

One-year long common view measurements with continuous gravimeters

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<https://synte.obsmp.fr/spip/science/iaci/>

Laboratory at LNE, with 4 continuous gravimeters

Absolute gravimeter
CAG (Cold Atom Gravimeter)

since 2009

3 gravity points / s
(here one absolute point / 177 s)

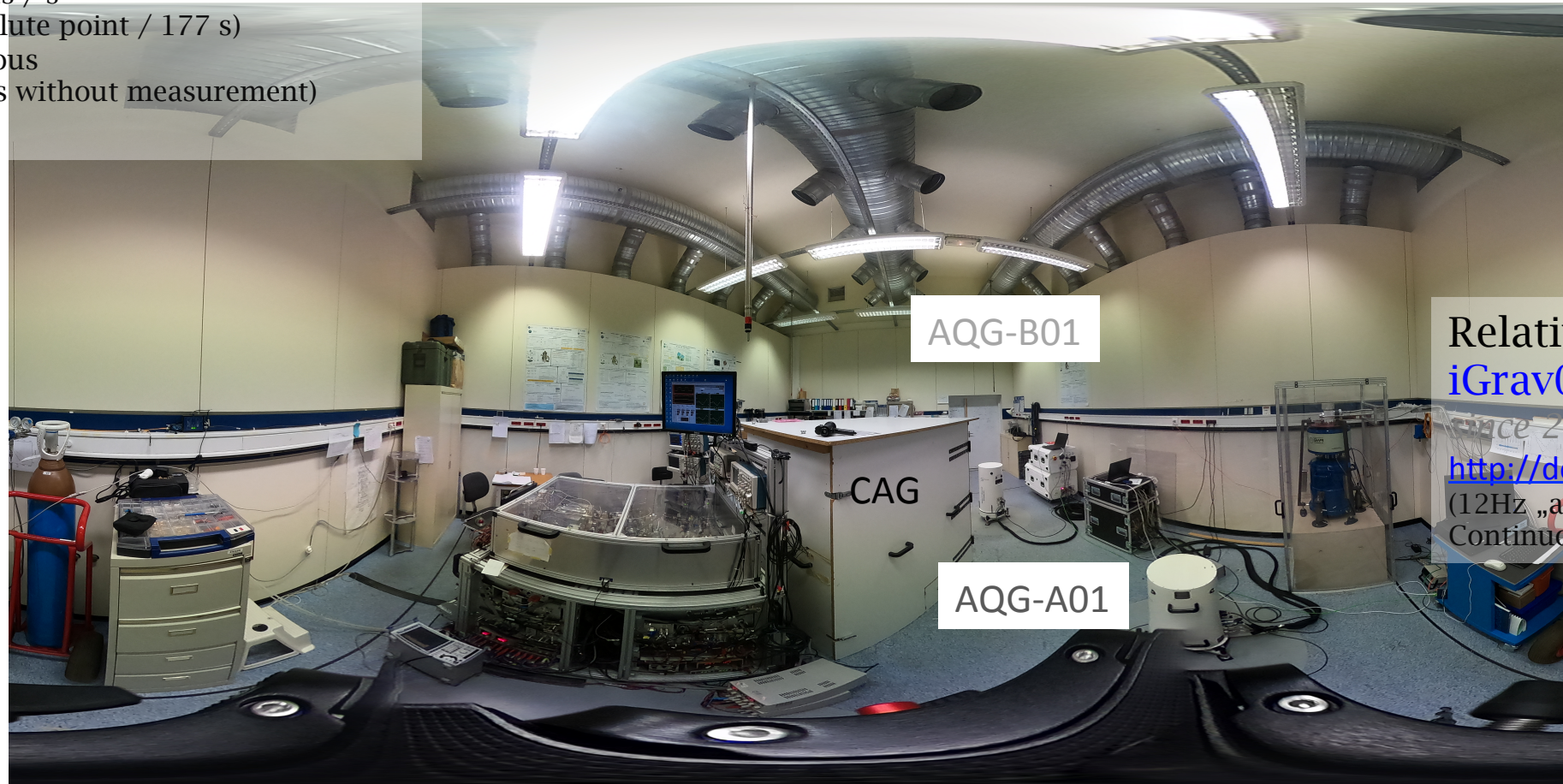
Quasi continuous
(200ms/360ms without measurement)

AQG-A01 (27/07/2019-13/10/2020)

AQG-B01 (16/09/2020-13/10/2020)

