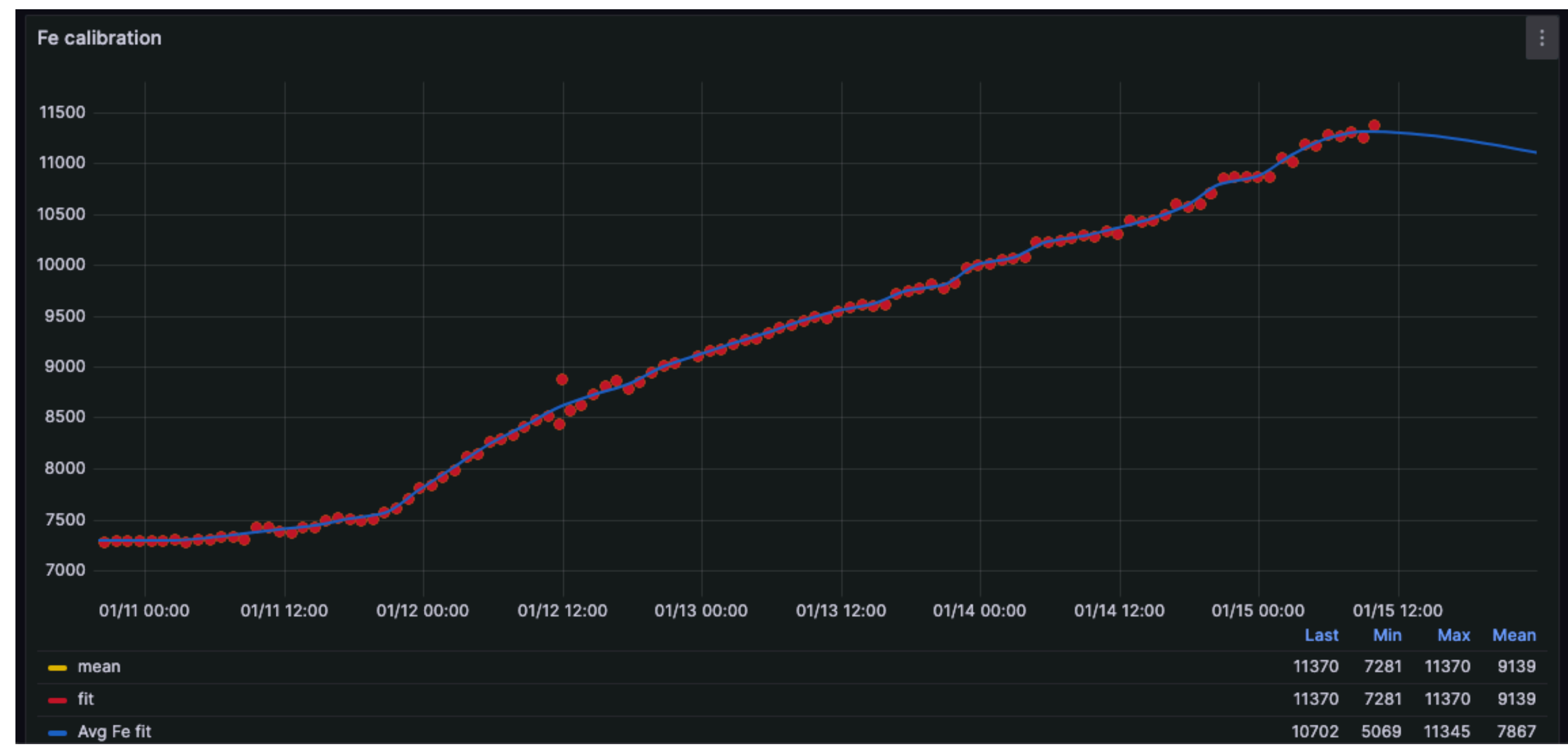


CYGN0, 25 Jan 2024

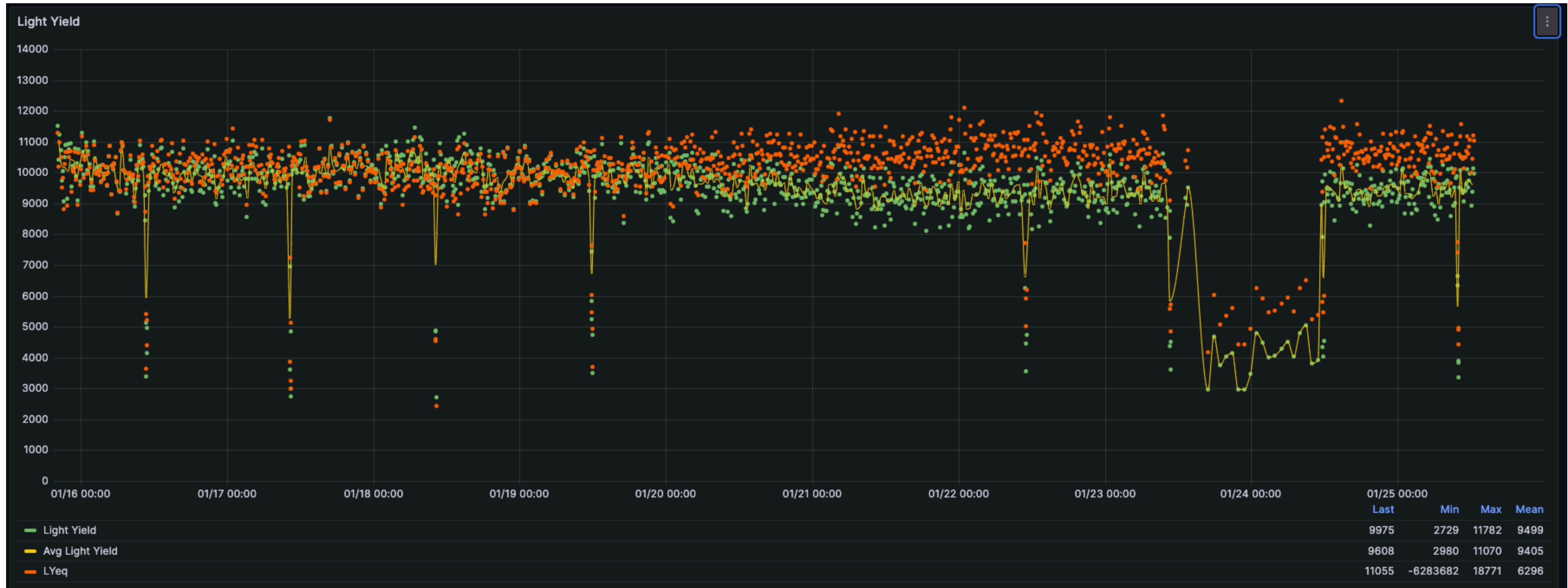
LIME: status



With a low gas flow (1 or 2 litres/h) the light yield decreased during the Christmas break

Gas flow was increased to 5 litres/h (11 January), the LY increased too

LIME: status



Since the 15 January, the LY is very stable (and very good, more than 10 k counts/6keV) and we are taking continuous data in RUN4 configuration;

We are evaluating the amount of data needed to compare results with Monte Carlo;

CYGNO-04

- We are having weekly meeting to discuss details about the design and realisation of the detector and the shielding;
- With the help of Giulia, we are restarting the complete simulation in GEANT4 of the expected background;
- Melba, with the help of Flaminia and Pietro, will take care of this work in the next months;
- The work on the new DAQ is a crucial point, bi-weekly meetings will start next week;

Papers

- We have received comments from PRL for the paper on hydrogenated mixtures. In principle, with appropriate corrections that our colleagues in Coimbra have already collected, the journal could accept the paper;
- We have the paper on EL awaiting comments from internal reviewers. If we can close it than we can move toward the submission;
- We are starting to gather material and ideas for a paper on AmBe (Stefano will be the corresponding author) in which we would also like to use 3D reco;
- We had a meeting with the Sheffield colleagues that confirmed that all the works related to CYGNO-like approaches will be published as CYGNO collaboration.