



A Statistical Overview and Current State of the Occultation Portal



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<https://occultation.tug.tubitak.gov.tr/>



Stellar Occultation Campaigns by



ACROSS
Asteroid Collaborative Research
via Occultation Systematic Survey

Occultation portal: A web-based platform for data collection and analysis of stellar occultations

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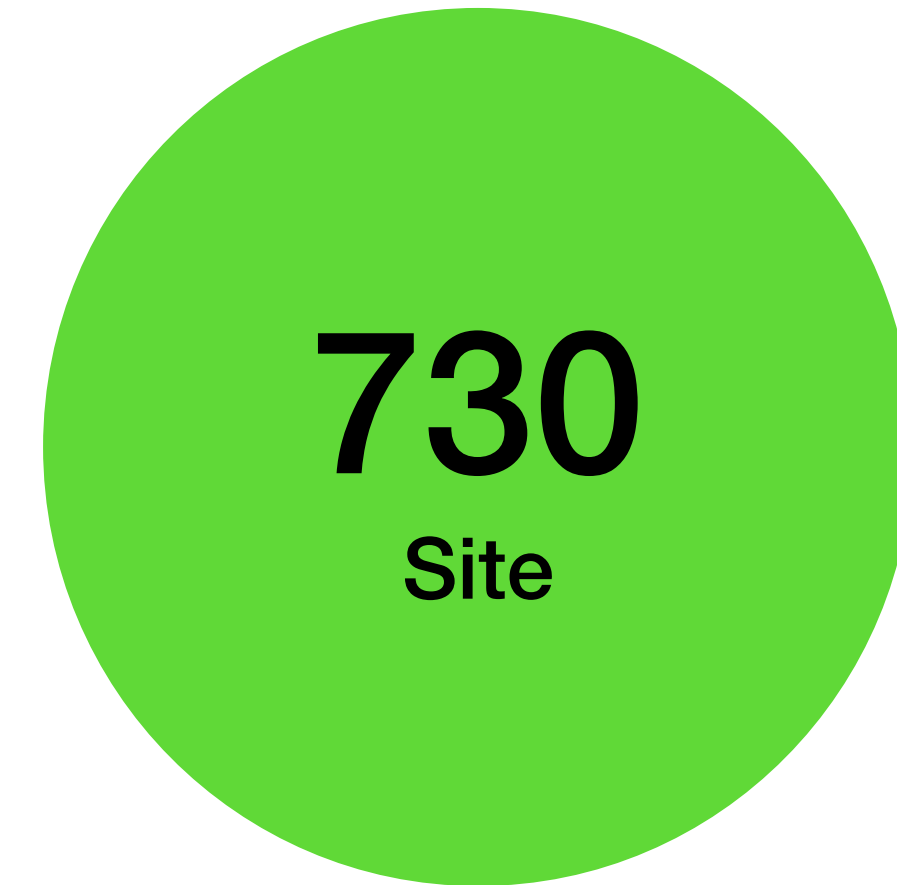
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ABSTRACT

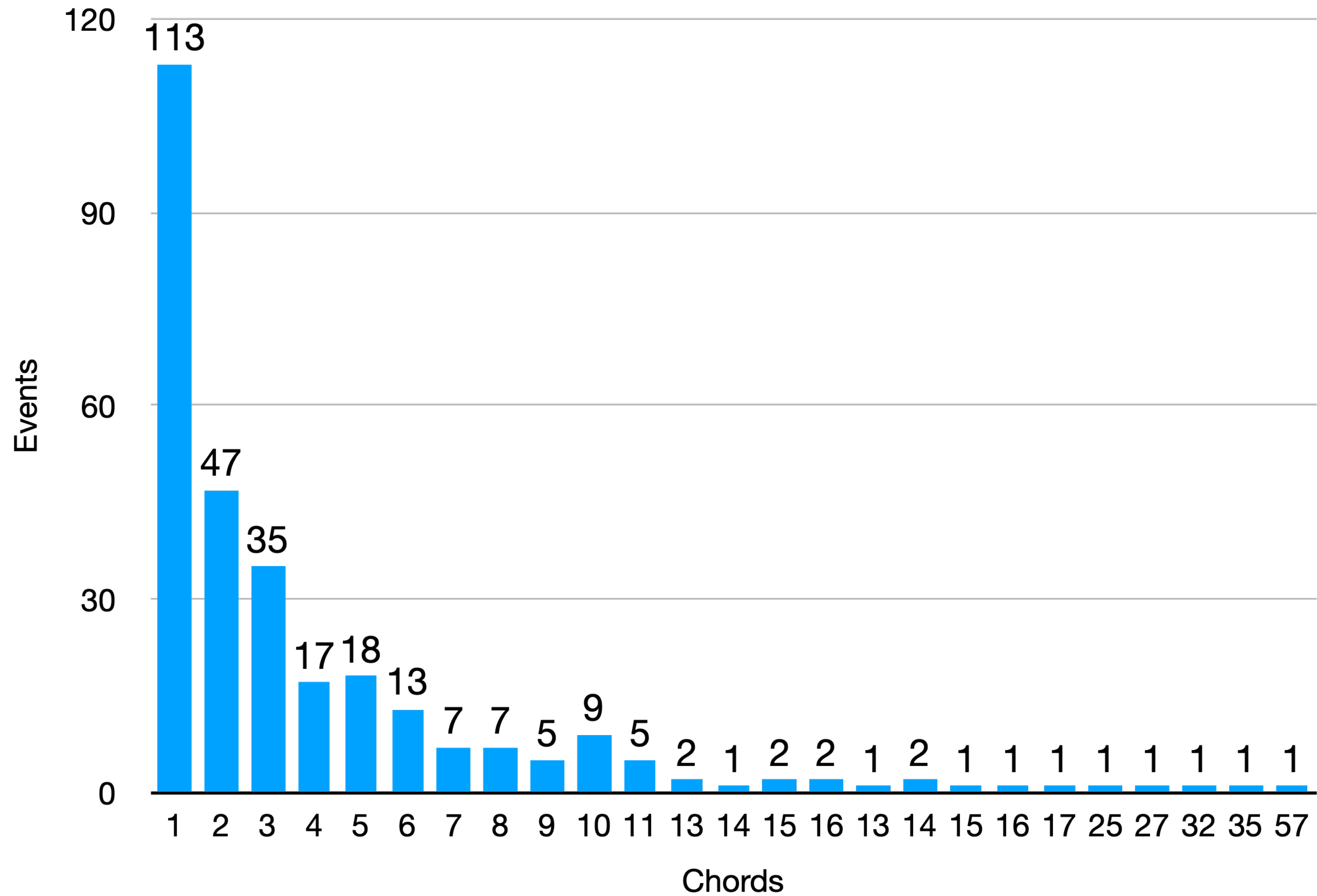
Recording a stellar occultation is one powerful method that gives direct information about the physical properties of the occulting Solar system object. In order to obtain reliable and accurate results, simultaneous observations from different locations across-track of the projected path are of great importance. However, organizing all the observing stations, aggregating, and analysing the data is time-consuming and not that easy. We have developed a web portal named *Occultation Portal (OP)* to manage all those occultation observation campaigns from a central server. With this portal, the instrumental and observational information of all observers participating in a stellar occultation campaign and the concerned data are archived systematically in a standard format. The researchers can then visualize the archived data on an event basis. The investigators can also extract the light curve for each data set with the added reduction pipeline to the portal base. This paper describes in detail the portal structure and the developed features.

