Qualification Lossmaps at 4TeV ADJUST Totem & Alpha IN
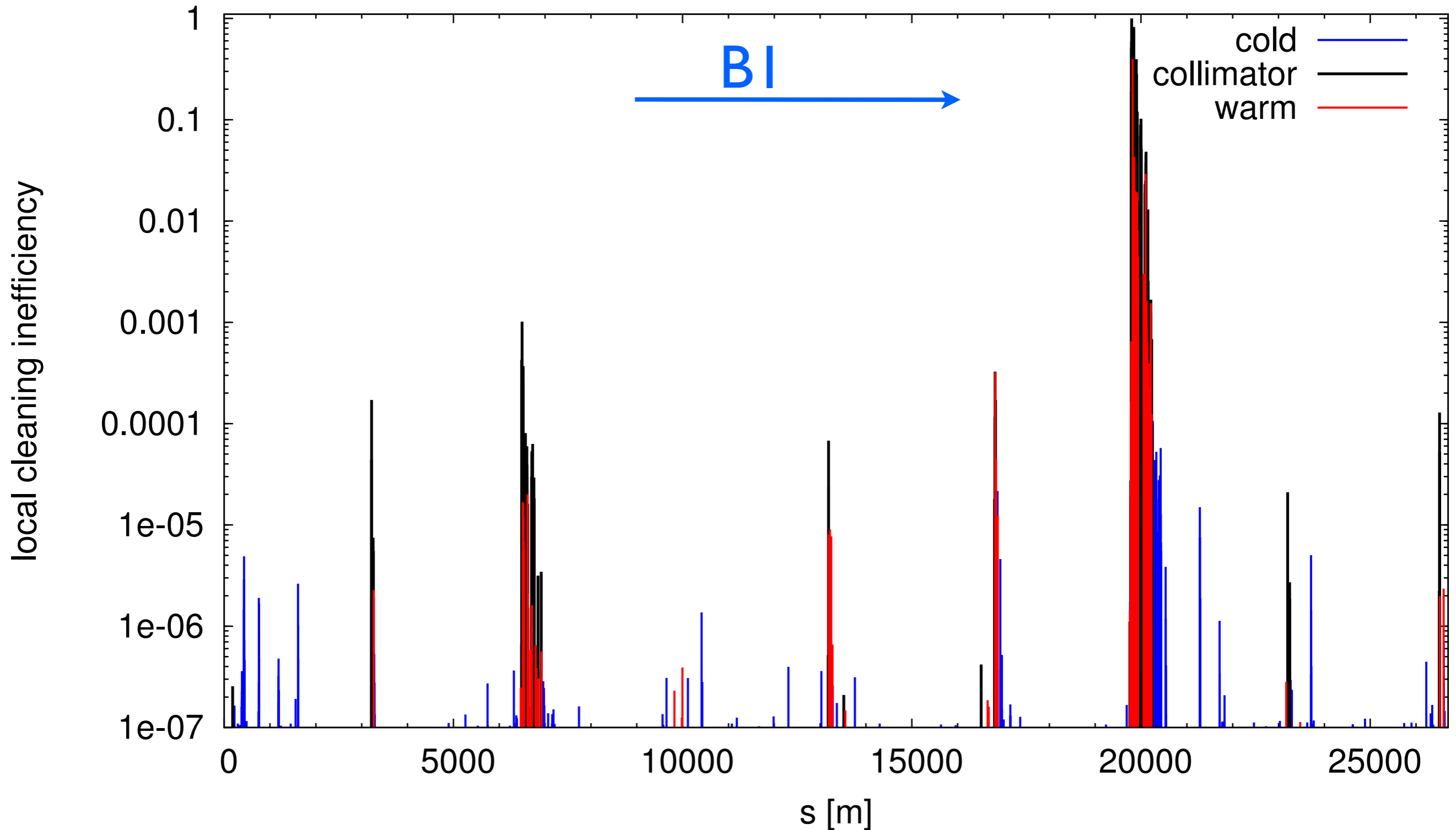
S. Redaelli, B. Salvachua, G. Valentino
for the Collimation Team

Qualification Lossmaps after TS2

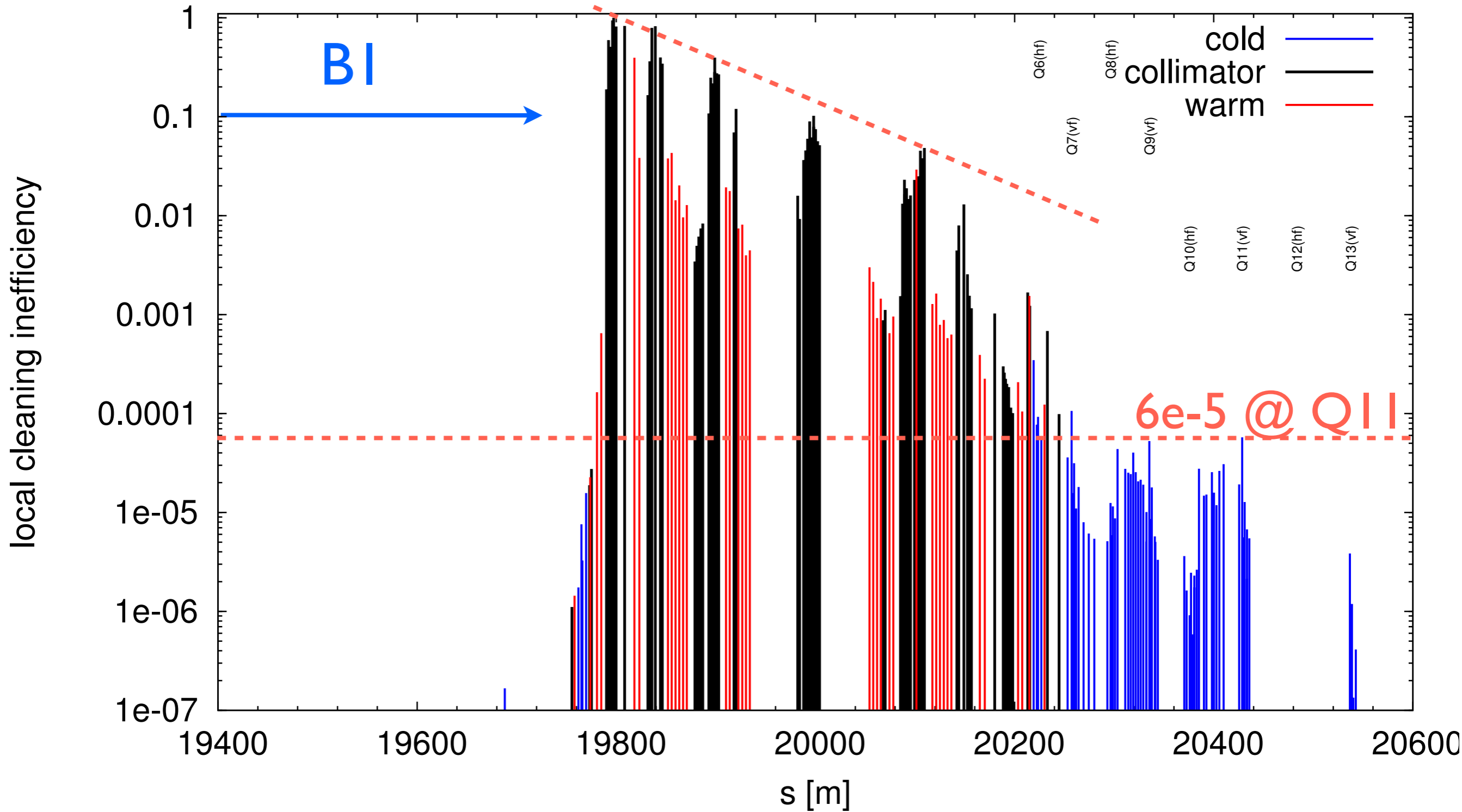| Lossmap	2012-07-01
B1-V	05:37:08
B1-H	05:41:31
B2-V	05:47:59
B2-H	05:49:50
B1+B2 NEG off-momentum (+500Hz)	05:53:30

