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Minor deformanions zones in the sedimentary cover on East Arctic Russian shelf

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Tectonic zonation map of East Arctic Russian shelf at1:5 000 000 scale was produced in VNIIO in cooperation with MAGE & DMNG. The map serves to provide a tectonic basis for regional assessment of oil and gas prospects. Zones of low amplitude deformations, some of them manifesting distinct flower structures, were mapped within major sedimentary basins and interpreted as associated with transtensional and transpressional faults. Many zones display structural discontinuity precluding kinematic identification.
Minor deformations decrease upsection on most lines shot within shelf area. The situation is different with lines that transect shelf break and continental slope. It is most likely that minor deformations zones parallel continental slope and comprise normal fault component. Soft sediment slides accompanied with faults and folds are well pronounced in the upper portion of seismic signatures and sea bottom topography here.