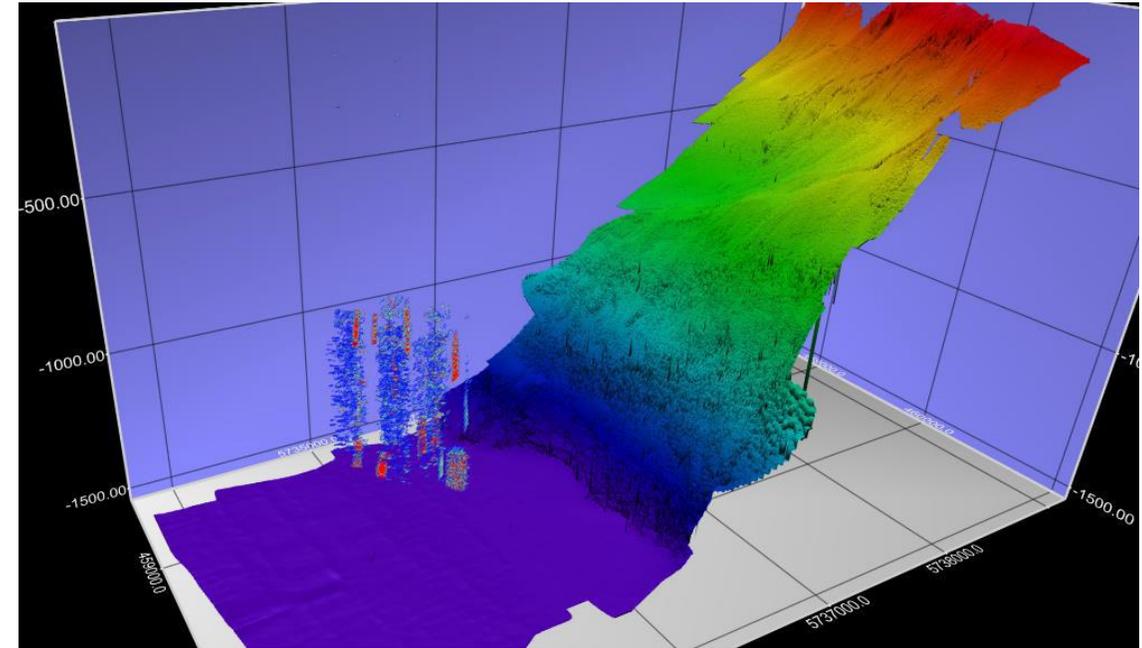
