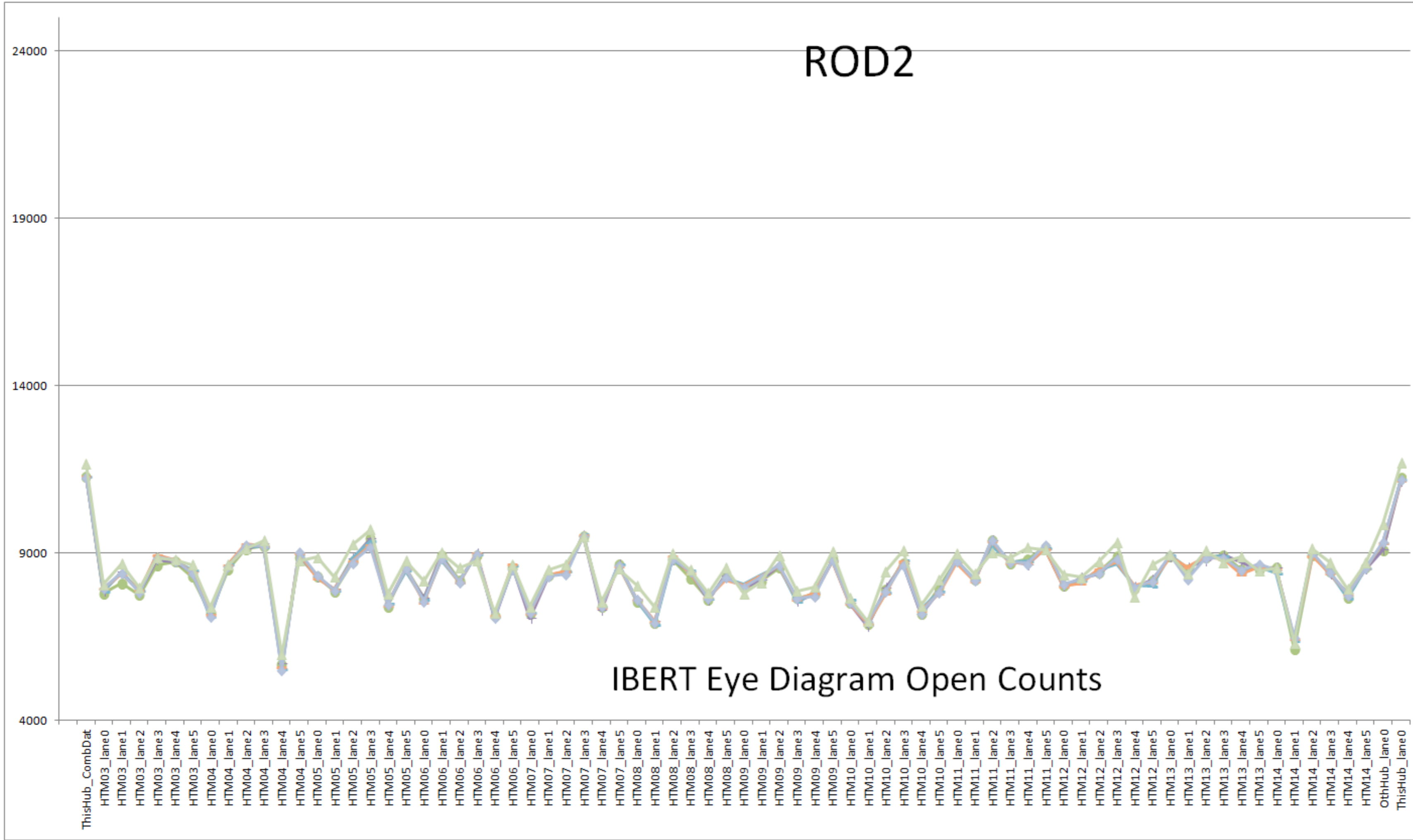


ROD2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Open Counts

Hub1: SN09
FW: IBERT+IPbus+GBT
Tempv3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Test v2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

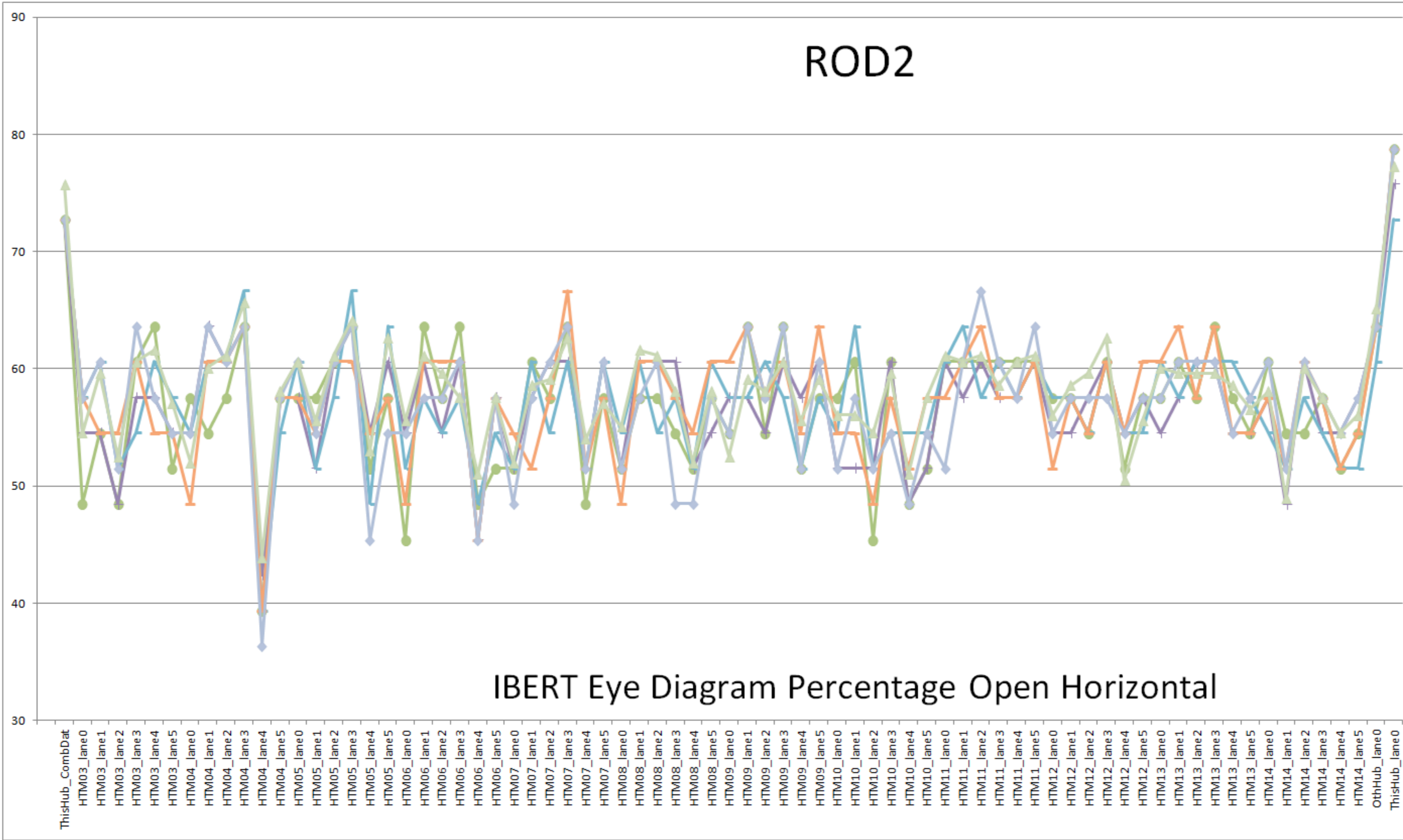
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM 11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