B1-V 2012.07.01 05:37:08

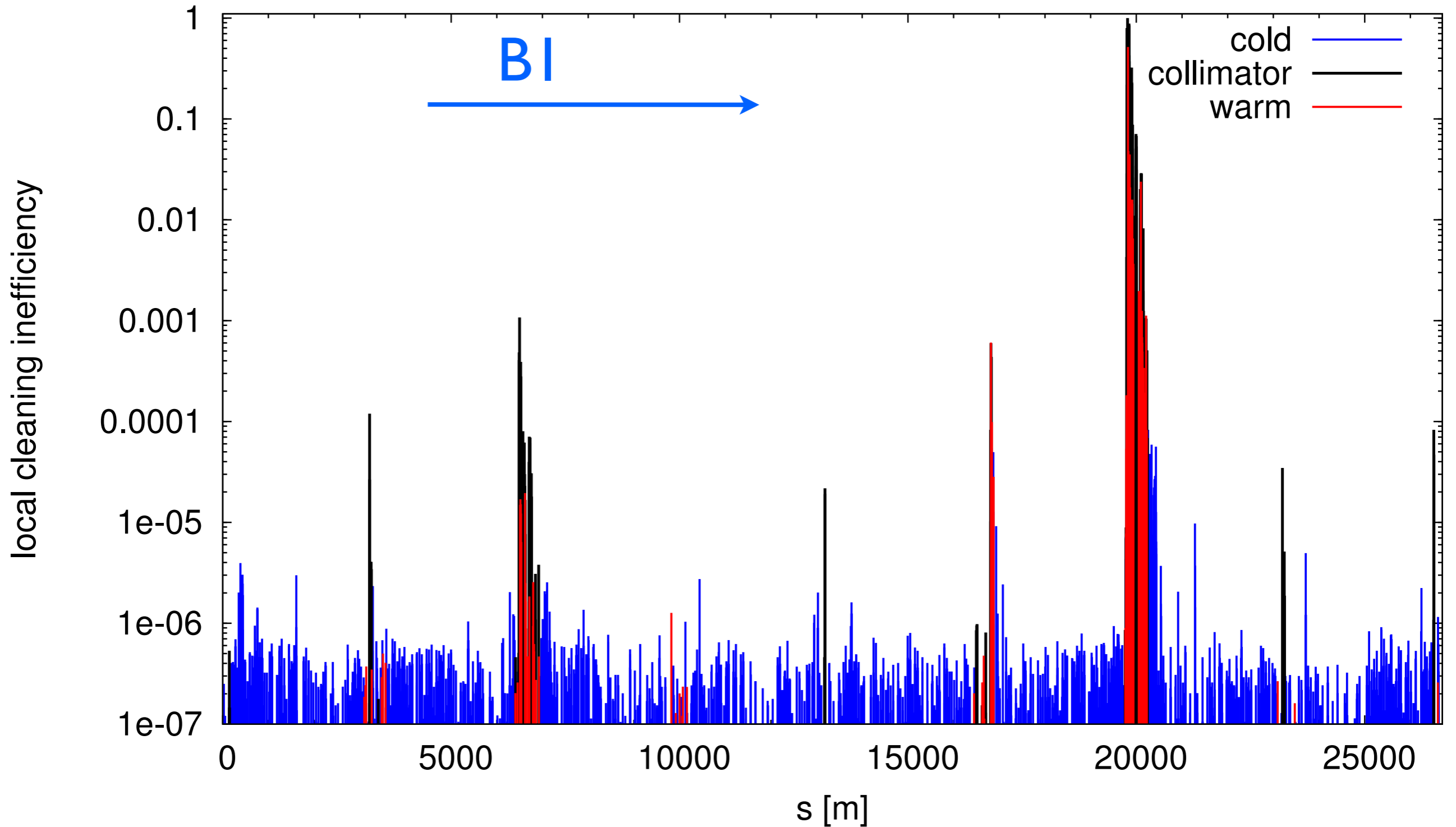betatron losses B1 4000GeV ver norm F (2012.07.01, 05:37:08)

B1-V 2012.07.01 05:37:08

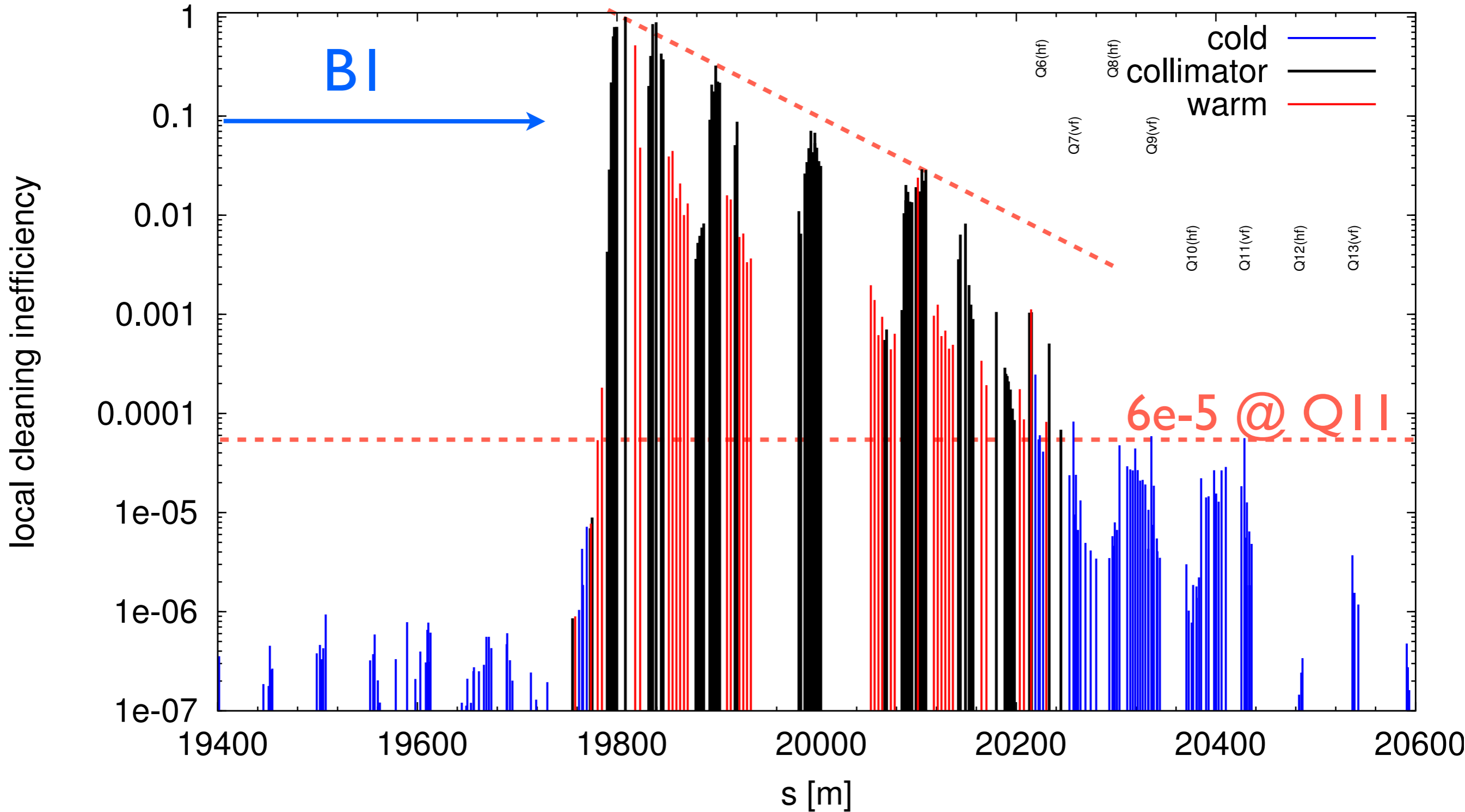betatron losses B1 4000GeV ver norm IR7 (2012.07.01, 05:37:08)