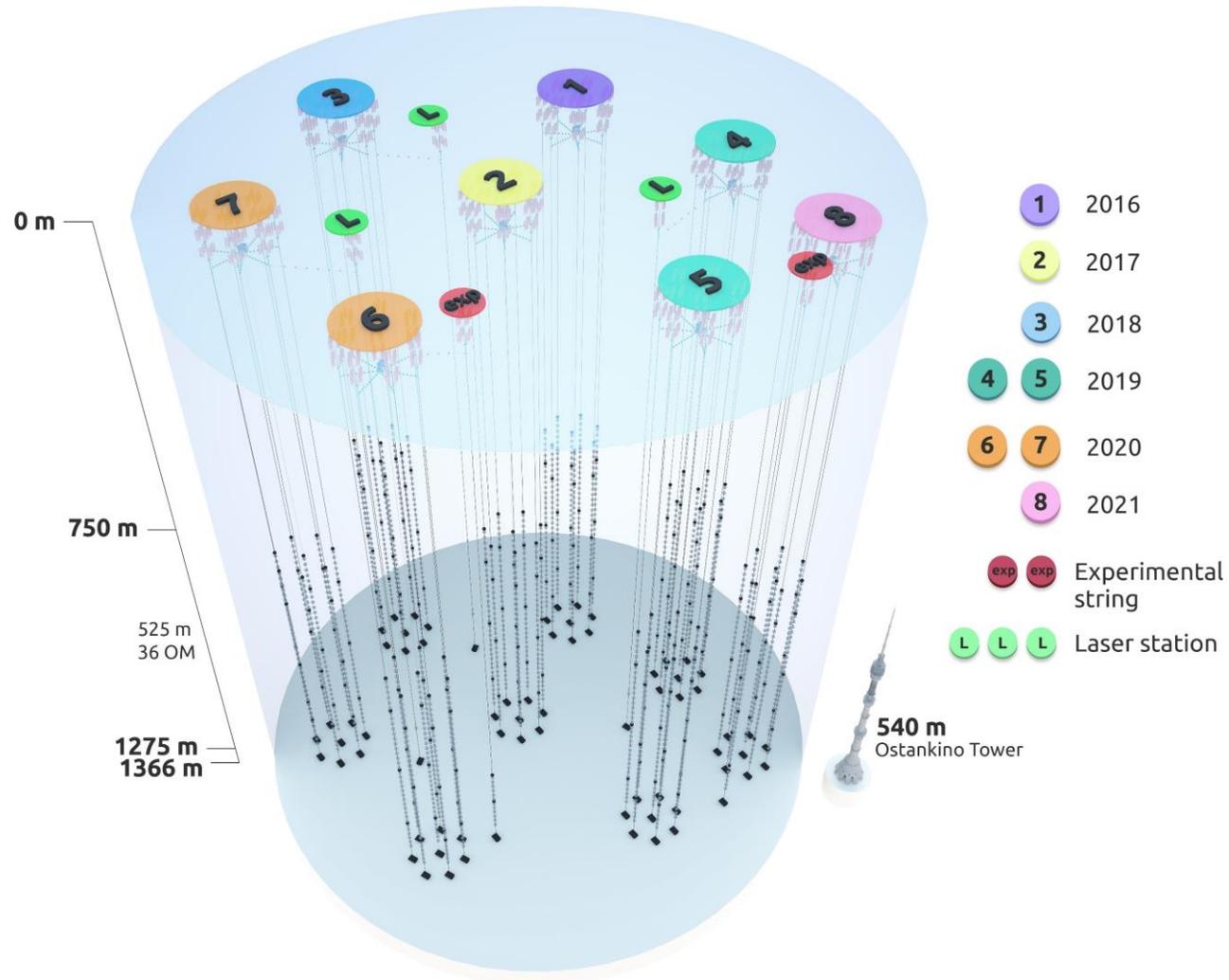


