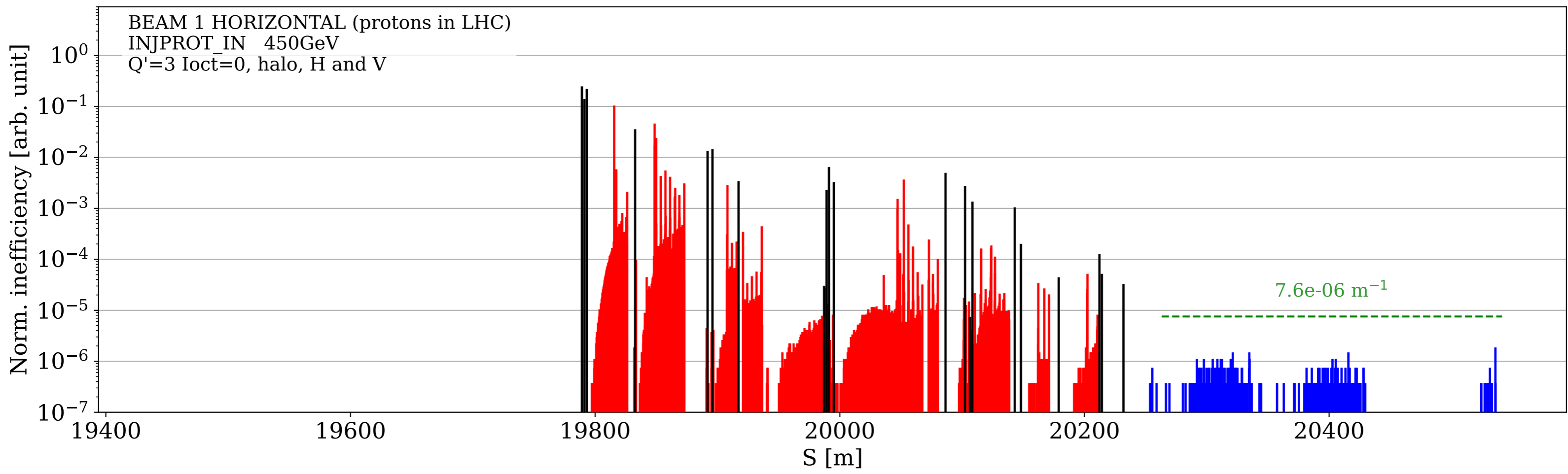
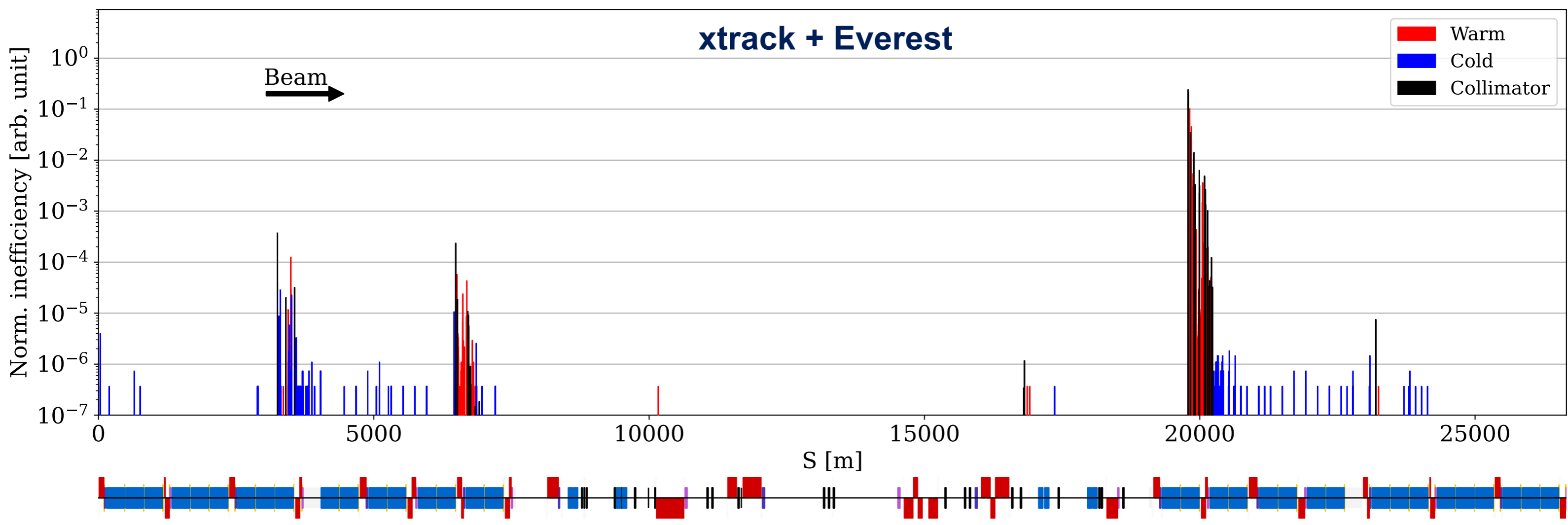


Beam 1 on-momentum

xtrack + Everest

- Warm
- Cold
- Collimator

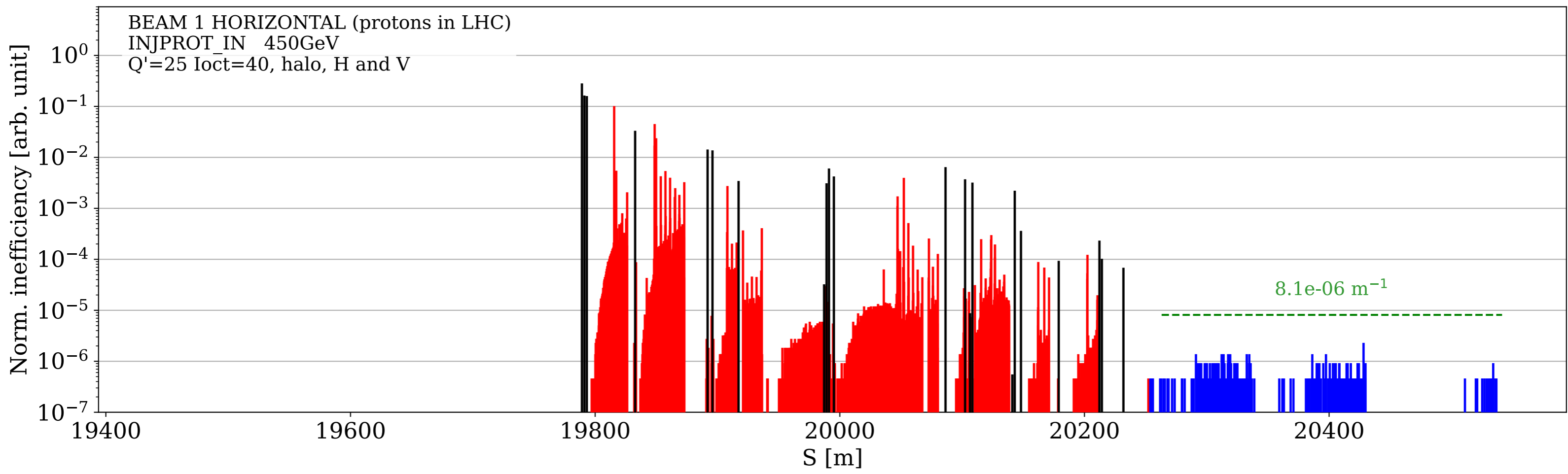
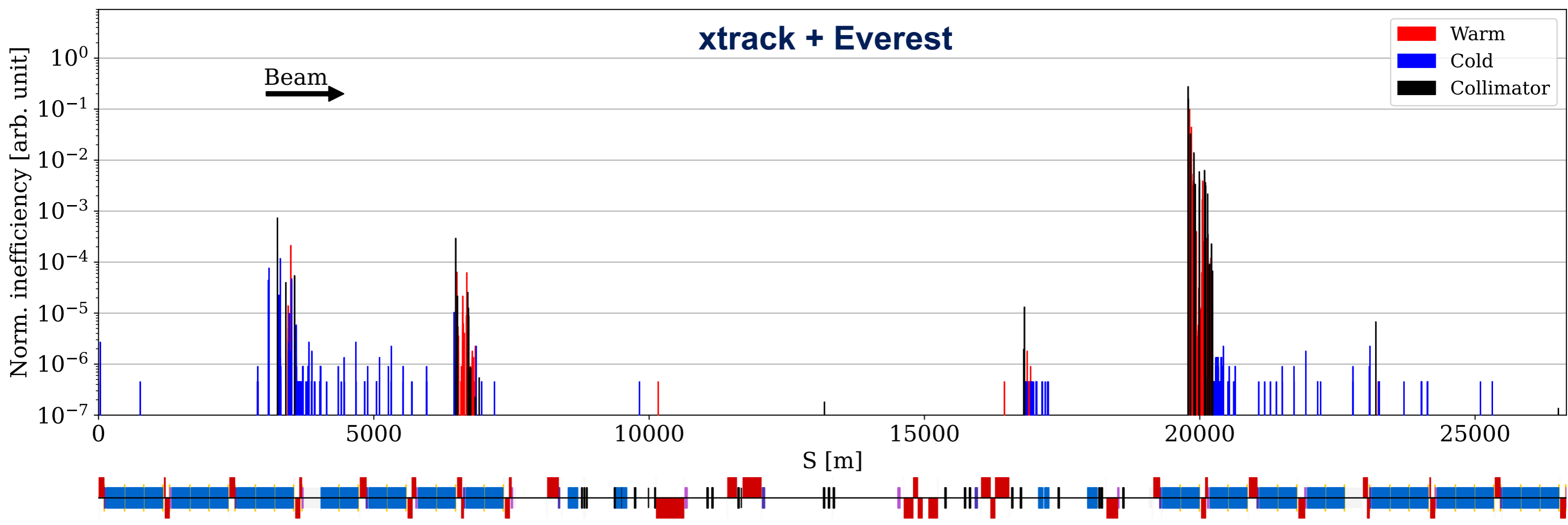
Beam →



xtrack + Everest


- Warm
- Cold
- Collimator

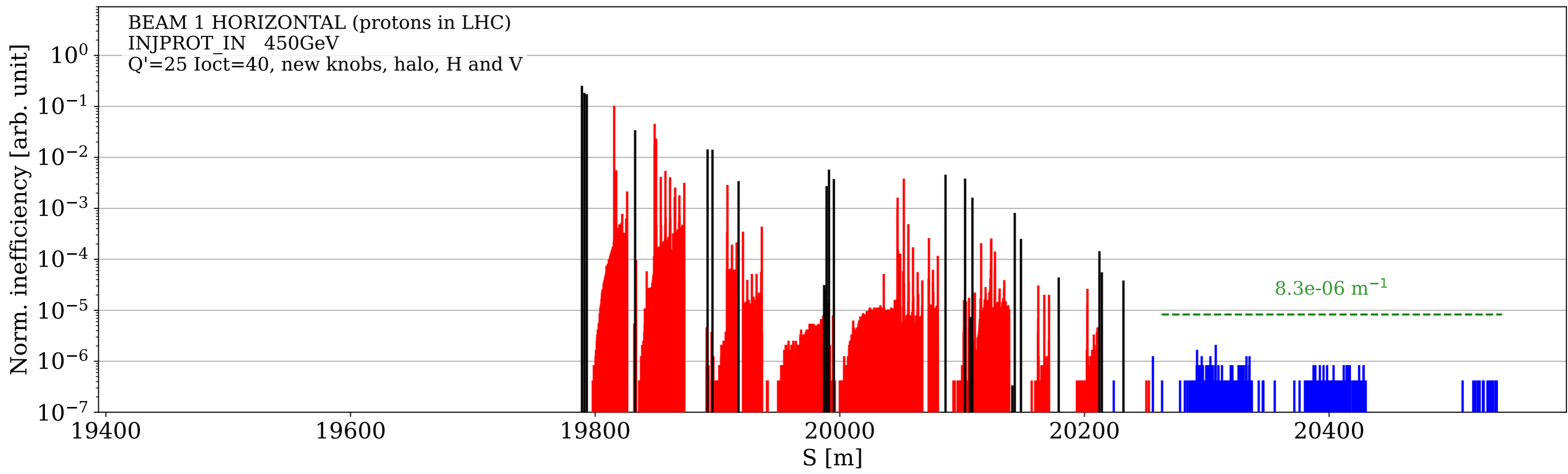
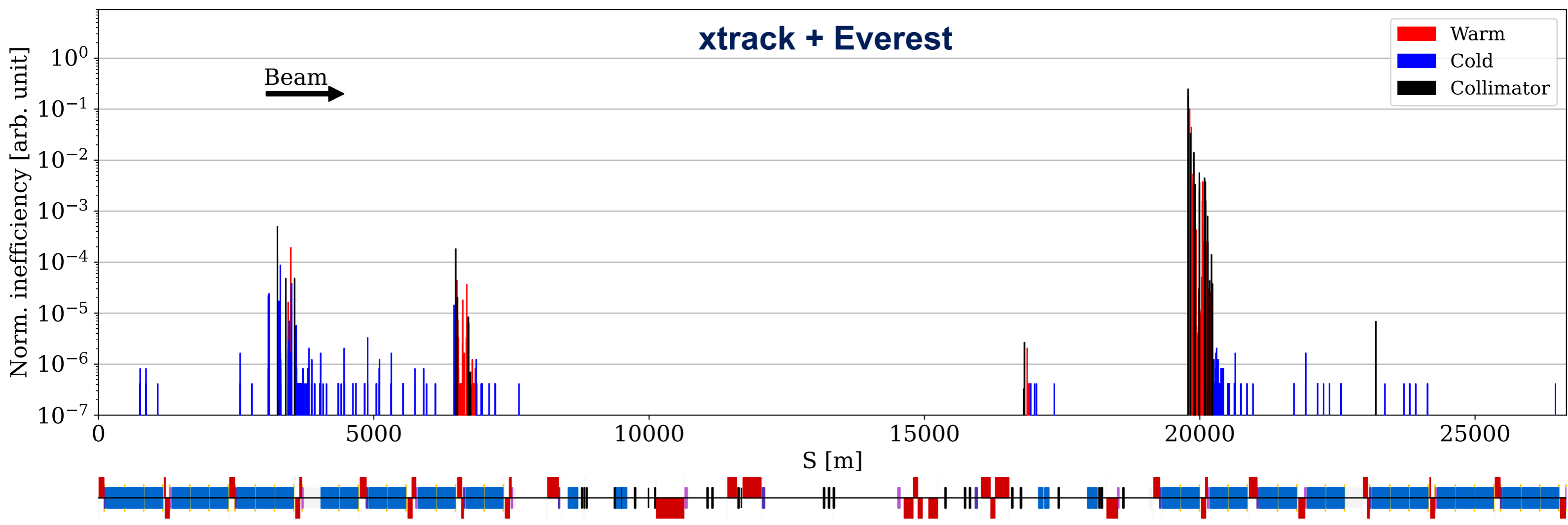
Beam →



xtrack + Everest

- Warm
- Cold
- Collimator

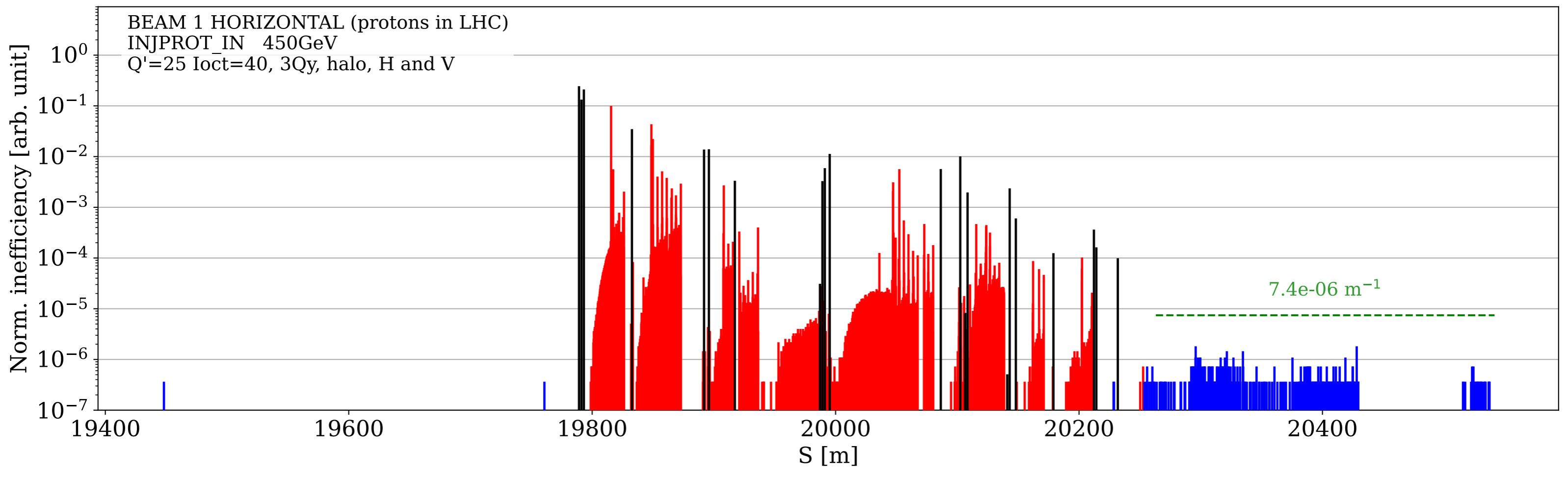
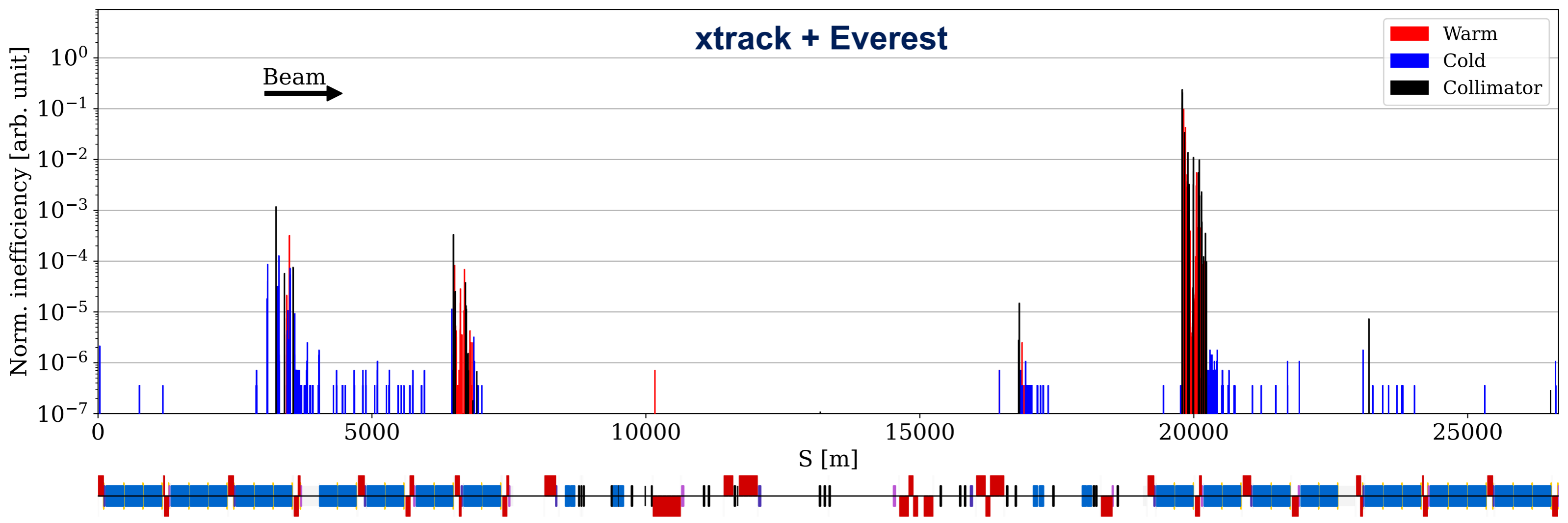
Beam 