B1-H 2012.07.01 05:41:31

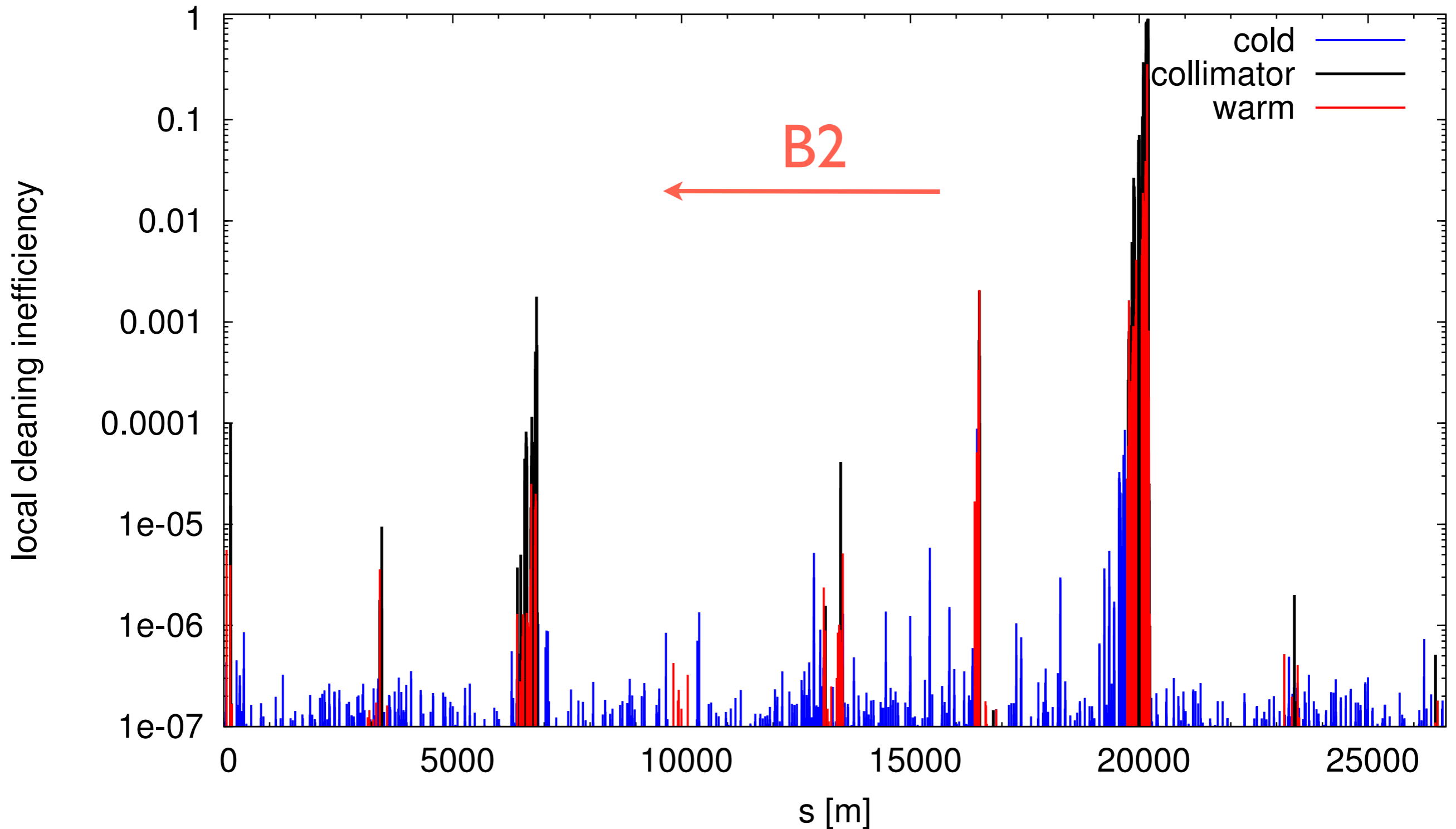betatron losses B1 4000GeV hor norm F (2012.07.01, 05:41:31)

B1-H 2012.07.01 05:41:31

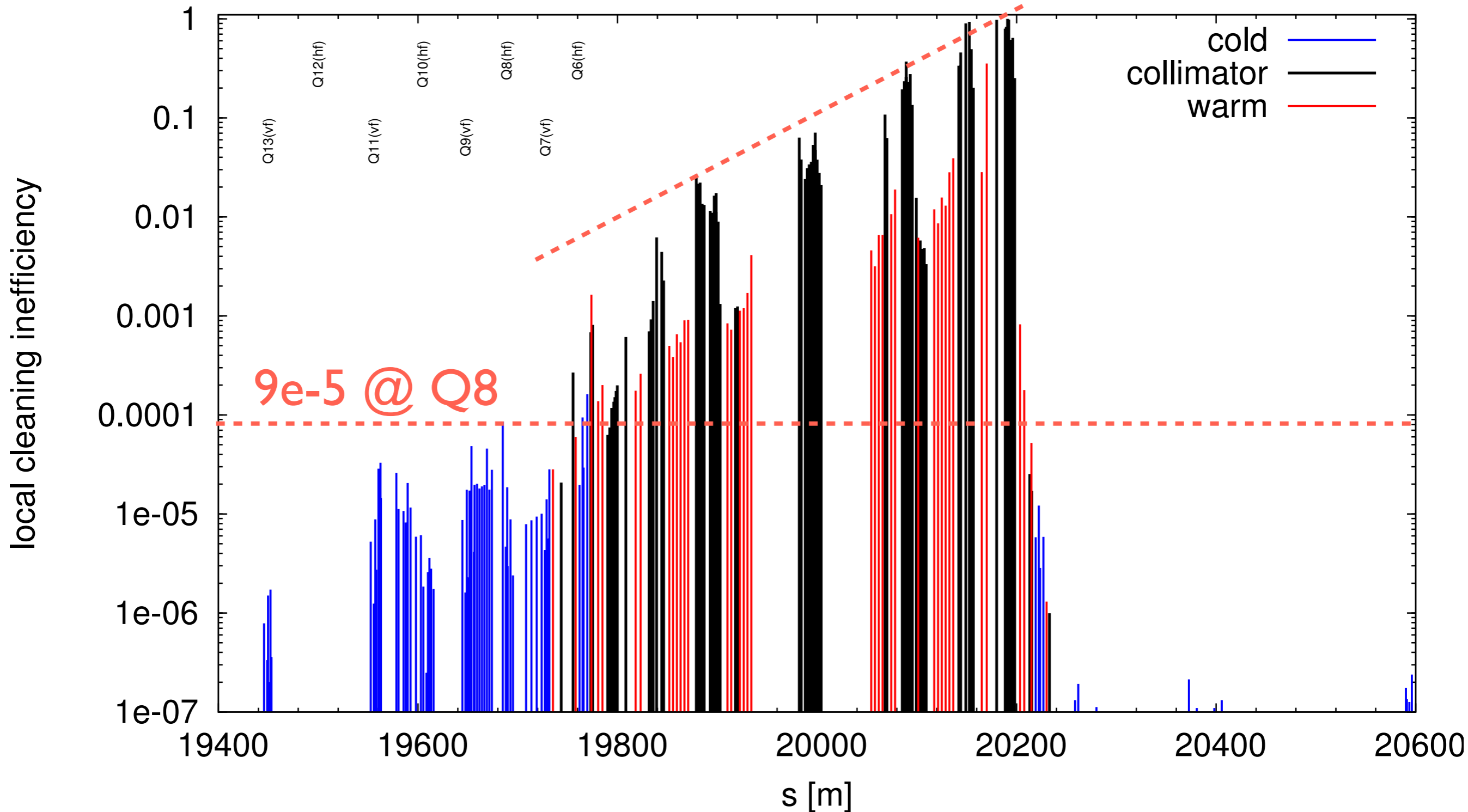betatron losses B1 4000GeV hor norm IR7 (2012.07.01, 05:41:31)

