

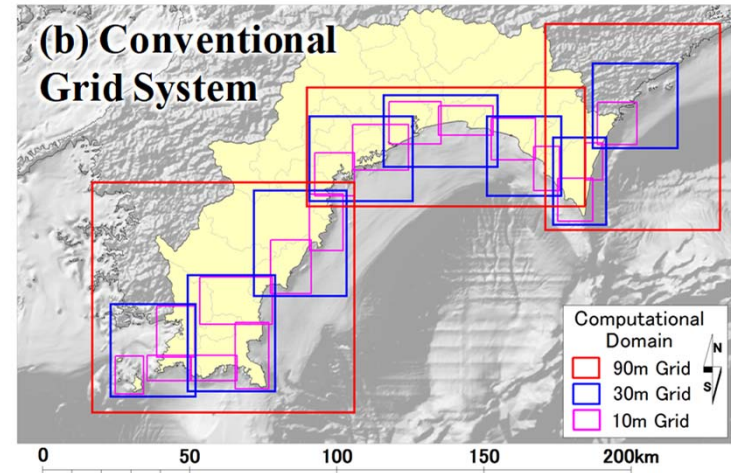
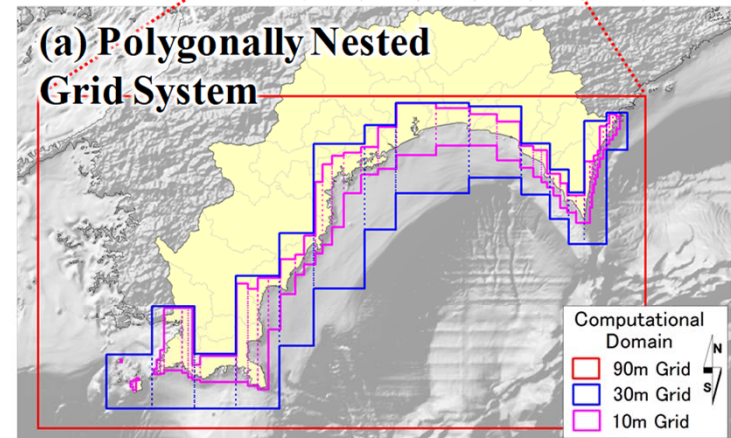
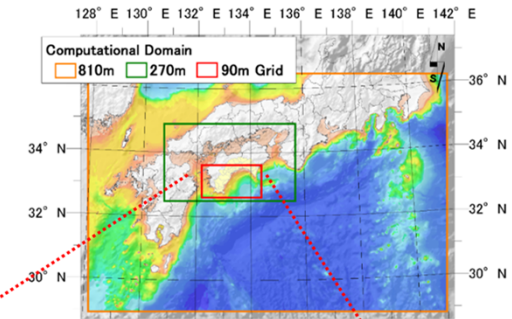
# Takuya Inoue

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Working on  
 “**realtime tsunami inundation forecast**”  
 on a regional scale (e.g., entire Japan/U.S.)

## Efficient Numerical Model



## Study Areas and Results

Calculation Regions: 810m (shown left), 270m, 90m, 30m, 10m  
 Platform: SX-ACE Cores Used: 256 Calc. Time: 6 hours

**7 Minutes Fault Estimation**

**10 Minutes Tsunami Simulation**

**20 Minutes After Event**

Study Area	Kochi	Shizuoka	Miyagi*
No. of Grids	16.5 million	8.0 million	15.7 million
Time Step (sec)	0.10	0.05	0.10
Exec. Time (min)	<b>6.7</b>	<b>7.3</b>	<b>6.5</b>

\*Ishinomaki and Higashimatsushima cities

**Flowchart of forecast**

## Current Research:

- Integrated computation of far-/near-field tsunami
- Utilization of Artificial Intelligence (AI)