xtrack + Everest

- Warm
- Cold
- Collimator

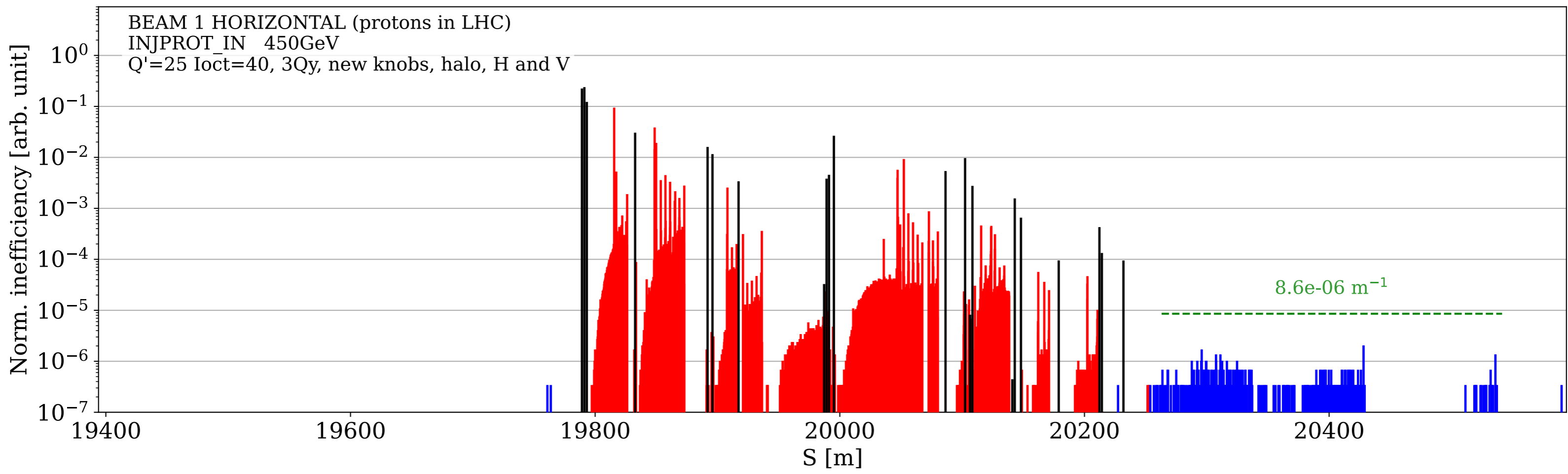
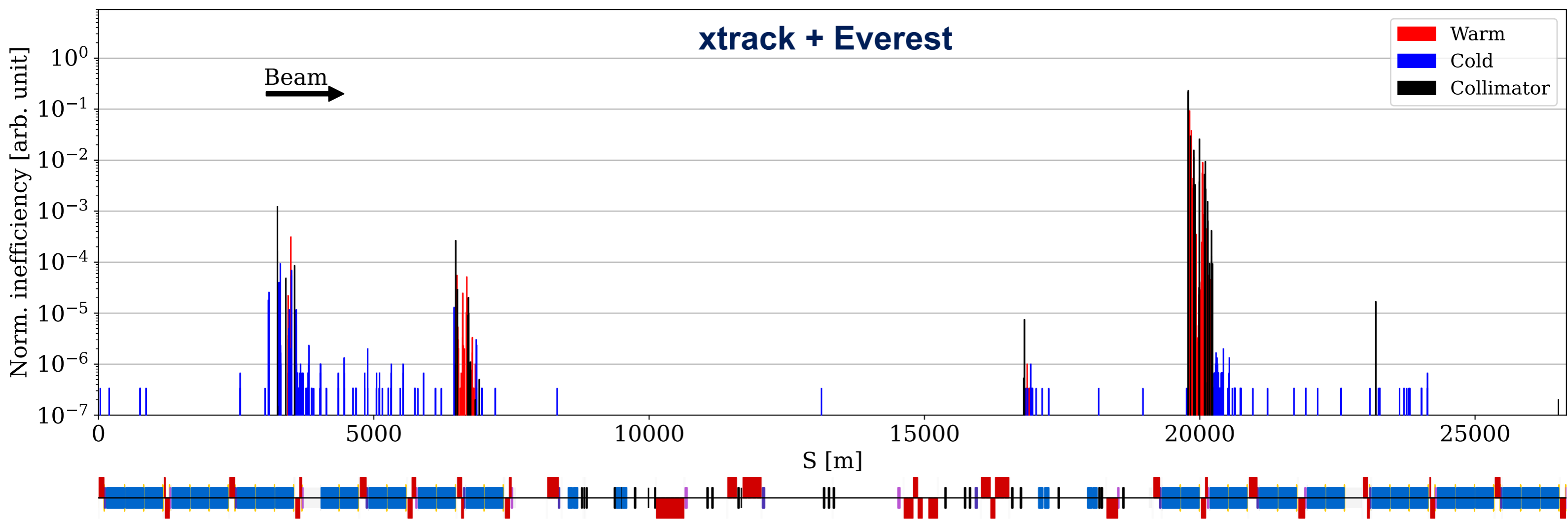
Beam →



xtrack + Everest

- Warm
- Cold
- Collimator


Beam →

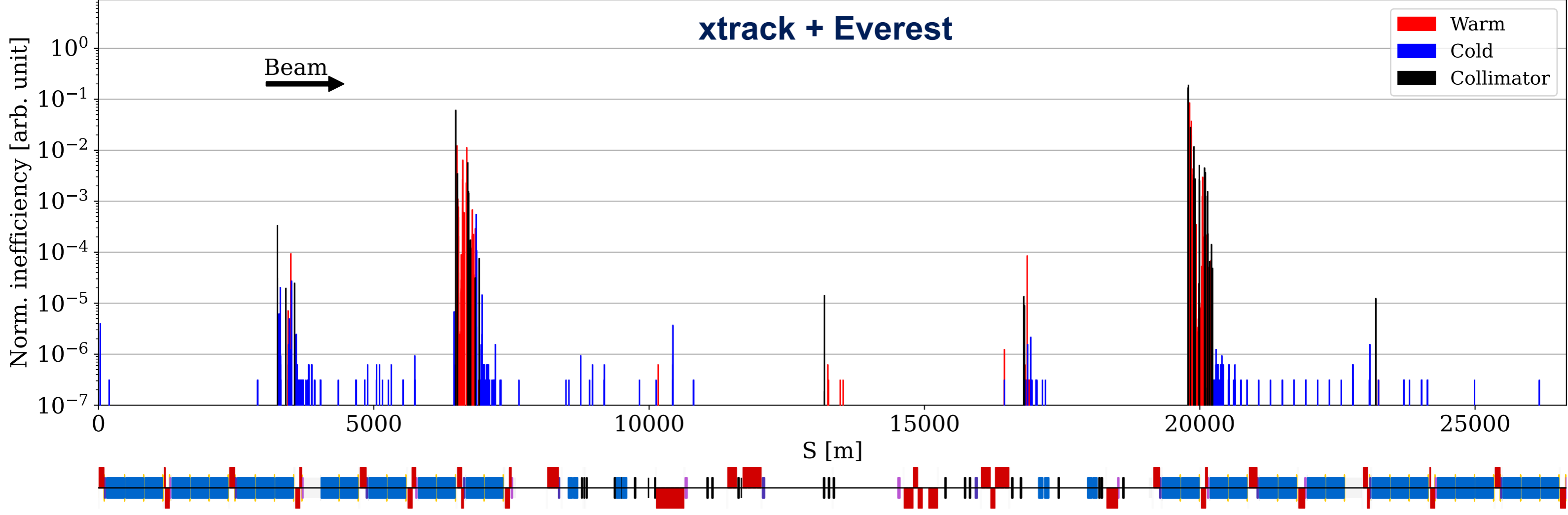


Beam 1 positive off-momentum shift

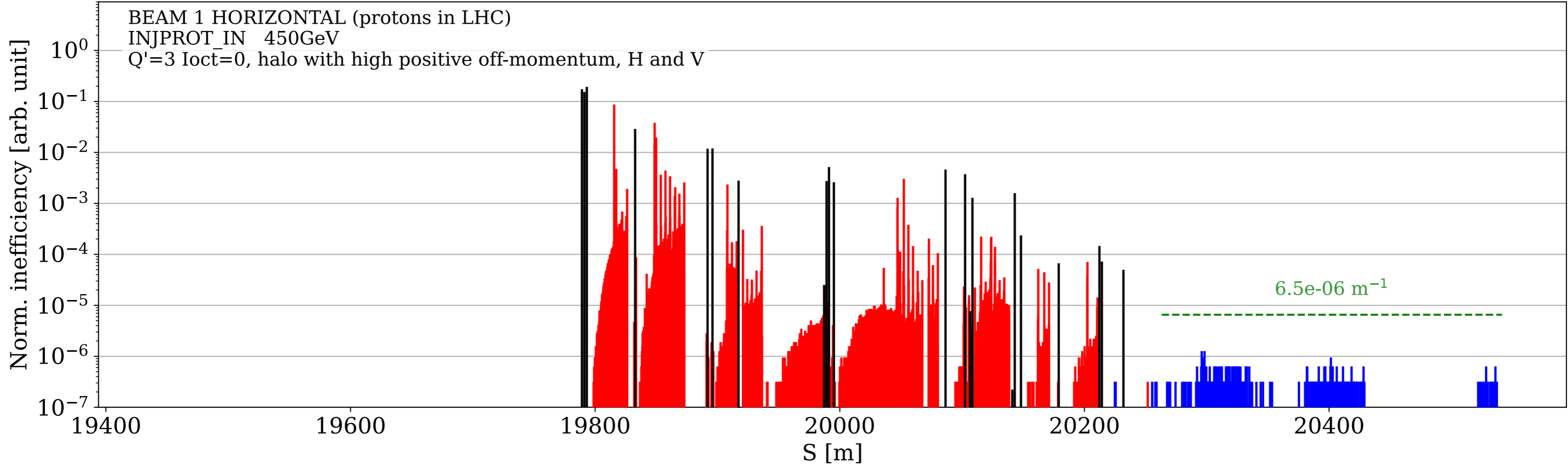
xtrack + Everest

- Warm
- Cold
- Collimator

Beam 




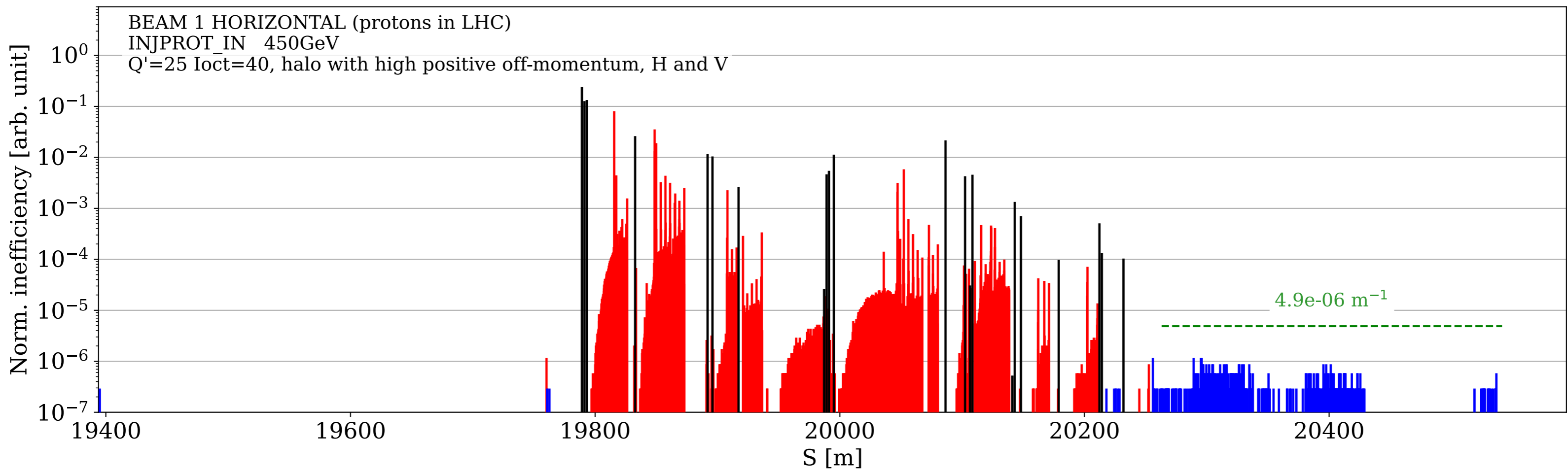
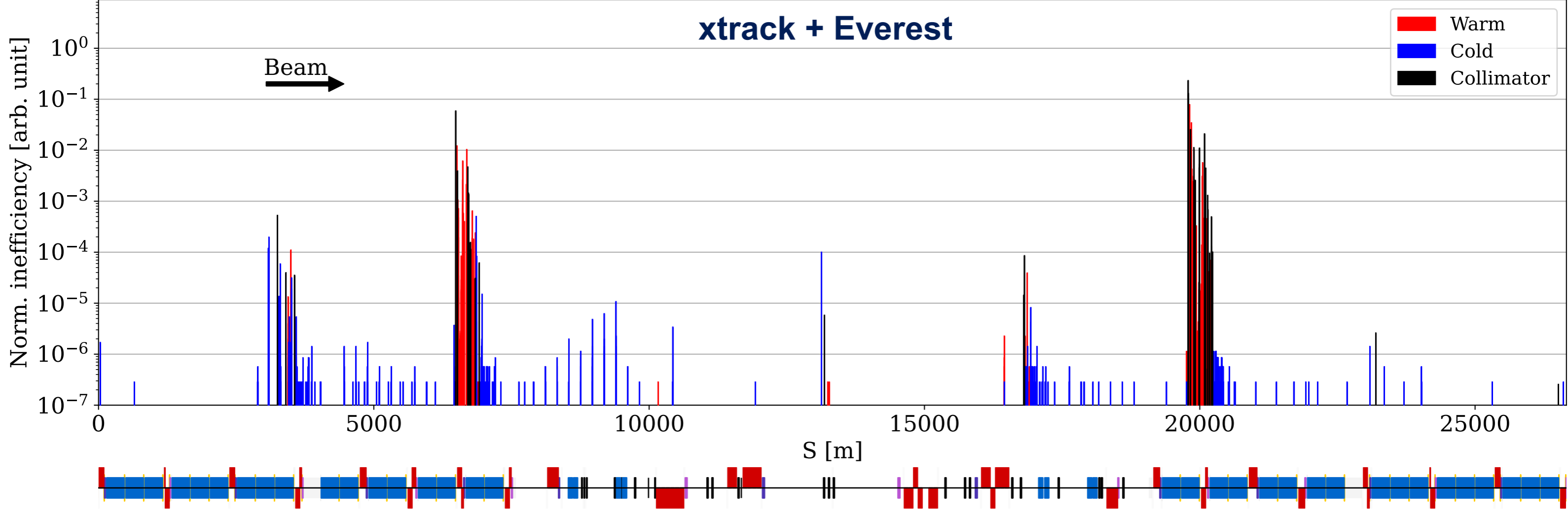
BEAM 1 HORIZONTAL (protons in LHC)
INJPROT_IN 450GeV
Q'=3 Ioct=0, halo with high positive off-momentum, H and V