B2-V 2012.07.01 05:47:59

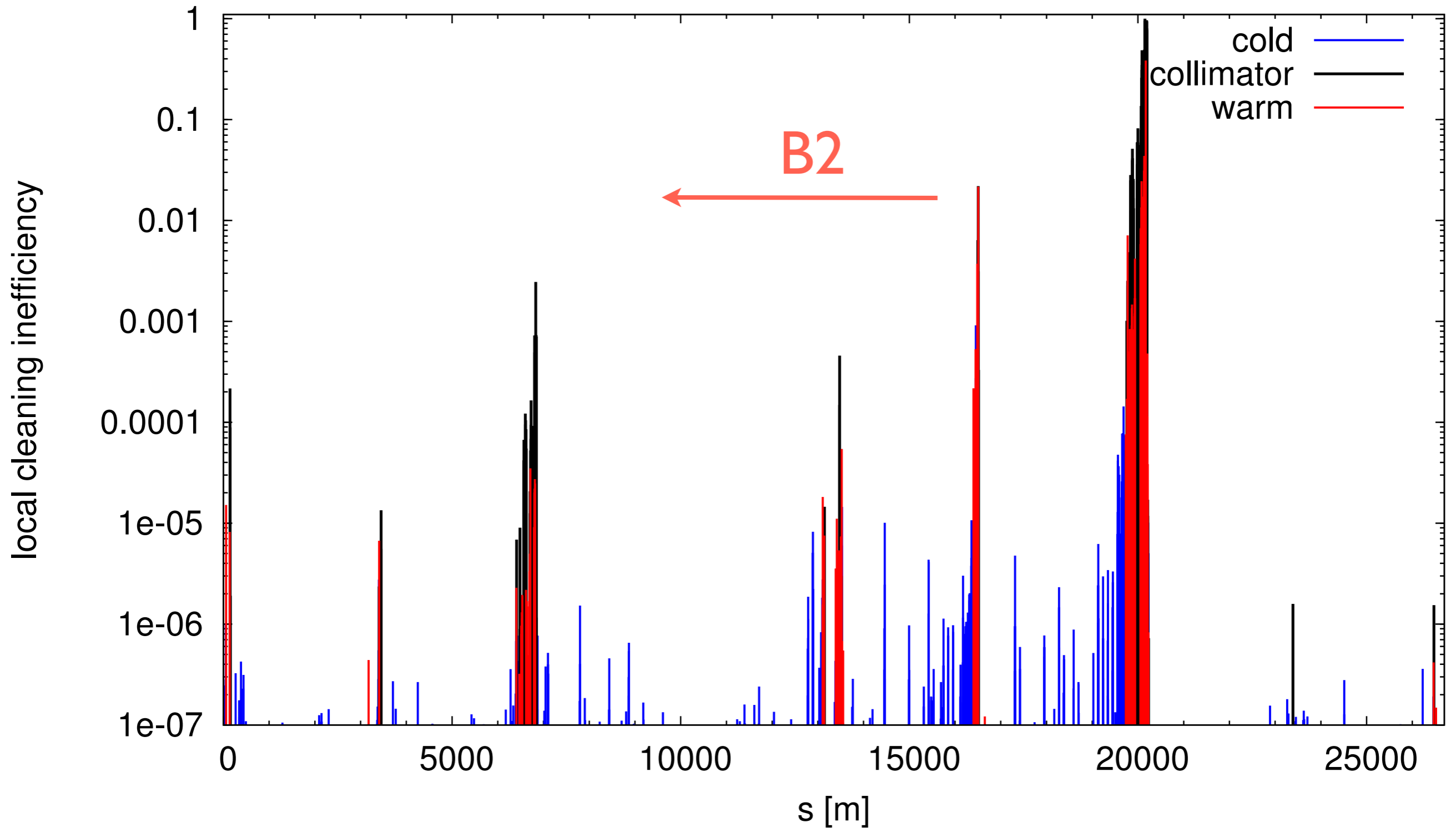betatron losses B2 4000GeV ver norm F (2012.07.01, 05:47:59)

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B2-V 2012.07.01 05:47:59

betatron losses B2 4000GeV ver norm IR7 (2012.07.01, 05:47:59)

Q13(vf) Q12(hf) Q11(vf) Q10(hf) Q9(vf) Q8(hf) Q7(vf) Q6(hf)