ROD2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Percentage Open Horizontal

- H% ROD2 19-Feb-2019_a noDFE&EqOFF
- H% ROD2 19-Feb-2019_b noDFE&EqOFF
- H% ROD2 19-Feb-2019_c noDFE&EqOFF
- H% ROD2 19-Feb-2019_d noDFE&EqOFF
- H% ROD2 20-Feb-2019_a noDFE&EqOFF
- H%
- H% ROD2 03:04-Jan-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Tempv3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

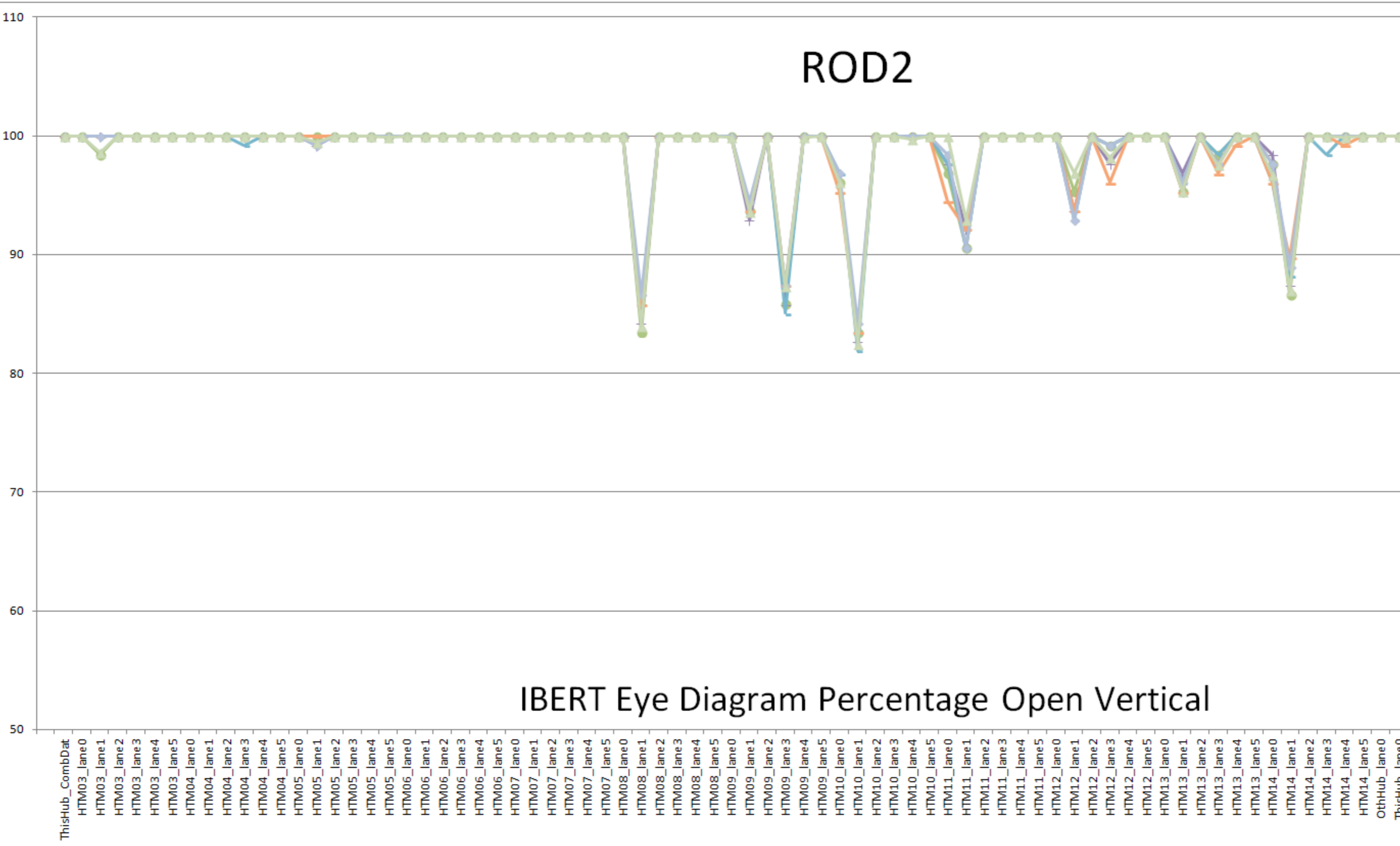
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM 11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

ROD2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Percentage Open Vertical

Hub1: SN09
FW: IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FW IBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Test v2p2 14-Dec-2018
ROD2: SN00
FW IBERT 03/05-Aug-2017

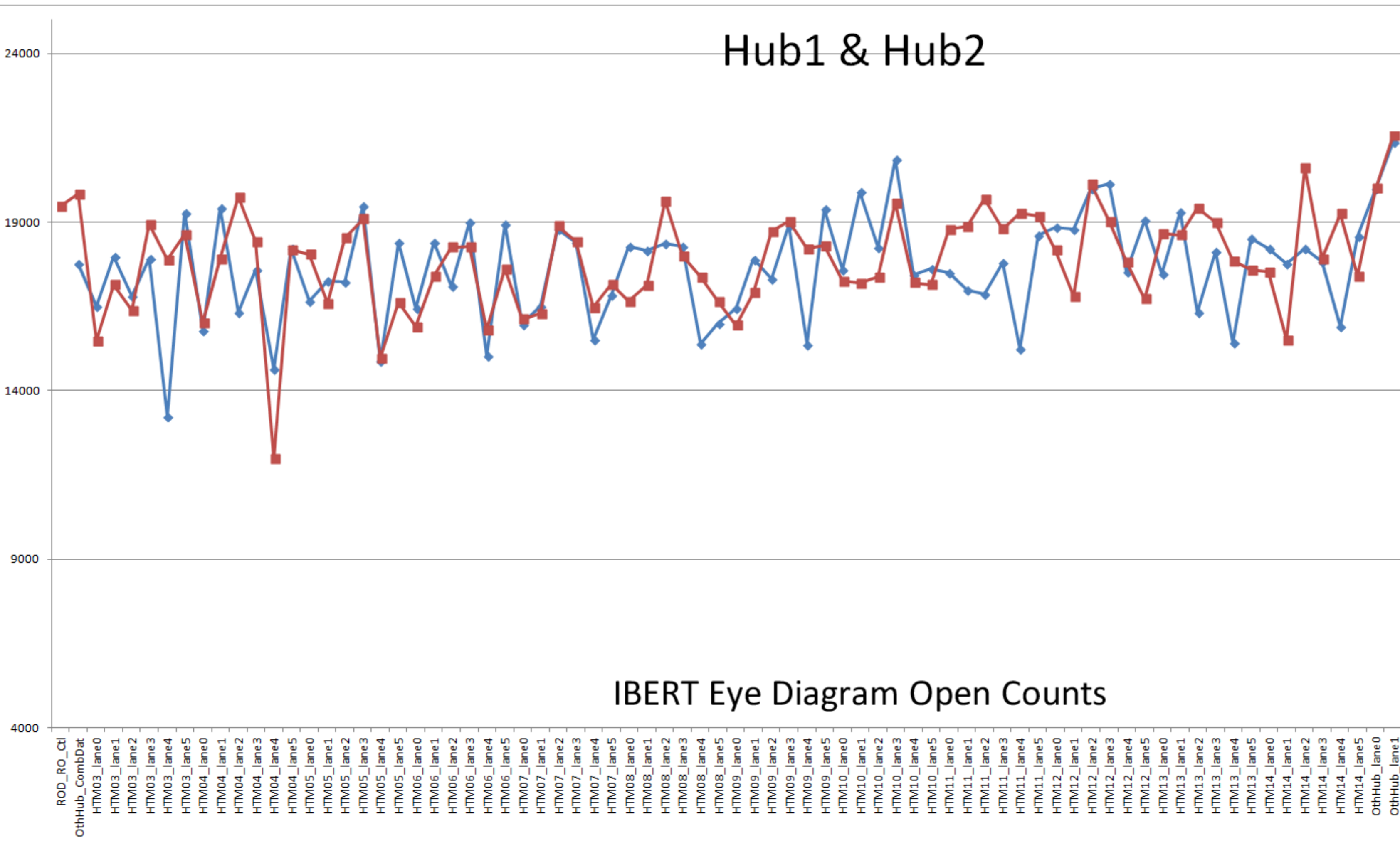
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

