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The German joint research project "concepts for future gravity satellite missions"

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Within the German joint research project “concepts for future gravity satellite missions”, funded by the Geotechnologies programme of the German Federal Ministry of Education and Research, options and concepts for future satellite missions for precise (time-variable) gravity field recovery are investigated. The project team is composed of members from science and industry, bringing together experts in geodesy, satellite systems, metrology, sensor technology and control systems. The majority of team members already contributed to former gravity missions. The composition of the team guarantees that not only geodetic aspects and objectives are investigated, but also technological and financial constraints are considered. Conversely, satellite, sensor and system concepts are developed and improved in a direct exchange with geodetic and scientific claims. The project aims to develop concepts for both near and mid-term future satellite missions, taking into account e.g. advanced satellite formations and constellations, improved orbit design, innovative metrology and sensor systems and advances in satellite systems.