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The new GRGS-RL04 series of mass variations modelled with GRACE data

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The GRACE mission was effective from 2002 till 2017 and revealed the strong interest of Earth' gravity monitoring for climate studies, but not only.

CNES/GRGS provided monthly and 10-day gravity field models and made them available on the GRGS web site and as well on the Graceplotter web site where comparison graphics with other models are presented.

A new release: GRACE-GRGS-RL04, is now achieved over the full mission span. It corrects some small deficiencies appeared previously as in other realizations and slightly improves the resolution. It delivers monthly and 10-day gravity variations expressed in terms of geoid and equivalent water height. Two types of computation were achieved and compared: in terms of spherical harmonic expansion up to degree/order 90 and in terms of surface masses (mascons) by 2 degree square.

Both solution types exhibit more or less the same mass variations, what tends to demonstrate the consistency of both methods.

A particular care was brought to the quality of the models in studying the behavior of very dry regions or in comparing with other products derived from altimetry.

We will show some processing refinements and quality test results in comparison with other available models.