# Data Quality Monitoring system of the Baikal-GVD experiment

Maksim Sorokovikov  
on behalf of the Baikal-GVD Collaboration

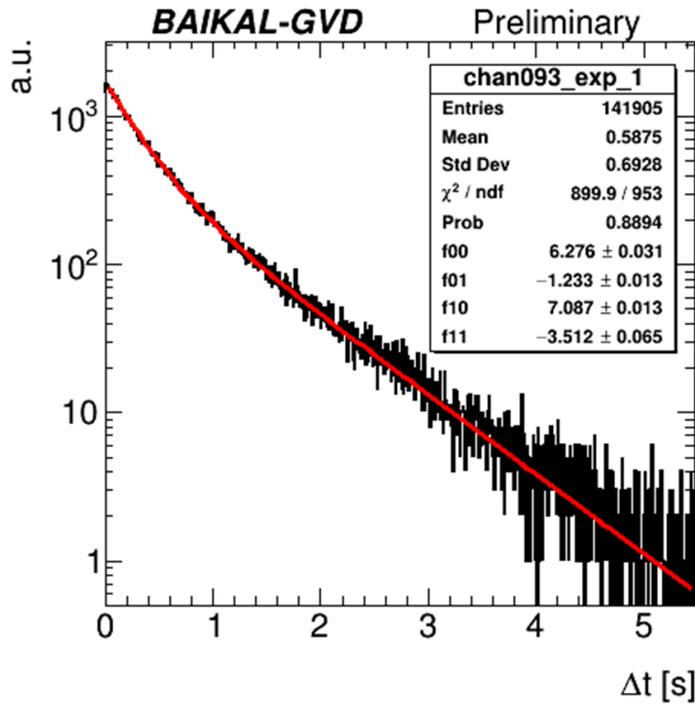
# Introduction



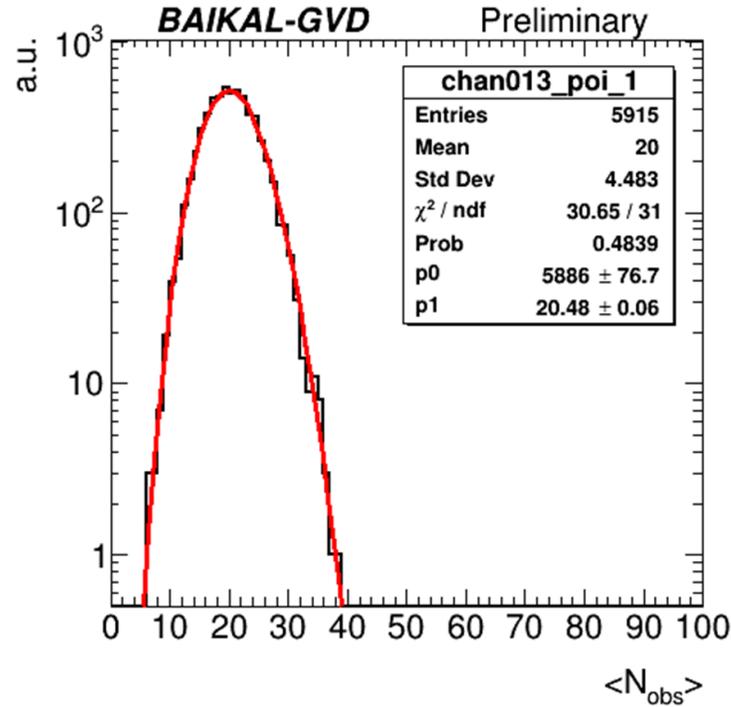
Deployment schedule

Year	Number of clusters	Number of OMs
2016	1	288
2017	2	576
2018	3	864
2019	5	1440
2020	7	2016
2021	8	2304
2022	10	2880
2023	12	3456
2024	14	4032

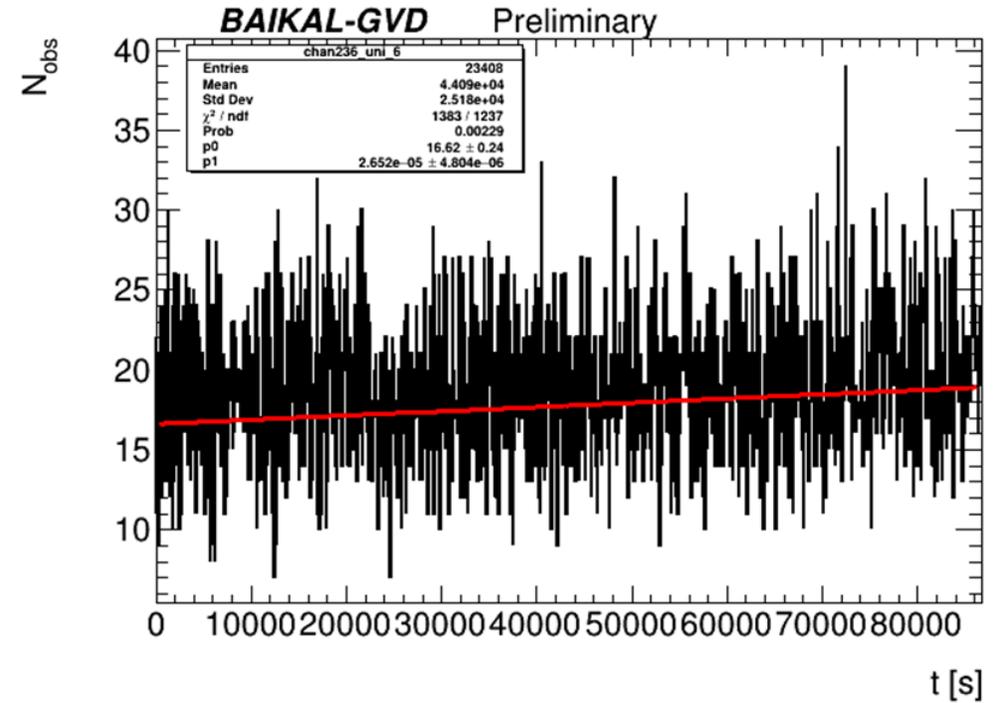
# Estimation of the Poissonian character of events flow