} Not the same

Coriolis measurement 13/10-5/11/2020



Relative gravimeter
iGrav005 SG

since 2013

<http://doi.org/10.5880/igets.tr.l1.001>

(12Hz „averaged“) 1 gravity point / s
Continuous



iGrav005 data

Relative gravimeter iGrav005 SG

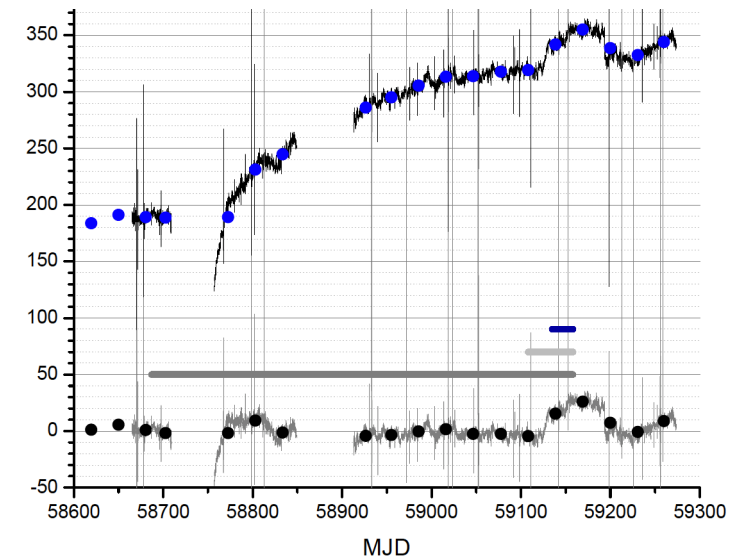
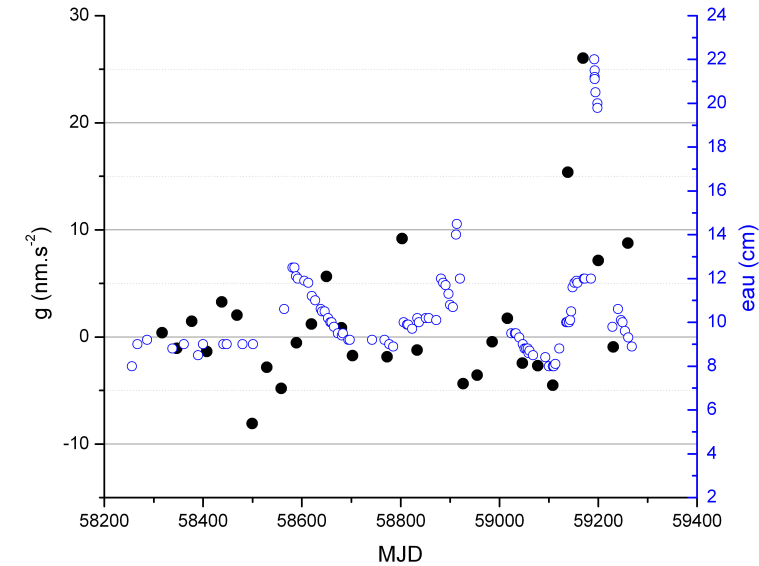
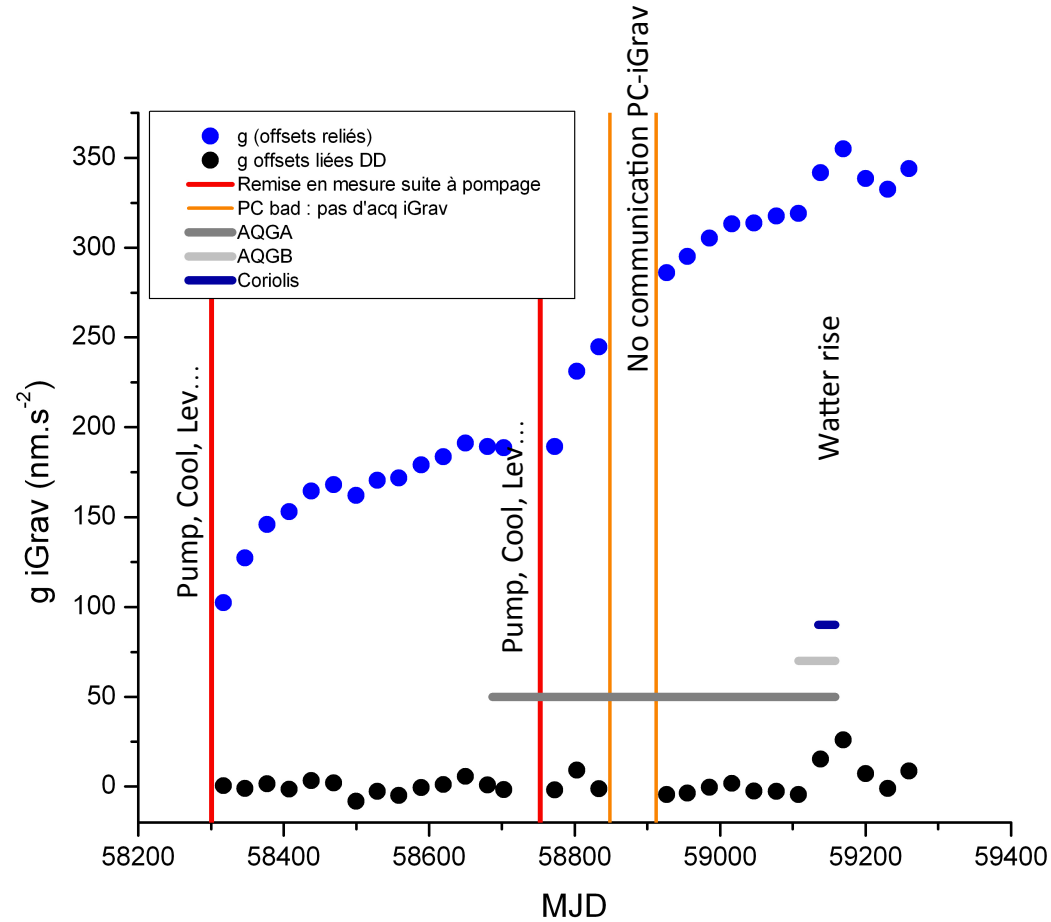
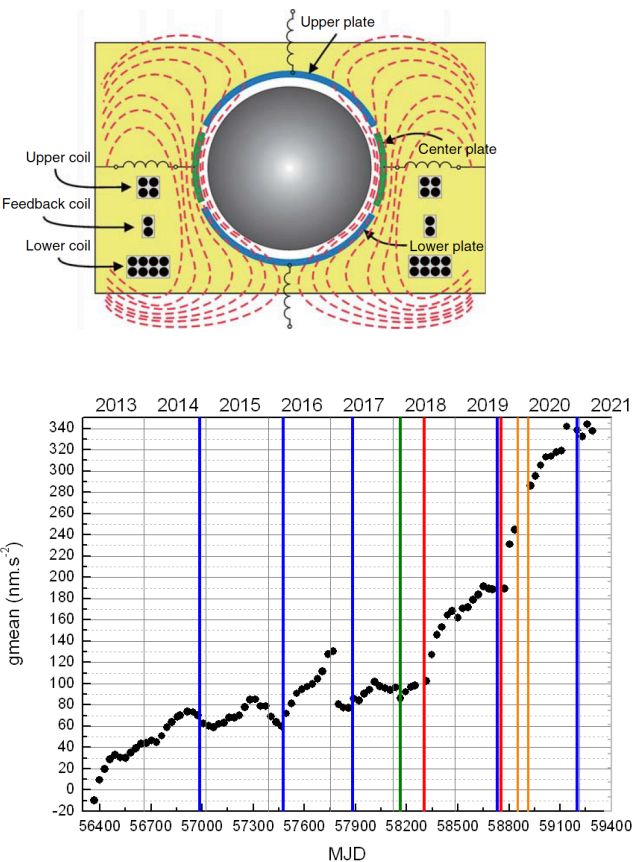
since 2013