xtrack + Everest

- Warm
- Cold
- Collimator

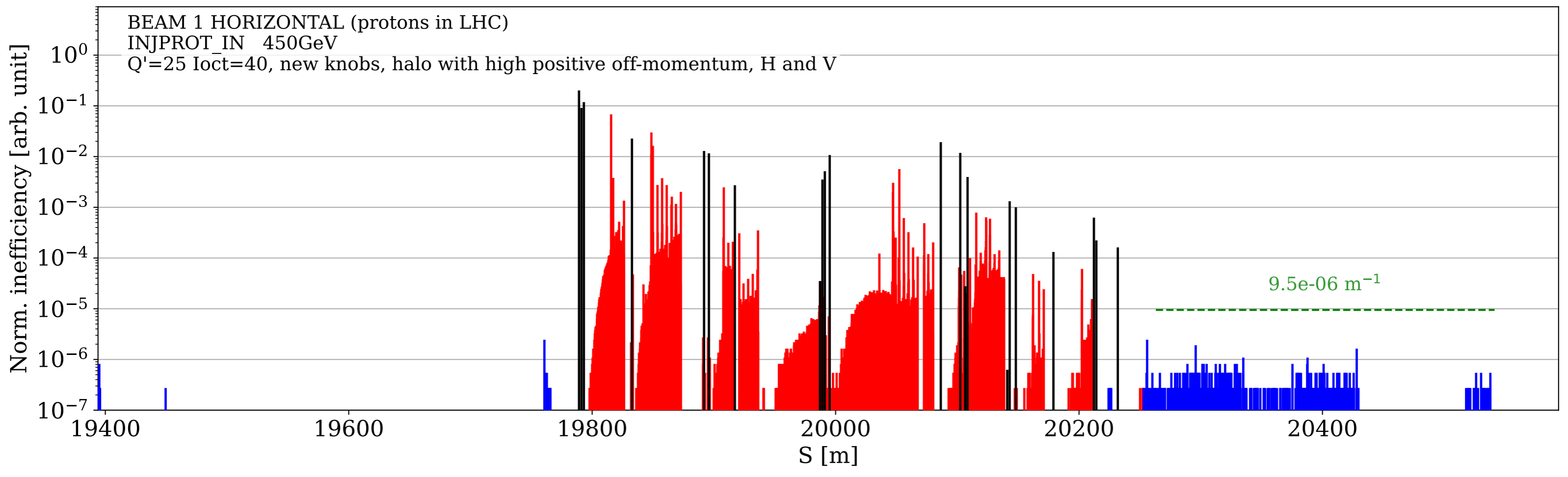
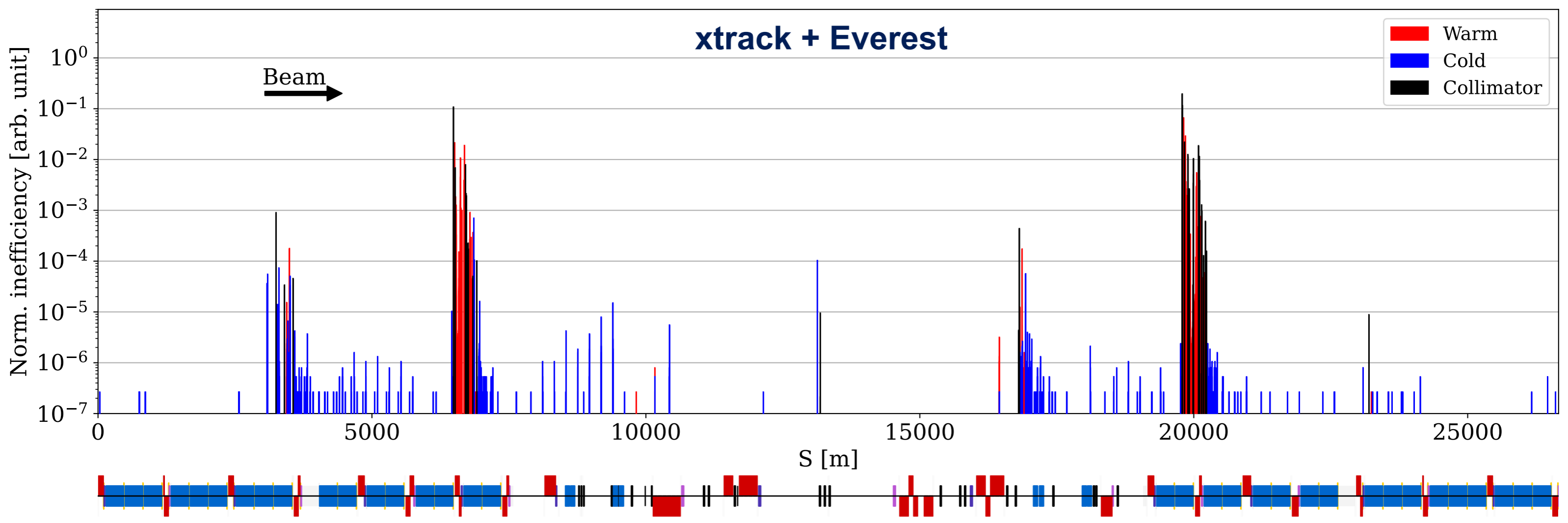
Beam 



xtrack + Everest

- Warm
- Cold
- Collimator

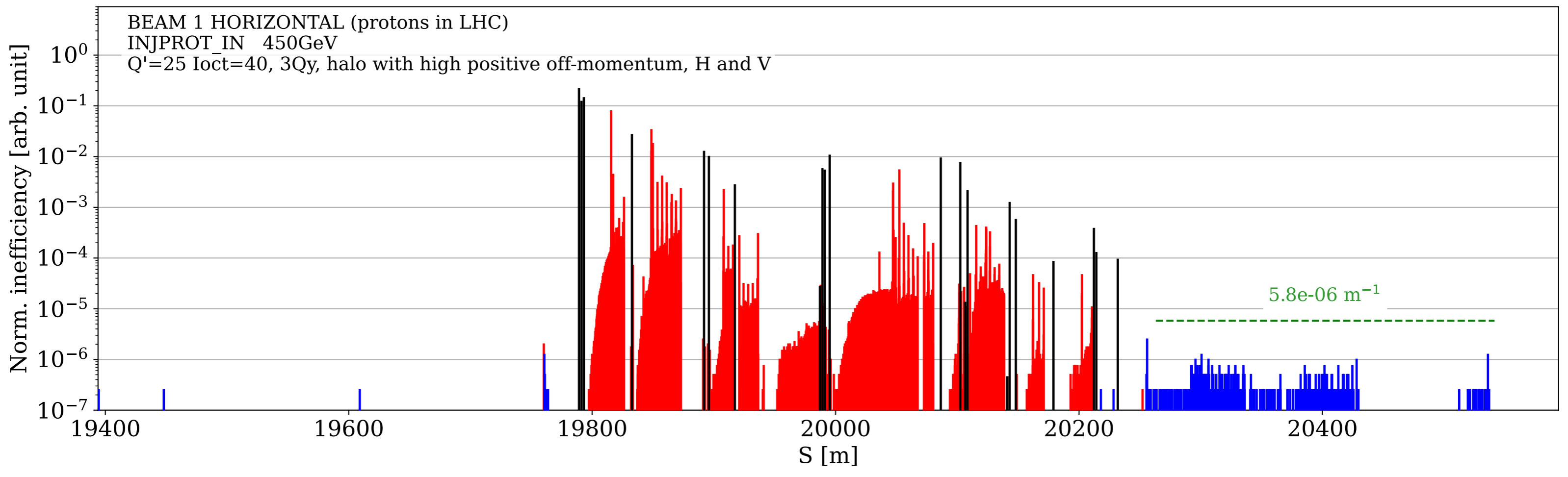
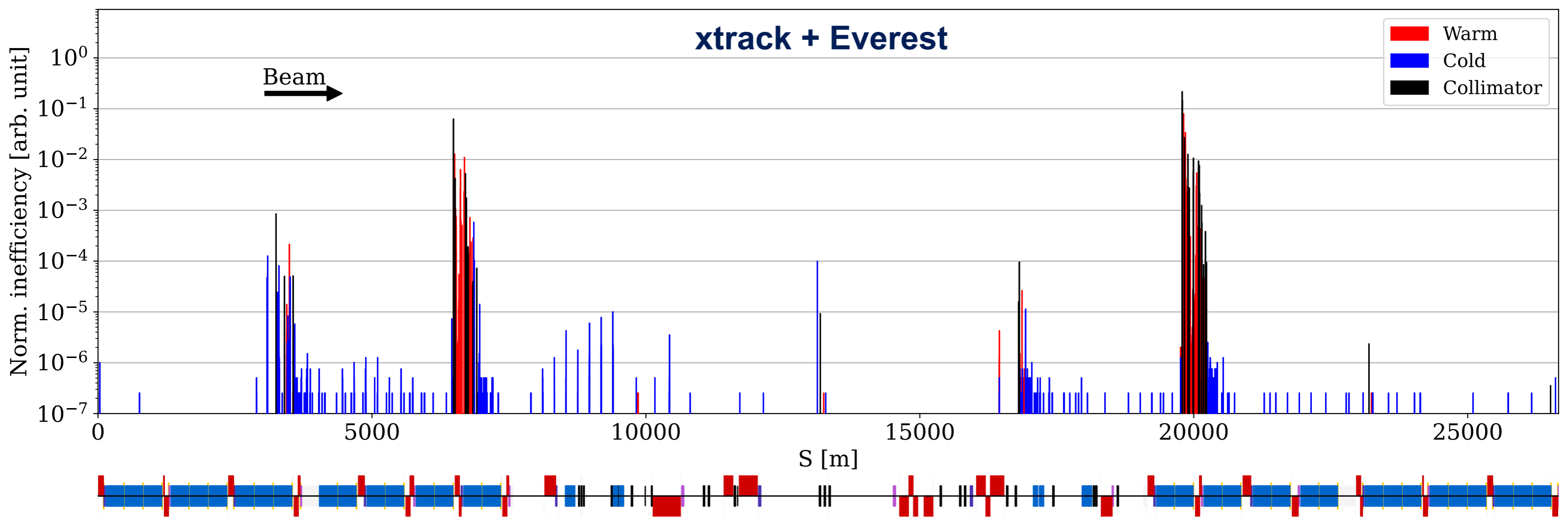
Beam →



xtrack + Everest


- Warm
- Cold
- Collimator

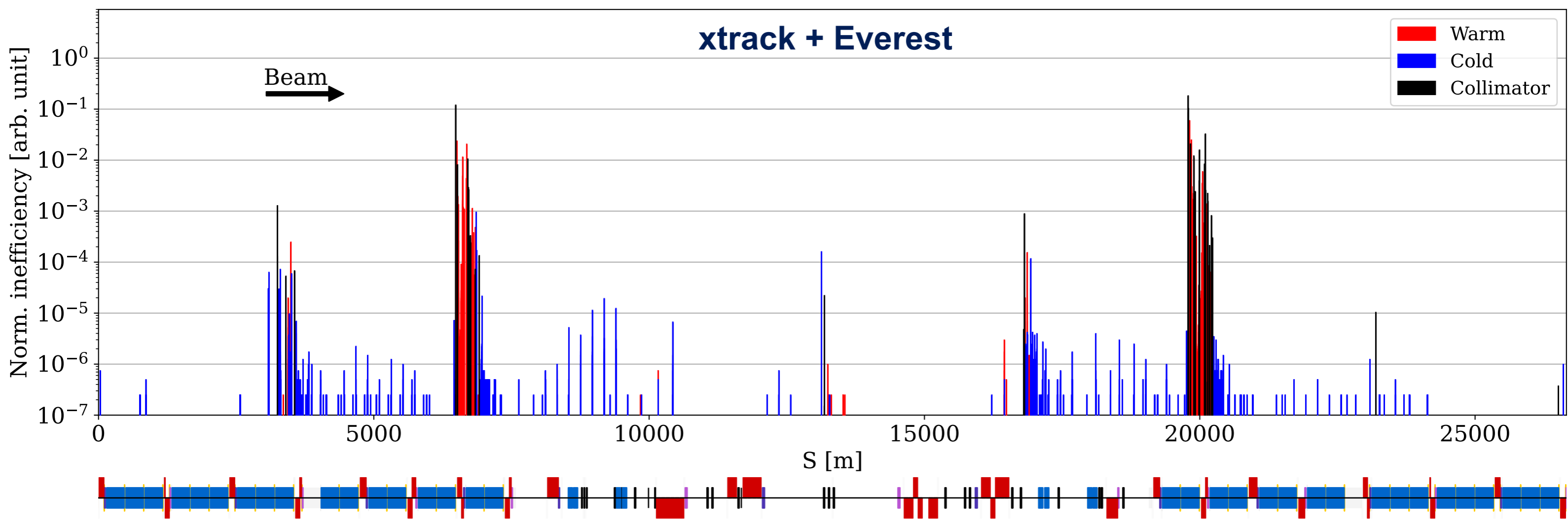
Beam →



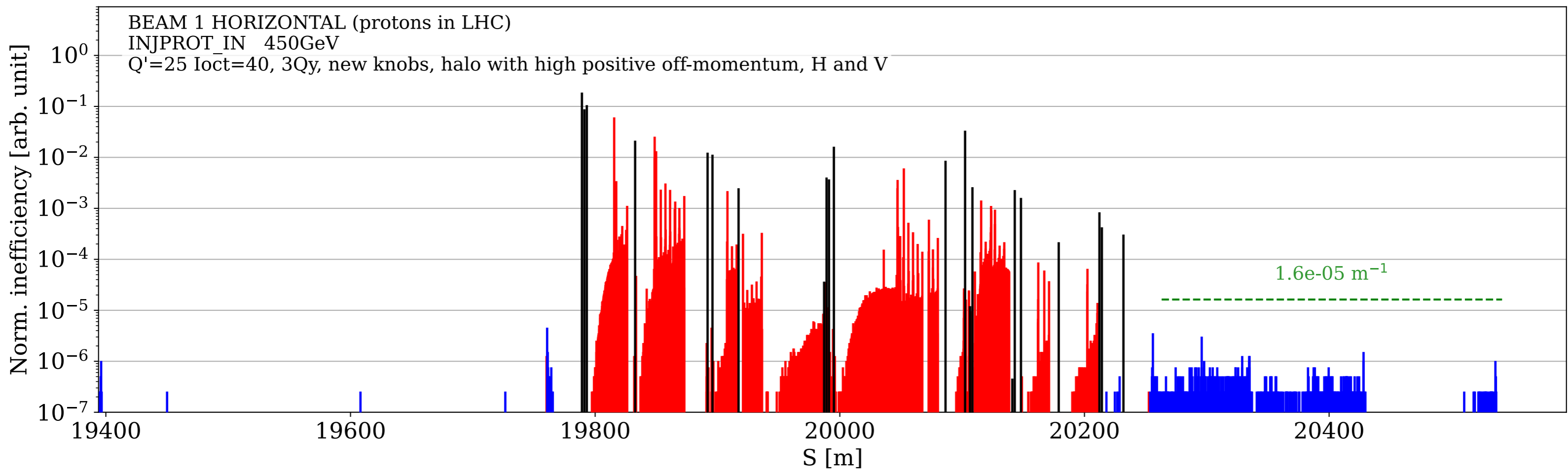
xtrack + Everest

- Warm
- Cold
- Collimator

Beam 



BEAM 1 HORIZONTAL (protons in LHC)
INJPROT_IN 450GeV
Q'=25 Ioct=40, 3Qy, new knobs, halo with high positive off-momentum, H and V

