

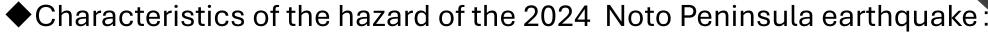
Advisory Opinion:
Preparing for Wide-Area
Regional Disasters Based on
Lessons from the 2024 Noto
Peninsula Earthquake and Heavy
Rain Disaster: Background (1)
Earthquake Disaster

見解:

能登半島地震・豪雨災害の教訓に基づく 広域地域災害への備え 1. 背景(地震災害) Naoshi HIRATA 平田直 The University of Tokyo 東京大学

Background: Wide-Area Regional Disasters (1) Earthquake Disaster

背景: 広域地域災害(1) 地震災害



令和6年能登半島地震のハザードの特徴

➤ Seismic activity that has been going on since December 2020 2020年12月から続いていた地震活動

- ➤ The M7.6 earthquake on January 1, 2024 → The largest inland earthquake → The widespread shaking for an inland earthquake 内陸の最大規模の地震
- ➤ The source area also extended to the sea area → Tsunami occurred 津波の発生
- ◆Long-term assessment of hazards were being made

長期的な予測は行われていた

- > Hazards were not properly incorporated into regional disaster prevention plans.
- ➤ National Earthquake Hazard Map by HERP Committee





Background : Wide-Area Regional Disasters (1) Earthquake Disaster

背景: 広域地域災害(1) 地震災害

- ◆ Characteristics of the disaster caused by the 2022 Noto Peninsula Earthquake
 - >A wide-area regional cities/towns/villages were affected
 - >Housing damage due to delay in earthquake resistance
 - > Isolation of cities in mountainous areas
 - > Disaster-related deaths are more than twice as high as direct deaths
- ◆令和6年能登半島地震による災害の特徴
 - ▶広い範囲(広域)の地方市町村が被災
 - ▶耐震化の遅れによる住宅被害
 - ▶中山間部の都市の孤立化
 - ▶災害関連死が、直接死の2倍以上



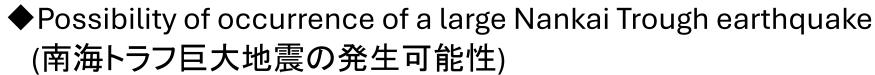


3 Wide-area disasters that will be worrying about in future (1) Earthquake disasters:

The Nankai Trough mega earthquake

3 将来憂慮すべき広域地域災害

(1) 地震災害 : 南海トラフ巨大地震



➤ Very High: III Rank

大変高い:IIIランク

➤ It has occurred repeatedly so far

これまで繰り返し発生していた

- > Finally, 80 years have passed since the Showa Nankai Trough earthquake in 1944 and 1946 最後は、1944年・1946年の昭和南海トラフ巨大地震ですでに80年経っている
- ◆Characteristics of the supposed hazard 想定されているハザードの特徴
 - > Strong shaking over a wide area

広域の強い揺れ

> High tsunami over a wide area

広域の高い津波

▶ There are places where there is little lead time for tsunami arrival 津波到着の猶予時間が少ない場所がある





(1) Earthquake disasters: The Nankai Trough mega earthquake

3 将来憂慮すべき広域地域災害

(1) 地震災害 : 南海トラフ巨大地震

Characteristics of damage from the Nankai Trough mega earthquake

南海トラフ巨大地震の被害の特徴

Widespread damage

広域の被害

> Both large cities and rural areas will be included → Wide-area Regional disasters

大都市、地方が両方が含まれる → 広域地域災害

- ➤ Tsunami damage is particularly high 津波被害が特に多い
- ◆Assuming Severe Damage and the Need for "Early Evacuation": 298,000 Deaths

甚大な被害の想定と「早期避難」の必要性: 死者計298,000人

- ▶ Strong tremors over a wide area: 2.5% of the victims (730,000 people) 広域の強い揺れ: 犠牲者の2.5割(730千人)
- ➤ High tsunami in a wide area: 70% of victims (215,000 people) → Proper evacuation can significantly reduce the number of people (215,000 people→ 79,000 people)

広域の高い津波:犠牲者の7割(215千人)

→ 適切に避難すれば、大幅に減らせる(215千人→7.9万人)