<http://doi.org/10.5880/igets.tr.l1.001>

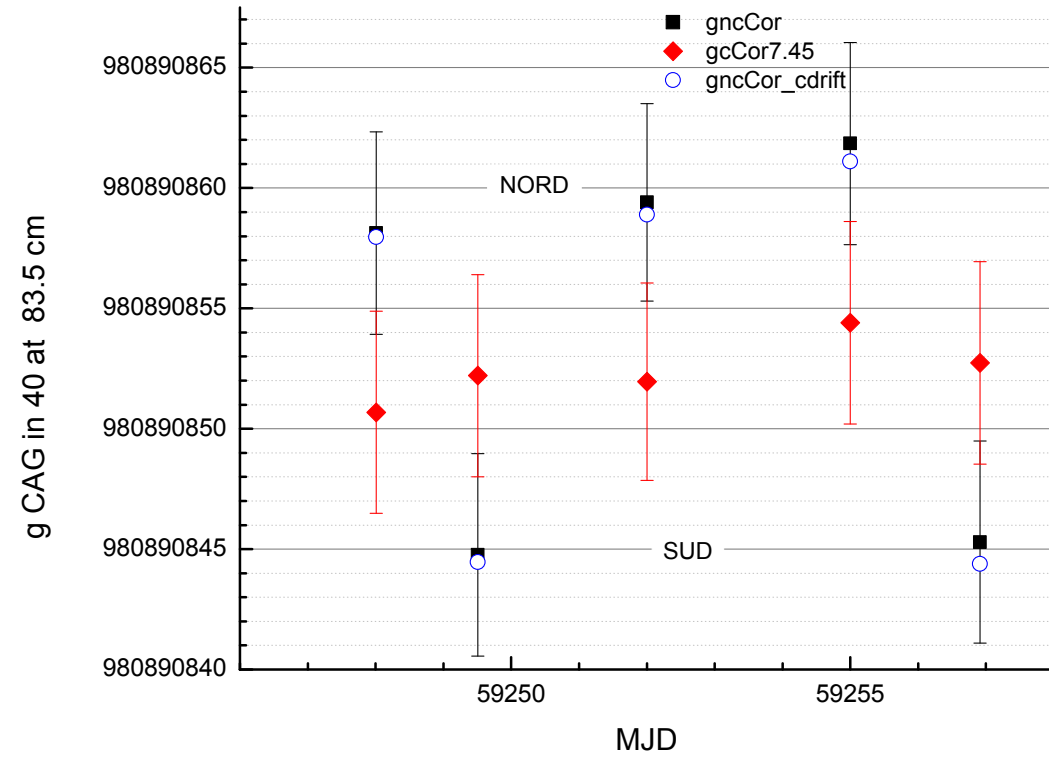
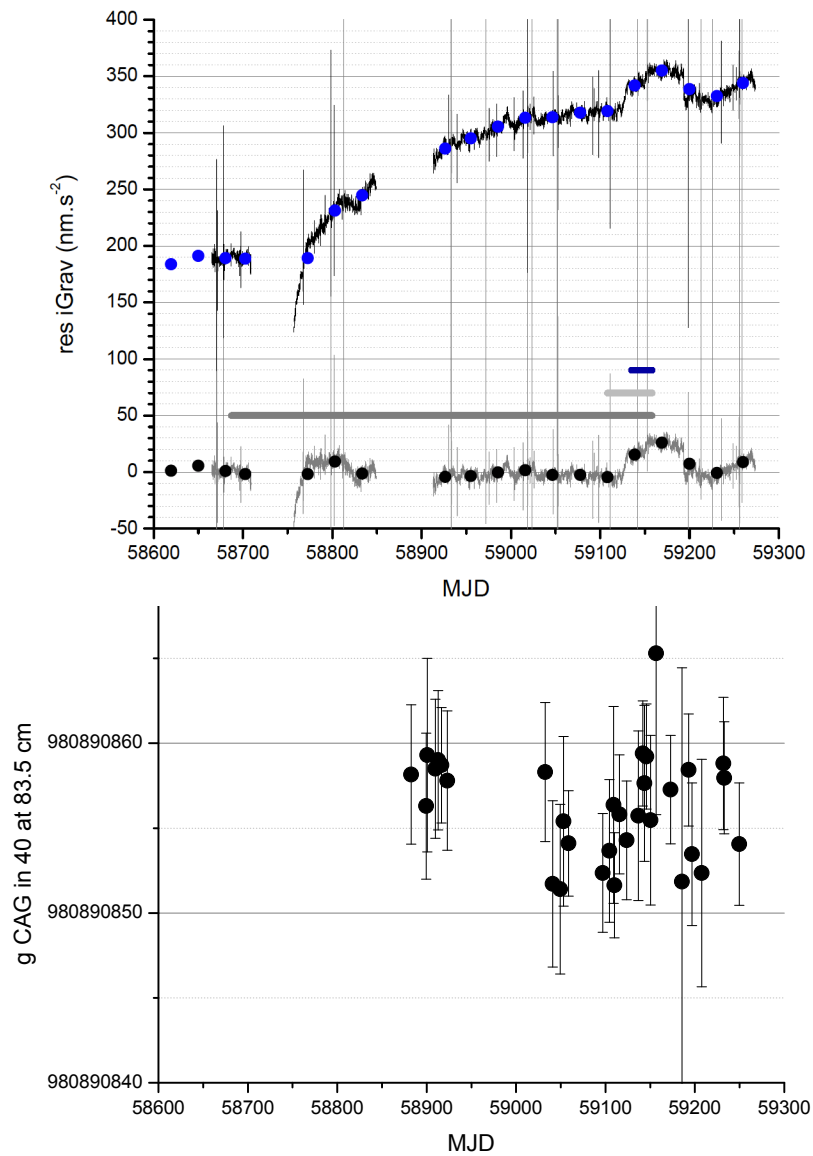
(12Hz „averaged“) 1 gravity point / s
Continuous