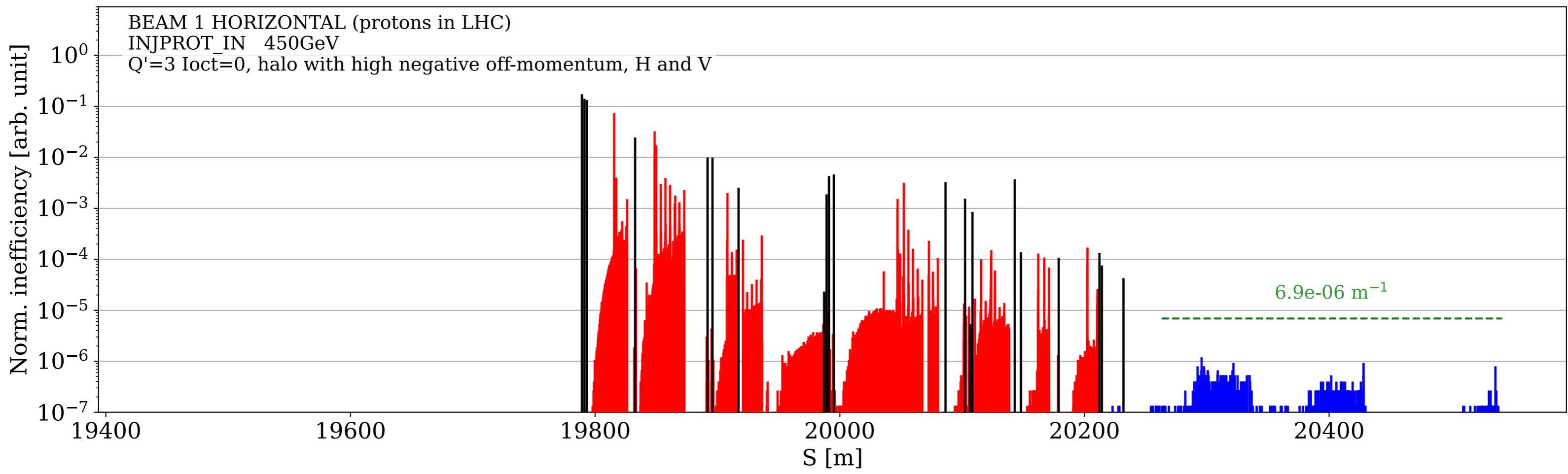
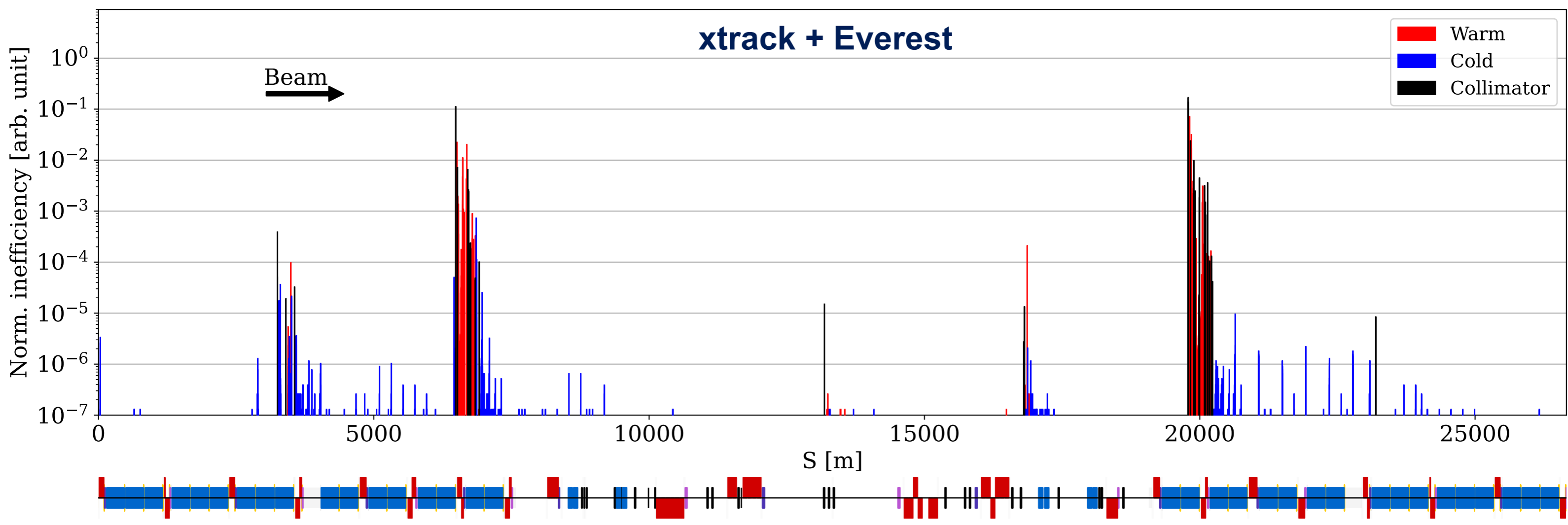


Beam 1 negative off-momentum shift

xtrack + Everest

- Warm
- Cold
- Collimator

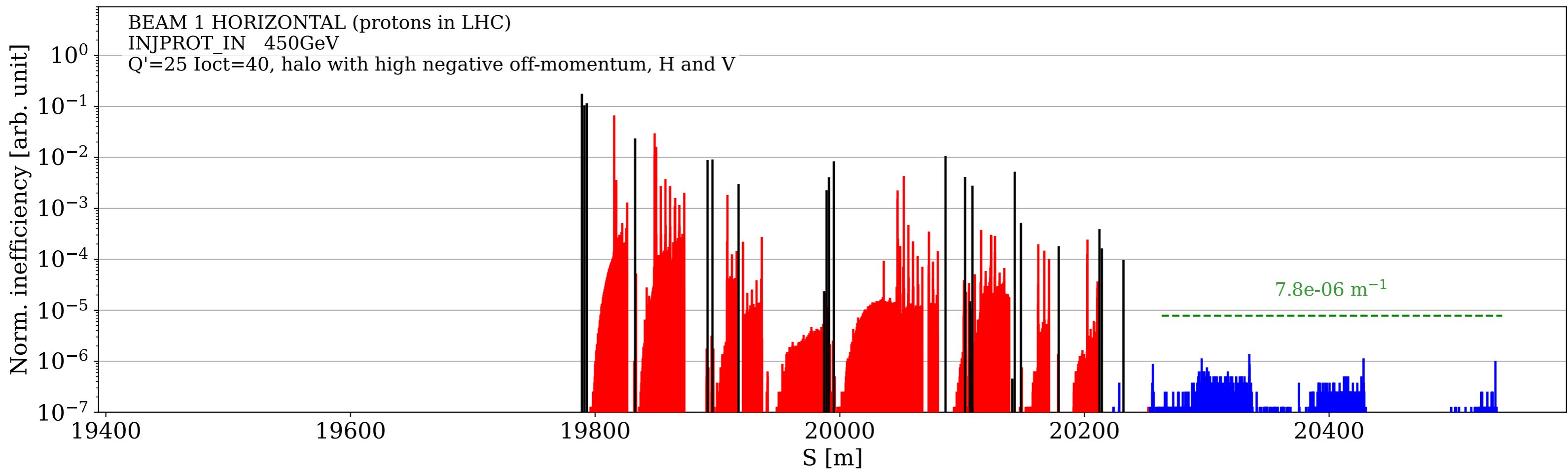
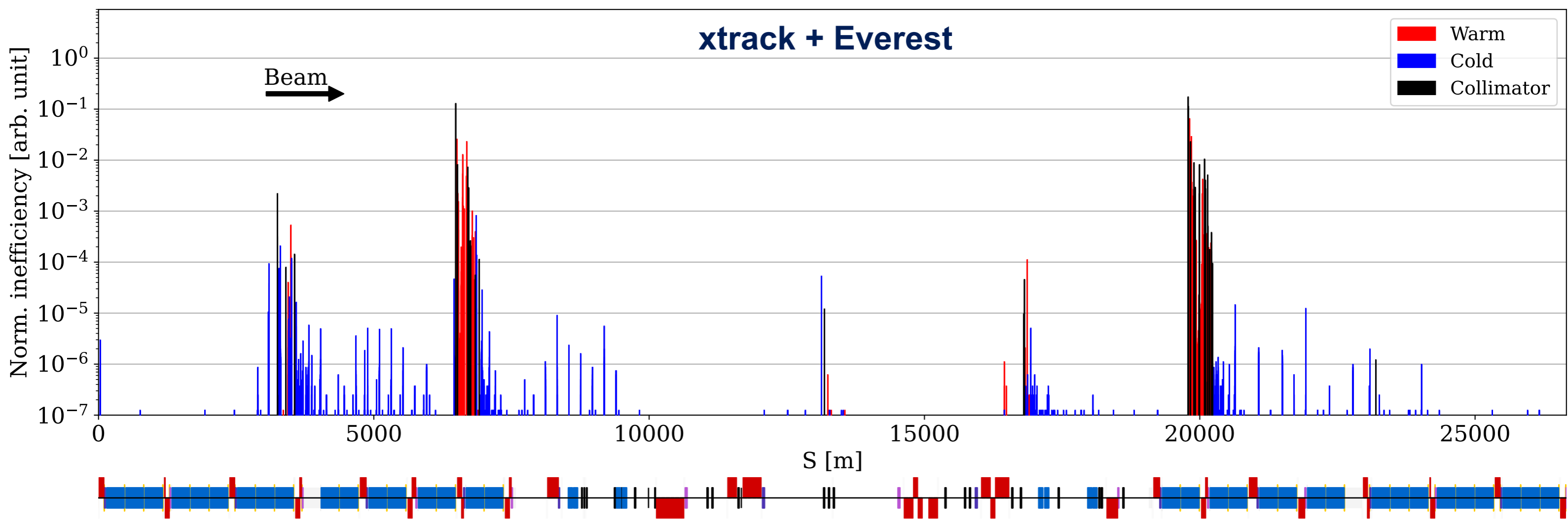
Beam →



xtrack + Everest


- Warm
- Cold
- Collimator

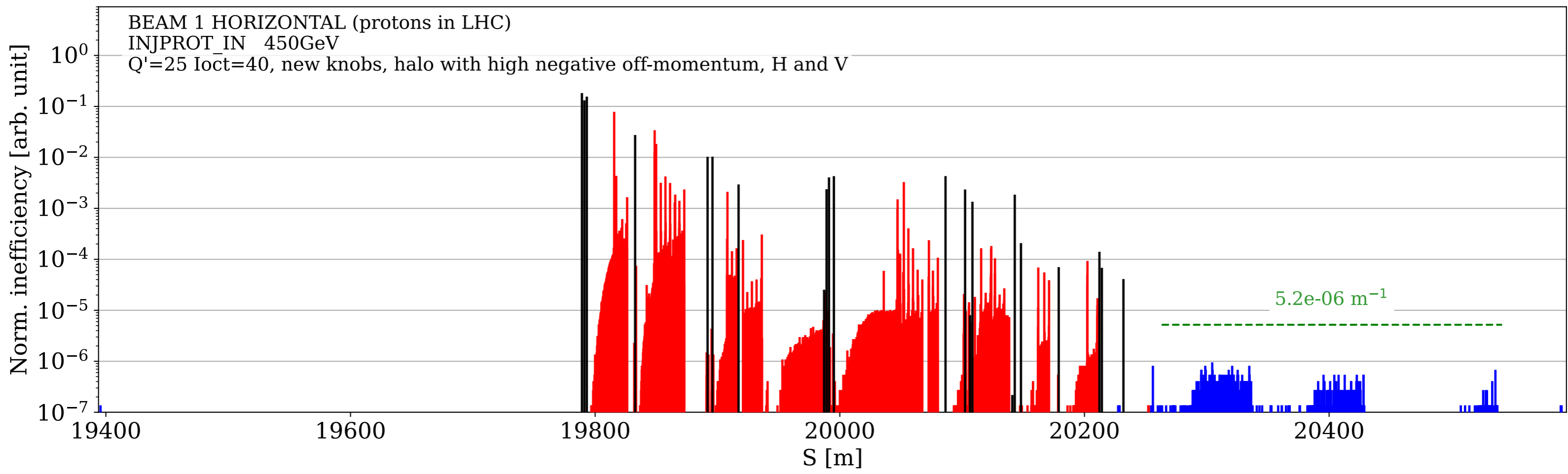
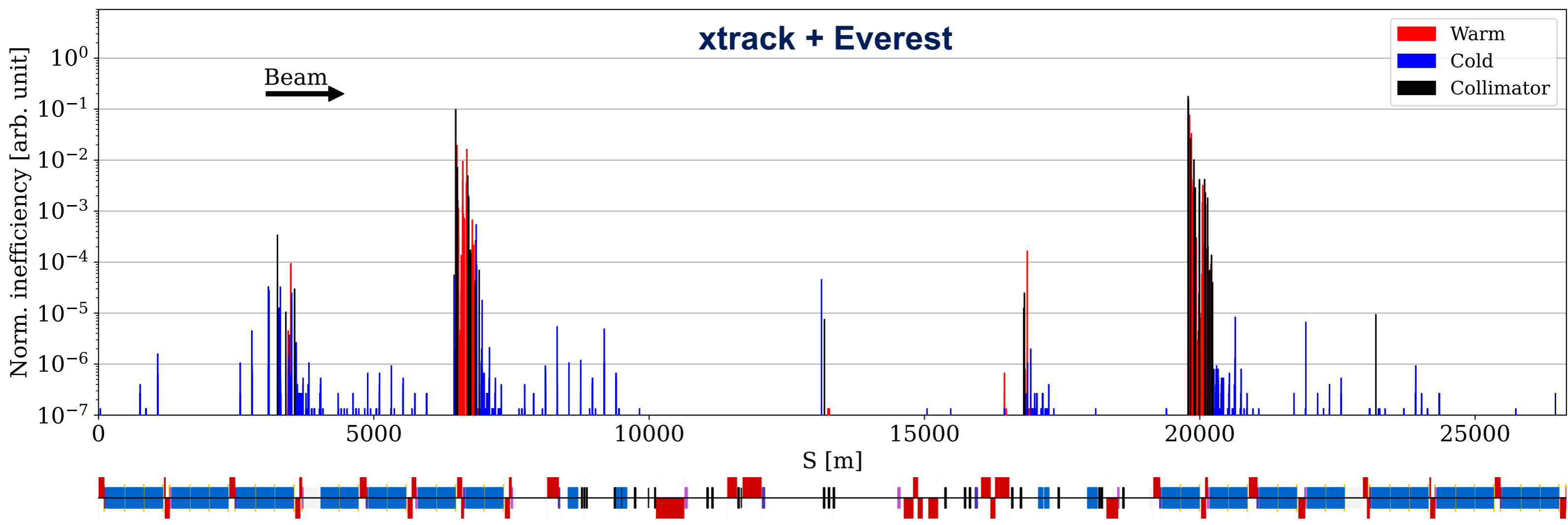
Beam →



xtrack + Everest

- Warm
- Cold
- Collimator

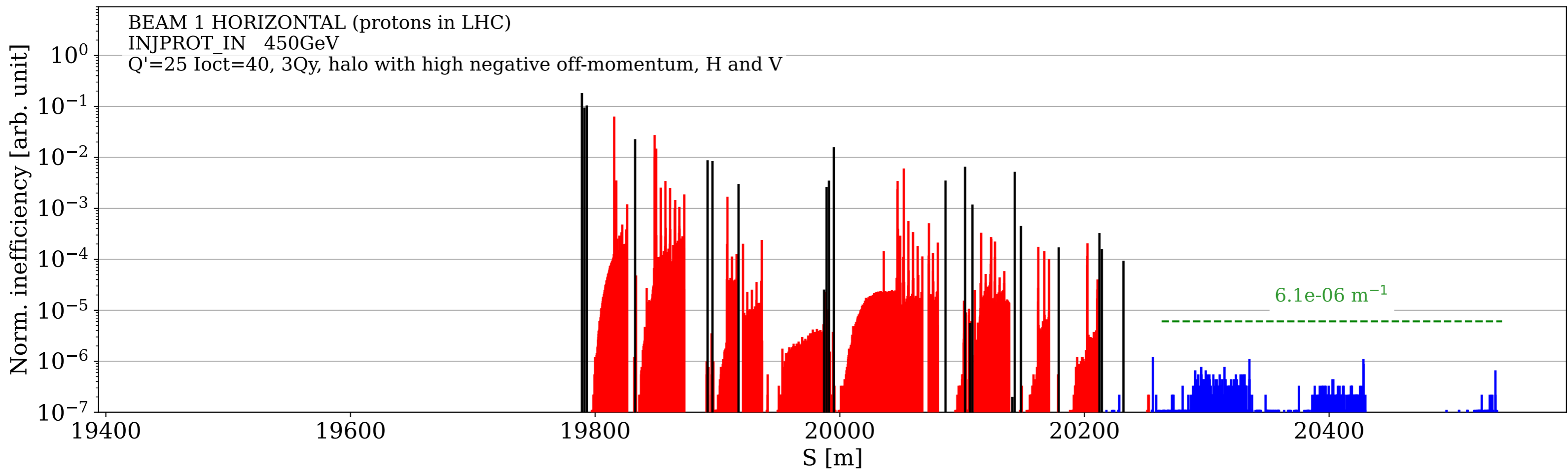
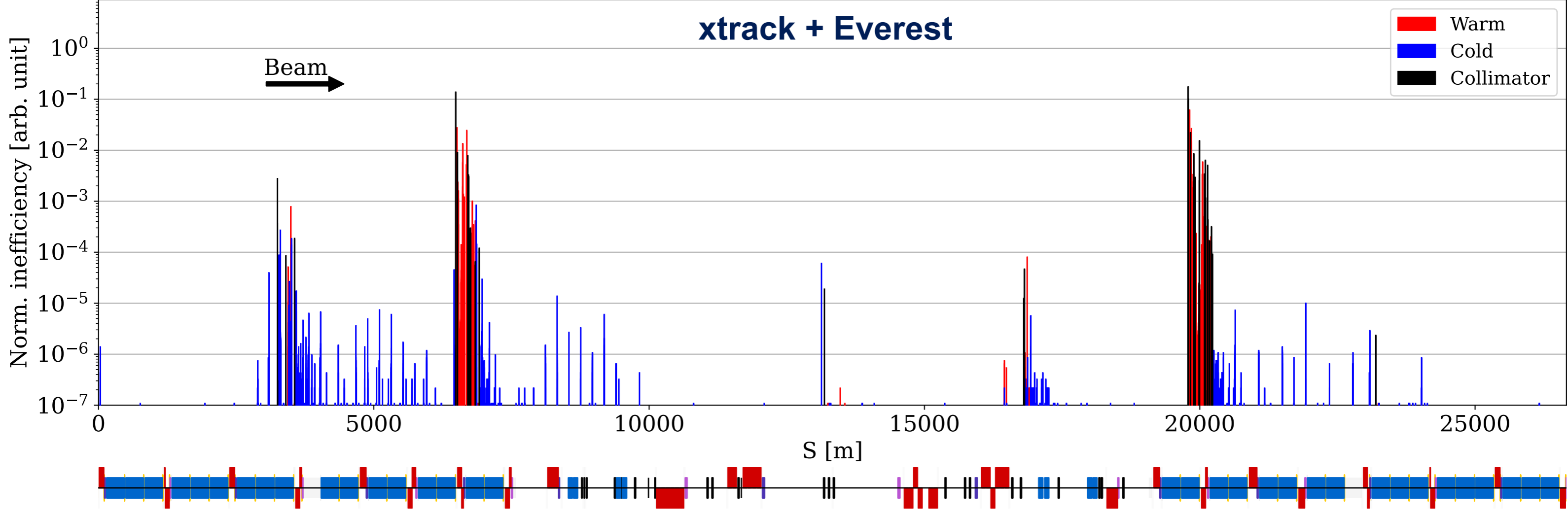
Beam 