Key words: methods: data analysis – techniques: image processing – occultations – minor planets, asteroids: general – software: development.

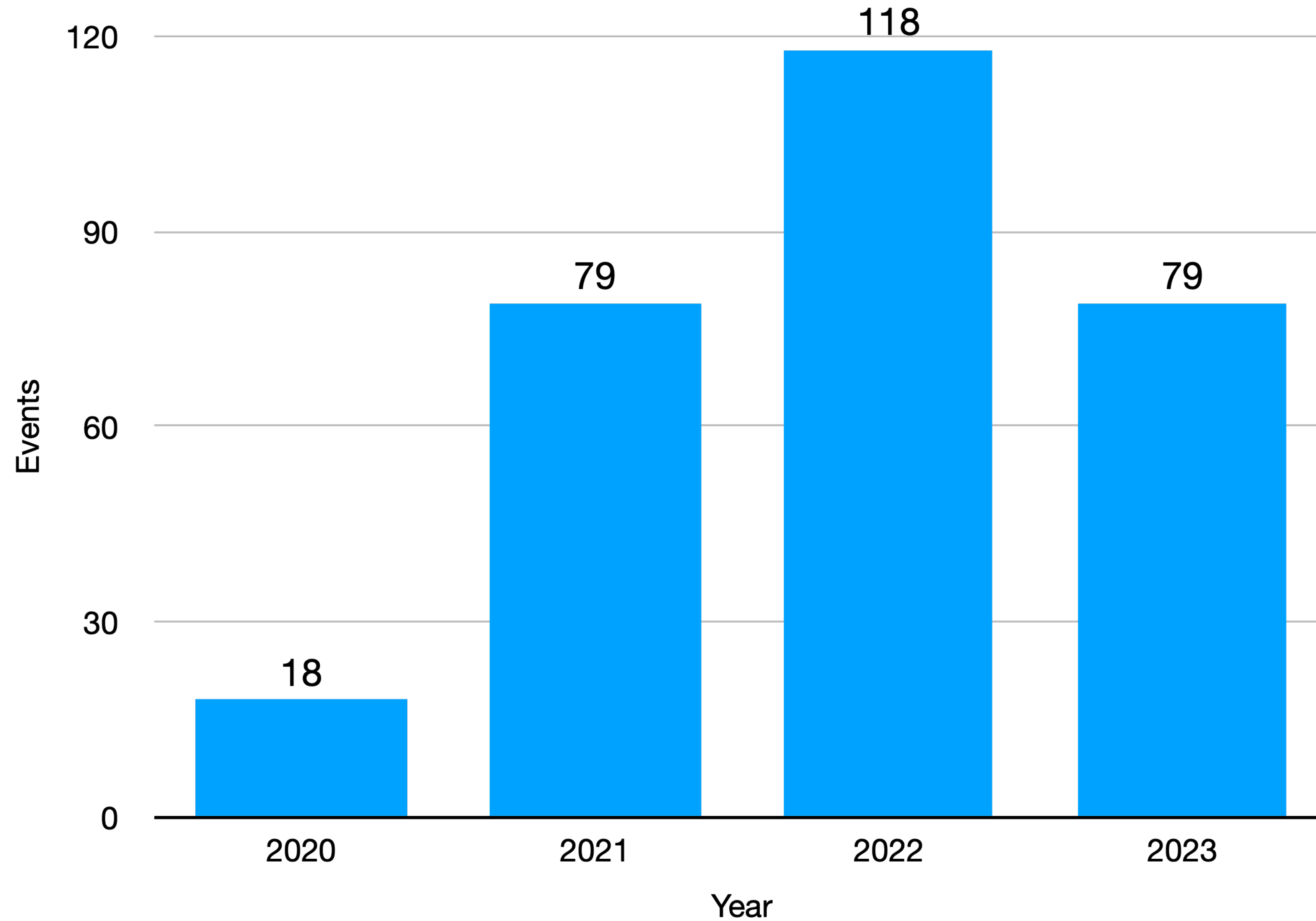
As of 16 September 2023



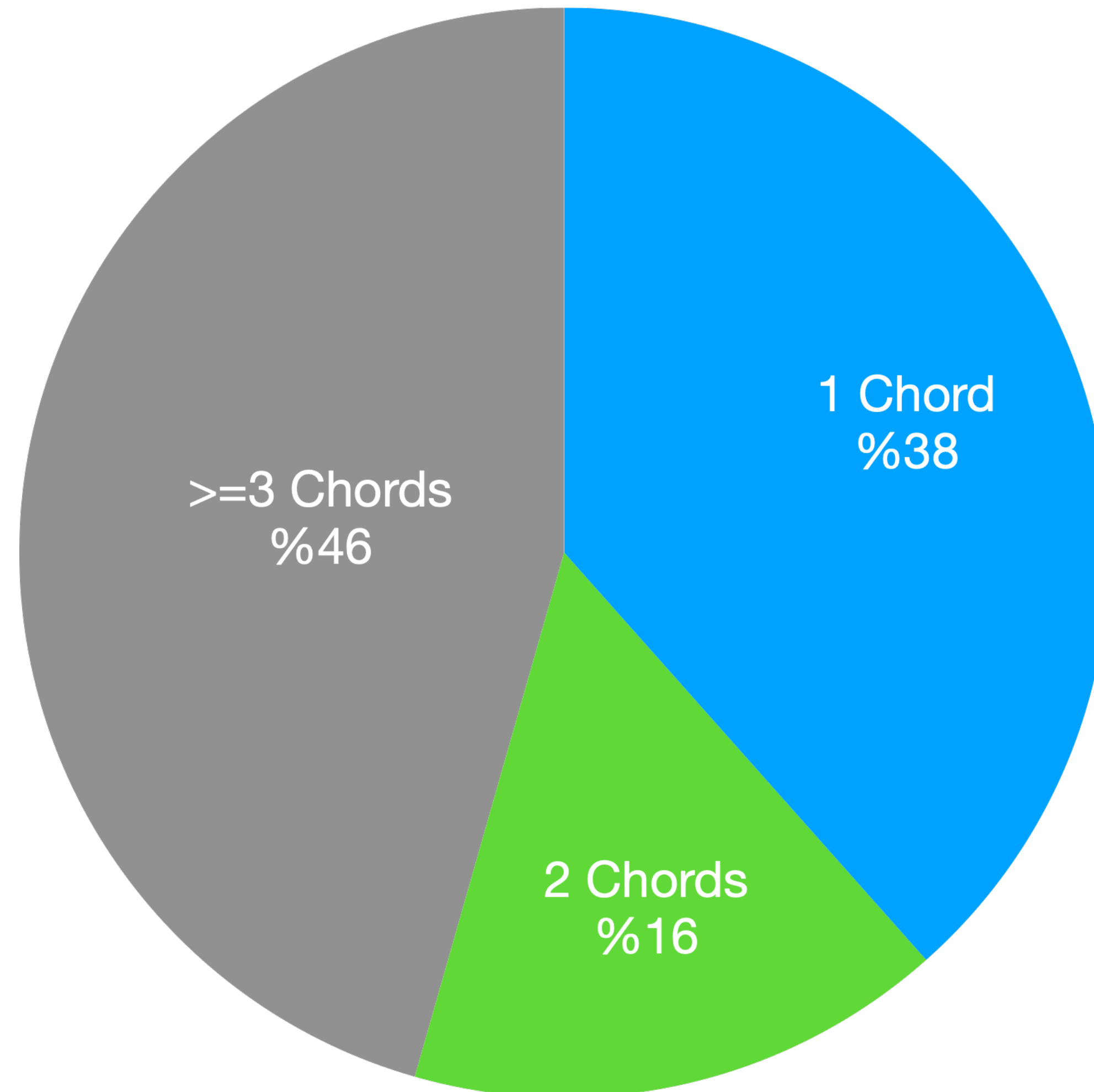
Number of events per chords
(8 August 2020 - 15 September 2023)



