

sPHENIX Run25 Update

sPHENIX General Meeting

2026 February 27

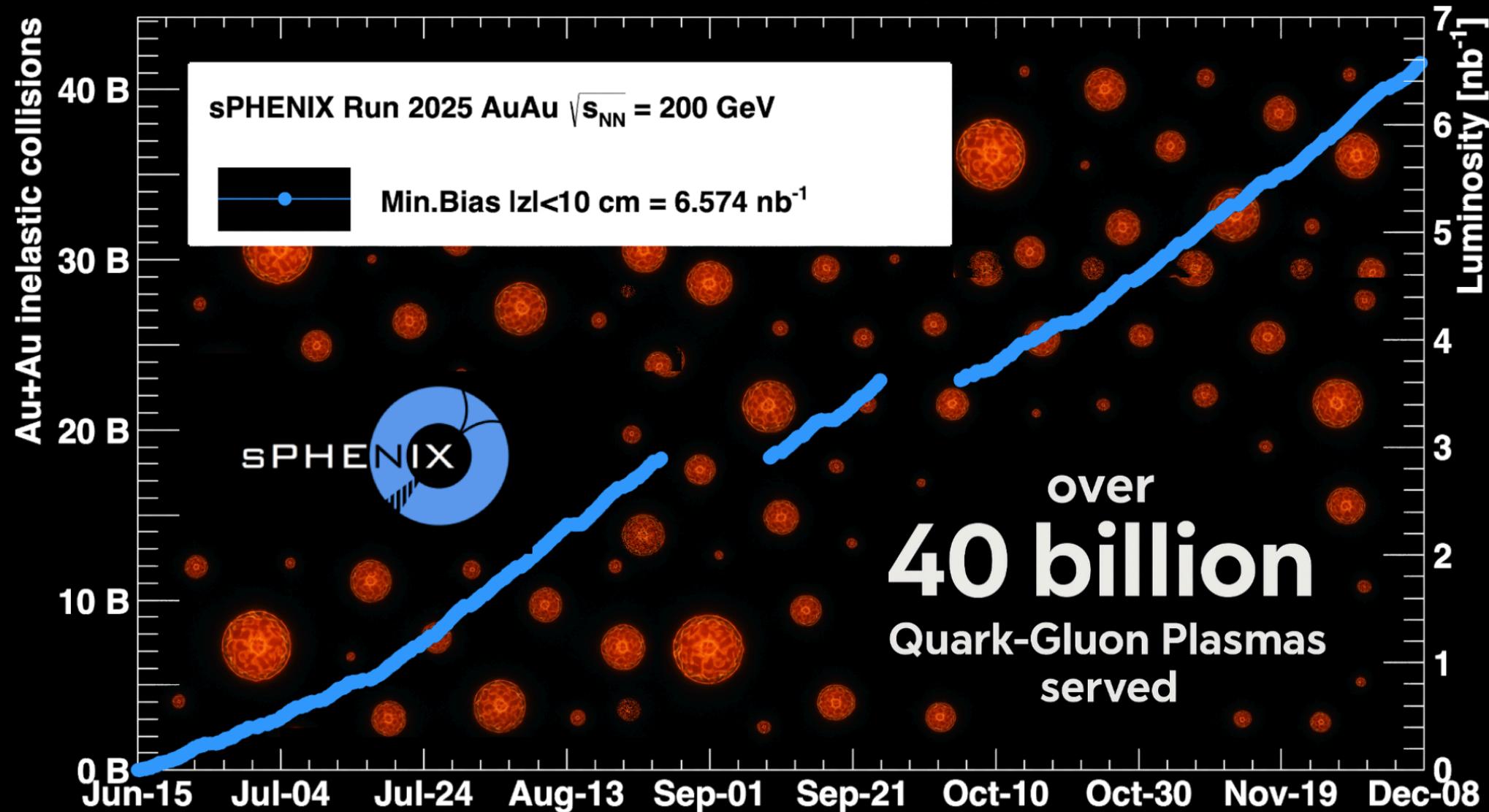
Rosi Reed
Lehigh University
sPHENIX Run Coordinator



