

SC13 Short lecture @ AICS

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Name	Dr. Taro Arikawa (Port and Airport Research Institute, Field 3)
Title of your Presentation	Development of high refining tsunami inundation simulator
Abstract	<p>In order to evaluate the damage due to giant tsunamis, influence of destruction of structures, debris, etc. is required. The power of the tsunami is greatly different depending on the place and the condition. Three dimensional numerical simulator should be required to analyze overflow, scour, flood into buildings and so on. Because the calculation cost of this kind of simulator is very high, nesting and coupling methodology with kind of wave equation is needed. So, the system which connects tsunami propagation simulator and 3-D numerical simulator should be developed. In this paper, accuracy and effectiveness of this coupling system is discussed by using the field data of damage by the Great East Japan Earthquake of March 11, 2011 in Onagawa area.</p> <p>The results of calculation say that the agreement of observation data indicated that the system works well and the accuracy of the inundation height is depend on mainly tsunami source. The CS3D system also calculates the wave pressures and the forces attacking on the building. So criteria of overturning of building were verified.</p>