

IAU Commission X2 - Solar System Ephemerides

Annual Report 2019

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The commission was created in 2015, based on approval of a proposal to merge the functions of the previous Commission 4 on Ephemerides and Commission 20 on Positions and Motions of Minor Planets, Comets and Satellites.

The main purpose of the SSE commission is to support the development of high precision ephemerides, and the products/services that disseminate them, for all solar system bodies: planets, dwarf planets, asteroids, comets, trans-Neptunian objects, natural satellites (of planets and asteroids). The ephemerides will include position, velocity, and orientation for bodies other than Earth.

Unfortunately there is no ongoing meetings where many of the members of the former Commission 4 and Commission 20 come together. In the last triennium Commission X2 proposed a IAU Symposium to bring a broad range of experts on Solar System Dynamics together, but the proposal was unsuccessful, primarily because the expected number of participants was judged to be too low.

Following the 2018 General Assembly, it was tentatively agreed that commission could sponsor meetings outside the Symposium process. Plans were tentatively made to hold such a meeting in June 2019, but these failed to come to fruition due to medical issues of the leader of the local organizing committee.

The X2 Organizing Committee then discussed options for an alternate meeting in 2019. However the small-body representative preferred to concentrate on the AAS-DPS/EPSC and triennial Asteroid-Comets-Meteors meetings in 2020, and the planetary ephemerides representative prefer to stick with the Journees meeting series. So there was no date agreed to.

Given the triennial IAU GA planned for 2021, the next option might be the following year, 2022, if the Asteroid-Comets-Meteors meeting sticks to its triennial schedule, though that may change since the 2020 ACM meeting has been canceled due to the Covid-19 pandemic.