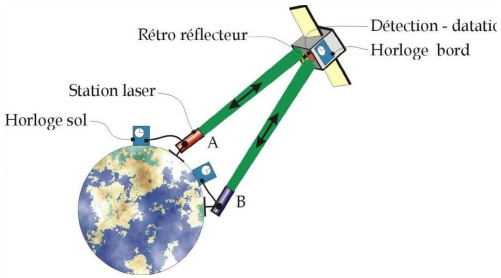
Time transfer and synergies with SLR



Time transfer by laser experiments :

T2L2 /Jason-2, LRO (oscillators in space) and the future ELT ACES /ISS (atomic clocks)

=> T2L2 extension: 2015 and 2016

Noise and short term stability are well understood (a few ps @ 1000 s)

At Station Level : need for a better accuracy (< 100 ps), long term stability and access to UTC/TAI (a few ns)

Comparisons of time transfer by laser with GNSS have been conducted between geodetic observatories (differ. of 150 ps between techniques) and will continue to be improved

Time calibration on the ground (delay in cables, devices, reference PPS, etc.) and associated procedures have been improved at tens of ps and will continue to be studied (notably for long term stability)

New concept : a GGOS station in space (on a GEO orbit) with ultra stable clock available in space for stations, satellites and space techniques as DORIS -> proposal to ESA