9e-5 @ Q8

- cold
- collimator
- warm

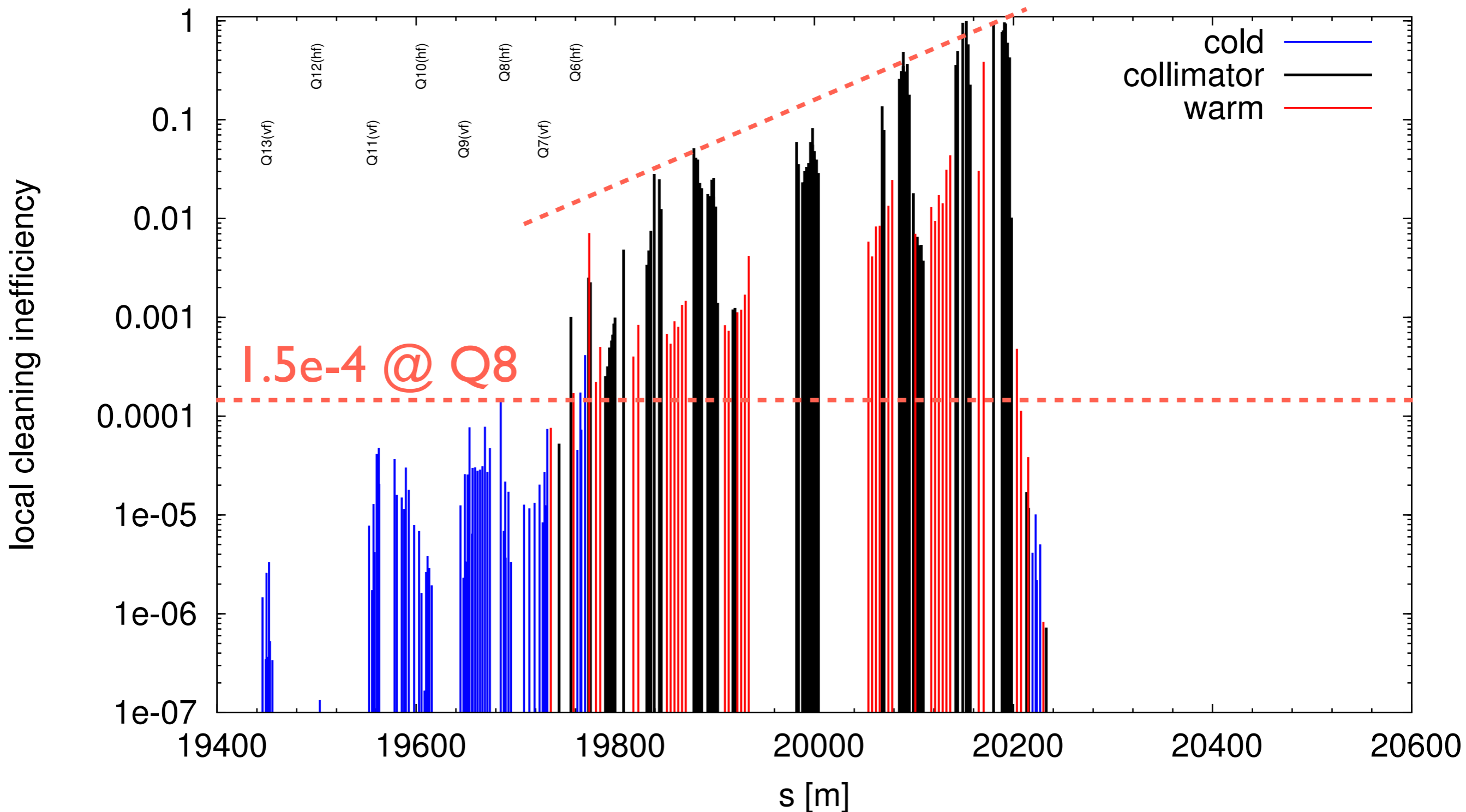local cleaning inefficiency

s [m]

B2-H 2012.07.01 05:49:50

betatron losses B2 4000GeV hor norm F (2012.07.01, 05:49:50)

