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CNES engineer Alexandre Couhert receives COSPAR's Outstanding Paper Award for Young Scientists

Alexandre Couhert, an engineer working in the orbit determination department at the Toulouse Space Centre, has received a COSPAR Outstanding Paper Award for Young Scientists for his paper *Towards the 1 mm/y stability of the radial orbit error at regional scales* published recently in the journal *Advances in Space Research*.

Every two years, COSPAR (Committee on Space Research) gives this award for young scientists under the age of 31 for the best papers published in the journal *Advances in Space Research*. Alexandre Couhert wrote his article in collaboration with NASA's Goddard Space Flight Center, the Jet Propulsion Laboratory (JPL), ESA's European Space Operations Centre (ESOC) and CNES subsidiary CLS (Collecte Localisation Satellites).

Since the launch of TOPEX/Poseidon in 1992, followed by its successors in the Jason series, years of joint research work by CNES's precise orbit determination team and the international community within the Ocean Surface Topography Science Team (OSTST) have improved the radial accuracy of altimetry satellite orbits. Today, their altitude is known to within less than one centimetre and their trajectory is used as the reference for measuring sea-surface height.

This level of performance makes it possible to observe the long-term drift in sea-surface height with an accuracy on the order of 0.1 mm/year. However, stability of orbit accuracy at regional scale has not yet been attained. To achieve this, the radial orbit error would need to be better than 1 mm/year to study the regional distribution of variations in sea level. This paper looks at avenues that could be pursued to reduce this uncertainty and assess progress made using in-situ measurements.

This award crowns the efforts of CNES's precise orbit determination team, working with the international community in this field. The awards ceremony will be on Tuesday 2 August during the 41st COSPAR Scientific Assembly in Istanbul.

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