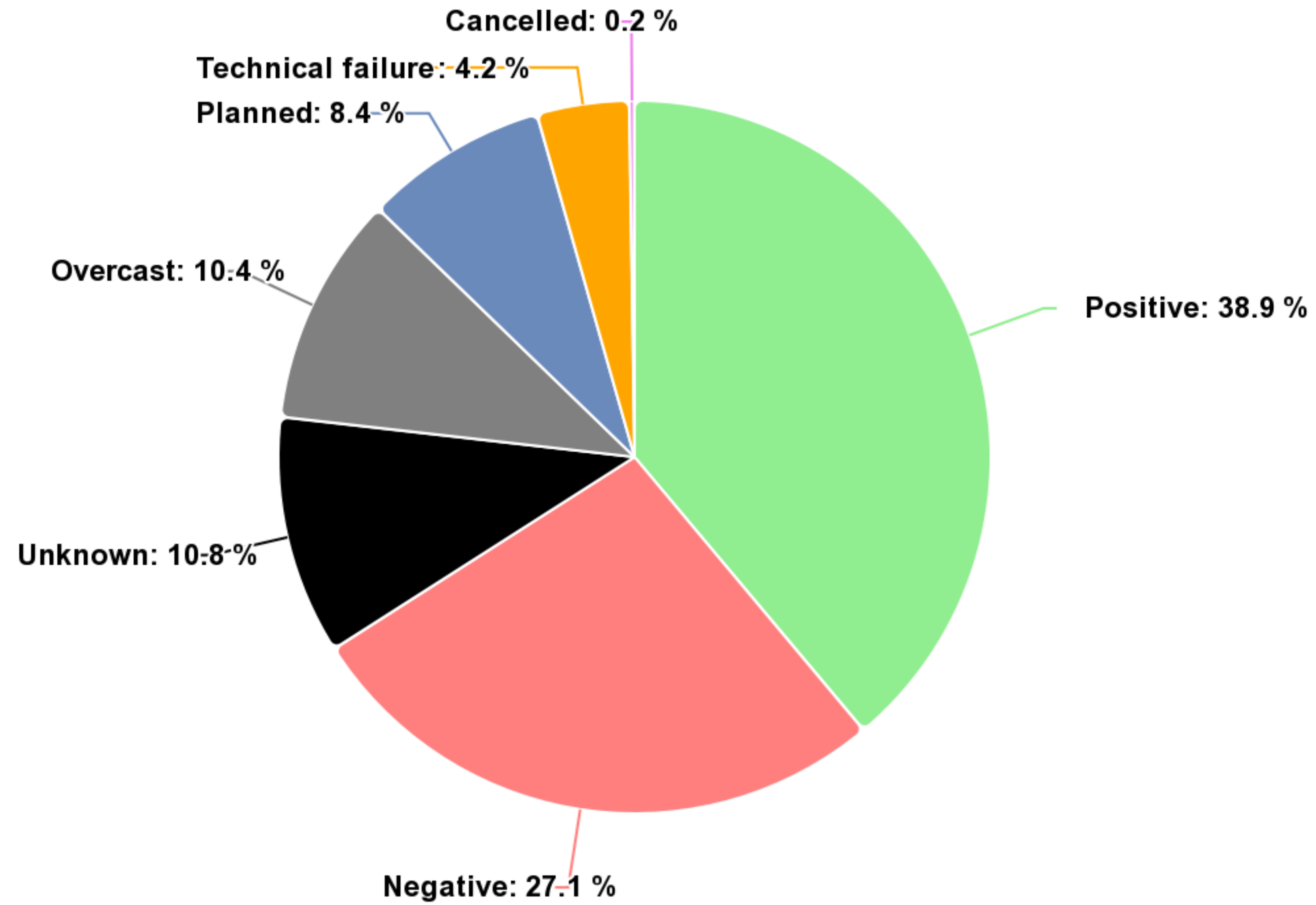
Number of events with at least one chord by year
(8 August 2020 - 15 September 2023)