Hub1 & Hub2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



◆ O HUB1 19:20-Feb-2019_avg noDFE&EqOFF
■ O HUB2 19:20-Feb-2019_avg noDFE&EqOFF

Hub1: SN09
 FW: IBERT+IPbus+GBT
 Temp v3 19-Dec-2018
ROD1: SN04
 FW IBERT 03/05-Aug-2017

Hub2: SN05
 FW: IBERT+IPbus
 Test v2p2 14-Dec-2018
ROD2: SN00
 FW IBERT 03/05-Aug-2017

HTM3-14:
 S/N 5,17,1,11,4,12,
 3,13,16,6,9,8
 HTM11 just replaced
 FW: IBERT+IPbus
 rev 07-Sep-2018

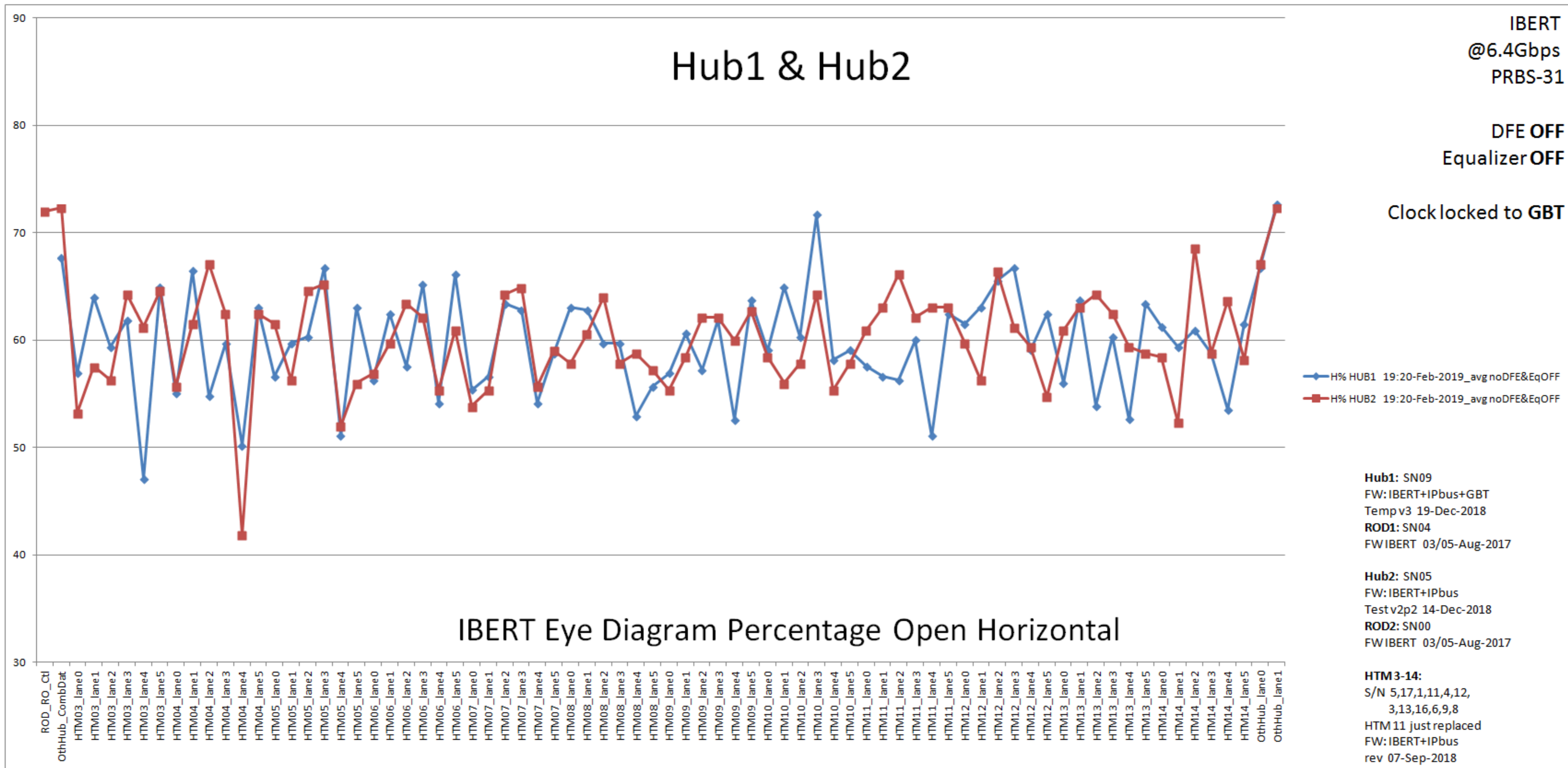
IBERT Eye Diagram Open Counts

Hub1 & Hub2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Percentage Open Horizontal

Hub1: SN09
FW: IBERT+IPbus+GBT
Tempv3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