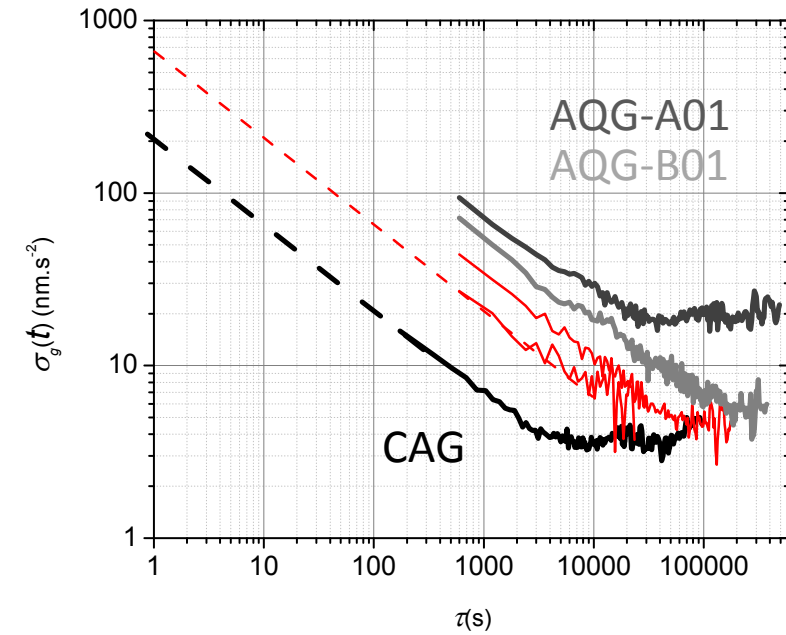
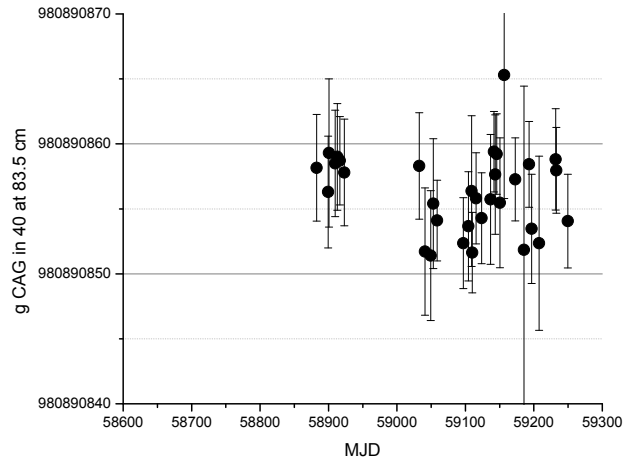
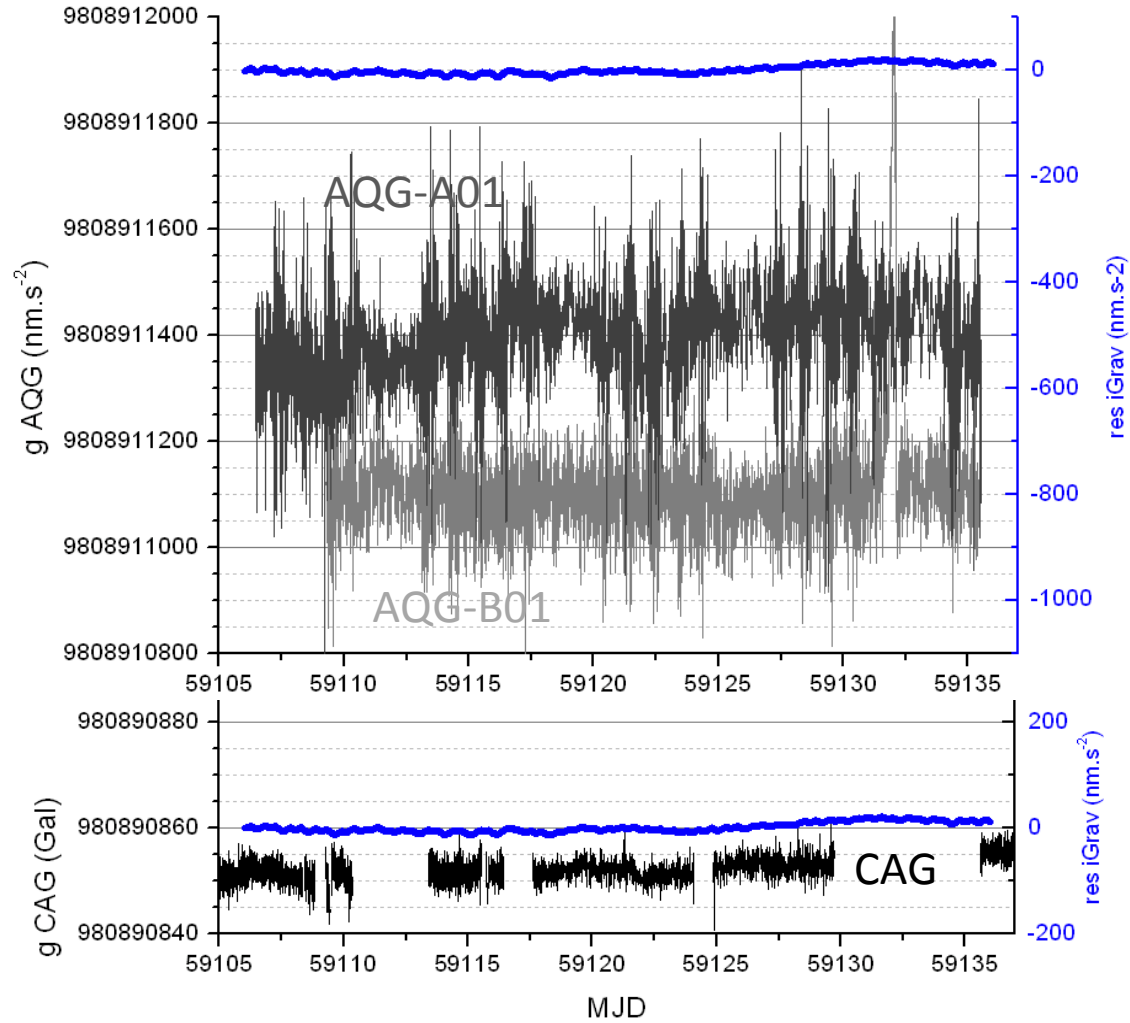
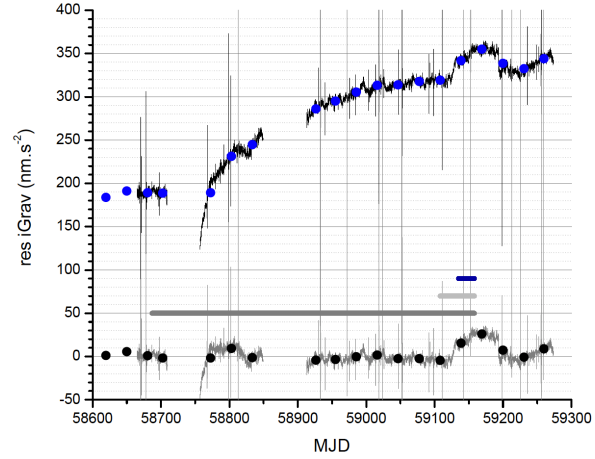
How to reconnect the iGrav data ?