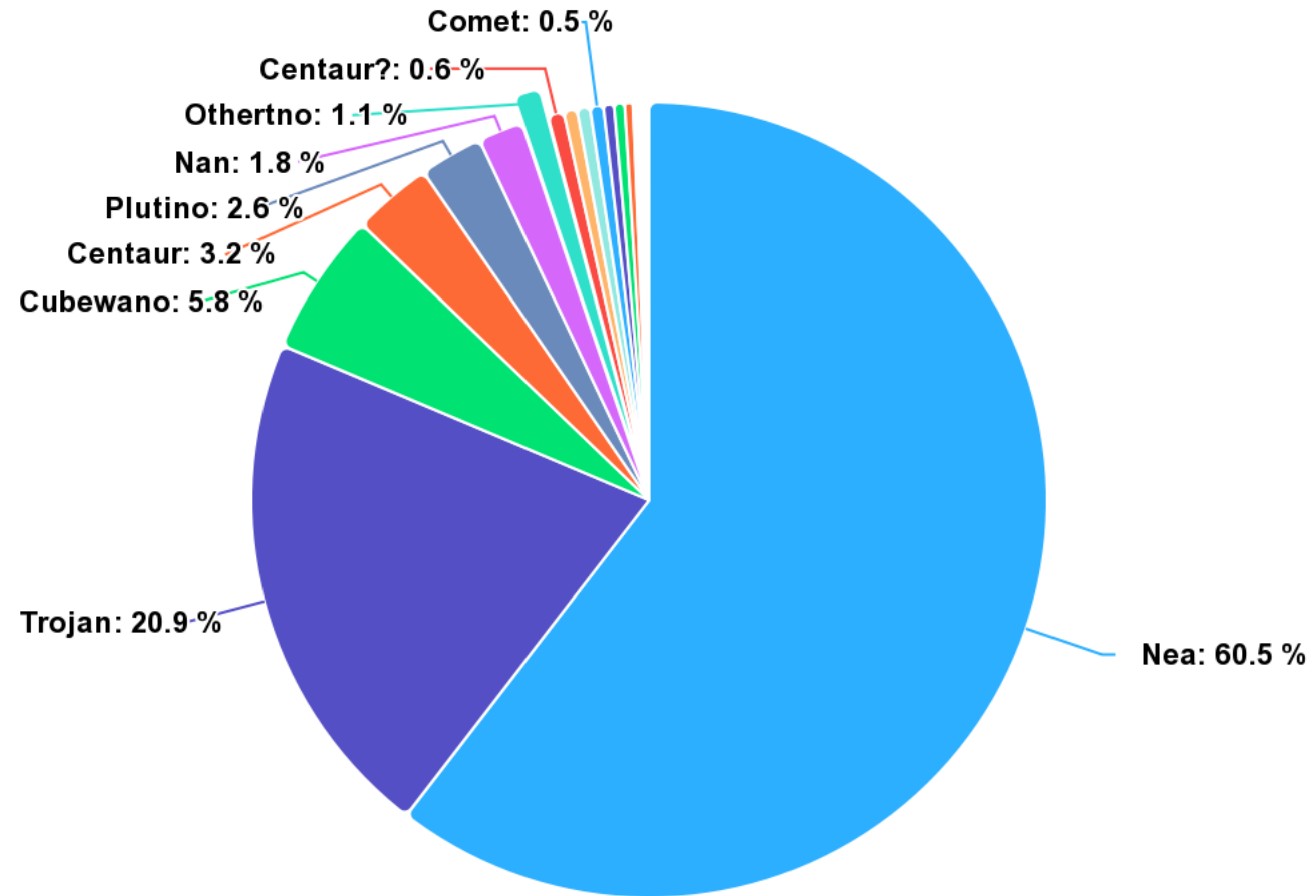
Number of events per chords
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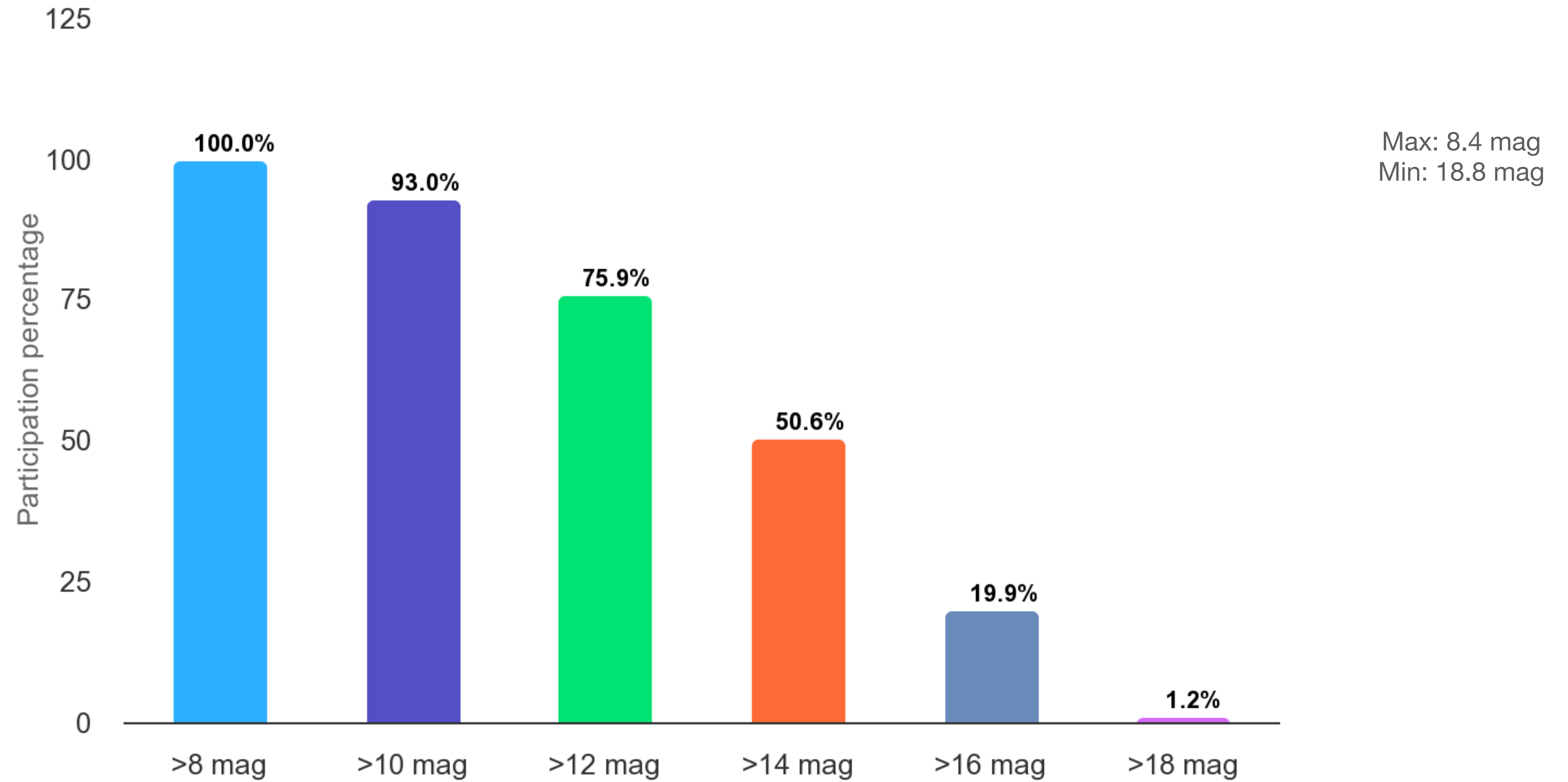
Campaign Statistics



