

Time series of Satellite Laser Ranging station positions

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Objectives of this work

♣ Objectives

to obtain SLR station positions with a reasonable sampling (10 days or less) and with a good accuracy (5 mm or better) to underline geodynamical effects such as atmospheric and oceanic loadings and to compute accurate SLR

Terrestrial Reference Frames

♠satellites used : LAGEOS-1 and -2

♠method used : geometrical approach

♠a priori used : ITRF2000 corrected for tectonic velocity, Earth's and polar tides

♣ Problems underlined

- Residual orbital errors

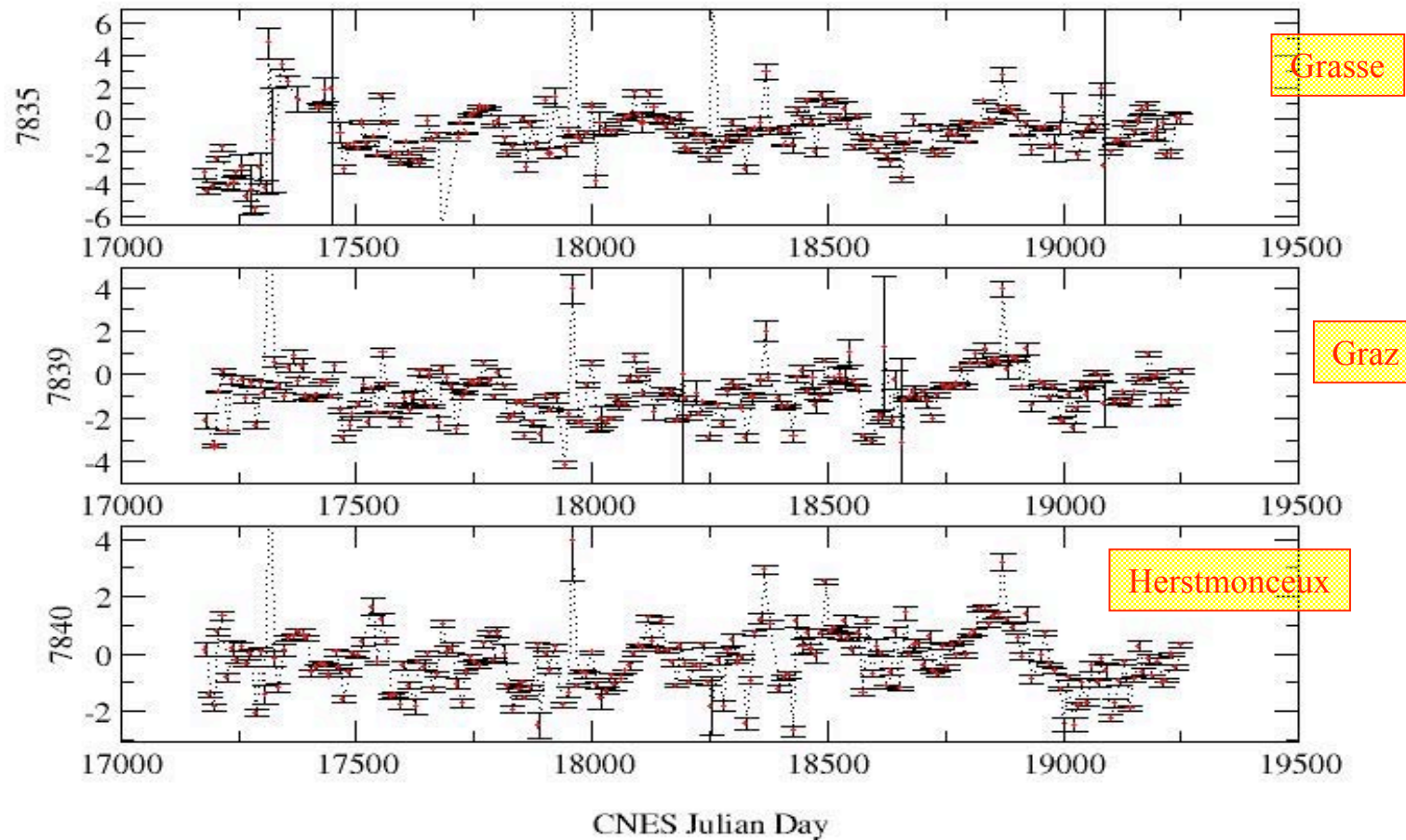
♠orbital arcs corrected for errors with Hill's theory

- "Least-square mean effect"

♠periodical models for the time behavior of station positions

Some results

Vertical component time series (cm)





May the force be with you for the reading of this poster !!!!!