Ron Belmont
UNC Greensboro
sPHENIX Deputy Run Coordinator



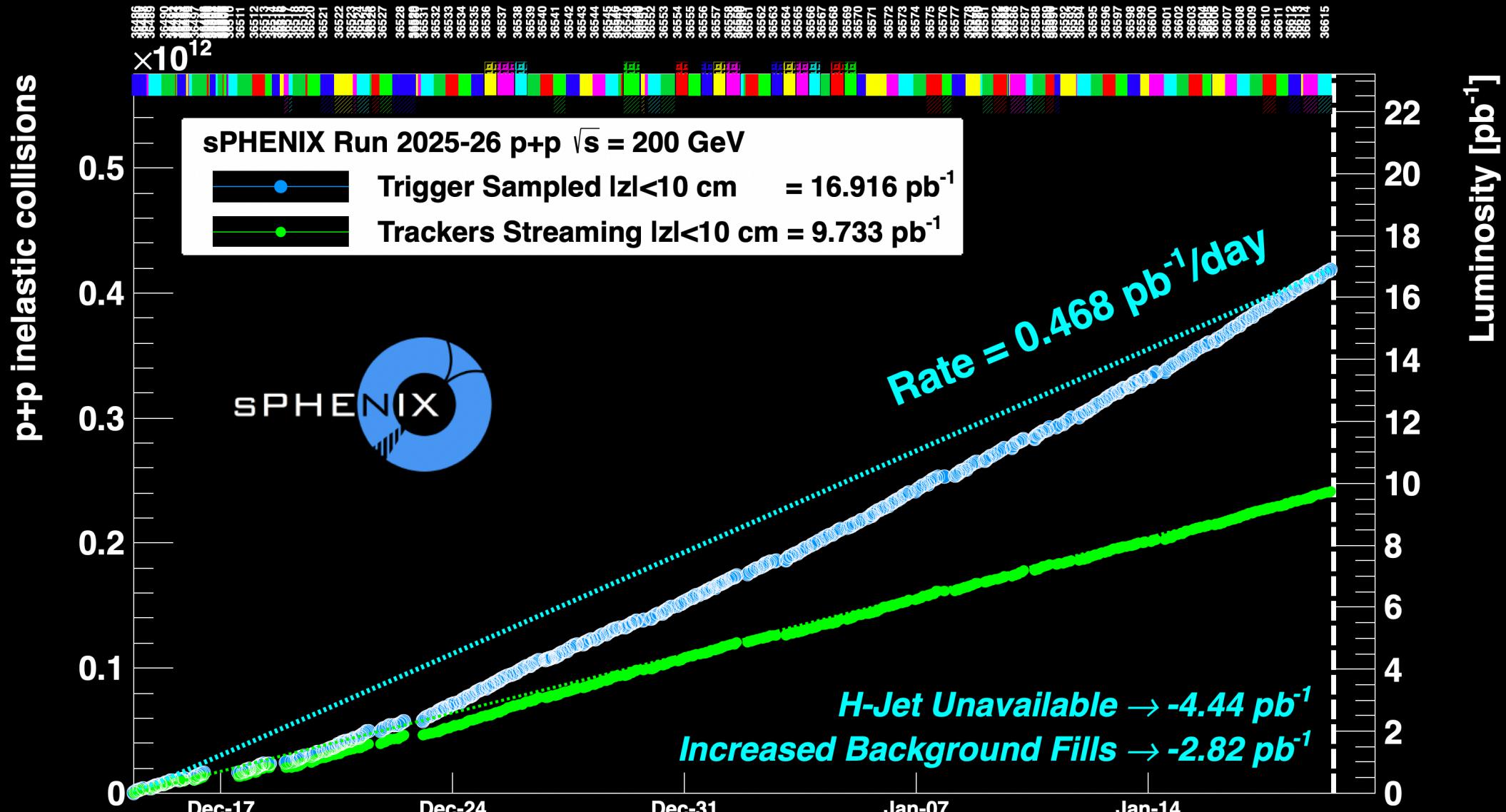
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Run25 Au+Au Summary

- 182 days from first Au+Au collisions on June 9 to final Au+Au collisions on December 8
 - Blue cold hipot failure March 26 led to nine weeks of delay
 - Squirrel incident followed immediately by damaged power line cross arm led to about one week of delay
 - Vacuum loss and window damage from unexpected abort led to about one week of delay
 - And so much more... be sure to read the forthcoming Run History!
- All subsystem triggered data: 6.574/nb
 - 93% of Run25 goal
 - Decision was made to end Au+Au at a specified date to get started on p+p
- None of this spectacular success would have been possible without the tireless efforts of shift crew members, subsystem experts, and technicians, all of whom worked long hours for a very long time