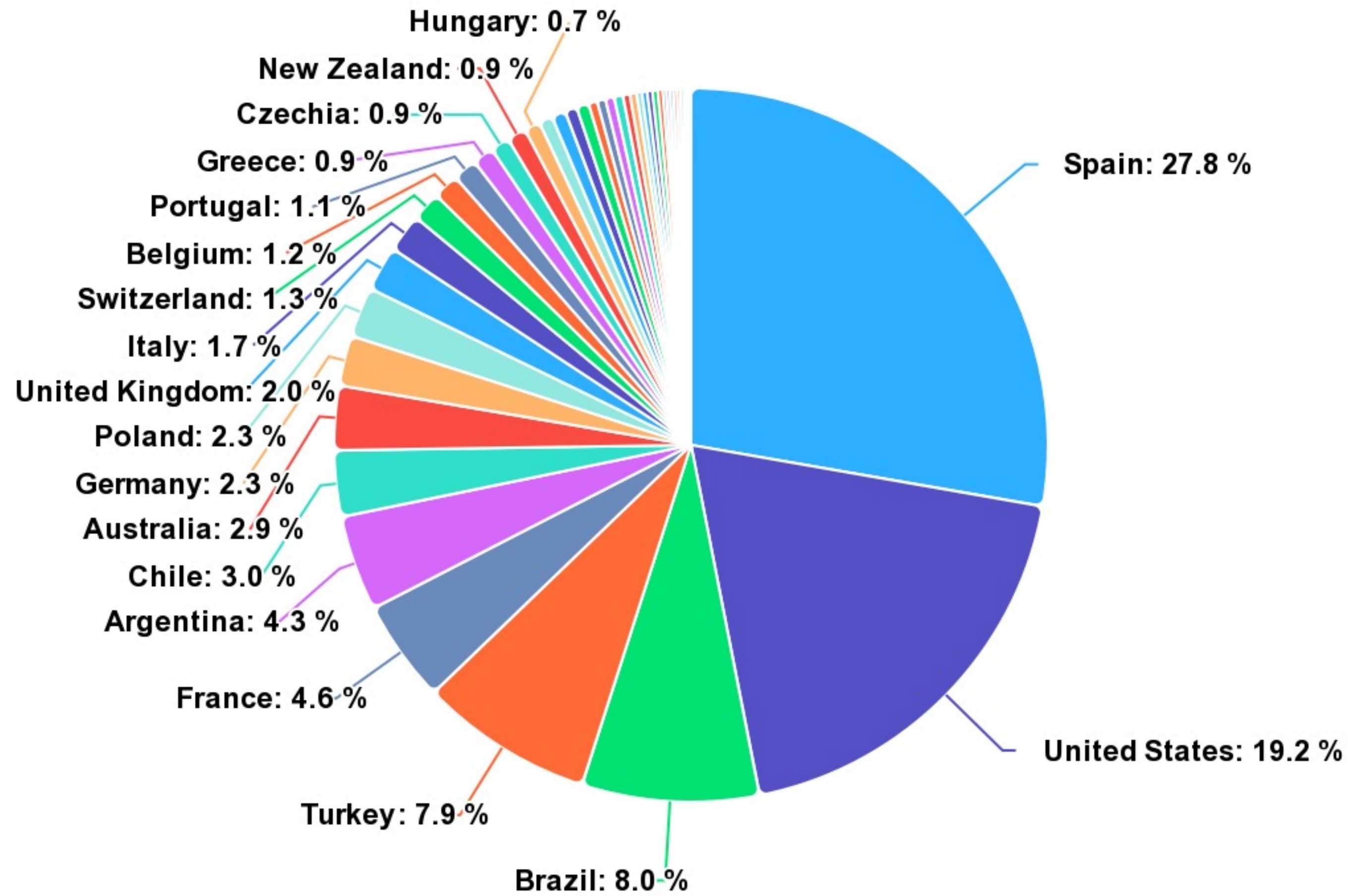
Campaign Dynamic Class Statistics



The brightness of the campaign stars, G [mag]



