

# The PIC in ESA Science Management Plan context

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# The PLATO Science Management Plan



- The Science Management Plan (SMP) is the document that “describes the approach that will be implemented to ensure the fulfilment of the scientific objectives of the PLATO mission and to optimise its scientific return...”
- The PLATO Input Catalogue is a major input for the achievement of the PLATO Science Objectives, thus it is addressed in the SMP



- A summary of the main features of the mission
- A description of the mission operations and the ground-based observation strategies
- The data generation approach and data rights
- A description of how the scientific community can participate in the mission
- The tasks and responsibilities of PLATO mission stakeholders up to the data distribution and archiving
- The principles for the publication policy
- A description of the key aspects for the implementation of an outreach plan

# The SMP is an official agreement



- The SMP is approved by the Science Programme Committee
- It reflects the agreements between ESA and the PMC, including the participation of the scientific community



# SMP references to the PIC (i)



- In preparation for and during the operation of the mission, the PMC will be also responsible of generating the PLATO Input Catalogue (PIC), containing the list of targets to be observed for each spacecraft pointing, and of defining a “prime sample”, consisting of PIC targets to be observed with high PLATO accuracy.
- In particular, the Science Working Team will supervise the preparation and periodic update of the PIC and “prime sample” list.
- The PIC and “prime sample” definition will be reviewed under the responsibility of the ESA Advisory Structure before launch and in the course of operations as needed, e.g., following updates of the PIC and of the “prime sample” and/or based on the findings of PLATO.”



# SMP references to the PIC (ii)



- A first version of the PIC with the targets in the first Long Duration Observation sky field will be delivered by the PMC two years before launch.
- Updates of the PIC are planned nine months before launch and six months before the start of each sky field observation.
- Other fine tunings on the PIC are possible at any time during mission operations following the mission planning cycle.



# SMP: The PIC and the GO programme (i)



- Members of the scientific community may participate in the PLATO mission by becoming Guest Observers selected by ESA through calls for proposals. The calls will ask for complementary science programmes not covered by the PLATO core science objectives listed in Section 2.1 of the SMP, and targeting objects within the PLATO sky fields defined by the SWT, that is, without requiring dedicated repointing of the spacecraft.
- The duration of the proposed observations cannot exceed the observation durations of the corresponding fields.
- ESA will appoint a Time Allocation Committee (TAC) for the evaluation and selection of the proposals.



# SMP: The PIC and the GO programme (ii)



- At any given time, 8% of the science data rate (excluding calibration data) will be allocated to the Guest Observers.
- Exploitation for complementary science of non-public PIC target data will only be carried out through approved GO programmes.





# Calibration targets



- Calibration targets are assumed in the operations of most missions
- Their purpose needs to be clear
- The data from calibration targets is by default public, unless there is overlap with guaranteed or guest observers approved programmes
- For PLATO, the calibration target policy is still to be defined: To be discussed within the SWT and agreed with ESA



- The preparation of the PIC is a major scientific and operational task
- The PIC needs to comply to the principles specified in the SMP
- The contents of the PIC are supervised by the SWT and ESA's Advisory Structure

The PIC should aim at maximising the science of the mission, respecting the commitments with the scientific community specified in the SMP