**Figure 1.** Exponential distribution for some selected channel

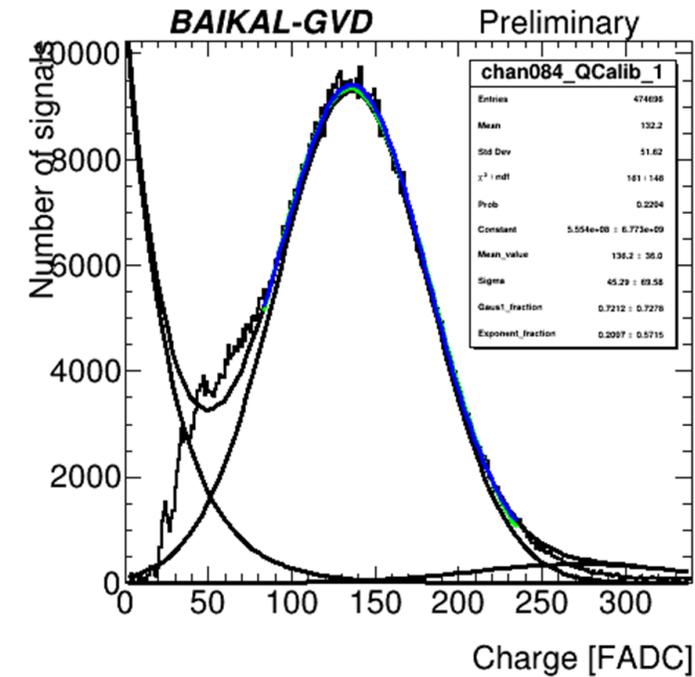


**Figure 2.** Poissonian distribution for some selected channel

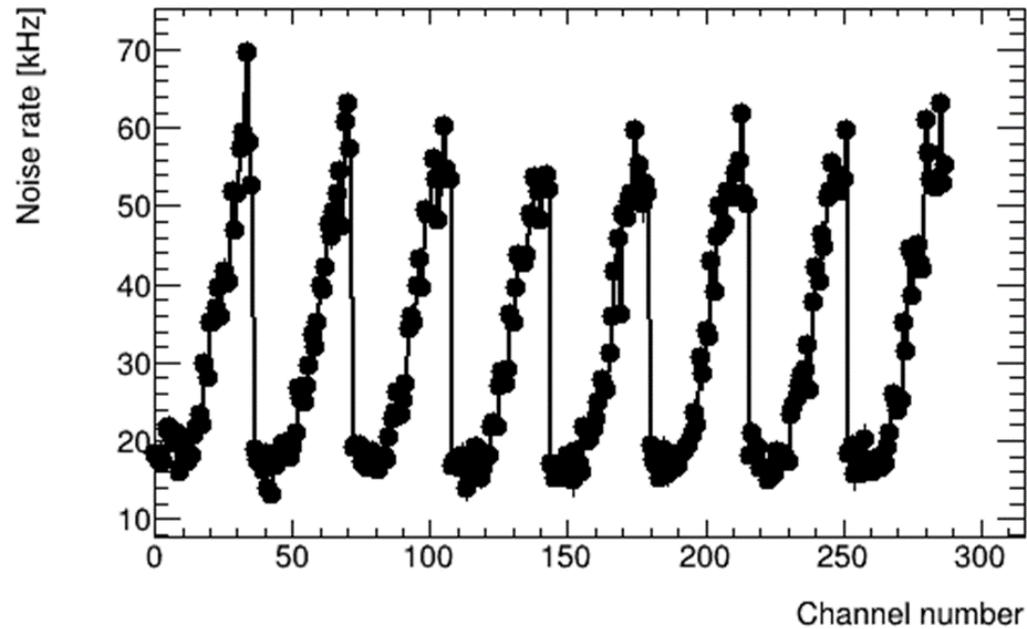


**Figure 3.** Uniform distribution for some selected channel

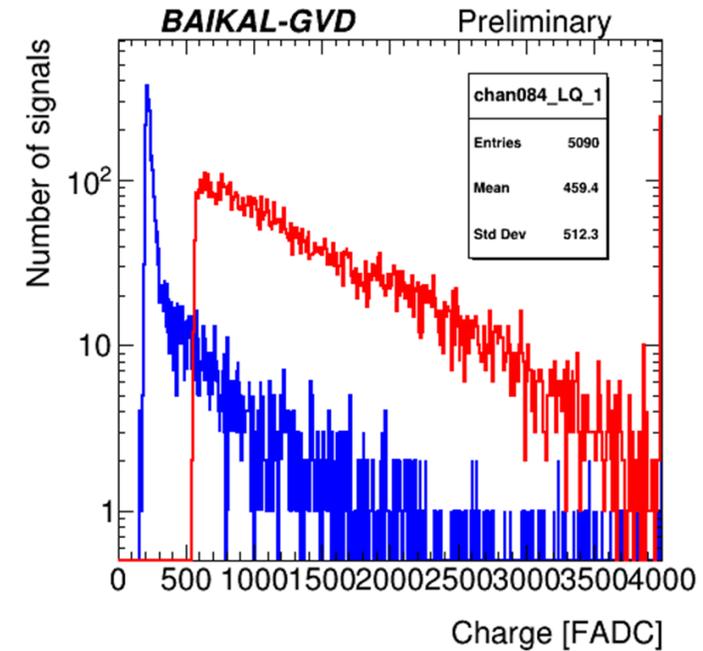
# Charge distribution tests



**Figure 4.** The charge distribution of non-trigger signals for a some selected channel



**Figure 5.** The noise rates for channels in some selected run



**Figure 6.** The signal charge values for some channel participating in the trigger

# Quality estimation algorithm

After estimation of the run using fitted distributions the solution algorithm is applied

Fit quality is estimated via  $\chi^2/\text{NDF}$  with threshold values for good (<2), normal (<4), and bad (>4) data

Fit quality estimations for each distribution are summed up as logical *and*

Channel, section and cluster levels are considered independently

Thank you for your attention