Participating Countries

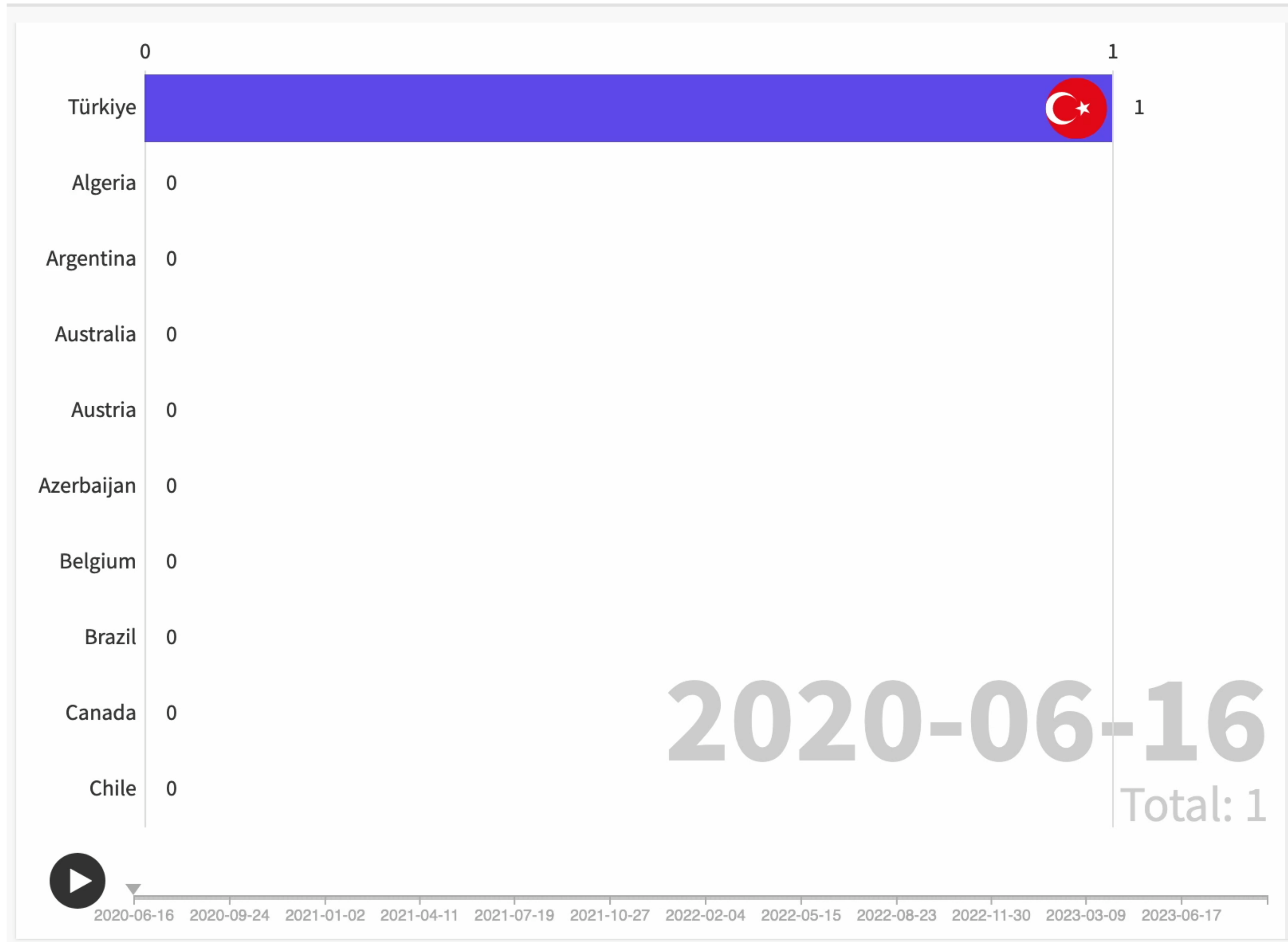


Observatories

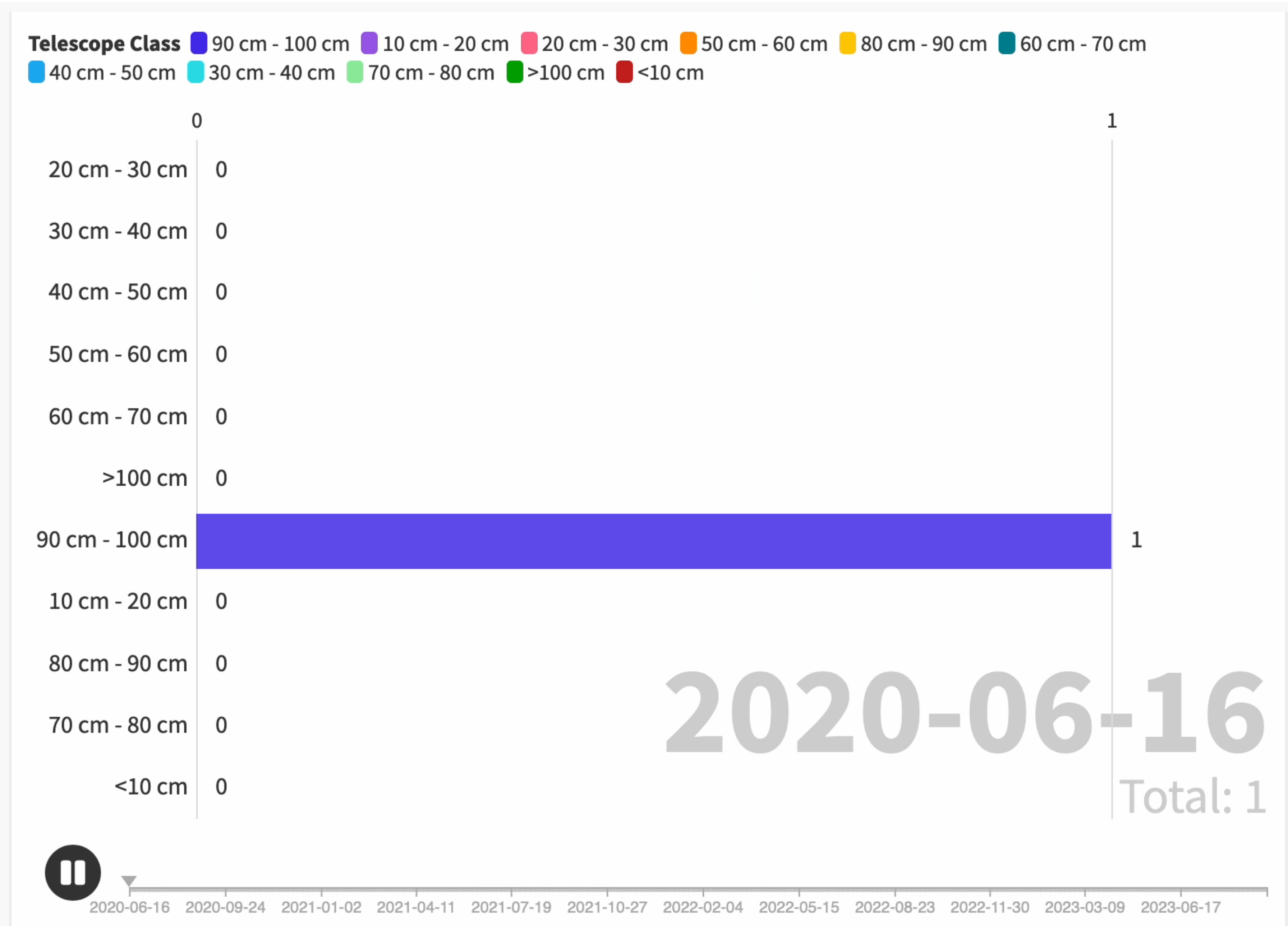


Total number of observatories: **730**