B2-H 2012.07.01 05:49:50

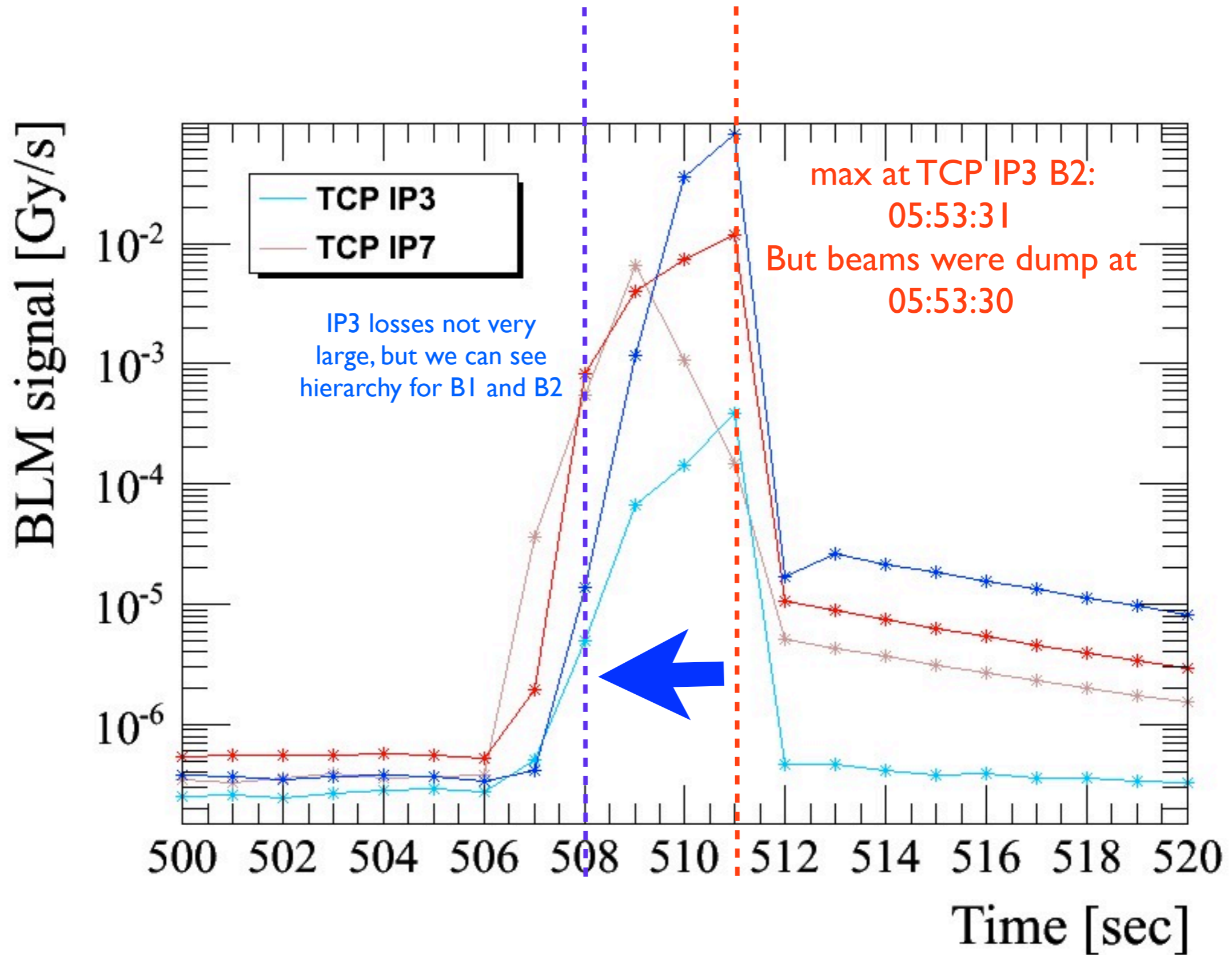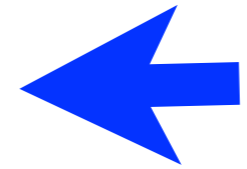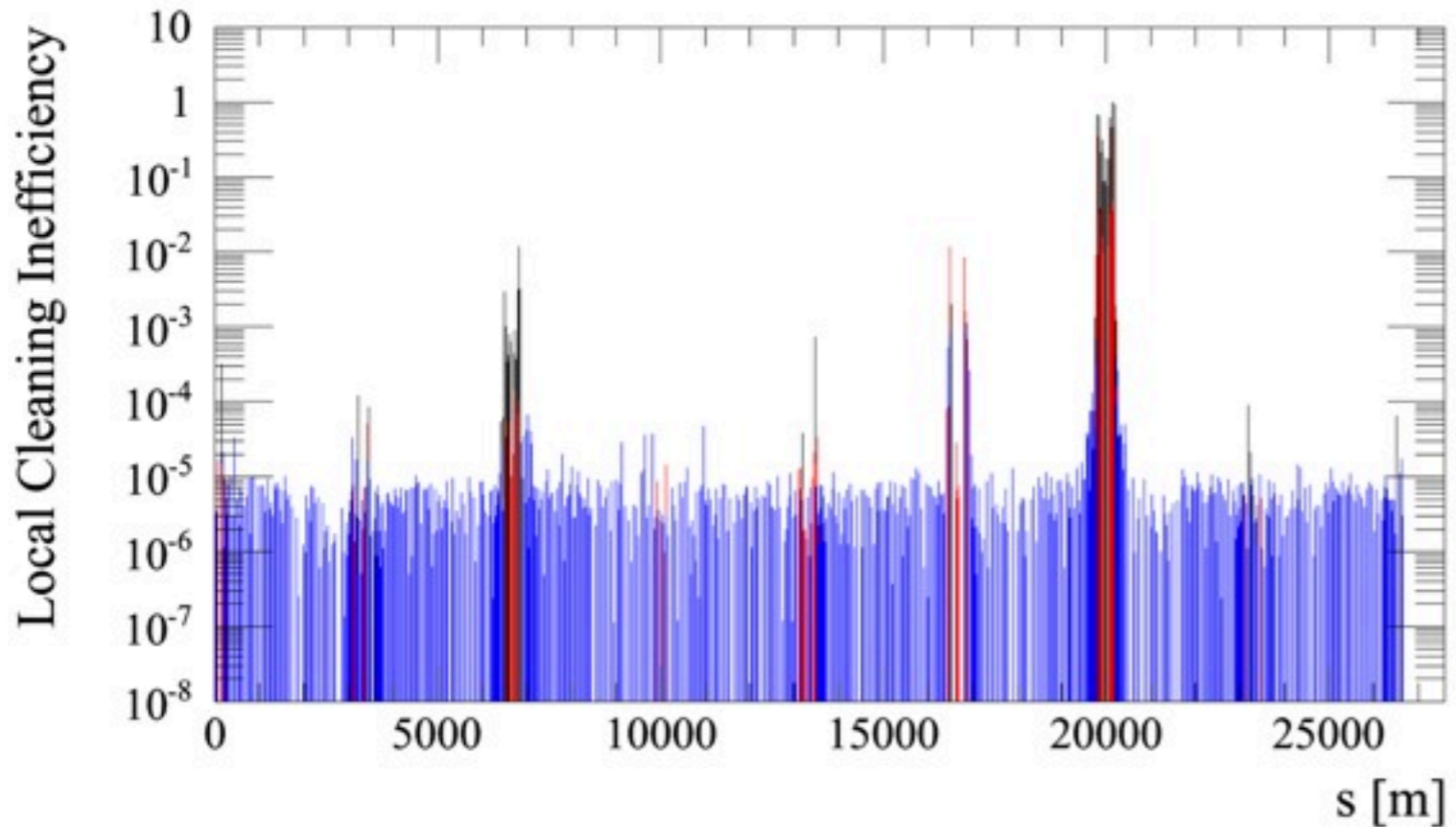betatron losses B2 4000GeV hor norm IR7 (2012.07.01, 05:49:50)

