



HY-2A altimetry satellite GPS orbits processing and performances

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The Chinese HY-2A altimetry satellite is on the mission orbit since 1st october 2011. This satellite uses a Doris receiver (French cooperation), a GPS receiver and a SLR retro-reflector for the precise orbit determination. The GPS is a dual frequency semi-codeless receiver.

Precise orbits are computed at CNES on the basis of 7 days arcs since the beginning of the mission (repeat cycle is 14 days).

This presentation describes the current processing performed at CNES for this satellite. The GPS only orbits perform very well and are compared with the Doris only orbits (floating ambiguity resolution, as for Jason 1 and 2). SLR measurements are also available at ILRS, and allow an external validation of the actual radial orbit performance.

This talk addresses the current status of POE solutions and the prospects for improvement based on the preliminary analysis of the tracking data.