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Geodetic reference station RIGA

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Point RIGA is datum of the coordinate system of the Republic of Latvia. In order to detect and control changes of coordinates of point in the result of movements of Earth's plates, space geodesy methods that are based on processing of special measurements of geodetic and navigation satellites, which are collected for long period of time are used. Coordinates are detected by use of GPS system in permanent mode. GPS data for twenty-four hours are regularly sent to GPS data European centre in Frankfurt and other places. This base station is unique in Latvia, because it is connected with satellite laser ranging (SLR) station, is as absolute gravimetric point and also groundwater measurements are performed there. These measurements are stored together with measurements of other observatories of world and on this basis updated global coordinates are calculated. Measurements made in permanent point RIGA are essential contribution of the Baltic region in the maintenance of geodetic reference system in Europe and wherewith in world.