

# Goals and Schedule for IP Tuning Task Group

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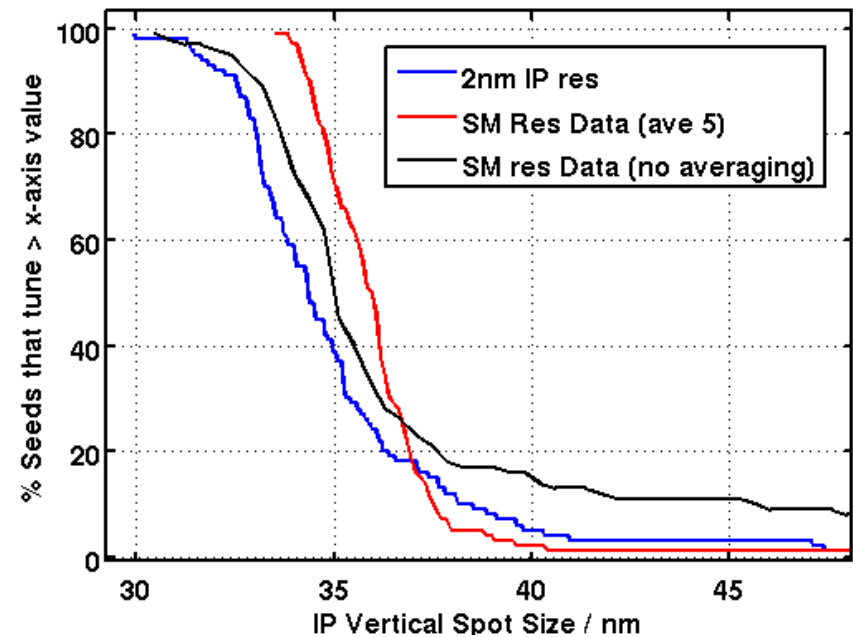
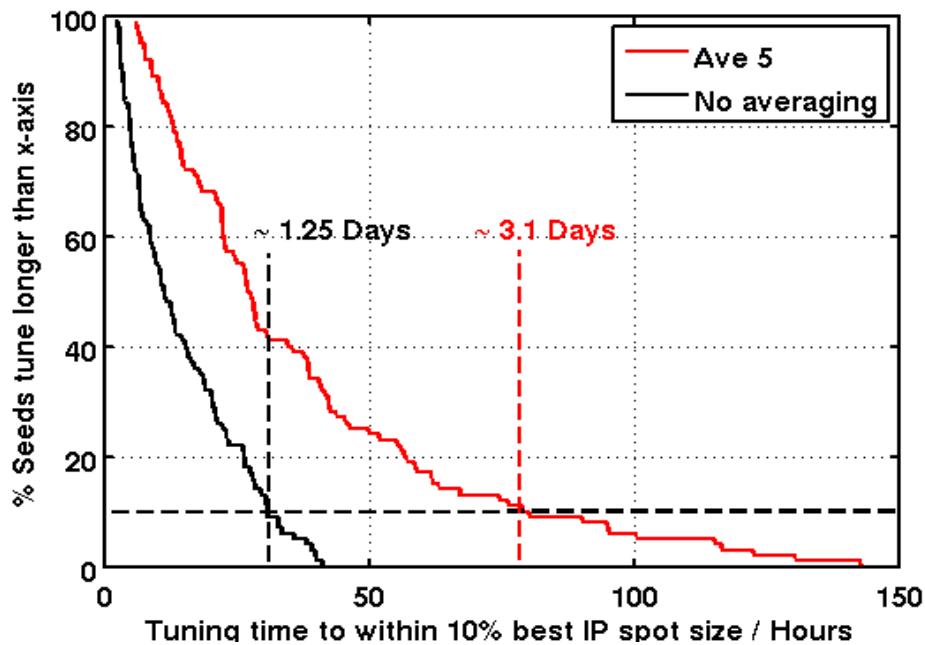
September 22 2008

# Goals - Simulation

- Goal to present final tuning plan in Dec ATF2 meeting
  - Details of tuning algorithms and planned implementation
- Cross-checked results with multiple models
  - Currently have Lucretia, Placet + ...?
  - Good to continue with independent analyses
  - Need to soon come to a point where we can compare and understand differences.
  - Use standard errors for comparison
    - 100 initial seeds available (AML)

# Simulation Comparisons

- Performance comparisons based on:
  - Vertical spot size achieved
  - Tuning time
- Use statistics from 100 random seeds
  - Agree on below format?



# Simulation Comparisons

- Simulations should also demonstrate:
  - Movers remain within dynamic ranges at all times
  - Magnet strengths remain within tolerances at all times
  - ...

# Goals - Implementation

- After Dec Meeting, start work on control-system-ready implementation.
  - Flight Simulator
- Due to tuning timescale, critical that procedure becomes fully automated.
- Need access to:
  - BPMs (being developed in EPICS, easily port to FS).
  - Mover system (already in EPICS + FS).
  - Magnet power supplies (already in EPICS + FS).
  - Shintake (+ carbon wirescanner) BSM ??

# Task Group Meeting Schedule

- Aim for meeting every ~2 weeks ?
- Next meeting: Monday October 13.
  - Simulation updates.
    - Aim for first code comparisons?
  - Invite J.N./D.M. - discussion of Sextupole mover system capabilities?