GPU use efficiency for certain problems in geophysics
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Modern computer architectures like hybrid clusters and single node systems provide great opportunity for professionals in natural sciences to study challenging problems with just their desktops. The authors participated in moving algorithms to GPU and hybrid systems from different areas from bioinformatics to Earth science. It was confidently shown that GPU allows one to speed up his/her application 10-100 times compare to the single core of CPU. So, algorithm of seismic data analysis was accelerated 150 times, tsunami wave propagation modelling was accelerated in 100 times, etc. Several particular examples are discussed in details.

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