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Seasonal modulation of the tidal waves

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This presentation shows the results of studies on the modulation of tidal waves at station Jozefoslaw. Method based on elliptical regularization of tidal gravimetric data was presented. To facilitate the comparison of data for individual waves, the original results of observation analyses were adjust under the assumption that the graph depicting the modulation-dependent movement of the end of the vector representing parameters of the tidal waves is an ellipse. In case of regular modulation the end of the vector representing parameters of the tidal wave changes in the time equal to the period of this modulation. The analysis of observations was performed by the classical method based on the least-squares principle. The data covered the time period of 3 years tidal observations made at Jozefoslaw Observatory using LaCoste&Romberg ET-26 gravimeter. This presentation contains also research on changes of the modulation caused by the ocean and atmosphere.