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# Linking past and future : Merging energy, carbon and water fluxes measured by two different eddy covariance systems.

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## Résumé

The ICOS research infrastructure, monitors the greenhouse gases exchanged by ecosystems with a new level of standardisation. Indeed, All ICOS sites in Europe are equipped with a standardised eddy covariance system, namely the sonic anemometer Gill HS-50 associated with the enclosed gas analyser Licor LI7200.

A large number of ICOS site have been monitoring the carbon and water fluxes for a long time with non standardised systems. To ensured continuous and homogeneous record, it is important to compare the fluxes measured by the original (historical) set-up and the ICOS one.

At the Salles ICOS (FR-Bil) site, we have left our historical system (Gill RS3 sonic and LI7500) running along side the standardised set-up for more than a year. The resulting fluxes have been computed with the Eddypro software with similar configuration and the same meteorological inputs.

The first goal of this communication is to compare the fluxes obtained by the two systems and to detect systematic differences.

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