

# **SPECIAL DEVICE FOR DETECTION OF GRAVITY EFFECTS DURING ECLIPSES**

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There are three most known types of devices designed to measure a gravity effects using dynamic principle: gyroscopes, different kinds of torsion balances, and paraconic pendula. The last type of device gives more possibility for measurement because it has three degrees of freedom. The french scientist M.Allais was the first to use in 1954 a short solid paraconic pendulum as detector of gravity screening effect during a solar eclipse, and observed the abnormalities of its motion. Yet his results were strongly criticized by scientific community due a lot of device's defects: non-isolation from the atmosphere, nonautomatic starting and stopping, a visual system of observation and calculation, and so on. The author of this report experimented with a different paraconic pendula of his own constructions since 1961. Finally me and my team created the unique compact field device: short solid nonmagnetic pendulum placed inside of vacuum chamber with fully automatic remote control system of starting, stopping, and motion. One can see the motion of pendulum on PC-monitor; the data are collecting automatically. The observations with these pendula (Mexico,1991; Brasil,1994)gave two remarkable results: the effect of action of atmospheric shockwaves on the local place at the beginning of eclipse, and the change of velocity of oscillation plane of pendulum in direction of Foucault-effect equal in value to Foucault-effect at least.