Invited lecture

NEW DETERMINATION OF PERIOD AND QUALITY FACTOR OF CHANDLER WOBBLE, CONSIDERING GEOPHYSICAL EXCITATIONS

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Polar motion consists of both free (Chandler Wobble) and forced components. The latter are caused by different excitations of geophysical origin. Very long-periodic (or secular) part is most probably due to post-glacial rebound, shorter periodic part (with dominant annual period) are caused mainly by motions of the atmosphere and oceans. Recently it was also proposed that impulse-like excitations due to geomagnetic jerks might be responsible for rapid changes of the amplitude and phase of Chandler wobble. In order to precisely determine the parameters of the free part, it is necessary to consider all these influences. The result is the new determination of the period and quality factor of Chandler wobble, free from additional geophysical excitations.

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GAIA SCIENCE ALERTS FOLLOW-UP OBSERVATIONS

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Results of follow-up observations of Gaia Science Alerts obtained with the University of Vienna 1.5m telescope are presented.