



## **The Actual Plate Kinematic and Deformation Model (APKIM) 2005**

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The digital plate model PB2002 (Bird 2003) includes, different to other models of the lithospheric plates, rigid plates and inter-plate deformation zones, altogether 52 plates and 13 orogenes. The present day kinematics of these areas can be described using station velocities estimated from space geodetic observations. The APKIM2005 uses the VLBI, SLR and GPS data provided for the International Terrestrial Reference Frame (ITRF) 2005. Rotation vectors of 18 major plates and the velocity field of 4 larger deformation zones are estimated. Many vectors differ significantly from the vectors derived by geophysical methods from sea floor spreading rates, transform fault azimuths, and earthquake slip vectors. Reasons for the discrepancies are the different time periods covered by the geodetic and geophysical observations, respectively.