Q13(vf) Q12(hf) Q11(vf) Q10(hf) Q9(vf) Q8(hf) Q7(vf) Q6(hf)

1.5e-4 @ Q8

cold
collimator
warm

local cleaning inefficiency

s [m]

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Off - Momentum lossmap

Off-momentum lossmaps: Selecting time for the analysis

B1+B2 NEG-4TeV Date/Time: 2012-07-01 05:53:28

momentum losses B1 and B2 4000GeV neg offset norm F (2012.07.01, 05:53:30)

IP3 losses not very large, but we can see hierarchy for B1 and B2

But they are mainly betatron losses

max at TCP IP3 B2: 05:53:31
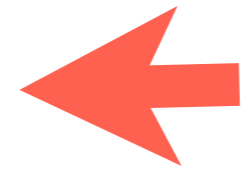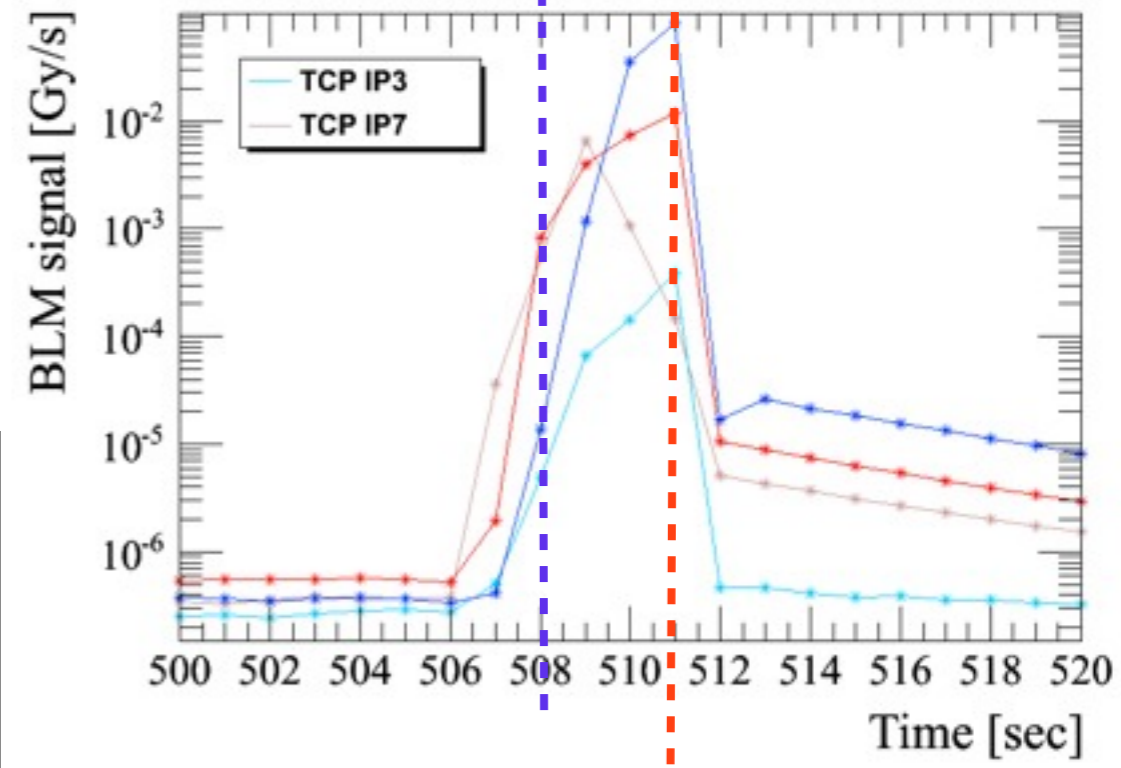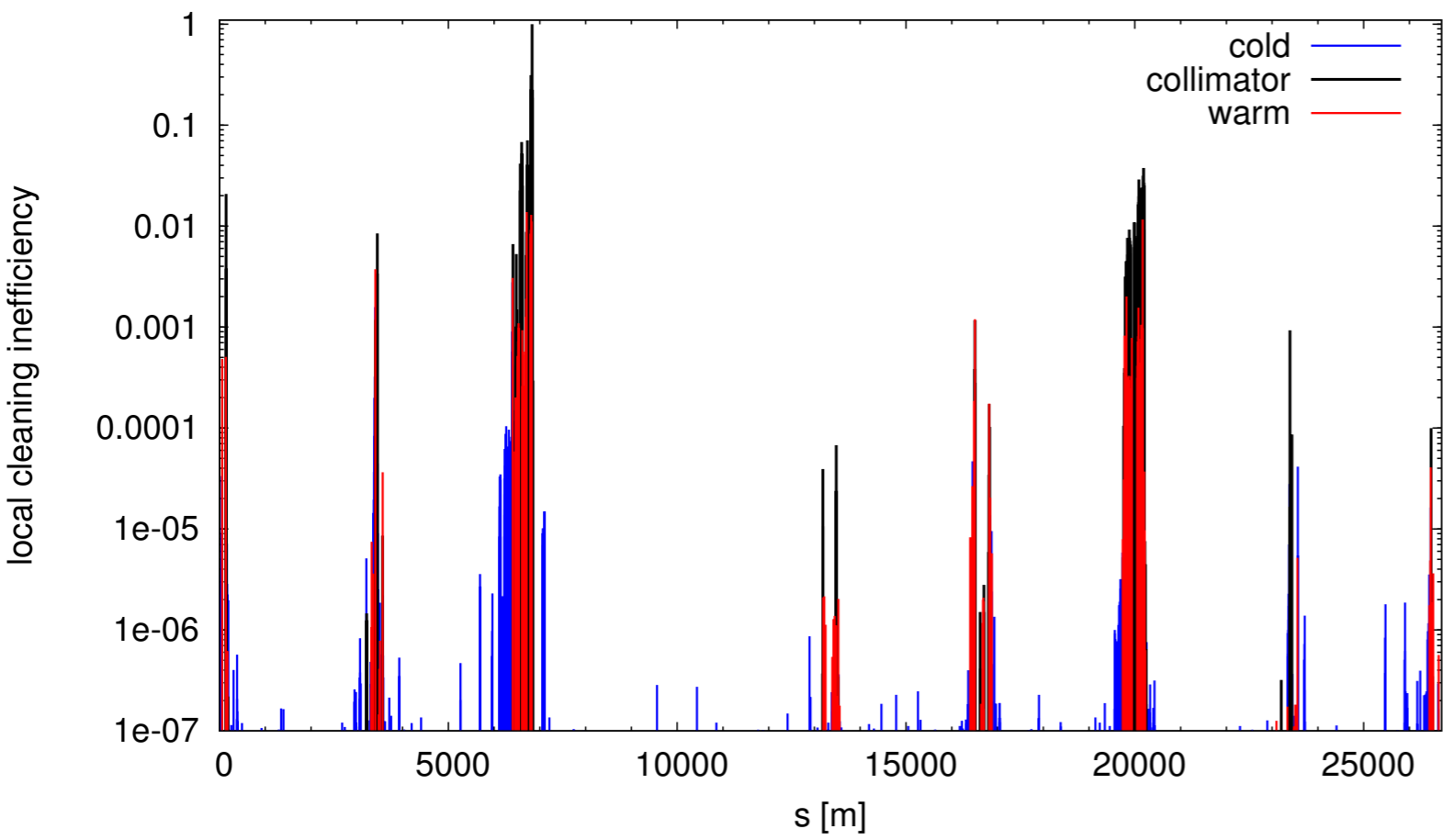But beams were dump at 05:53:30