xtrack + Everest

- Warm
- Cold
- Collimator

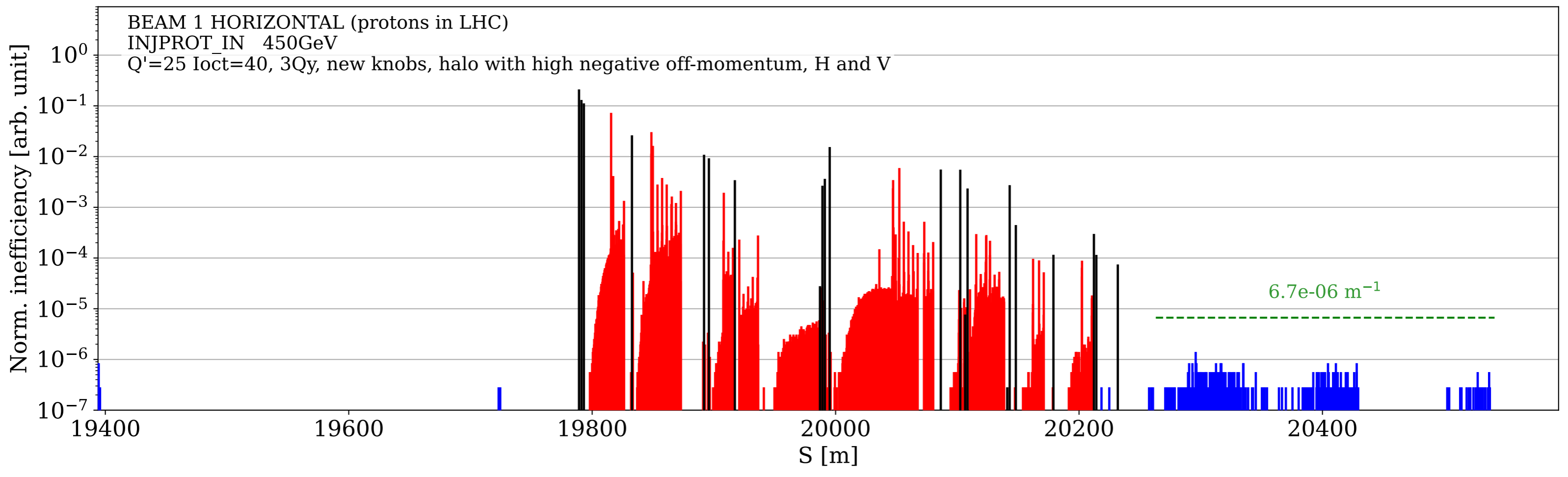
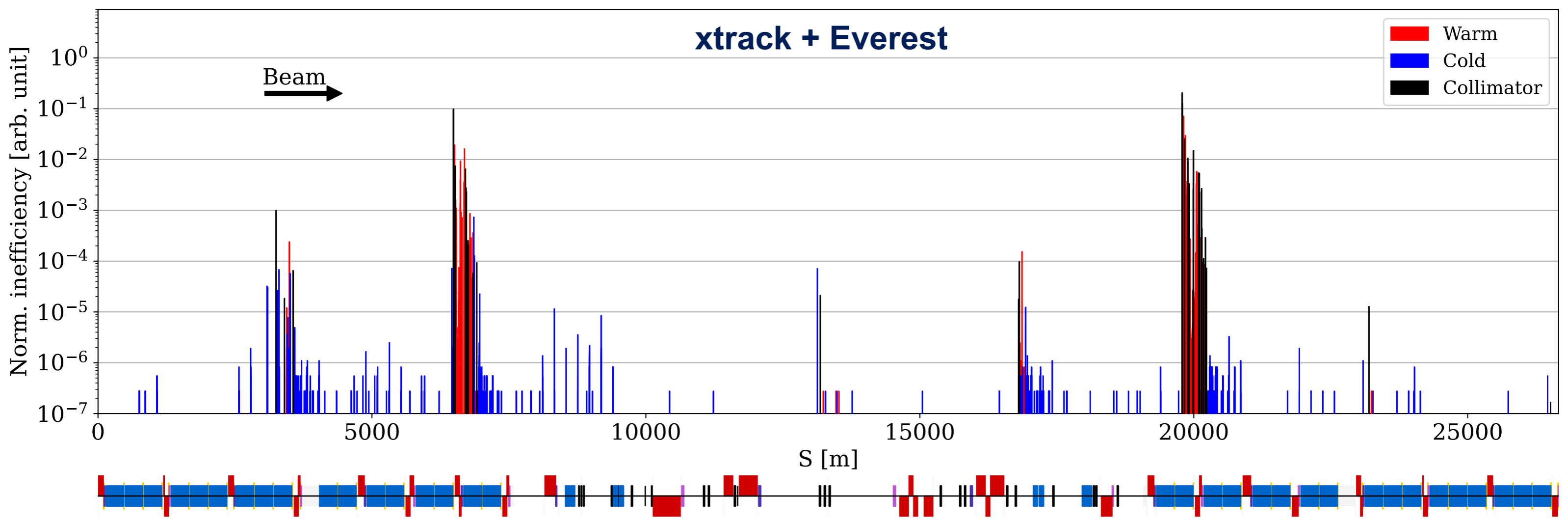
Beam →



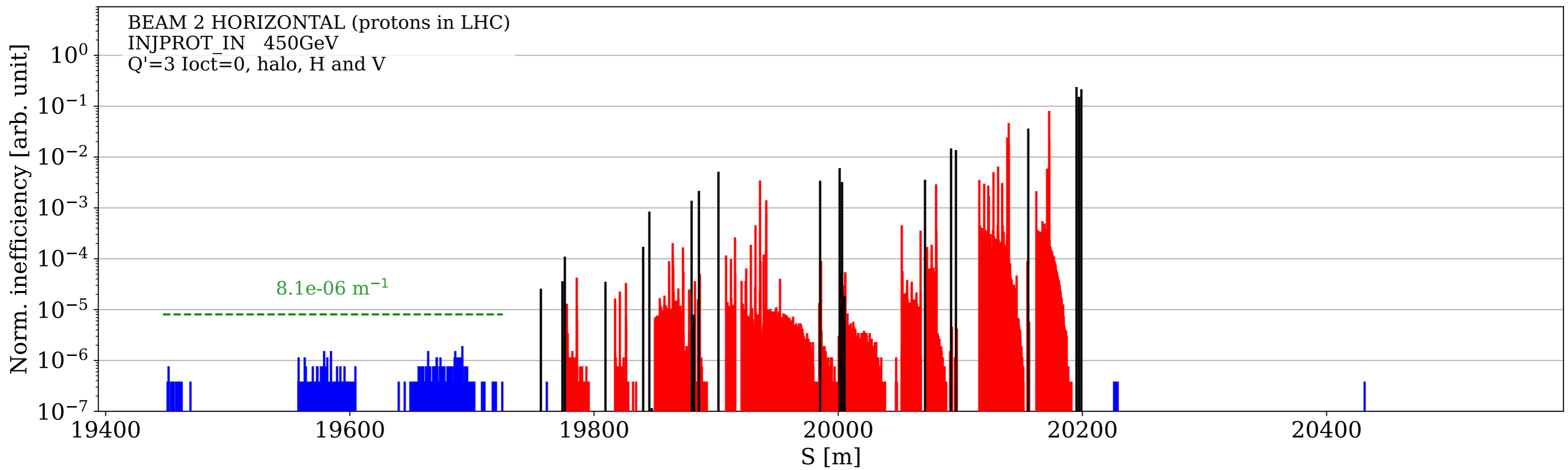
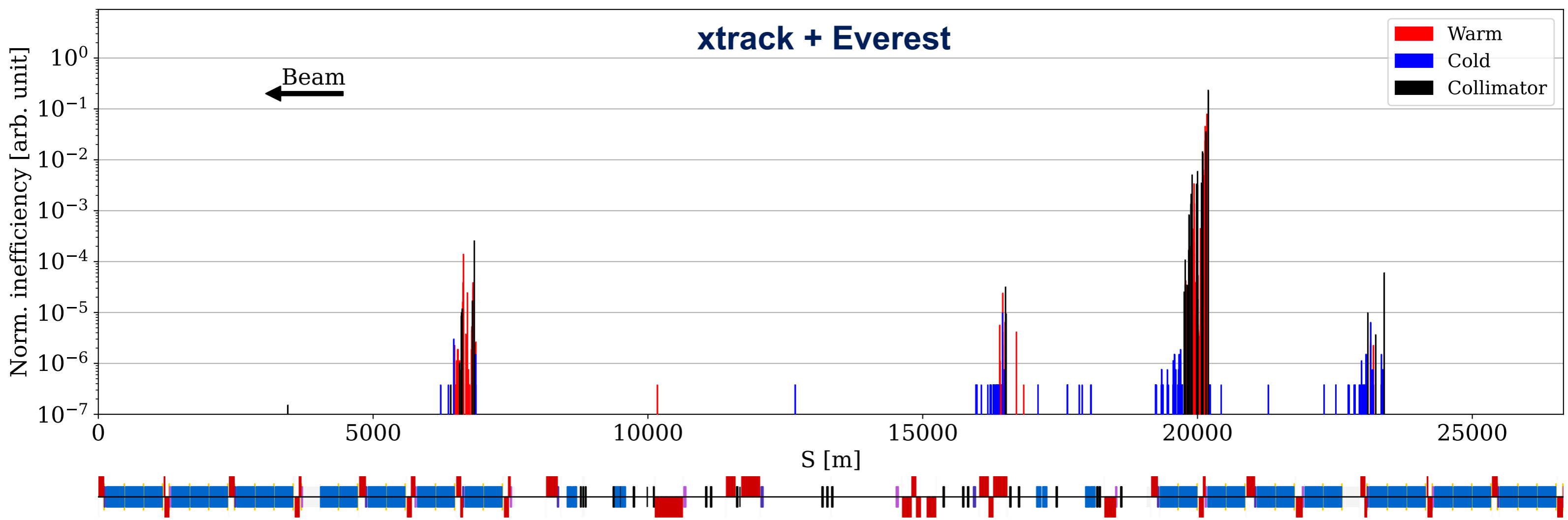
xtrack + Everest

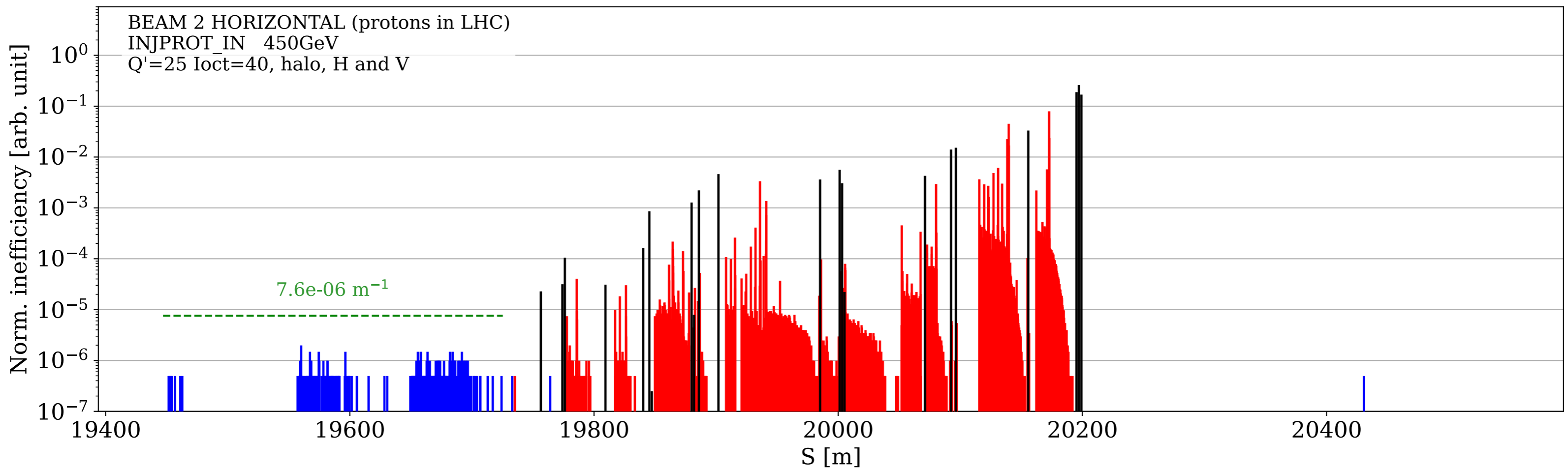
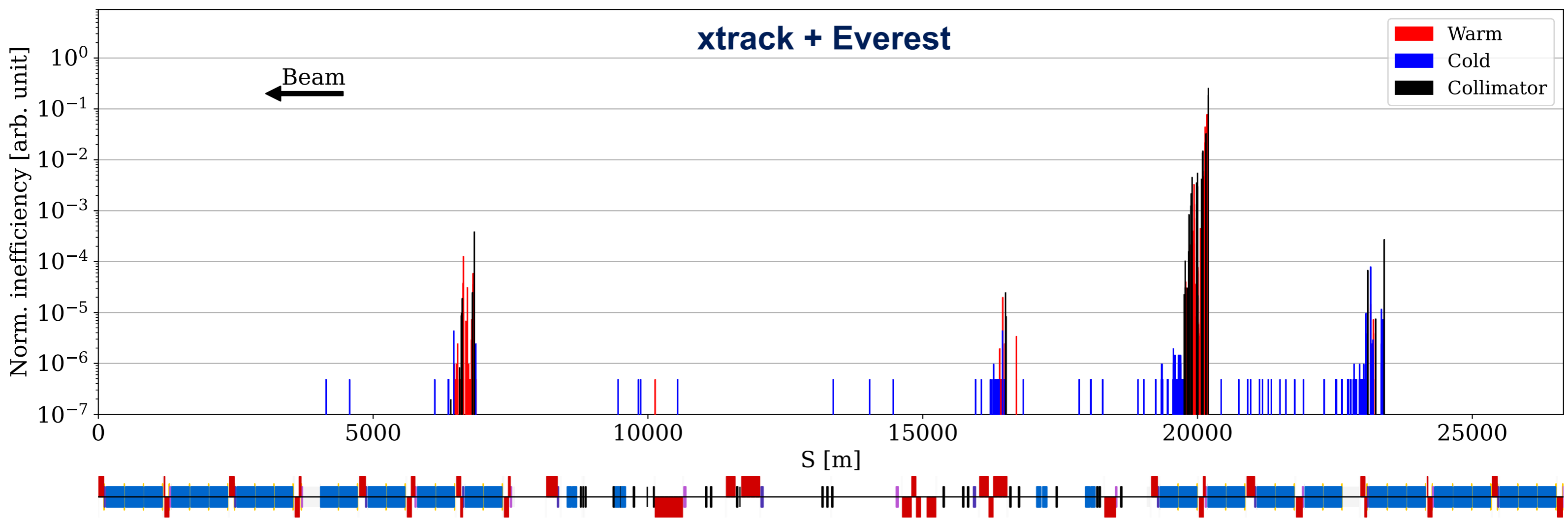
- Warm
- Cold
- Collimator

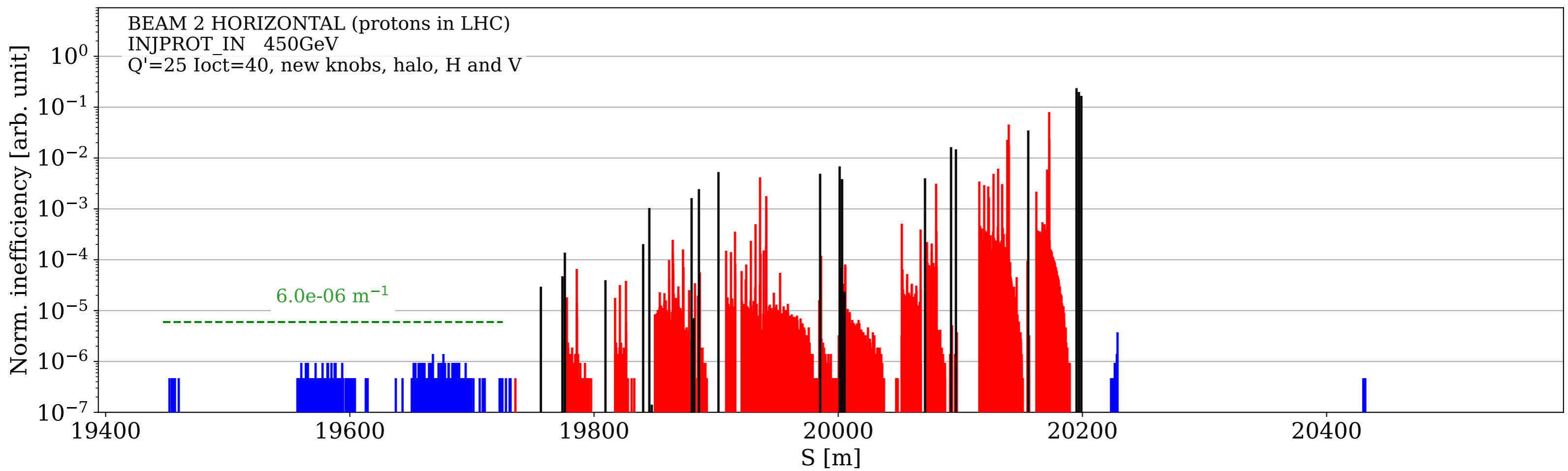
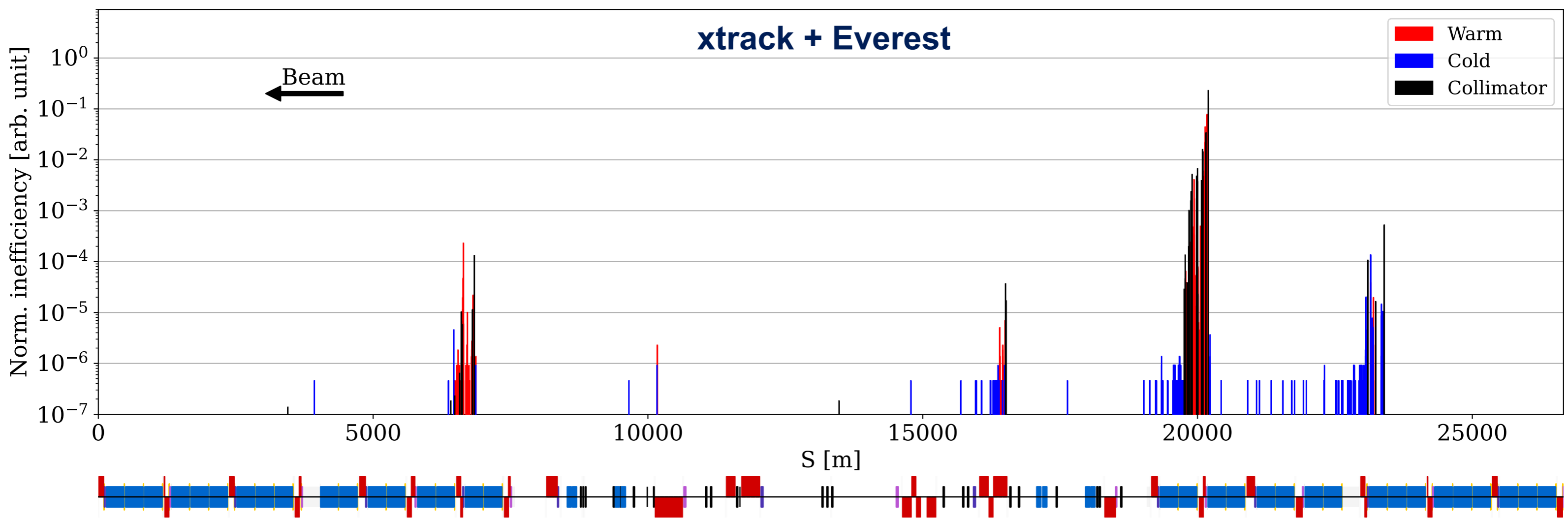
Beam →



