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STT55-01 会場:103 時間:5 月 27 日 14:30-14:45

地震津波の防災減災のための京コンピュータを用いたシミュレーション研究
Advanced Disaster Simulation Researches on Earthquakes and Tsunamis using High Performance Computing System Kei

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‘Kei’ computer is one of the highest computing system in the world. Using ‘Kei’ computer, we are performing the advanced simulation for disaster mitigation by earthquakes and tsunamis in a project ‘Study for Advancement of Prediction Accuracy on Earthquake and Tsunami’. In this research project, we have three research fields as Earthquake simulation research field, Tsunami research filed and Damage estimation research field.

In Earthquake simulation research field, we are developing the scenario simulations of earthquake recurrences on the subducting plate around Japan. As other earthquake simulation researches, we are simulating seismic waves based on the scenarios, and the underground structures using seismographs.

The second research simulation research field on Tsunami hazard, we are developing applications for the simulating tsunami damages at East Japan earthquake 2011. In this research field, not only damage simulations, but also we are developing the early tsunami detection system using simulation and real time data. Finally, we will apply it to the Nankai trough seismogenic zone and etc.

The third research field is the civil engineering research as the adavanced civil engineering structural analyses, seismic response analyses on large scale cities, and agent simulation for more precise and practical evacuations.

Finally, we will integrate these research fields in this project for the seismic simulator on disaster mitigation.

キーワード: ハイパフォーマンスコンピューティング, 防災・減災, シミュレーション, 地震, 津波
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