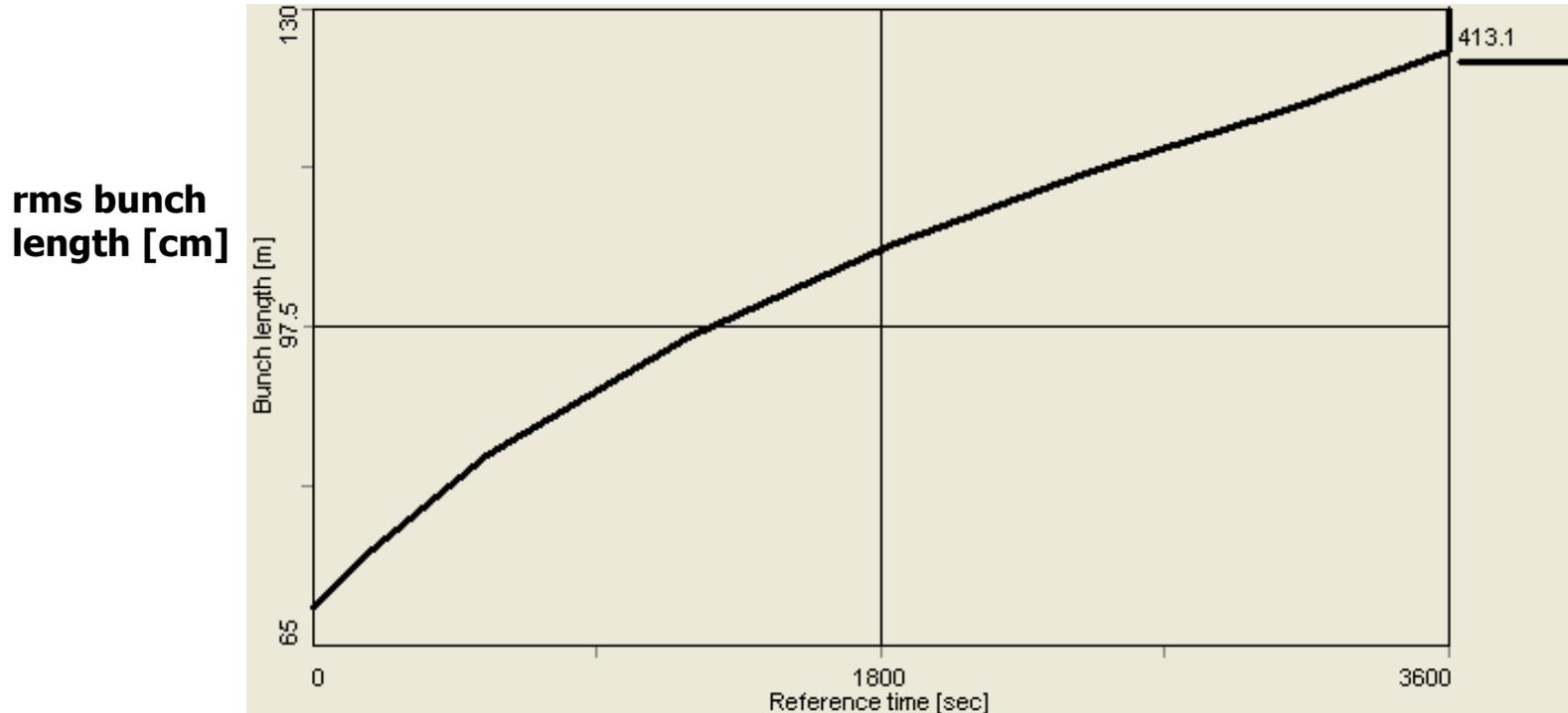


# IBS growth at Au store: simulation of Feb. 11 experiment (using BetaCool code, Martini's model for IBS)

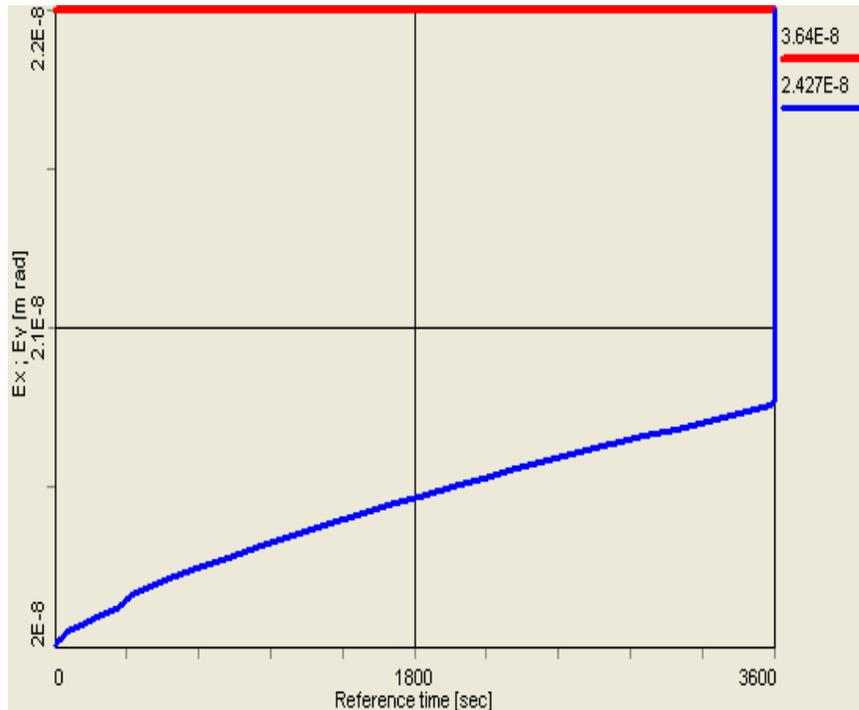


**Simulations: 80% growth in 1 hour**  
**Experiment: 70% growth in 1 hour**



**reasonable agreement  
in longitudinal direction**

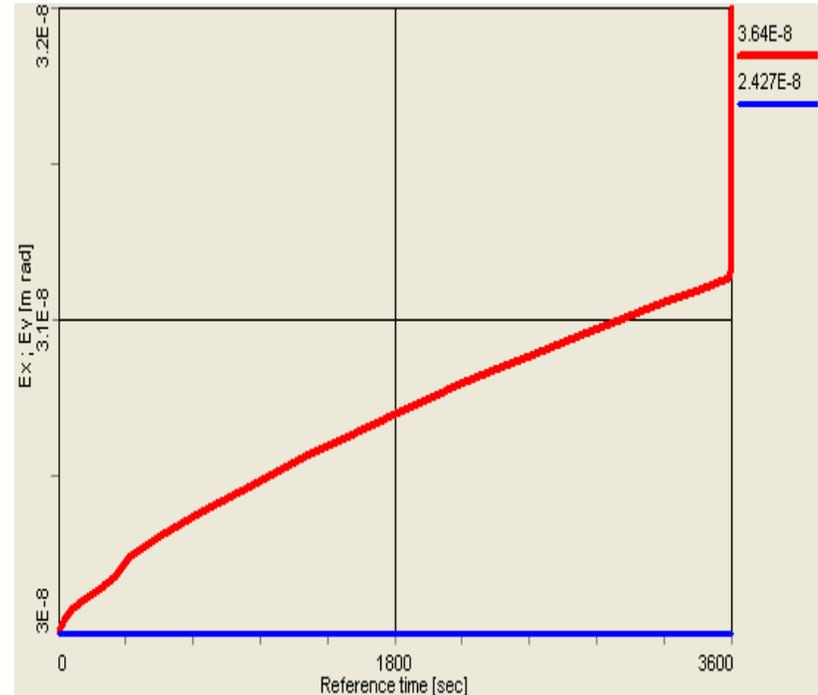
# IBS transverse emittance growth: Feb.11 experiment (simulations)



**Vertical:**

**Simulation: 4% relative growth**

**Experiment: 30% growth**



**Horizontal:**

**Simulation: 6% growth**

**Experiment: 20% growth**

# Summary

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**February 11 run:** good data in yellow

all 6 bunches had **similar intensity** – measured **transverse growth is too big**

**Need experiment with different intensities**

**February 17 experiment:**

**Different intensities** in blue – IMP does not work – data is **not useful**

**Similar intensities** in yellow – IMP gives good data – as during Feb.11.

**February 25 experiment:**

**Different intensities** in 3 bunches – 2 have similar low intensity and 1 bunch had factor of 2 higher intensity – IMP works nicely – however:

high-intensity bunch was constantly kicked by TK plus Landau cavities were on which resulted in strange longitudinal profile – as a result, **still no data** for different intensities.