Beam 2 on-momentum





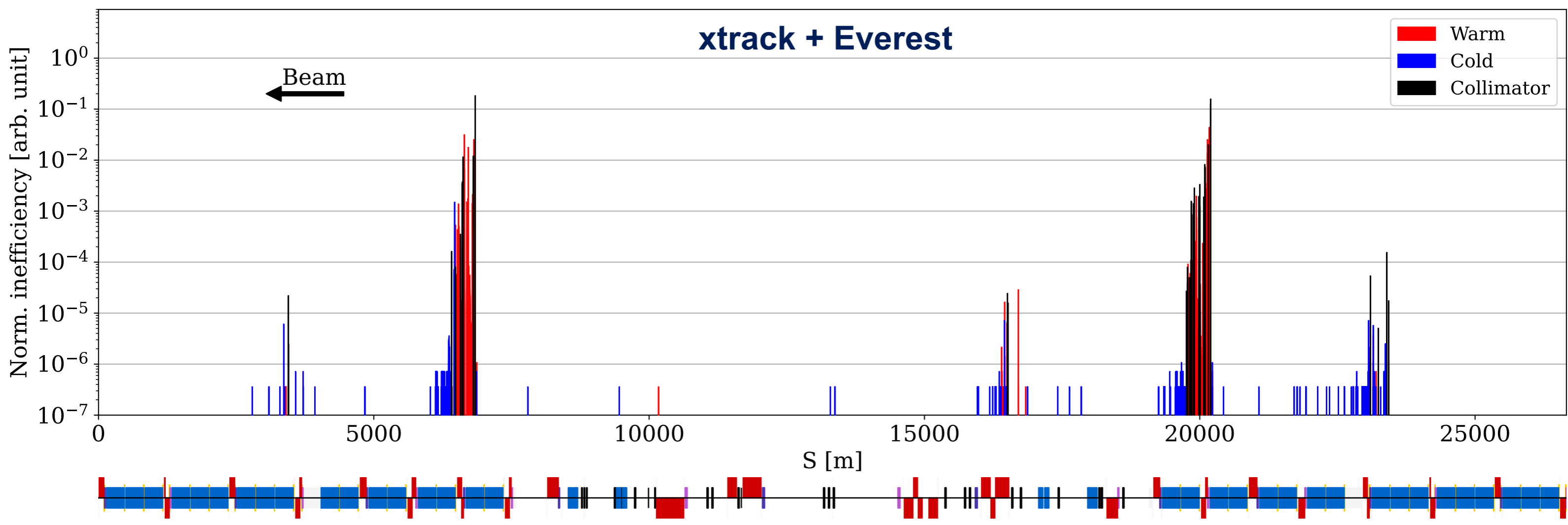


Beam 2 positive off-momentum shift

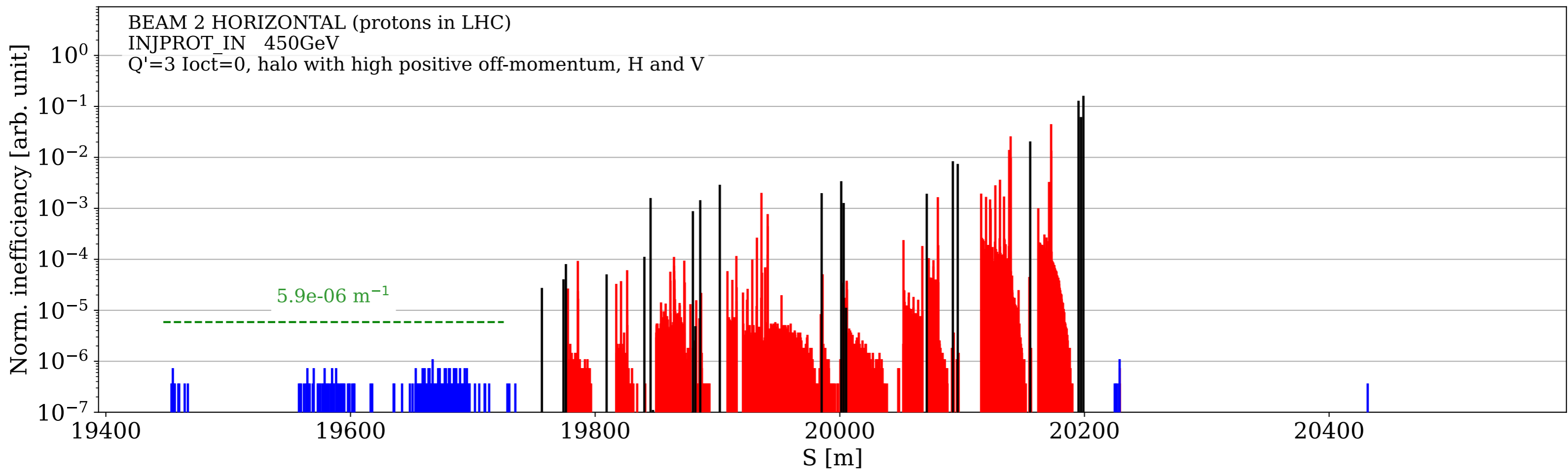
xtrack + Everest

- Warm
- Cold
- Collimator

← Beam



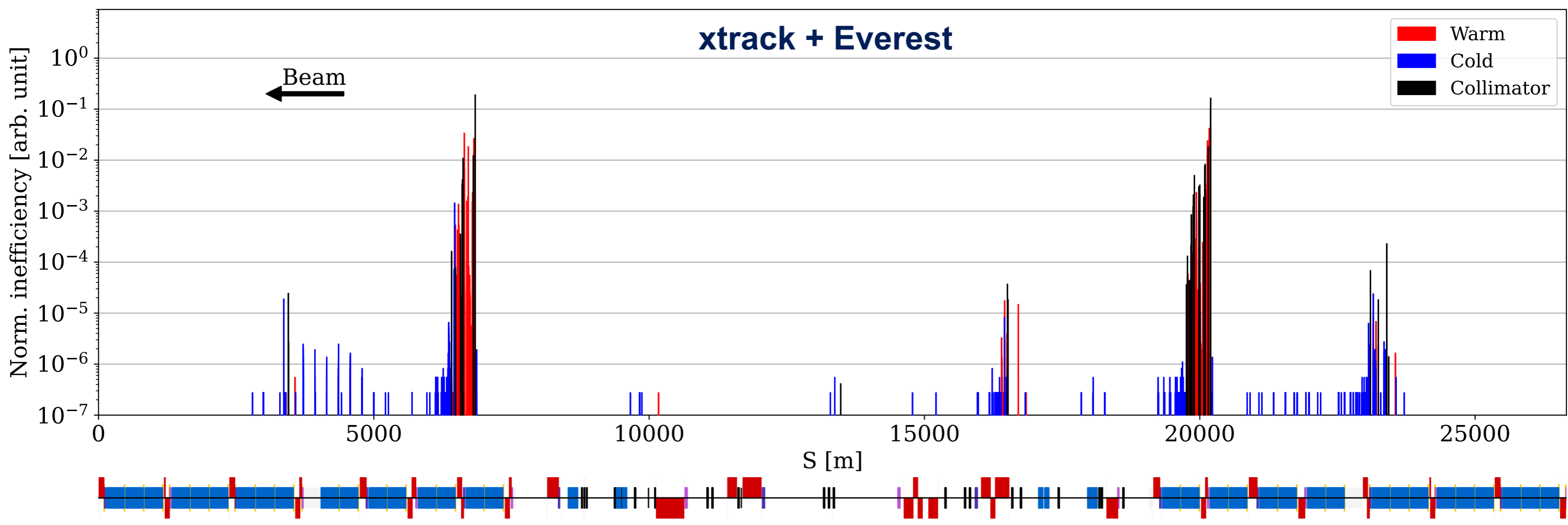
BEAM 2 HORIZONTAL (protons in LHC)
INJPROT_IN 450GeV
Q'=3 Ioct=0, halo with high positive off-momentum, H and V



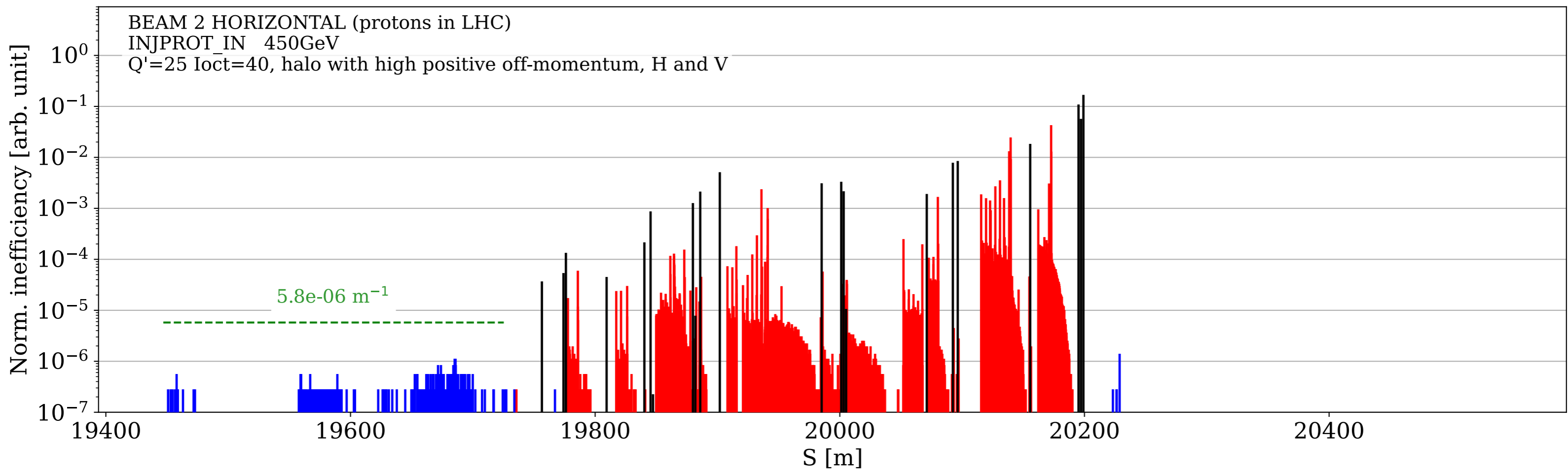
xtrack + Everest

- Warm
- Cold
- Collimator

← Beam



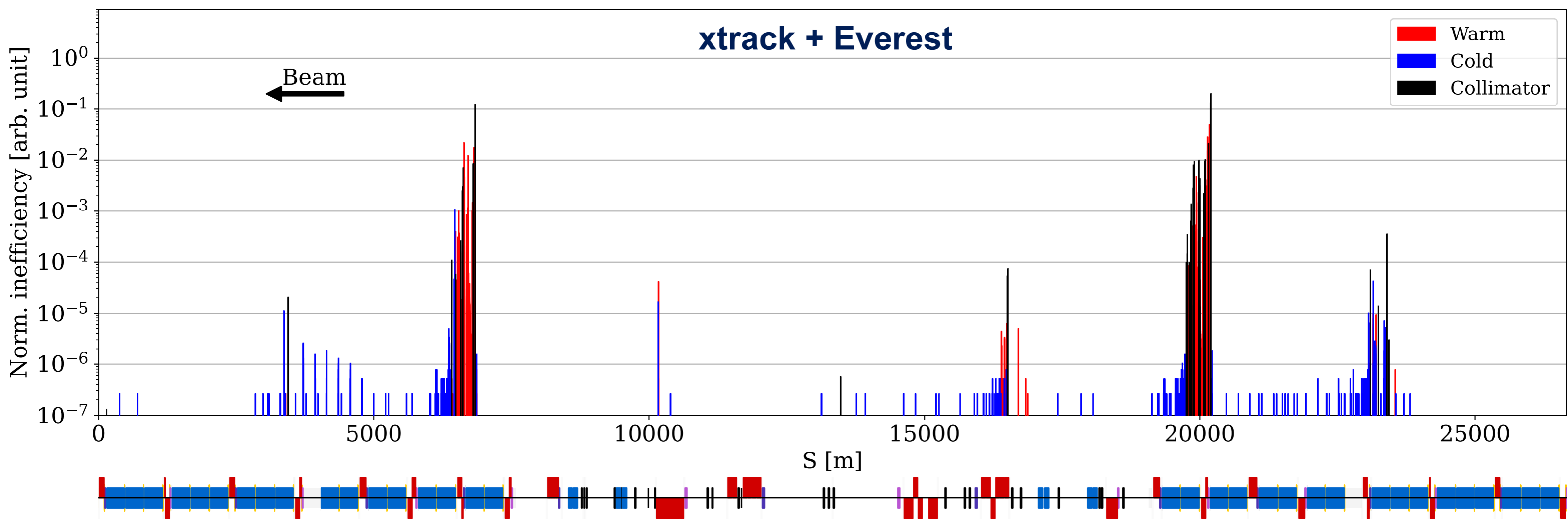
BEAM 2 HORIZONTAL (protons in LHC)
INJPROT_IN 450GeV
Q'=25 Ioct=40, halo with high positive off-momentum, H and V



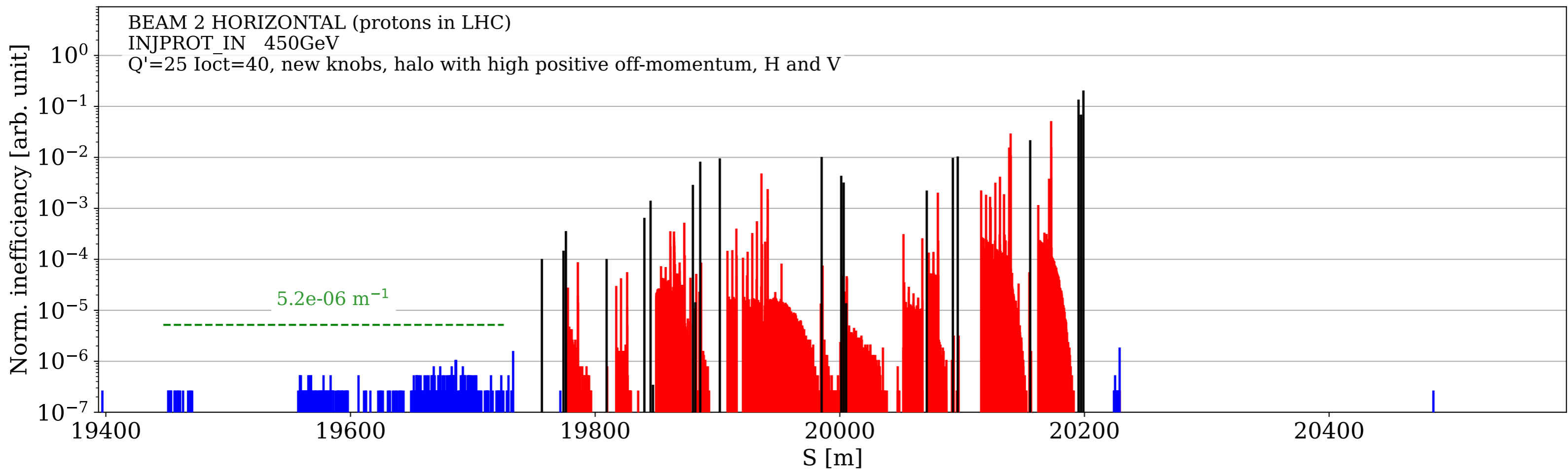
xtrack + Everest

- Warm
- Cold
- Collimator

← Beam



BEAM 2 HORIZONTAL (protons in LHC)
INJPROT_IN 450GeV
Q'=25 Ioct=40, new knobs, halo with high positive off-momentum, H and V