CAG

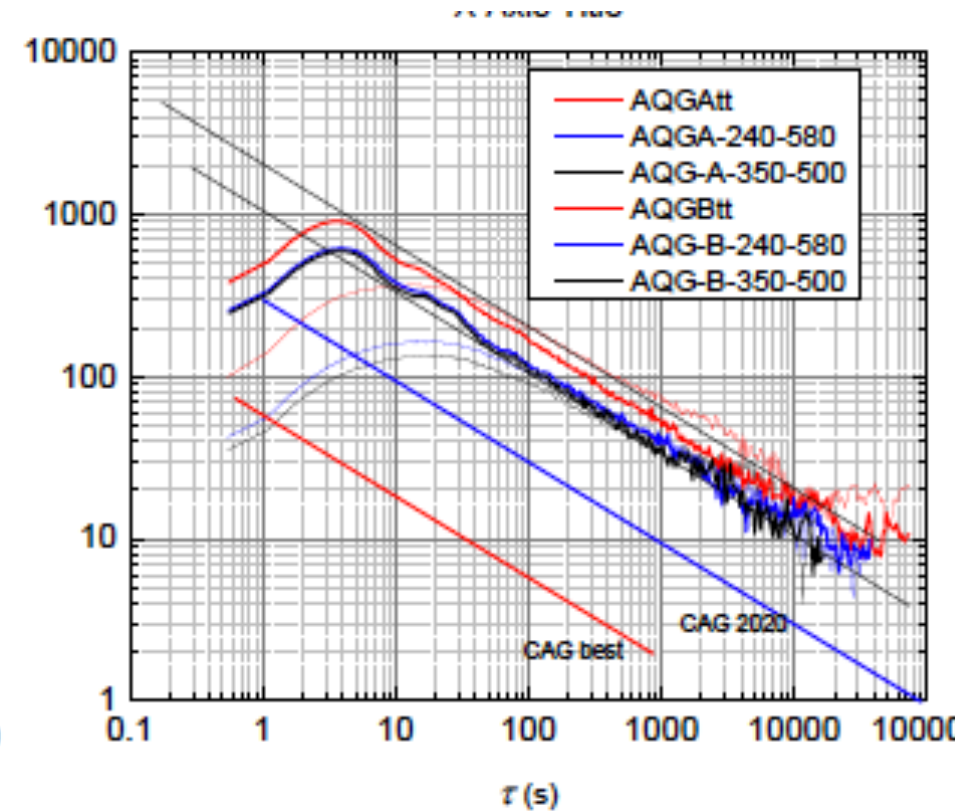
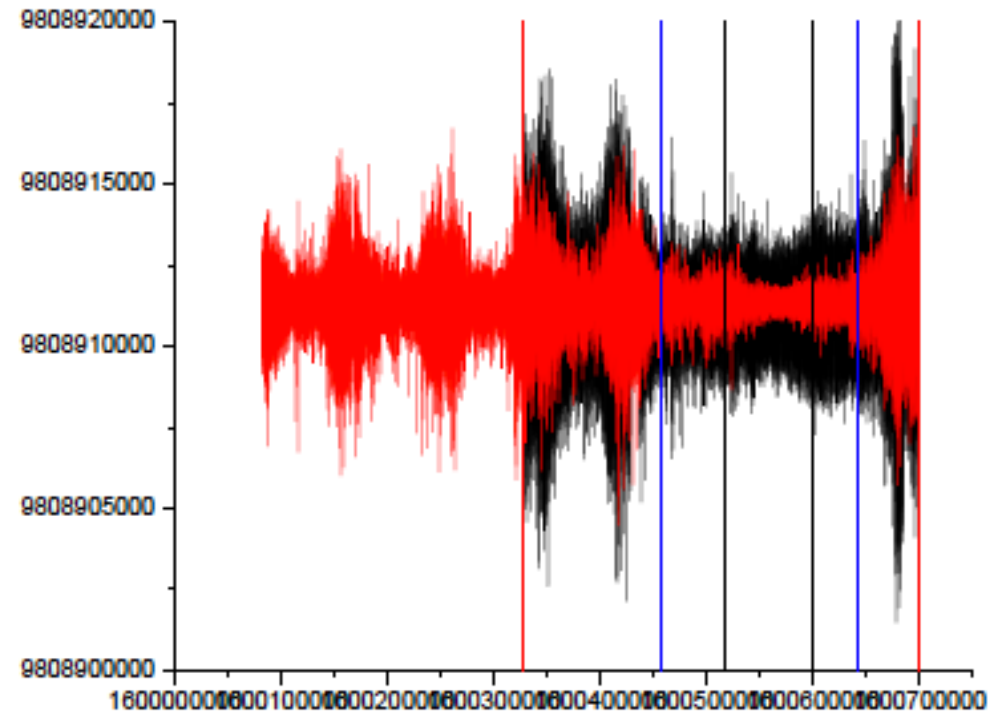
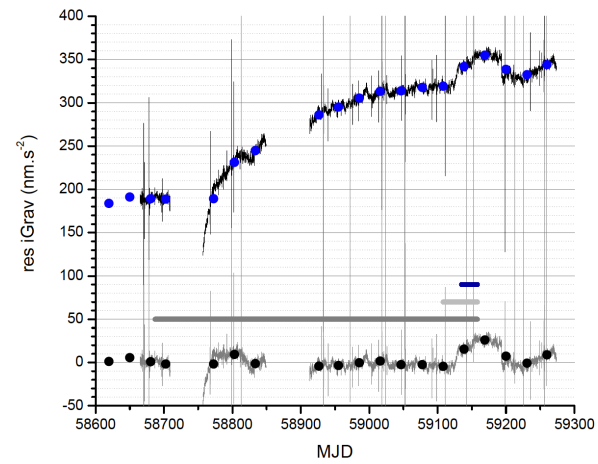