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B1+B2 NEG-4TeV Date/Time: 2012-07-01 05:53:28

IP3 losses not very large, but we can see hierarchy for B1 and B2

But they are mainly betatron losses
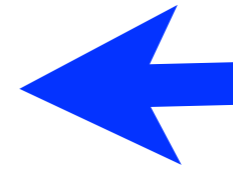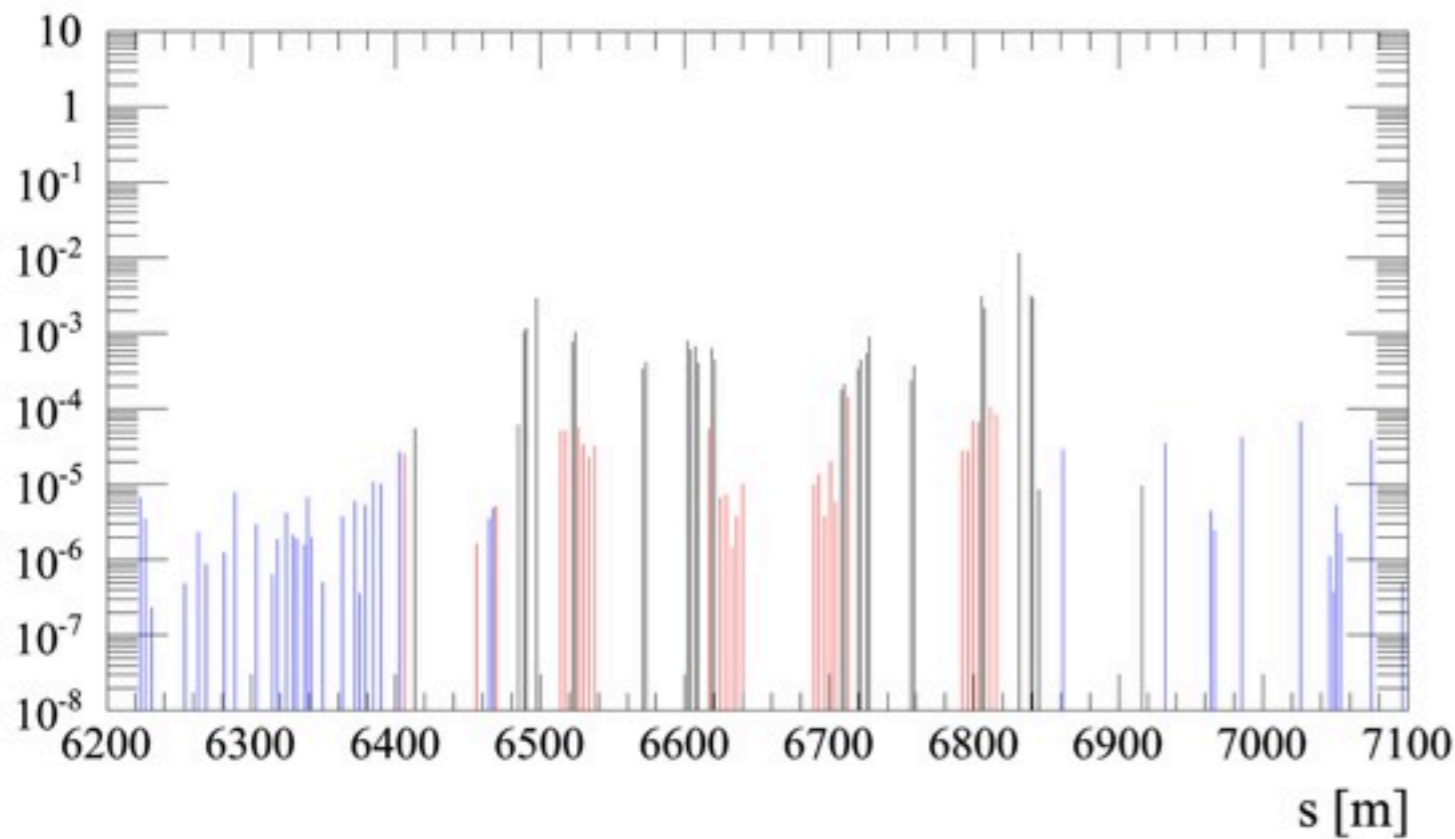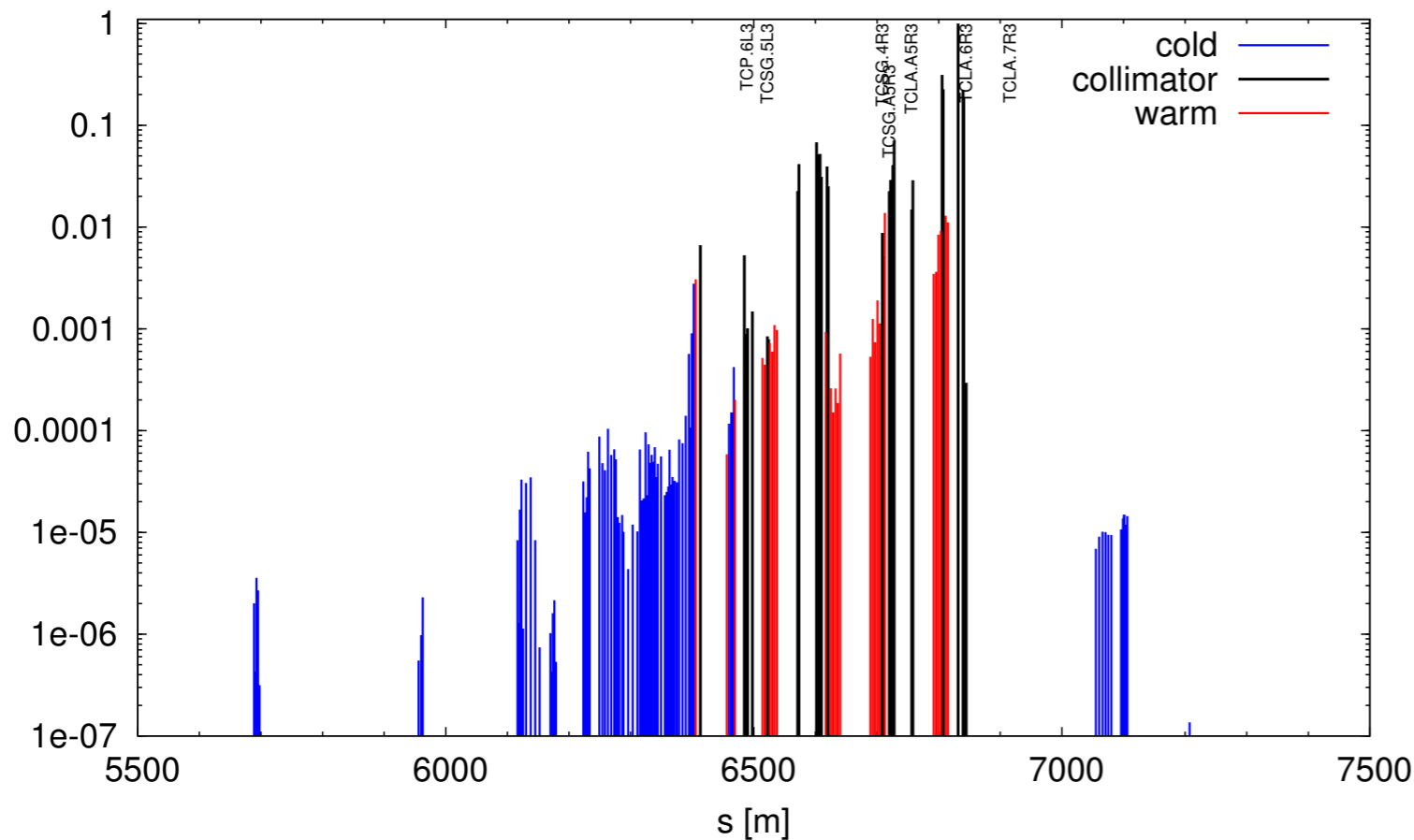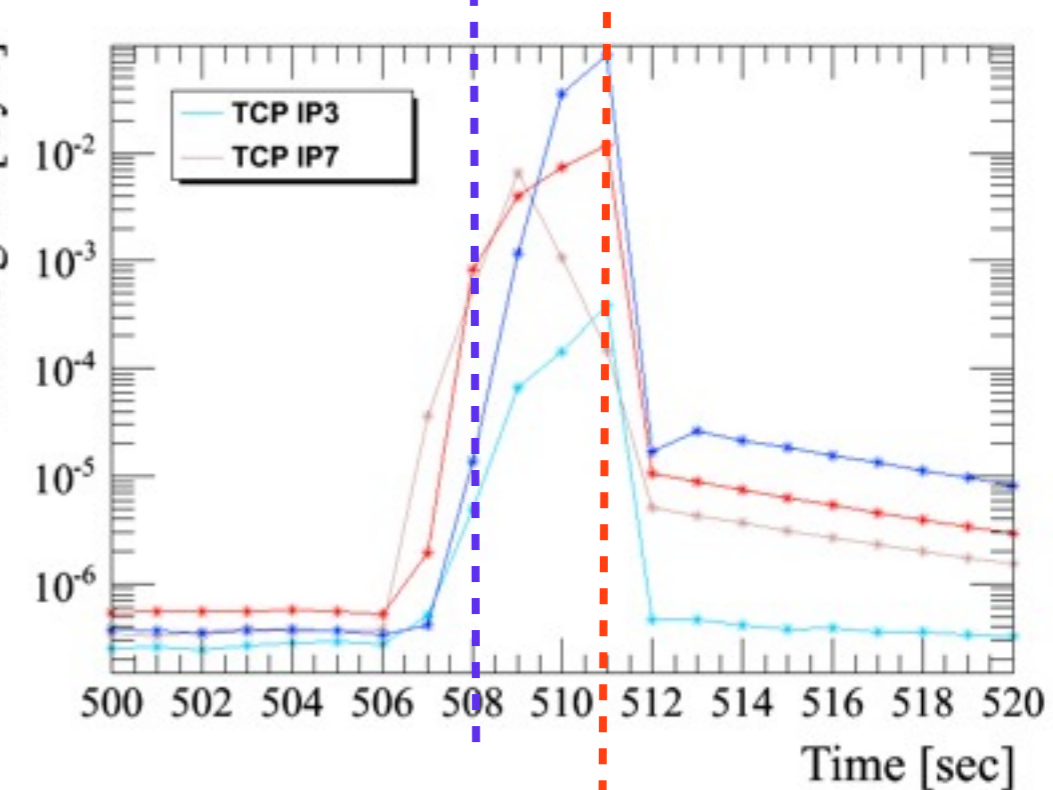
momentum losses B1 and B2 4000GeV neg offset norm IR3 (2012.07.01, 05:53:30)

cold
collimator
warm

TCP.6L3
TCSG.5L3
TCSG.A5R3
TCSG.4R3
TCLA.A5R3
TCLA.6R3
TCLA.7R3

max at TCP IP3 B2: 05:53:31
But beams were dump at 05:53:30

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Qualification Lossmaps after TS2

Lossmap	2012-07-01	Status
B1-V	05:37:08	OK
B1-H	05:41:31	OK
B2-V	05:47:59	OK
B2-H	05:49:50	OK
B1+B2 NEG off-momentum (+500Hz)	05:53:30	not clear, B2 seems ok, B1 doesn't show up in the lossmap