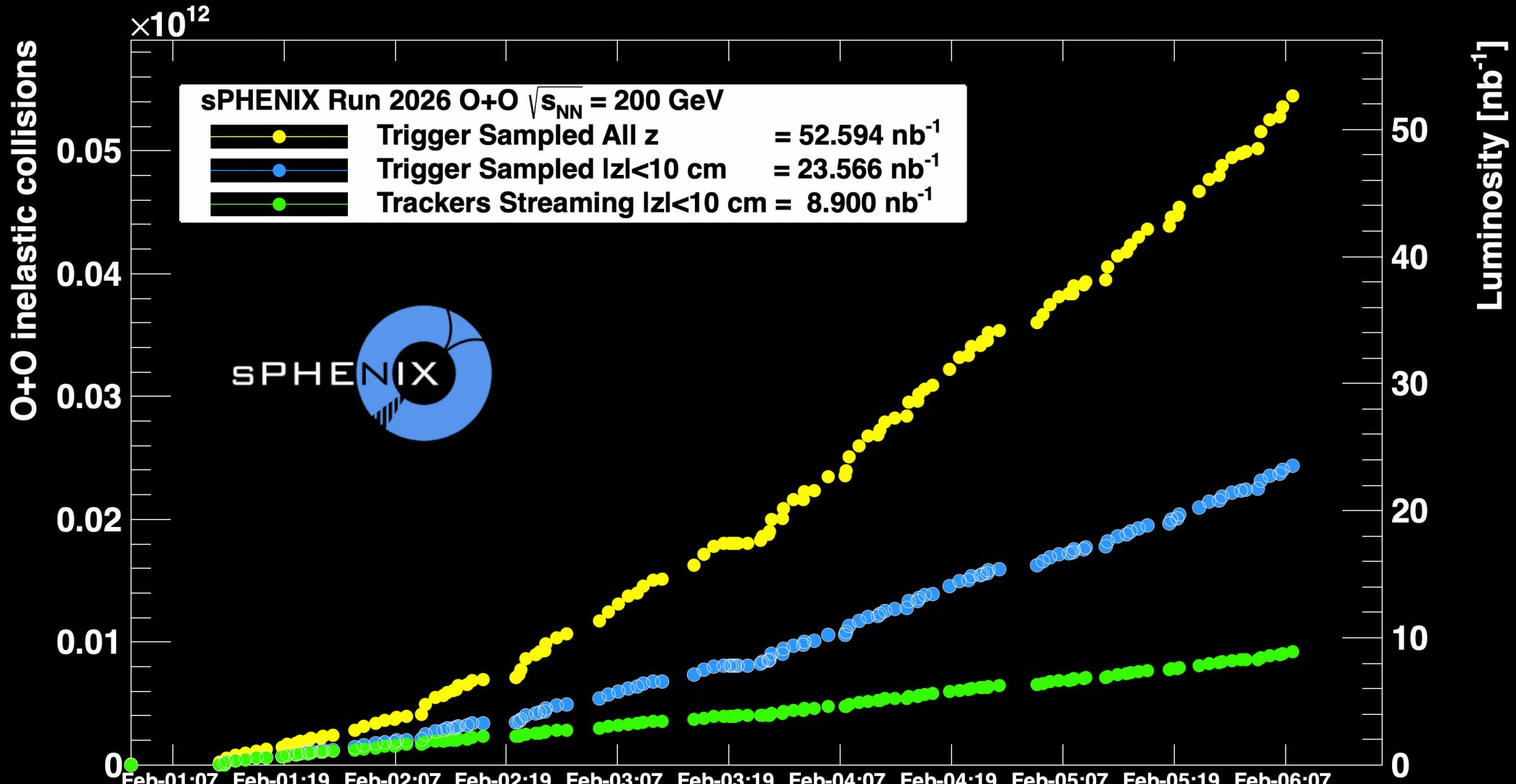
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Run25 p+p Summary

- All subsystem triggered data: 16.9/pb
 - 130% of Run25 goal
 - Program total of 30.2/pb = 67% of program goal
- All tracker streaming data: 9.7/pb
 - 216% of program goal
 - Program total of 12.6/pb = 280% of program goal
- All subsystem triggered data with known polarization (viz. functioning H-Jet polarimeter): 12.5/pb
 - 96% of Run25 goal
 - Program total of 25.8/pb = 57% of program goal
- None of this spectacular success would have been possible without the tireless efforts of shift crew members, subsystem experts, and technicians, all of whom worked some combination of nights, weekends, Christmas, and New Year's

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Run25 O+O Summary

- Our original program goal was 13/nb in two weeks of running
- Our “conservative estimate of what we thought we could achieve” was stated to be “at least 4/nb”
 - Me at the January 23 GM: “I want 5/nb, and I think we can do it”
 - sPHENIX: “hold my beer”
- The total run time was 5.33 days
- All subsystem triggered data: 23.6/nb
 - 182% of program goal
- All tracker streaming data: 8.9/nb
 - 228% of program goal
 - Original goal 3.9/nb assuming 30% streaming on 13/nb trigger sampled
- All vertex calo-only data: 52.6/nb
 - 404% of program goal
- What could you call this other than a spectacular success?

THE END: Friday 2026-02-06 at 9:10 EST



Summary

- 369 shift change meetings
- 182 days of Au+Au, 6.6/nb, 93% of goal
- 41 days of p+p, 16.7/pb, 130% of goal
- 5.3 days of O+O, 23.6/nb, 181% of goal
- All Run25 SCM docs uploaded to Invenio (as a tarball)
- Run25 Run Report forthcoming
 - Subsystem experts please help! (All should have access, let us know if you have issues)

Many Thanks to the Previous Run Coordinators



- The massive success of Run25 would not have been possible without the dedication and tireless efforts of the previous Run Coordinators
 - Run23: Stefan Bathe
 - Run24: Jamie Nagle
- NB: Sam approves