AQGs

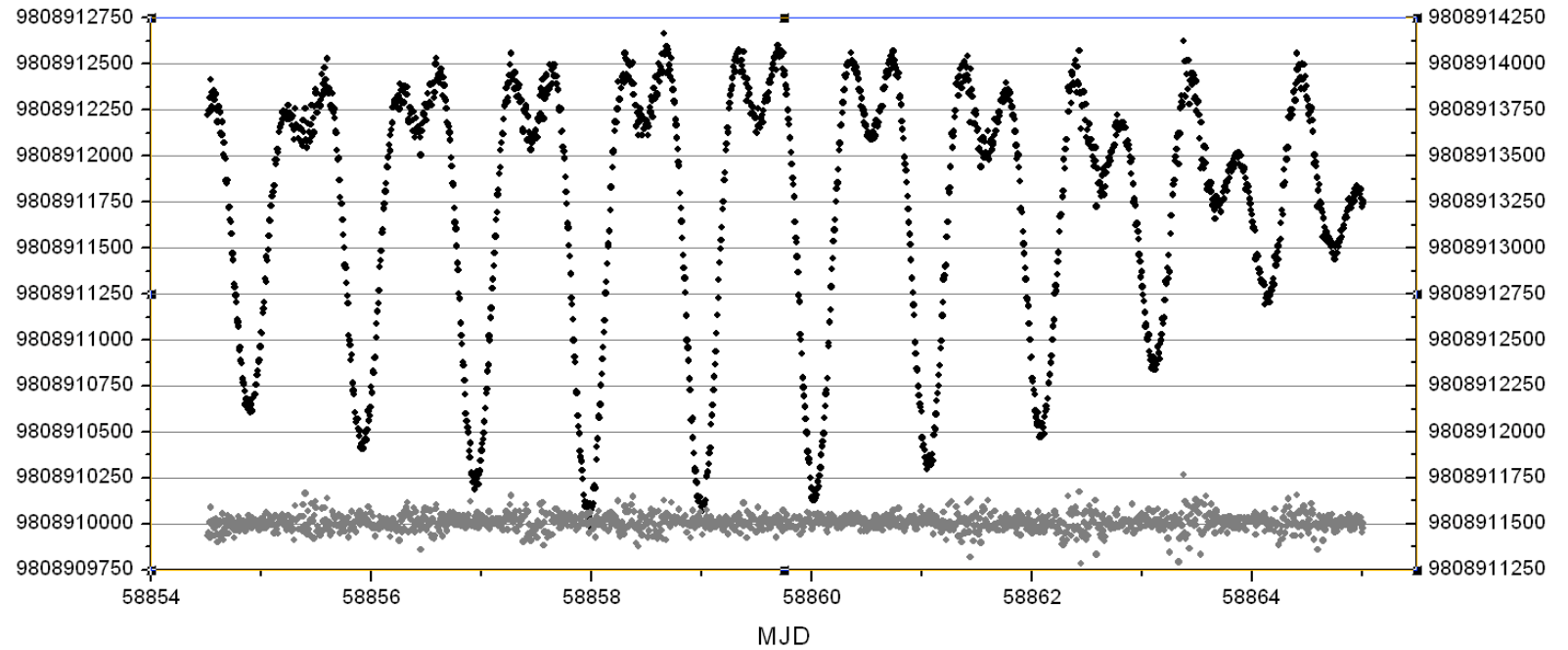
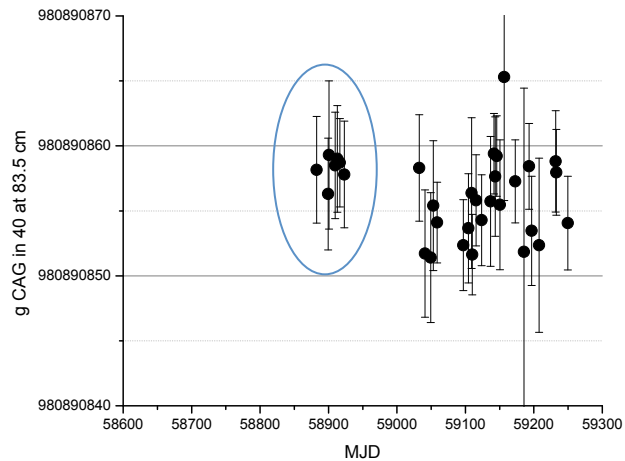
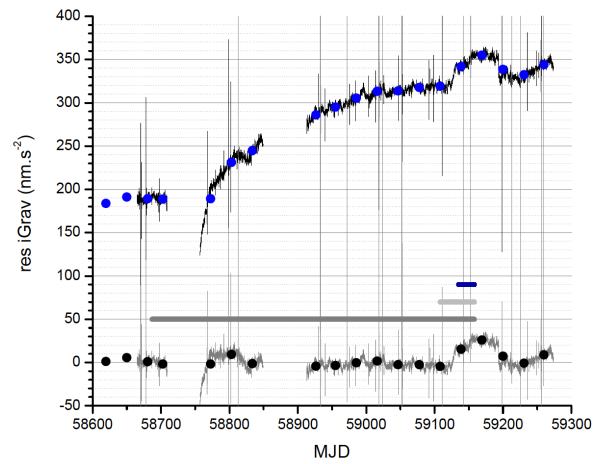


