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Coordination and optimization of the PLATO ground-based observations

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The PLATO mission will discover thousands of planetary systems by means of the transit method. These new systems will have to be confirmed with additional observations from ground observatories in order to discard false positive scenarios, and such additional observations will also be critical to further characterise the properties of the exoplanets such as their mass. To achieve this goal, several observational facilities providing for instance high-contrast imaging, and photometric and spectroscopic monitoring of the planet candidate host stars will have to be coordinated. The Ground-based Observations Program (GOP) is in charge of the infrastructure to coordinate all the observations, the gathering of the observational facilities that will participate in the project, the performance of the observations, and the quality control before sending the data to the PLATO Follow-up database for their analysis. We will present the design of these tools with particular focus on the GOP Operational Centre and the scheduling system.

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