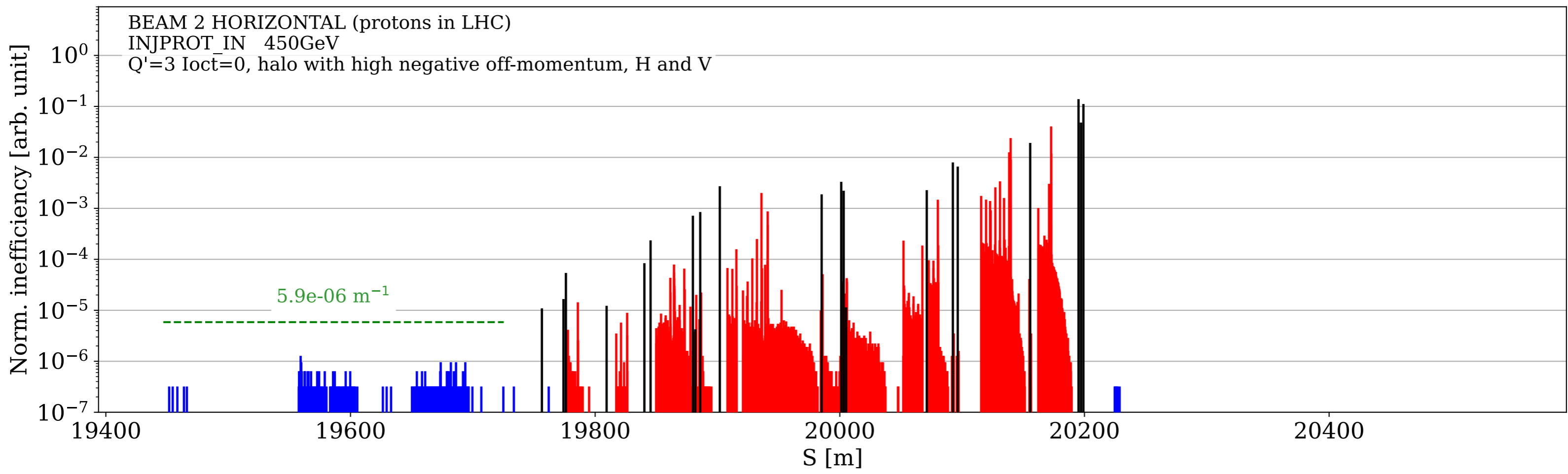
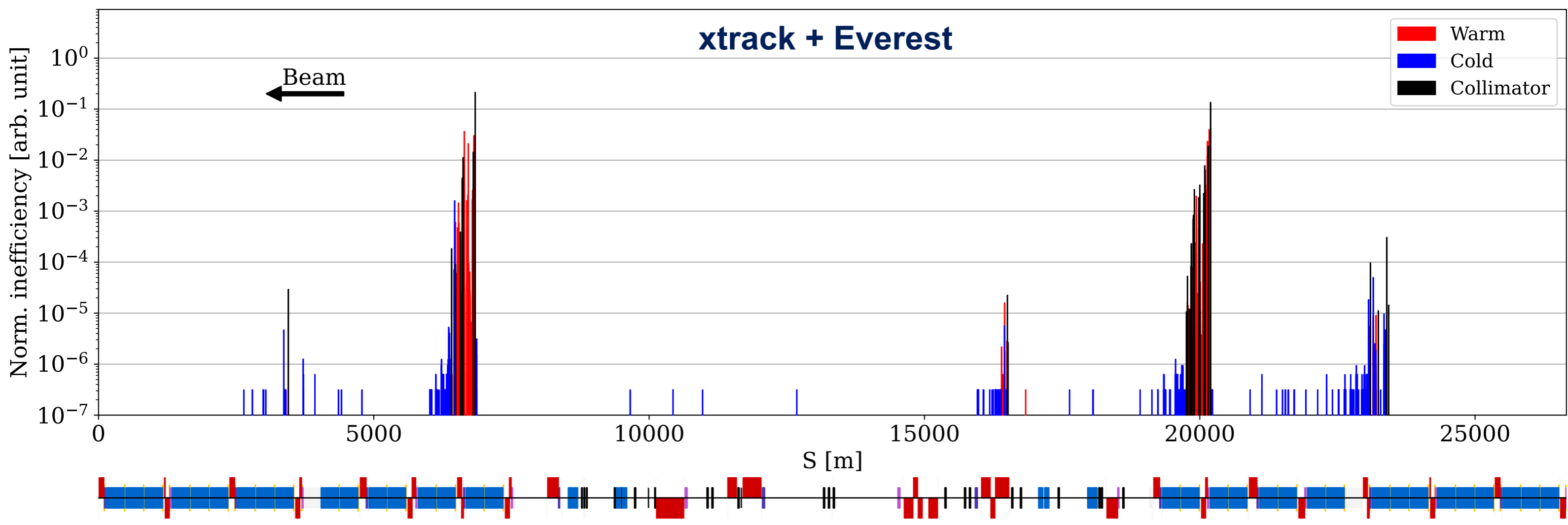


Beam 2 negative off-momentum shift

xtrack + Everest

- Warm
- Cold
- Collimator

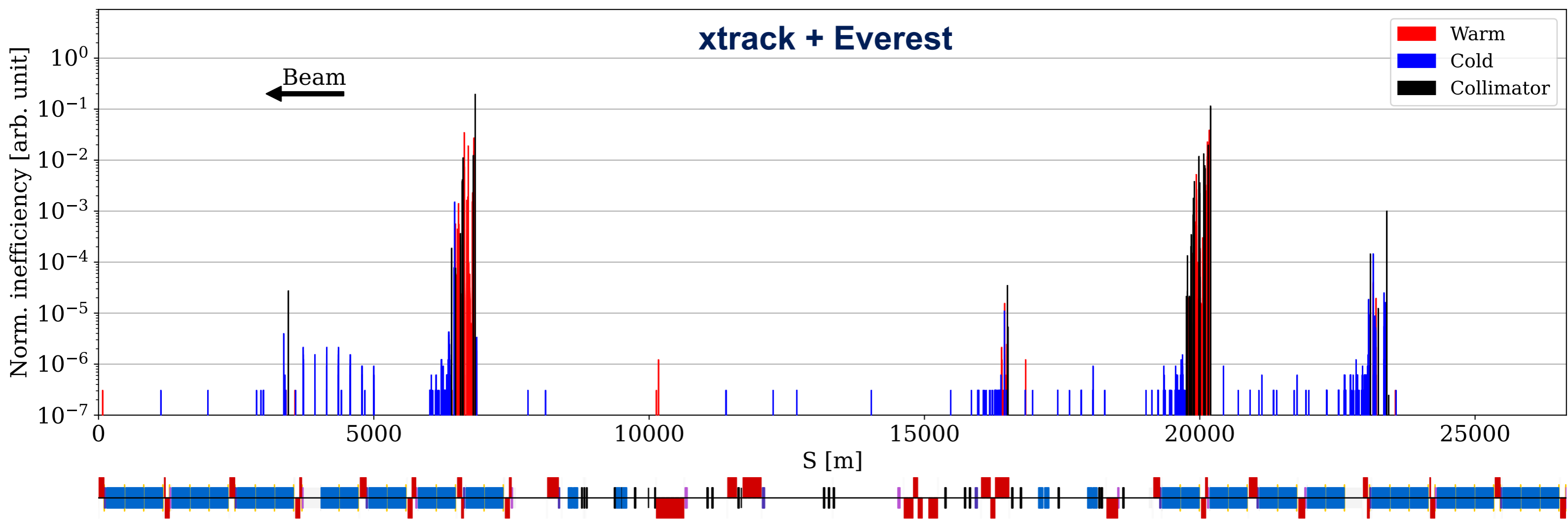
Beam
←



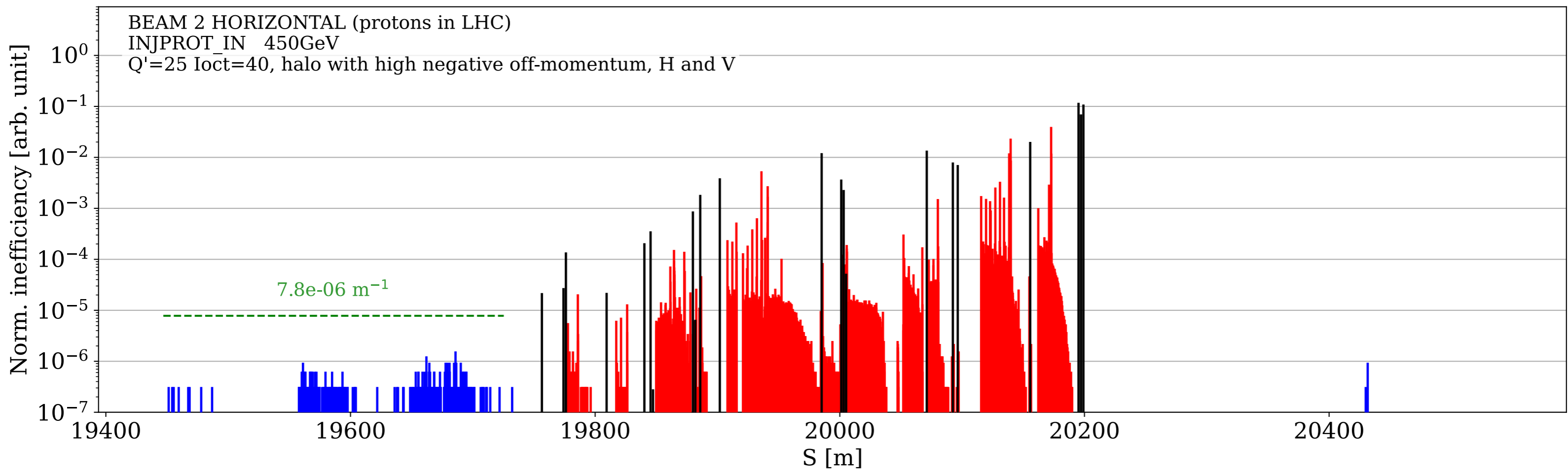
xtrack + Everest

- Warm
- Cold
- Collimator

← Beam



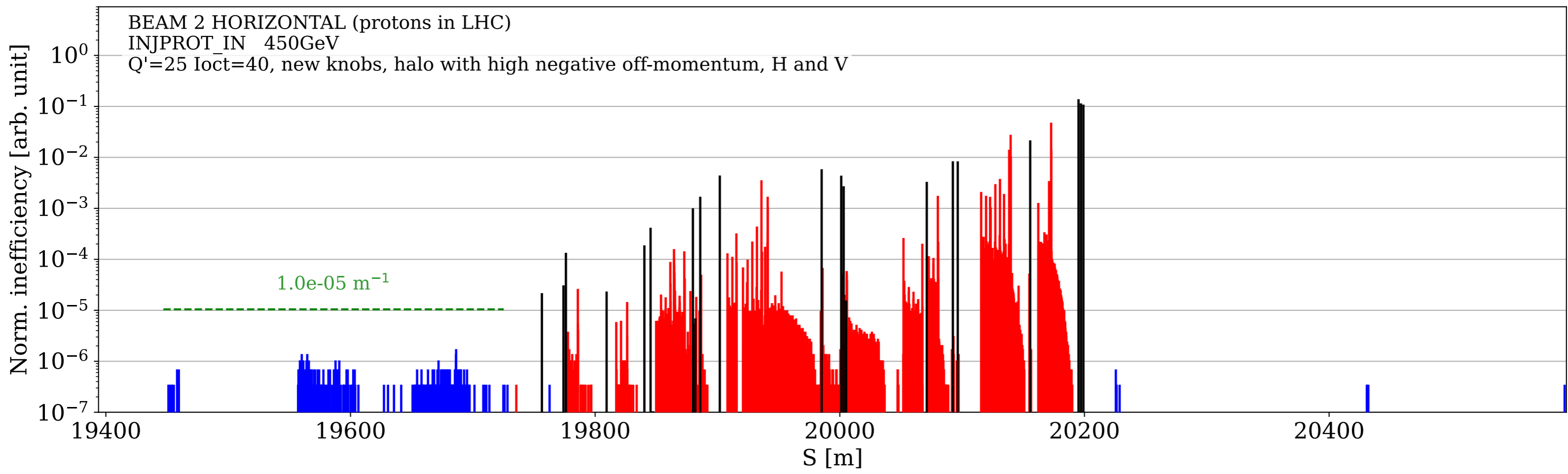
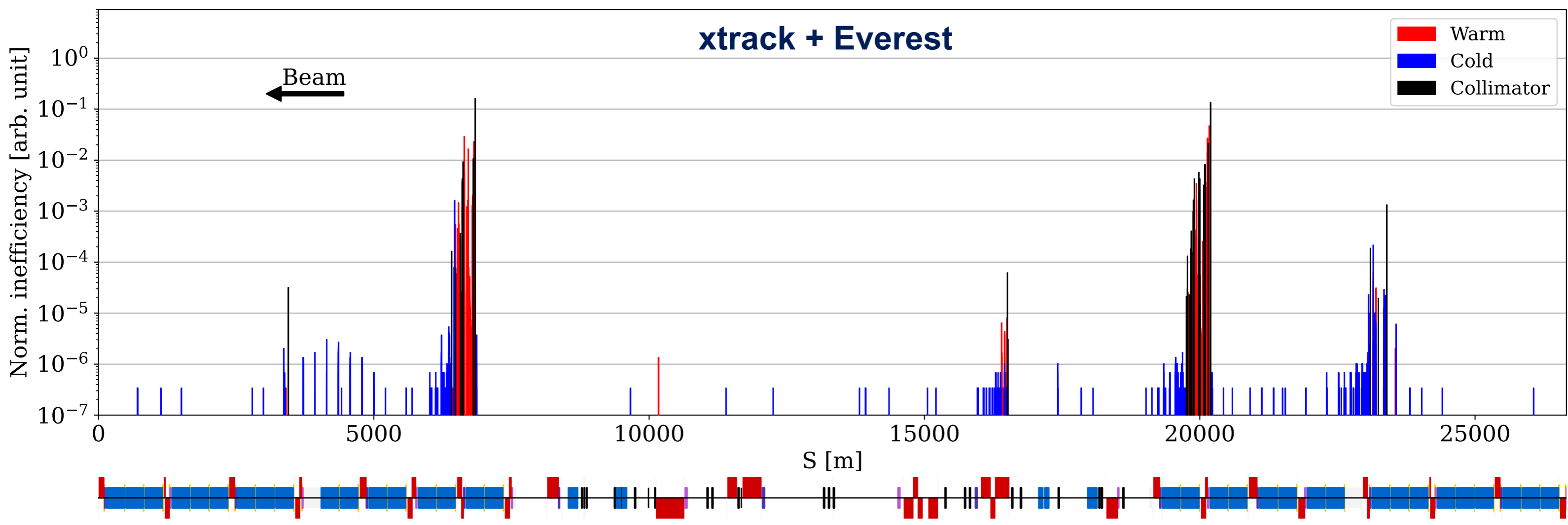
BEAM 2 HORIZONTAL (protons in LHC)
INJPROT_IN 450GeV
Q'=25 Ioct=40, halo with high negative off-momentum, H and V



xtrack + Everest

- Warm
- Cold
- Collimator

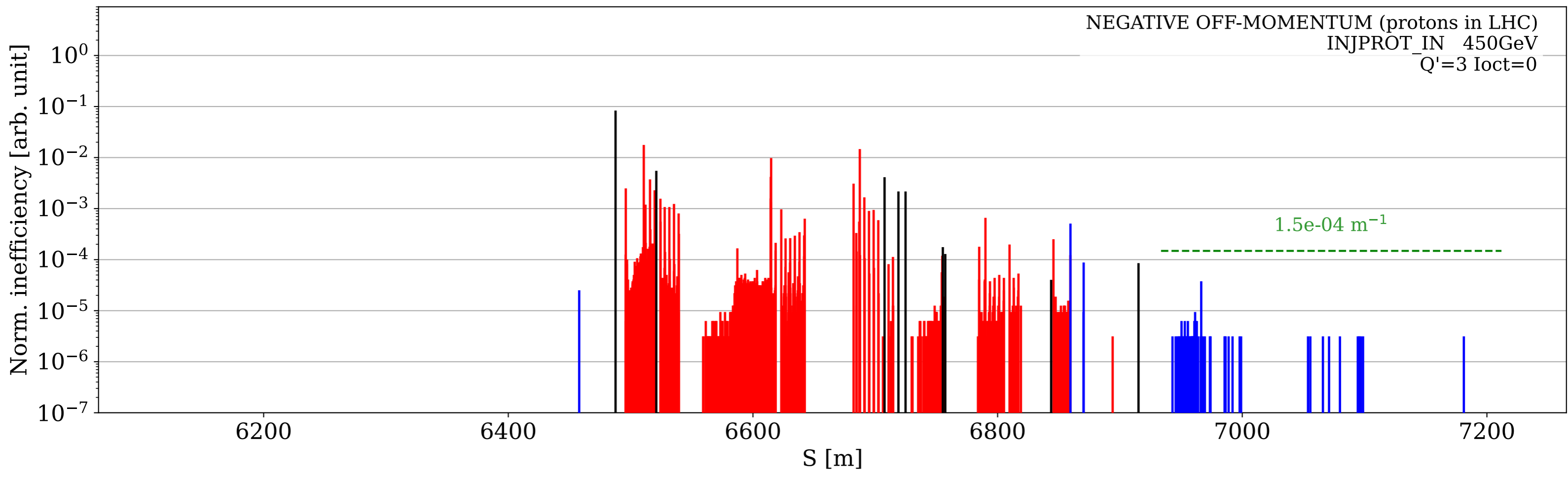
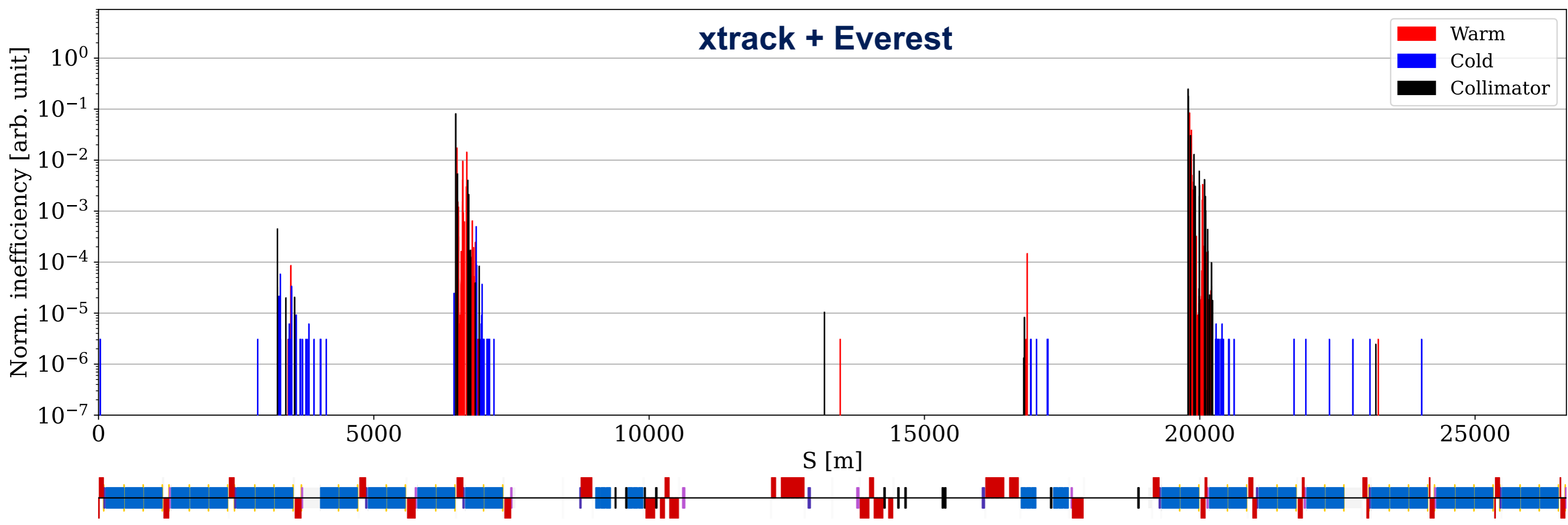
← Beam