AQG-A01
Other moment

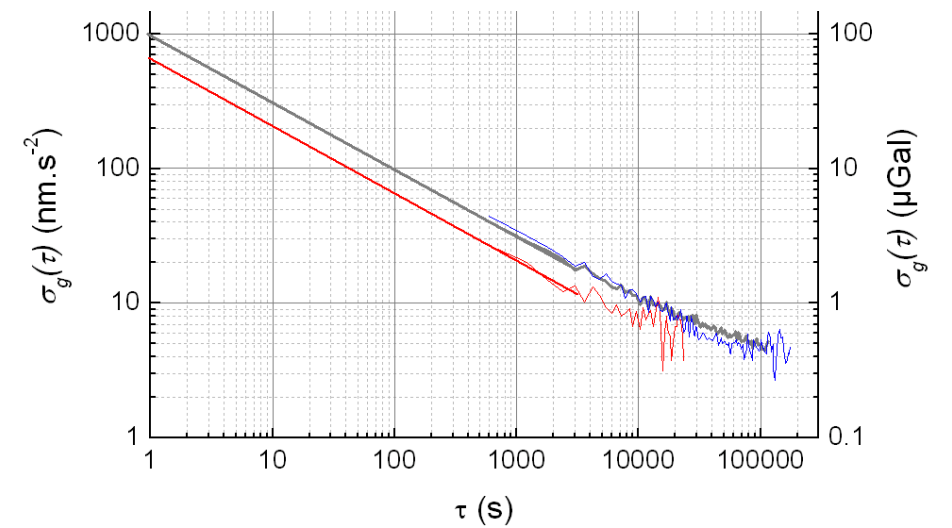
AQGs focus on Gain effect on sensitivity