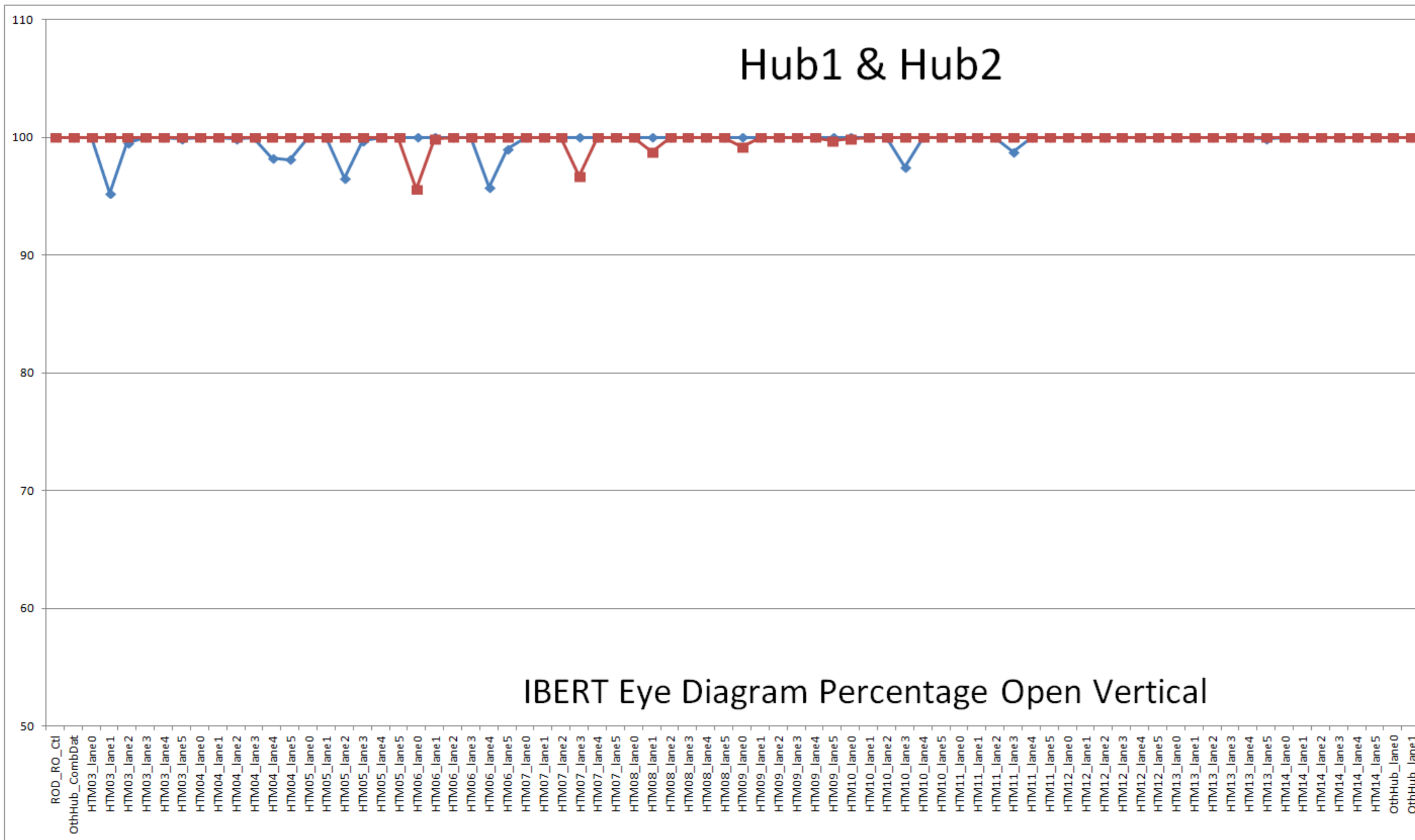
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

Hub1 & Hub2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



◆ V% HUB1 19:20-Feb-2019_avg noDFE&EqOFF
■ V% HUB2 19:20-Feb-2019_avg noDFE&EqOFF

Hub1: SN09
 FW: IBERT+IPbus+GBT
 Temp v3 19-Dec-2018
ROD1: SN04
 FW IBERT 03/05-Aug-2017

Hub2: SN05
 FW: IBERT+IPbus
 Test v2p2 14-Dec-2018
ROD2: SN00
 FW IBERT 03/05-Aug-2017

IBERT Eye Diagram Percentage Open Vertical

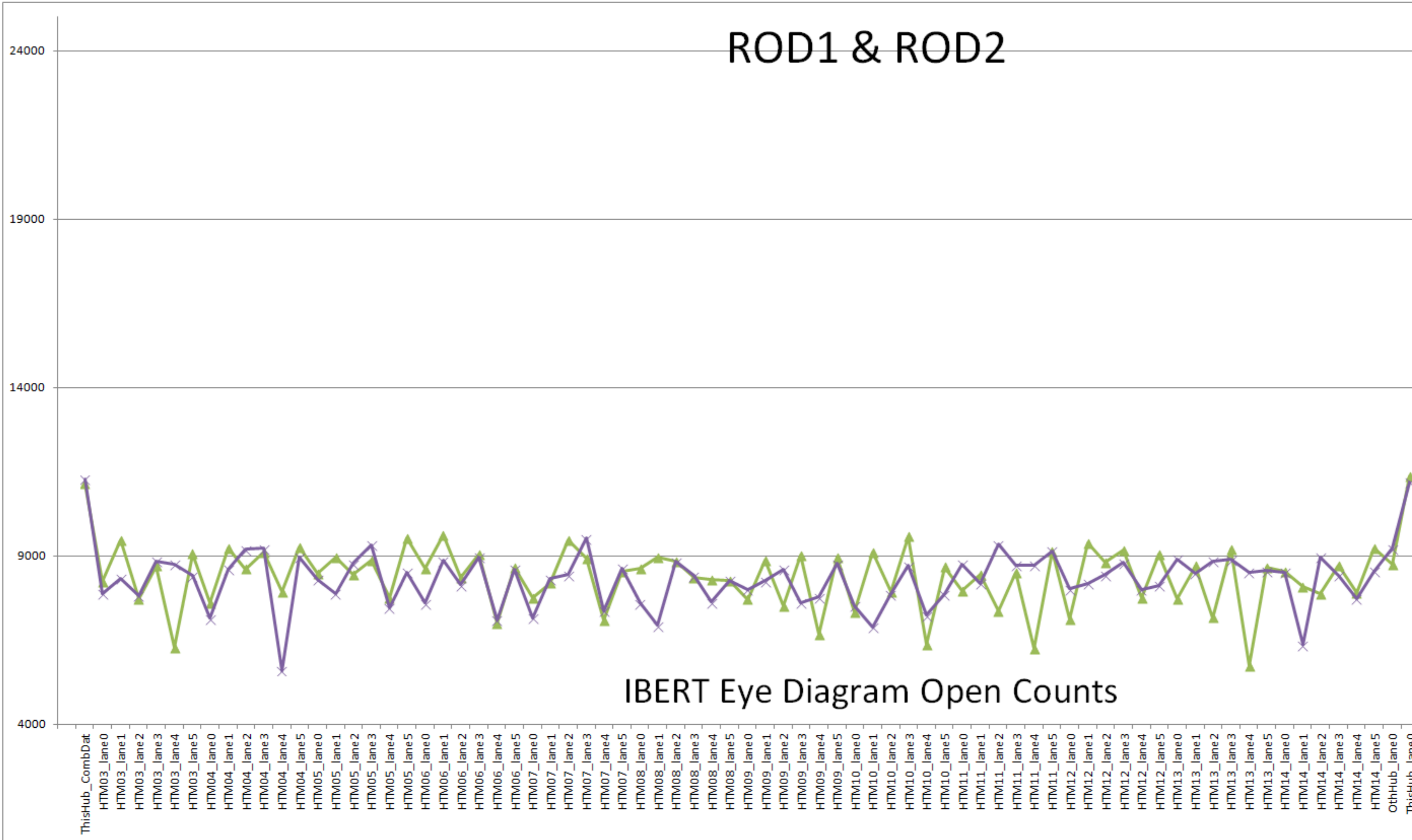
HTM3-14:
 S/N 5,17,1,11,4,12,
 3,13,16,6,9,8
 HTM11 just replaced
 FW: IBERT+IPbus
 rev 07-Sep-2018

ROD1 & ROD2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



O ROD1 19:20-Feb-2019_avg noDFE&EqOFF
O ROD2 19:20-Feb-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Tempv3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