Beam 1 RF sweep +300Hz

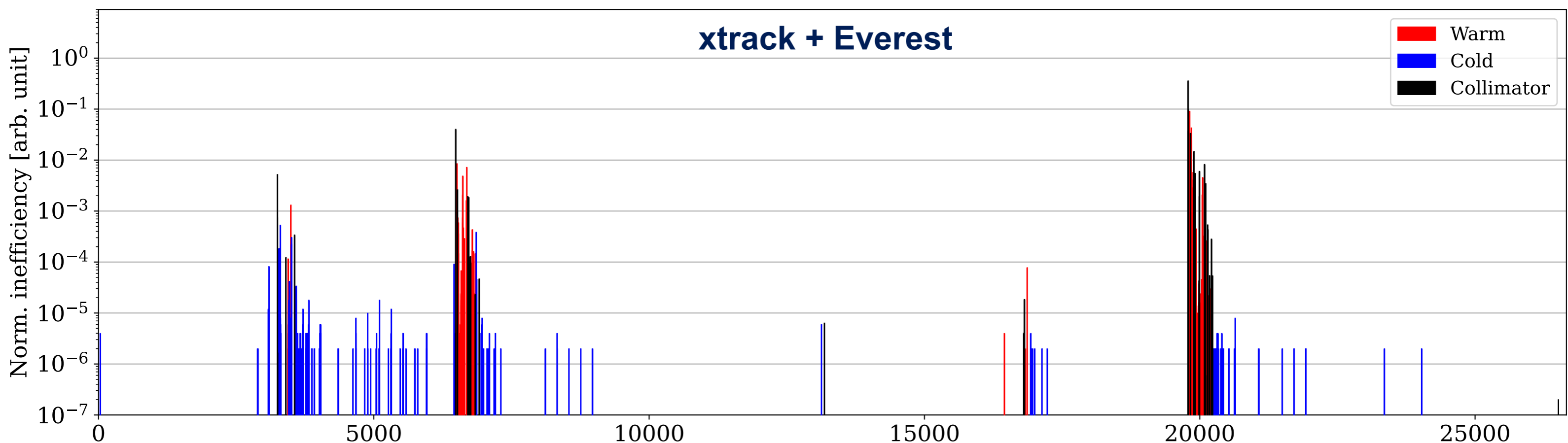
xtrack + Everest

- Warm
- Cold
- Collimator

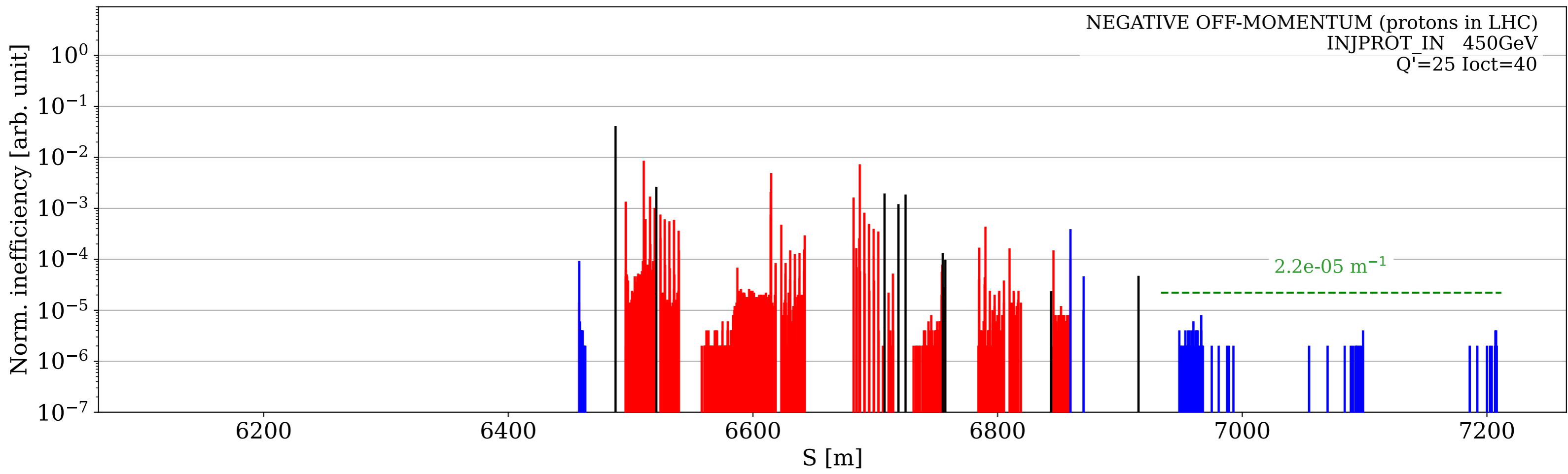
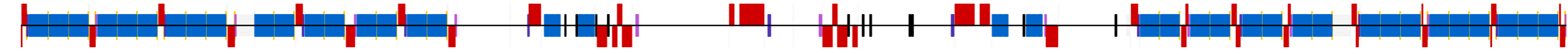


xtrack + Everest

- Warm
- Cold
- Collimator



S [m]



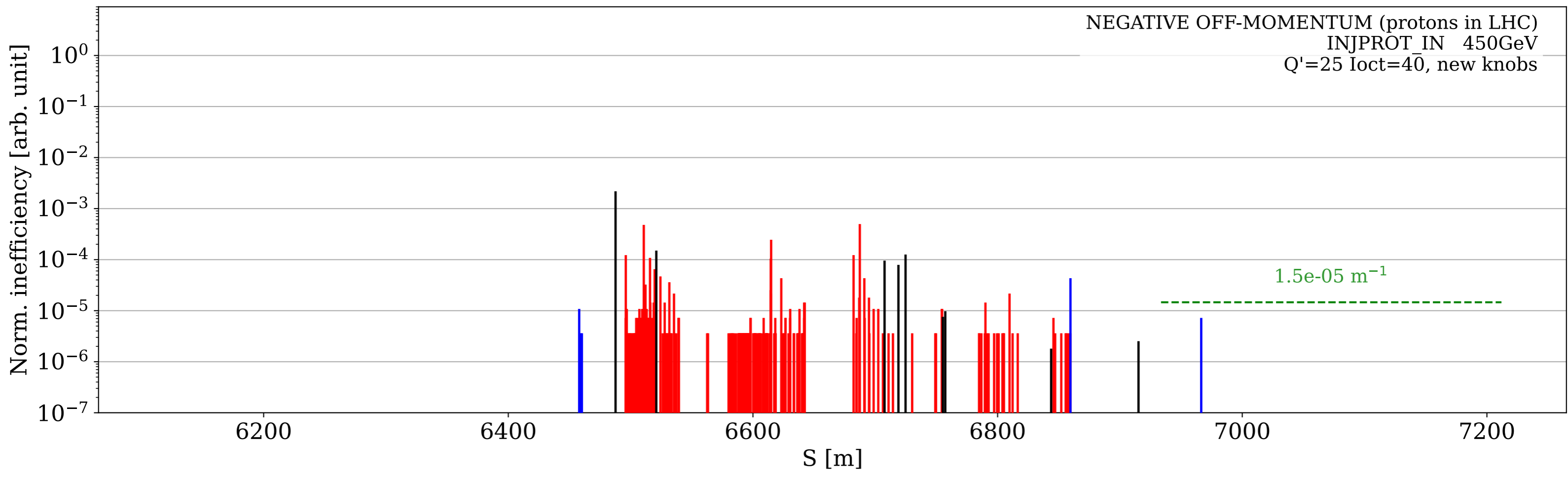
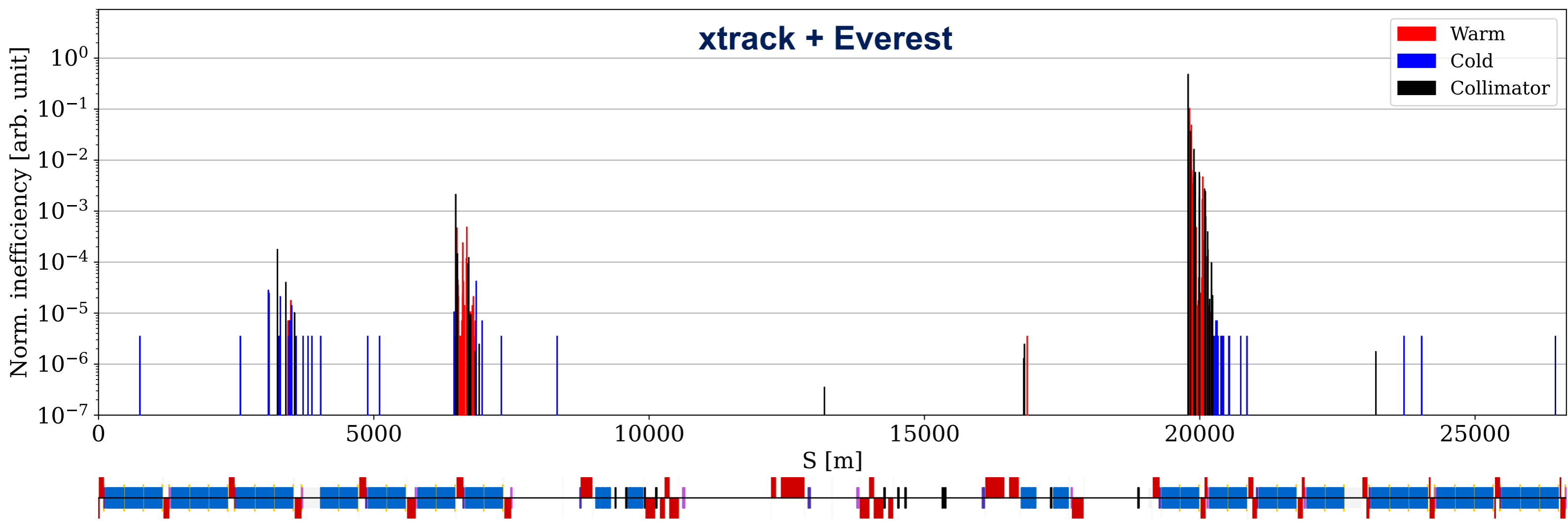
NEGATIVE OFF-MOMENTUM (protons in LHC)
INJPROT_IN 450GeV
Q'=25 Ioct=40

2.2e-05 m⁻¹

S [m]

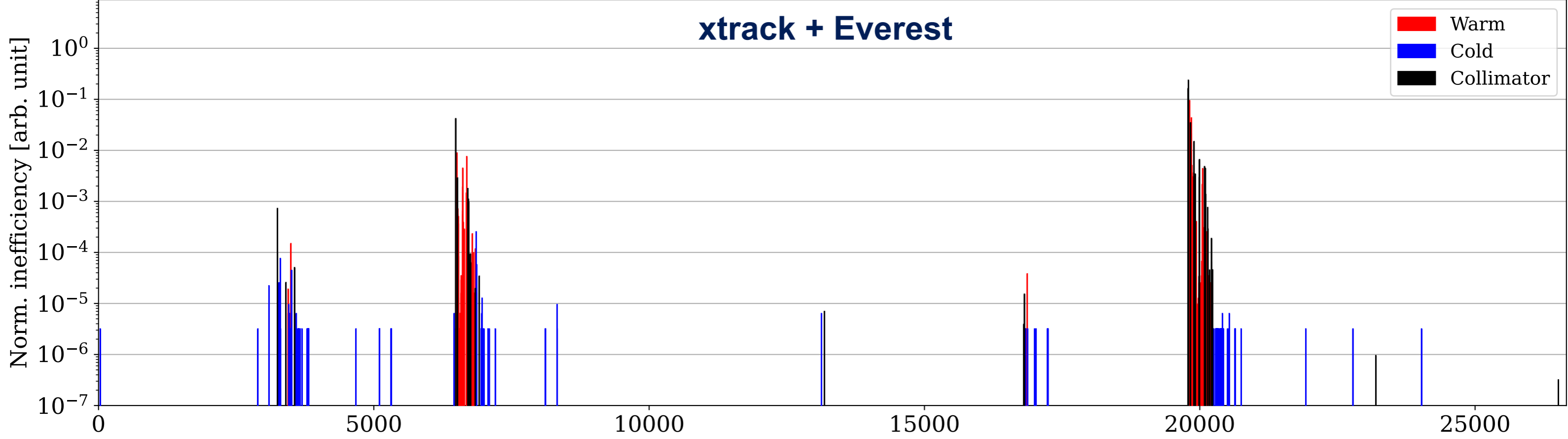
xtrack + Everest

- Warm
- Cold
- Collimator

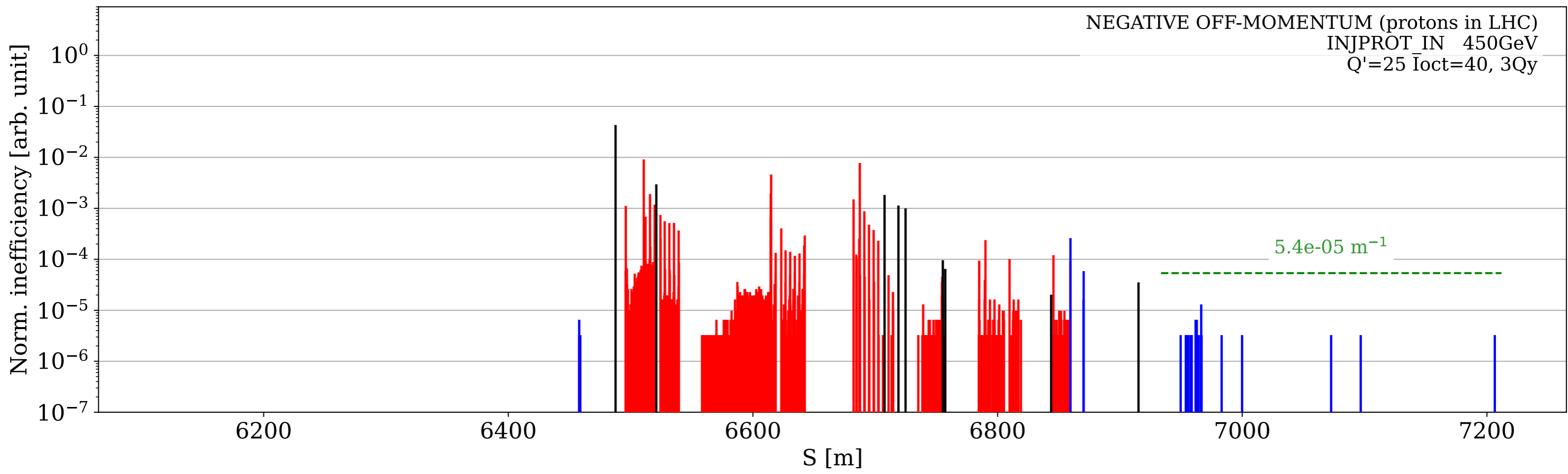
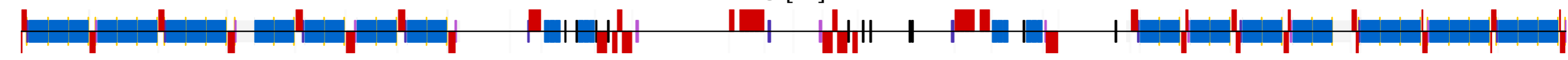


xtrack + Everest

- Warm
- Cold
- Collimator



S [m]



S [m]