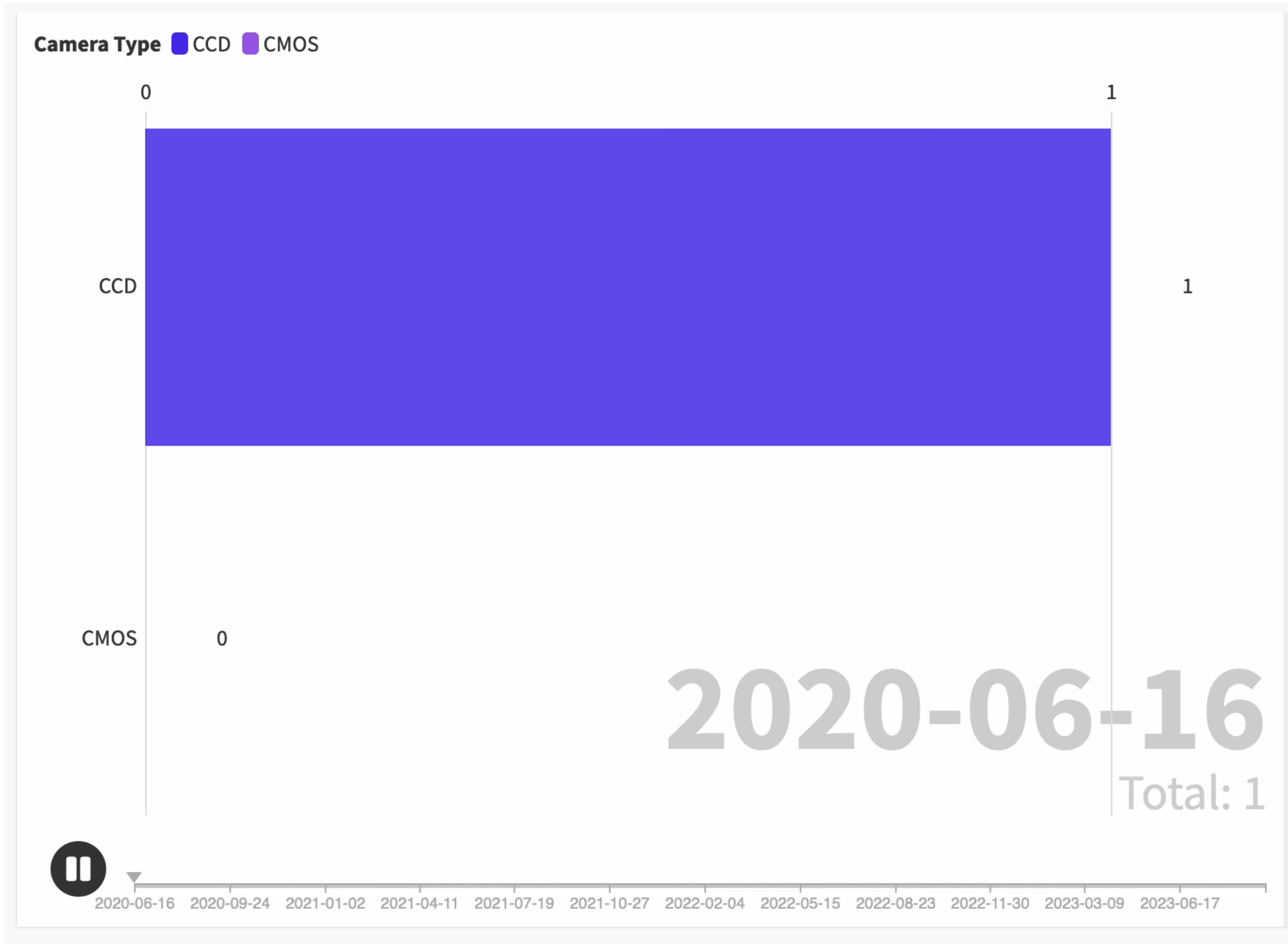
OP reports by Country



OP reports by Telescope Size



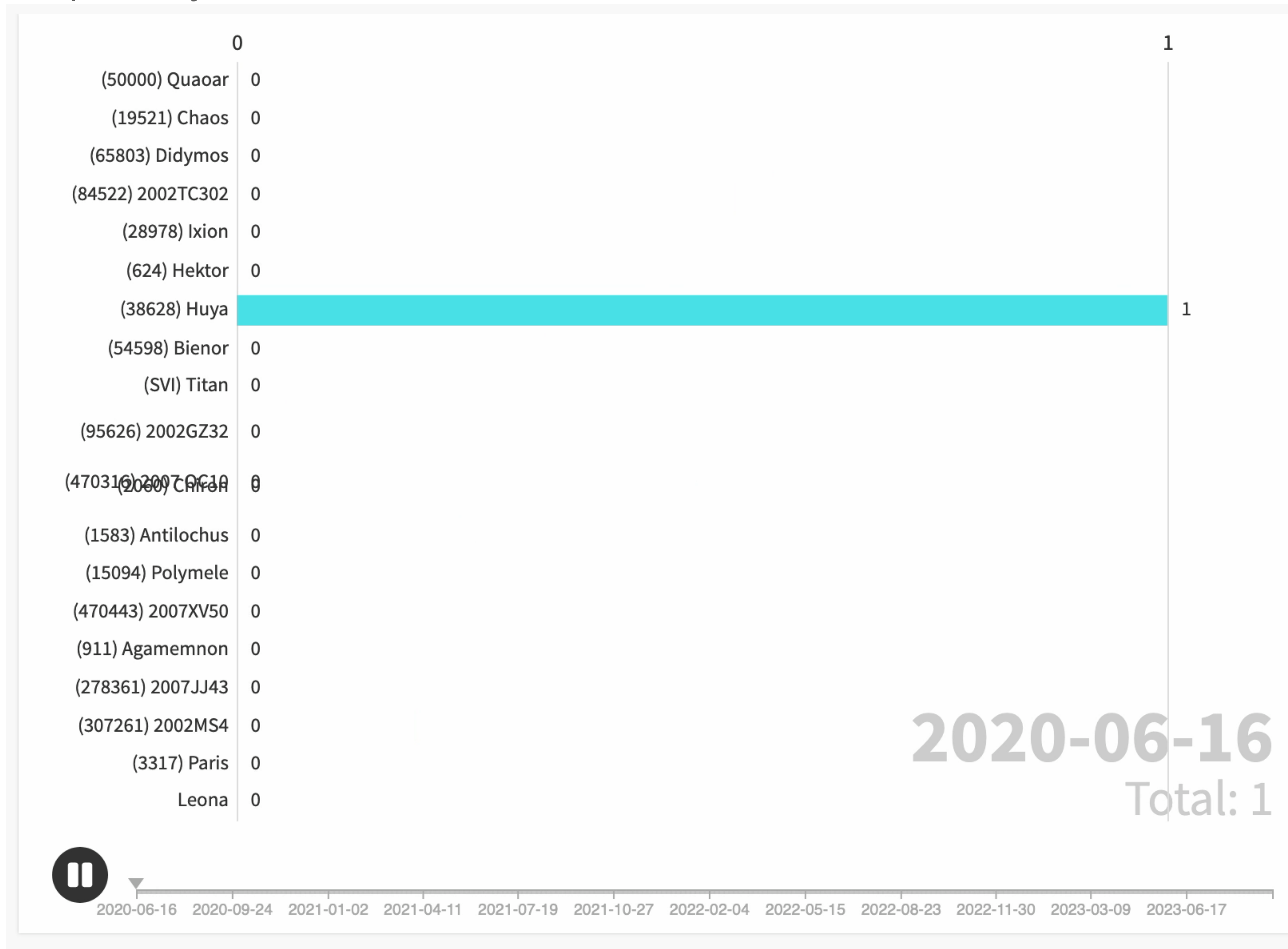
OP reports by CMOS vs CCD detectors



