NADRA-3D SOFTWARE PACKAGE

Areas of Application

The software package is to be used in civil engineering, geotechnical, and geological surveys to forecast dynamic processes in hydraulic and industrial structures, embankment slopes, and soil bodies under the impact of intensive construction activities, underground and mining operations, fluid motion, and heat conduction phenomena

Specification

The software is based on algorithms using high-performance graphic processors that support CUDA technology; the number of computational grid nodes reaches 10⁷; operates both on personal computers and multiprocessor supercomputers; runtime environment is Windows or Linux operating system

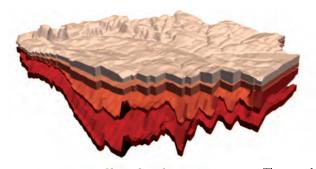
Stage of Development. Suggestions for Commercialization

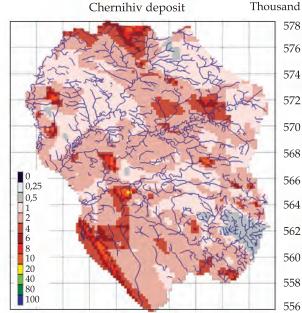
IRL4, TRL4

Creation of commercial versions and development of customized *Nadra-3D* subsystems, upon request

IPR Protection

IPR2





632 634 636 638 640 642 644 646 648 Thousand *Nadra-3D* grid computational domain

Advantages

Original mathematical models with discontinuous solutions to reflect the influence of cracks and thin inclusions having significantly different physical properties. Depending on hardware parameters and configuration, the software enables to accelerate computations up to 10 times as compared with competitors

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