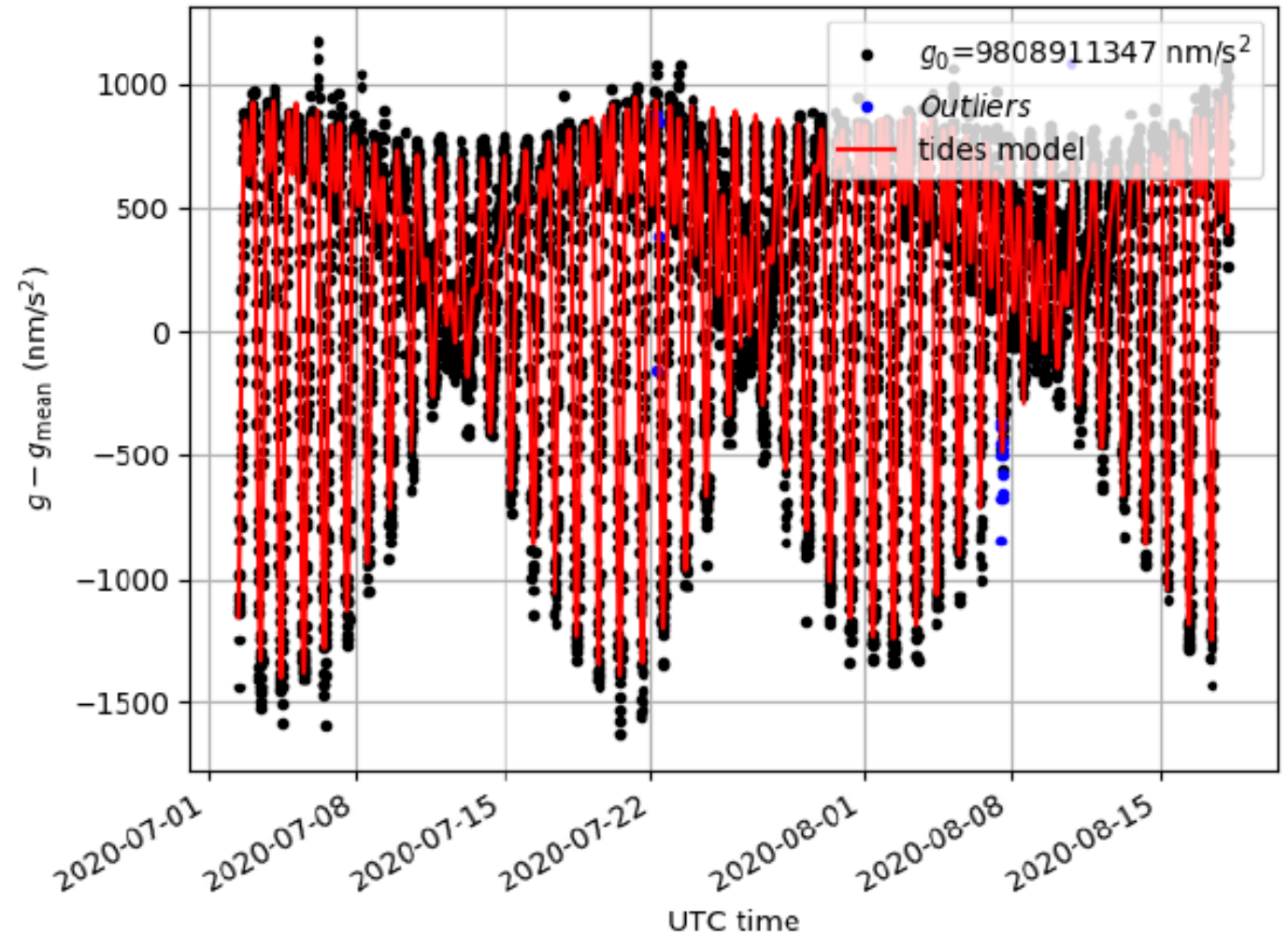
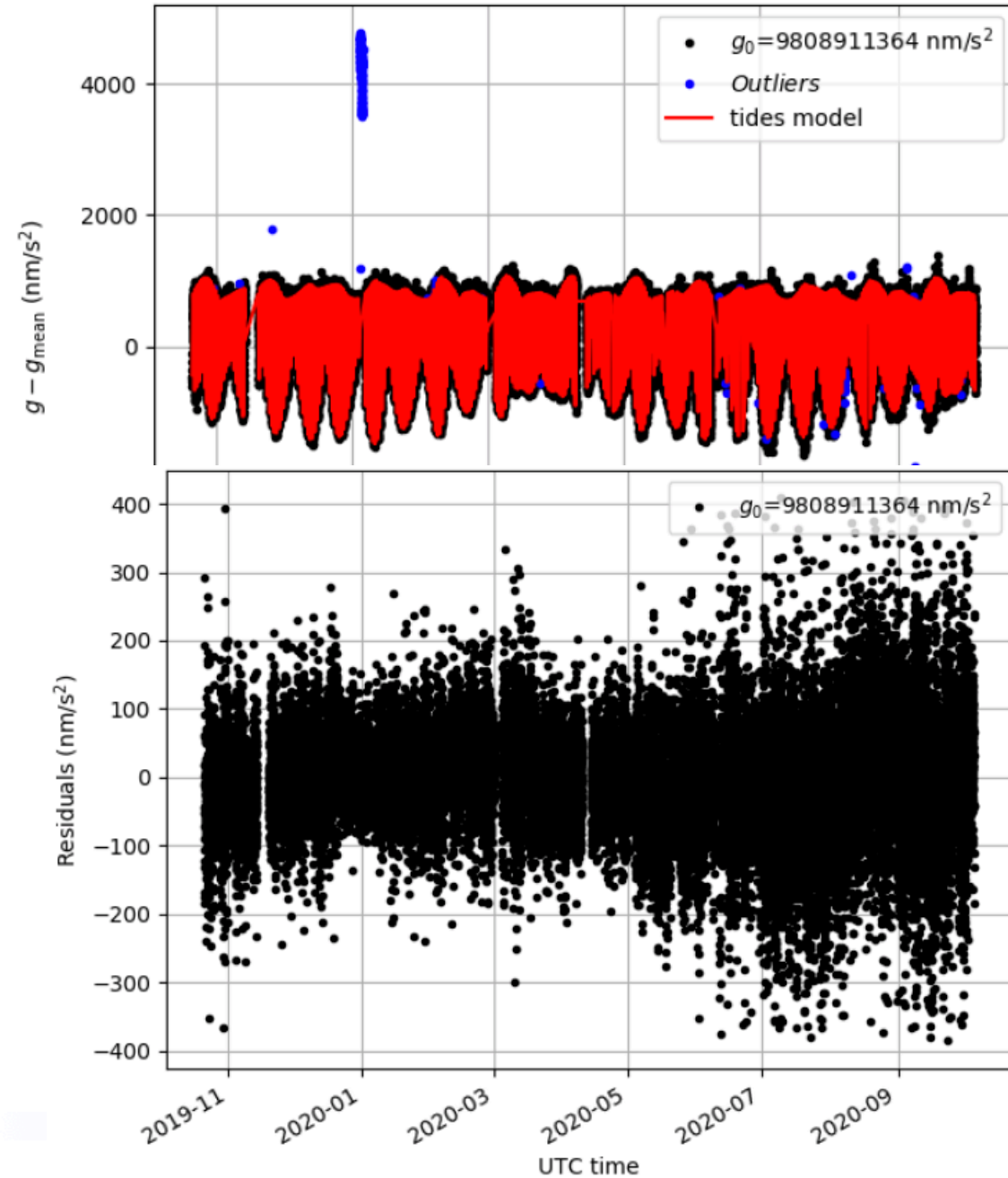
AQGs Gain effect on sensitivity, red measurement AQG-A01



To be compared to CAG



AQG-A01, still a lot to do with long measurements



Conclusion, measurement are done but treatment is on-going

SG iGrav data ready

CAG data ready, accuracy budget done for almost all measurements

AQGs: long measurements, accuracy still in progress

Need: time to compile and analyse more everything.