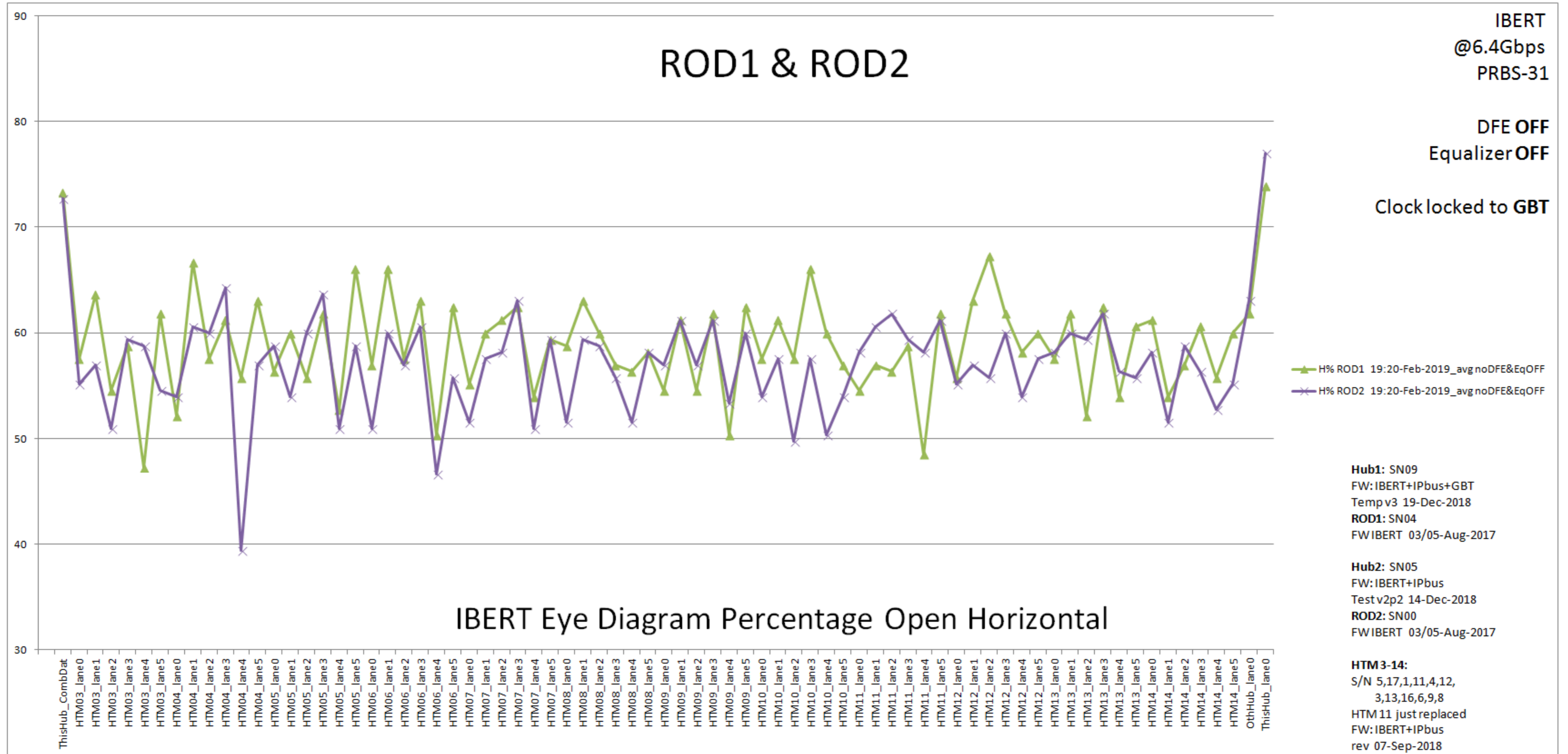
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM 11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

ROD1 & ROD2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Percentage Open Horizontal

Hub1: SN09
FW: IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FW IBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FW IBERT 03/05-Aug-2017

HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

ROD1 & ROD2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT

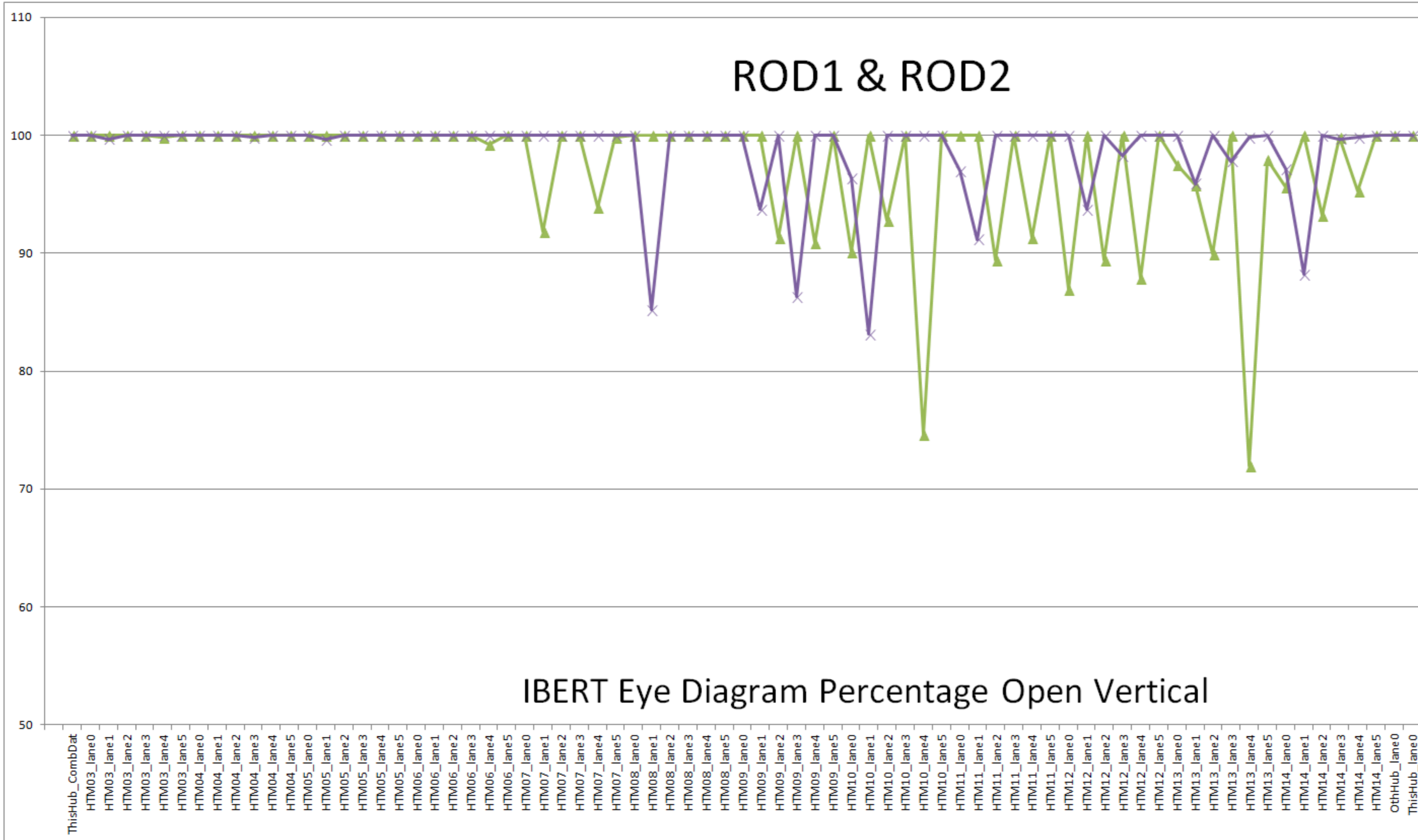
▲ V% ROD1 19:20-Feb-2019_avg noDFE&EqOFF
✕ V% ROD2 19:20-Feb-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FW IBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Test v2p2 14-Dec-2018
ROD2: SN00
FW IBERT 03/05-Aug-2017

HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

IBERT Eye Diagram Percentage Open Vertical

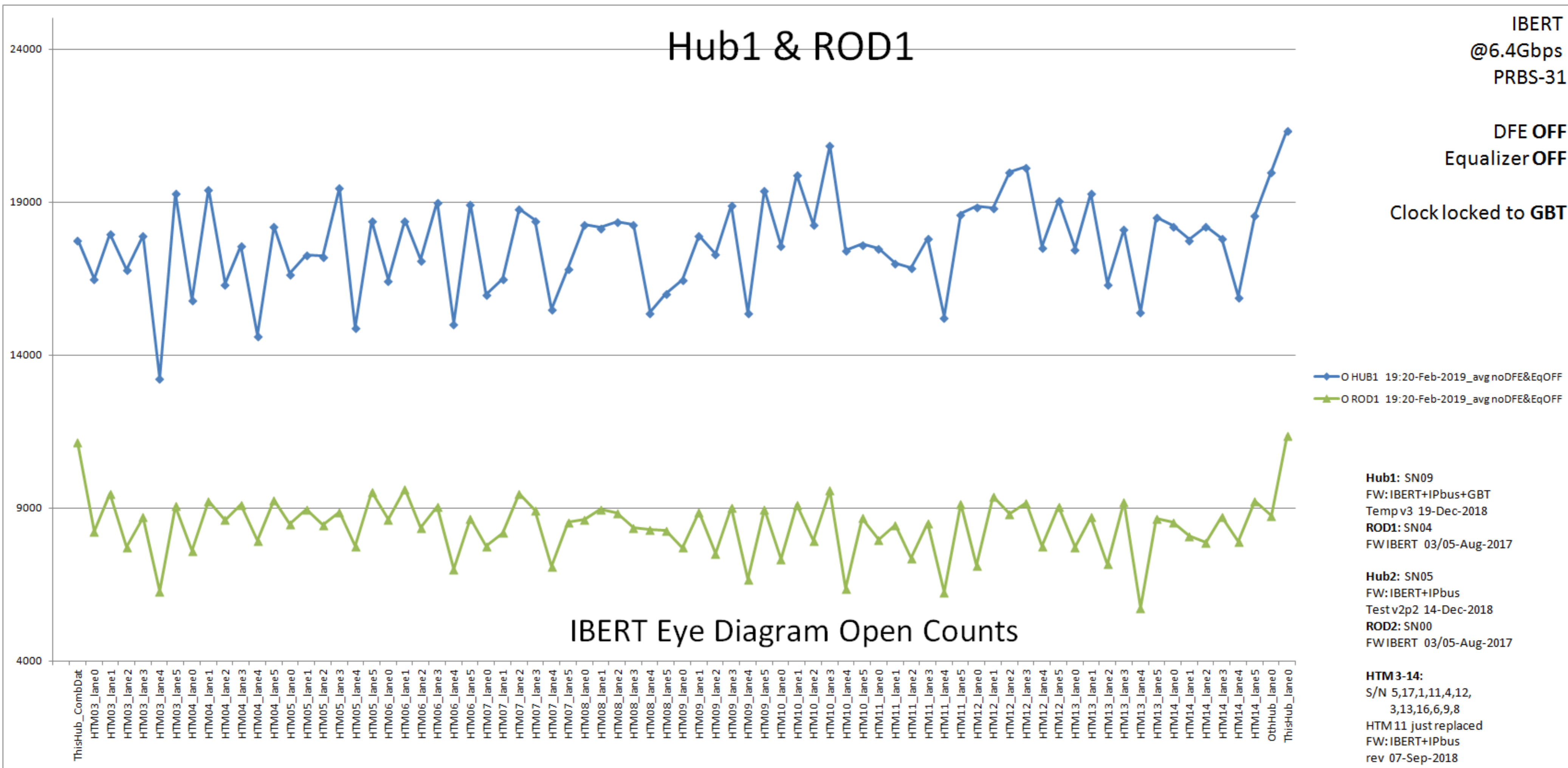


Hub1 & ROD1

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Open Counts

Hub1: SN09
FW:IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW:IBERT+IPbus
Test v2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

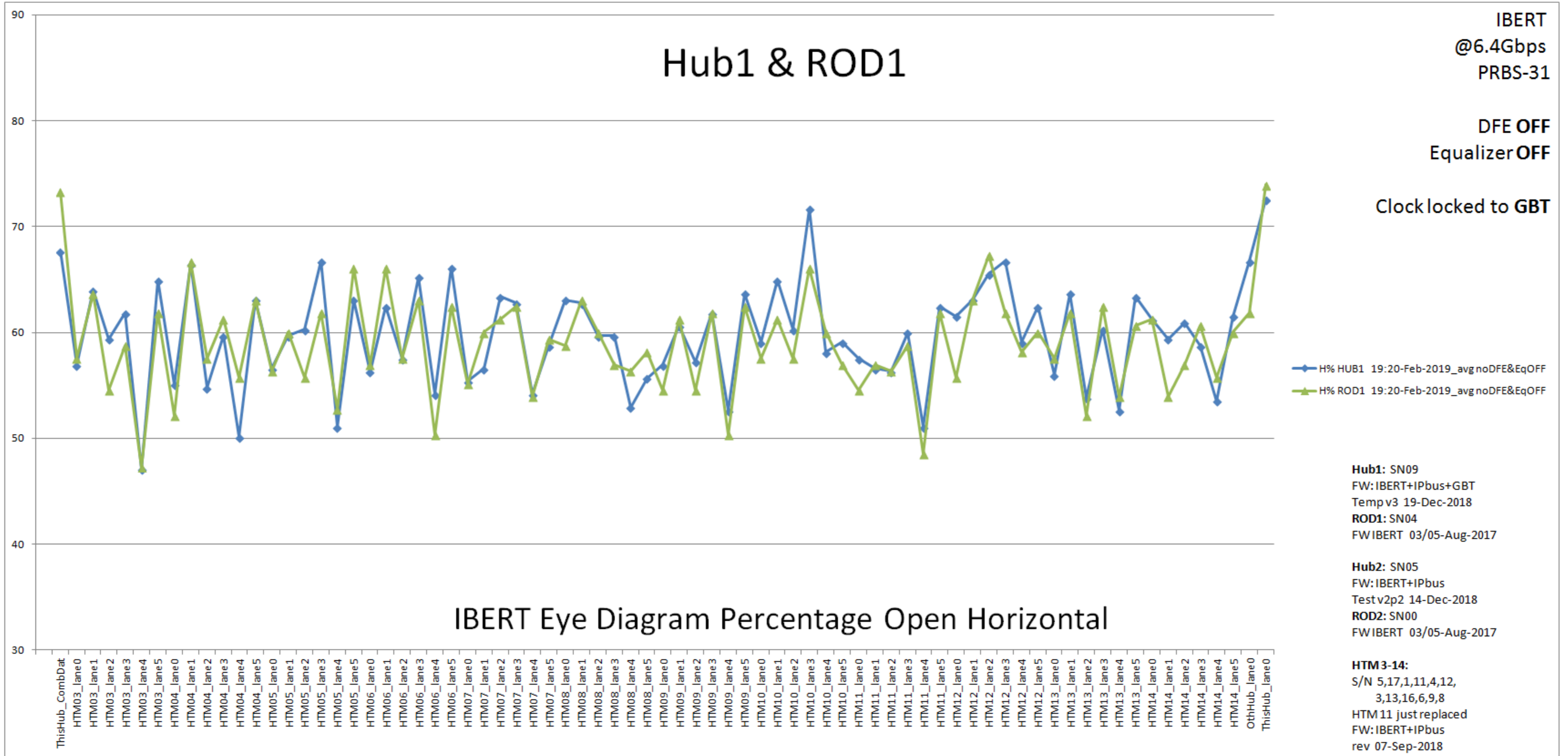
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM 11 just replaced
FW:IBERT+IPbus
rev 07-Sep-2018

