Recommendation of the Planetary Science Archive (PSA) User Group (UG) to the European Space Agency (ESA)

Meeting on 30th November and 1st December, online

1. Following the expectations of the science community to find planetary data in a single place, the PSA-UG recommends ESA:
    a. **All data from planetary missions, as well as relevant data from non-planetary missions** (i.e., Solar Orbiter), **should be placed and/or linked such that users of one mission or community can easily find those data stored in another.** This includes planetary data acquired by missions from outside the science directorate (i.e., data from PROSPECT, ExoMars, HERA, radiation monitors, etc).
    b. All data should be archived following the same format (i.e., PDS format). The PSA-UG also understands that other directorates may work in different ways, and that perhaps external entities are involved in the archival science. In this respect, the recommendation is to try to unify the format between archives when possible.

2. The PSA-UG **strongly recommends ESA to promptly look for solutions to speed up the process of data delivery to the science community**. Currently, the archiving of some datasets (i.e., Mars Express, ExoMars-TGO) is extremely delayed. The community has started to complain because data from the latest 3-5 years is, in some cases, not publicly available and cannot be used for scientific proposals to either the EU or NASA. The PSA-UG recommendation is to increase resources to the PSA team to solve this urgent situation. Alternative mechanisms (e.g., placing EXPRO contracts to entities outside ESA) should be considered if necessary.

3. There is a clear need to preserve heritage data, particularly from the first planetary missions, such as Giotto which a few datasets are not archived at all, but also from other missions now in their legacy phase (e.g. Venus Express and Rosetta). A large number of high-level products from these missions are not archived. The PSA-UG recommends that ESA to explores ways to provide continuing legacy support, and when needed, to apply for example, for **more generous funds from the "heritage space programme" to preserve legacy data** with a clearly defined set of priorities.