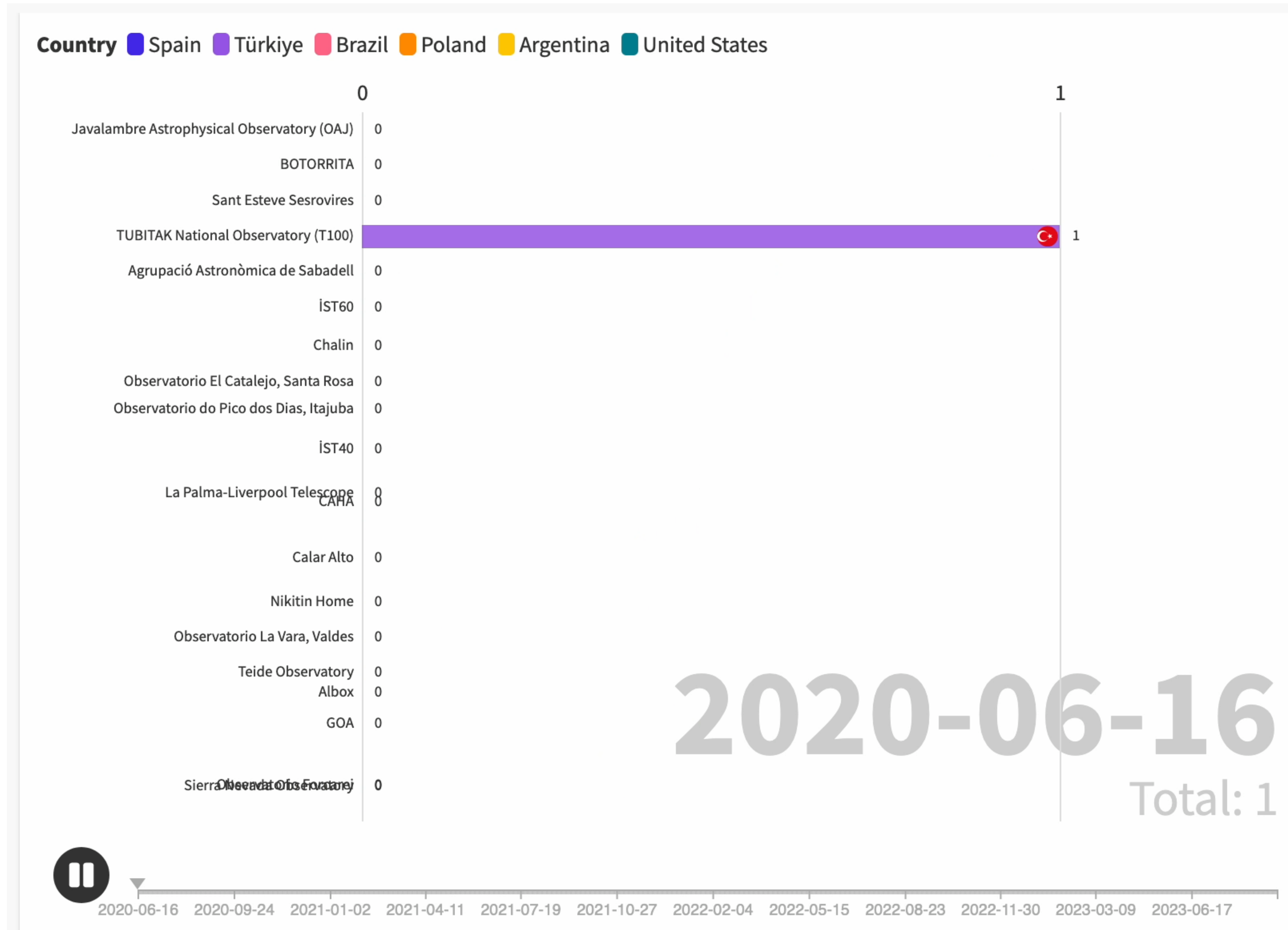
2020-06-16
Total: 1



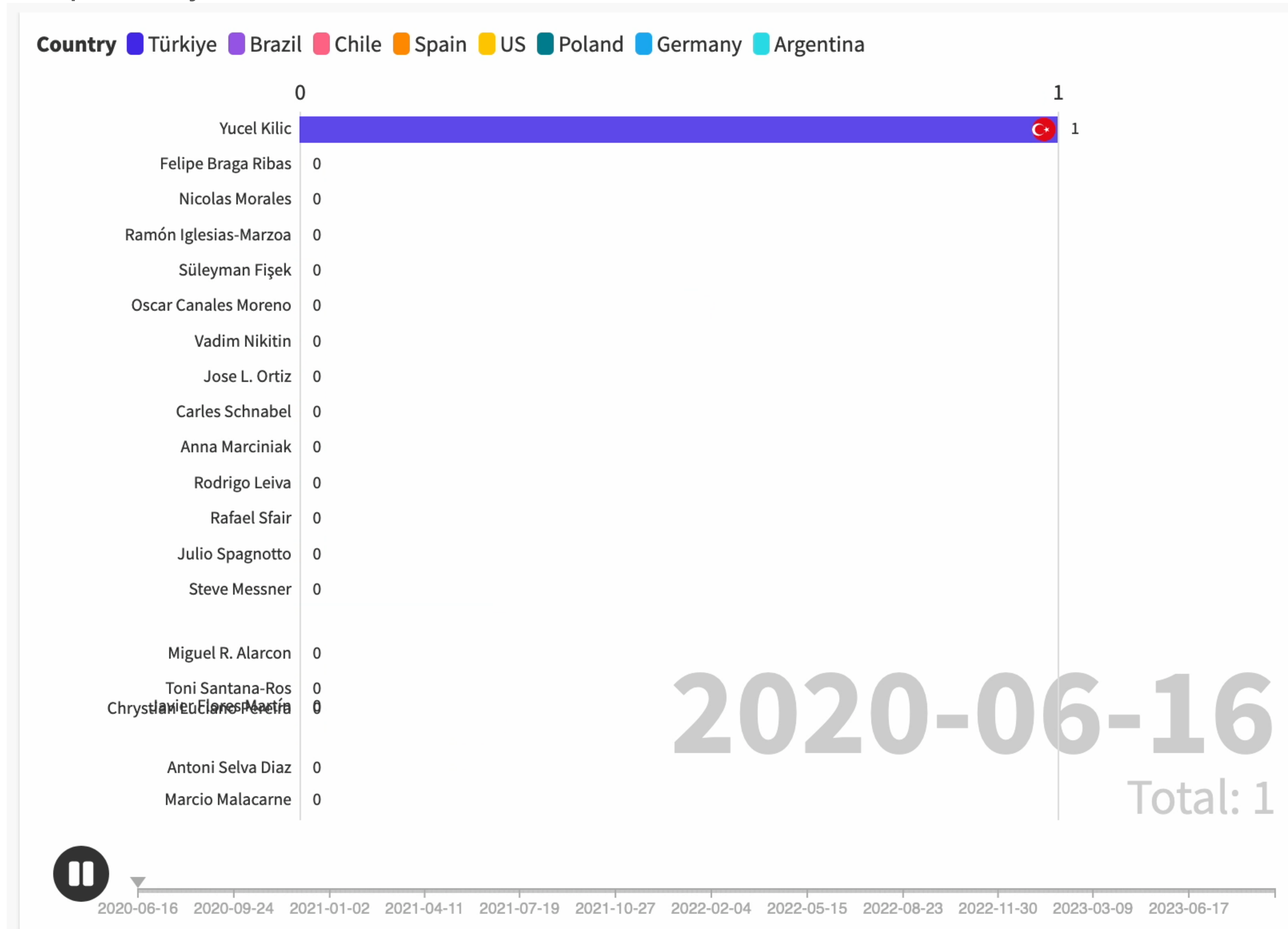
OP reports by SSO



OP reports by Observatories/Sites



OP reports by Users



Thank you!