Hub1 & ROD1

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



Hub1 & ROD1

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT

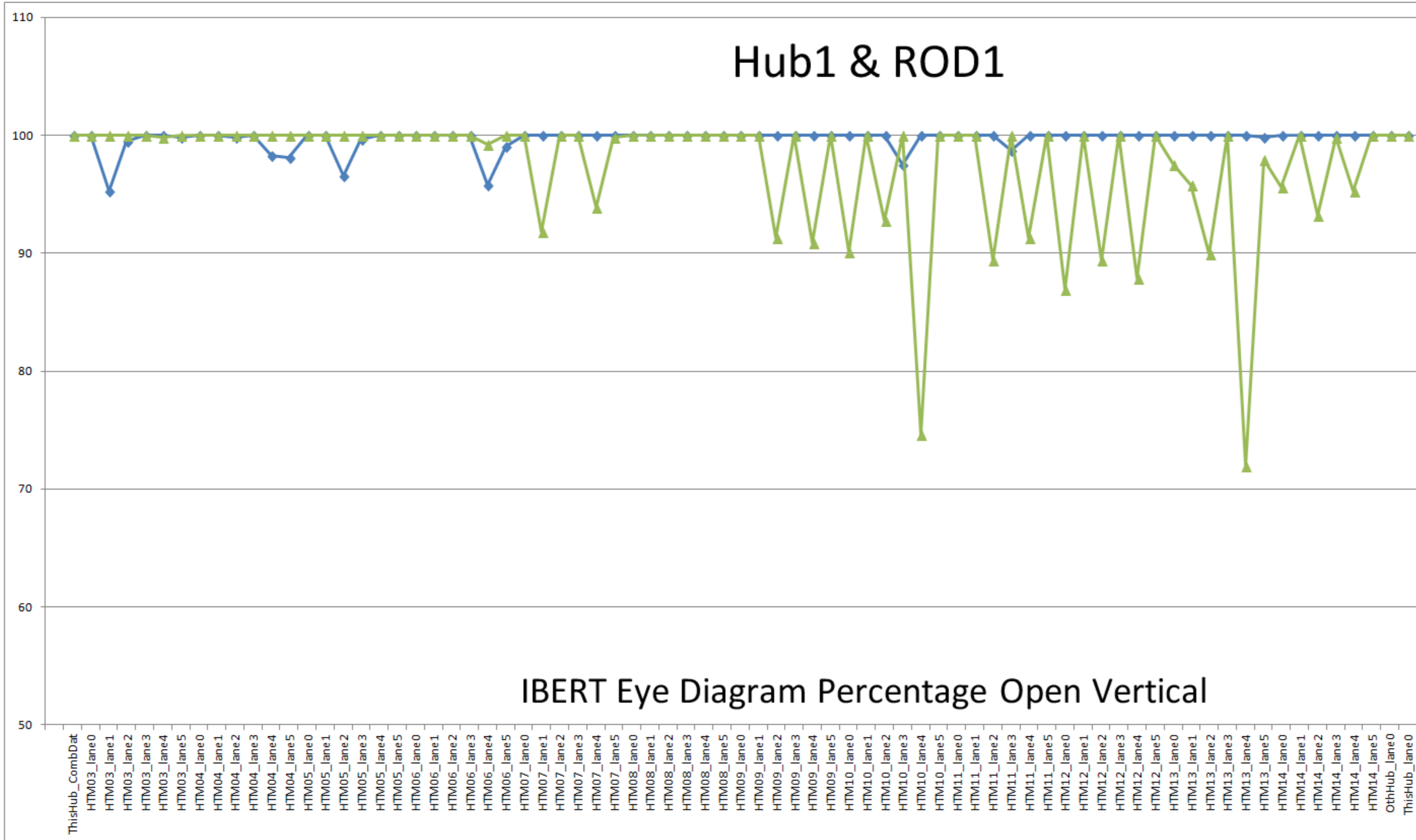
◆ V% HUB1 19:20-Feb-2019_avg noDFE&EqOFF
▲ V% ROD1 19:20-Feb-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FW IBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FW IBERT 03/05-Aug-2017

HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

IBERT Eye Diagram Percentage Open Vertical

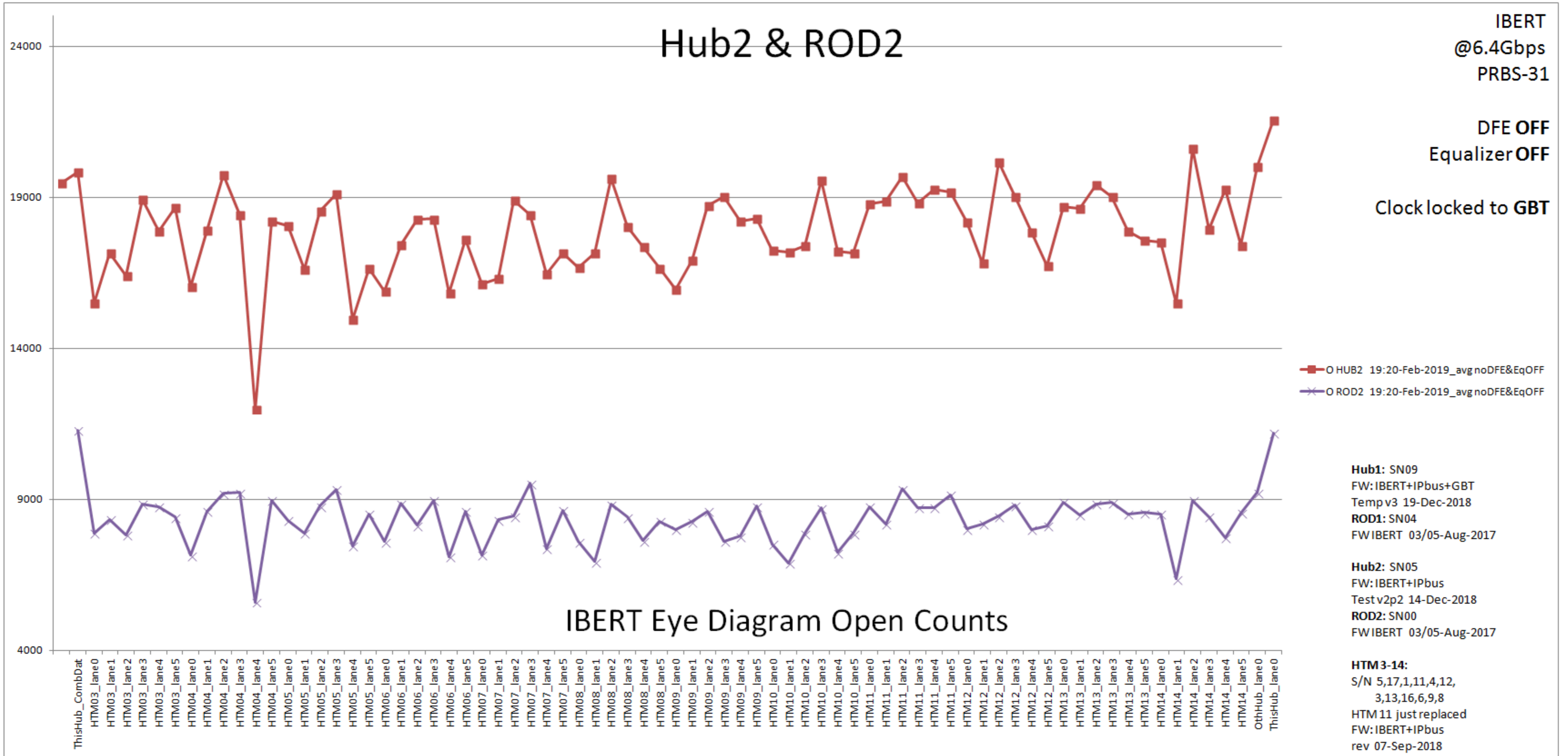


Hub2 & ROD2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



IBERT Eye Diagram Open Counts

Hub1: SN09
FW:IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FWIBERT 03/05-Aug-2017

Hub2: SN05
FW:IBERT+IPbus
Test v2p2 14-Dec-2018
ROD2: SN00
FWIBERT 03/05-Aug-2017

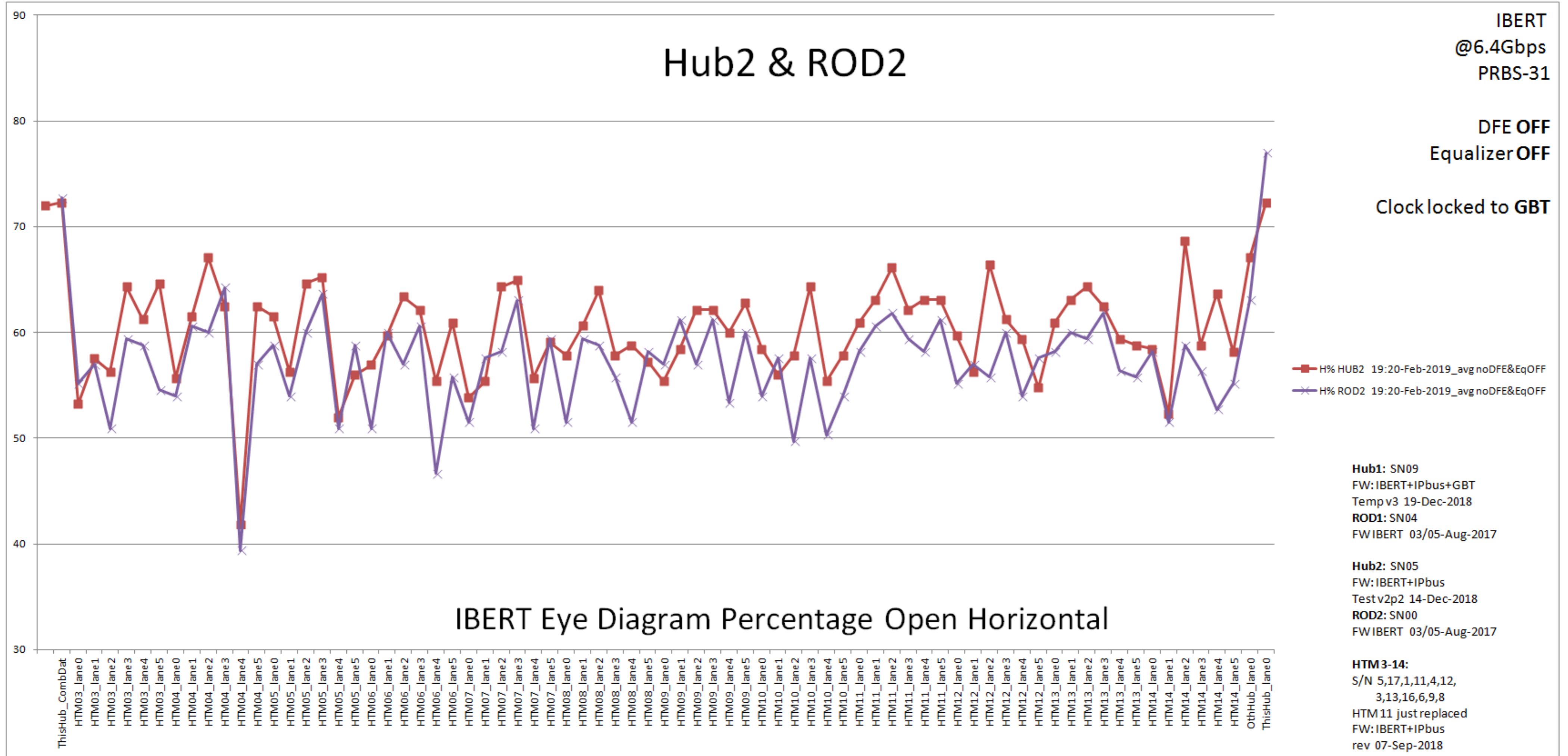
HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM 11 just replaced
FW:IBERT+IPbus
rev 07-Sep-2018

Hub2 & ROD2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT



■ H% HUB2 19:20-Feb-2019_avg noDFE&EqOFF
 × H% ROD2 19:20-Feb-2019_avg noDFE&EqOFF

Hub1: SN09
 FW:IBERT+IPbus+GBT
 Temp v3 19-Dec-2018
ROD1: SN04
 FWIBERT 03/05-Aug-2017

Hub2: SN05
 FW:IBERT+IPbus
 Test v2p2 14-Dec-2018
ROD2: SN00
 FWIBERT 03/05-Aug-2017

HTM3-14:
 S/N 5,17,1,11,4,12,
 3,13,16,6,9,8
 HTM 11 just replaced
 FW:IBERT+IPbus
 rev 07-Sep-2018

IBERT Eye Diagram Percentage Open Horizontal

Hub2 & ROD2

IBERT
@6.4Gbps
PRBS-31

DFE OFF
Equalizer OFF

Clock locked to GBT

■ V% HUB2 19:20-Feb-2019_avg noDFE&EqOFF
× V% ROD2 19:20-Feb-2019_avg noDFE&EqOFF

Hub1: SN09
FW: IBERT+IPbus+GBT
Temp v3 19-Dec-2018
ROD1: SN04
FW IBERT 03/05-Aug-2017

Hub2: SN05
FW: IBERT+IPbus
Testv2p2 14-Dec-2018
ROD2: SN00
FW IBERT 03/05-Aug-2017

HTM3-14:
S/N 5,17,1,11,4,12,
3,13,16,6,9,8
HTM11 just replaced
FW: IBERT+IPbus
rev 07-Sep-2018

IBERT Eye Diagram Percentage Open Vertical

