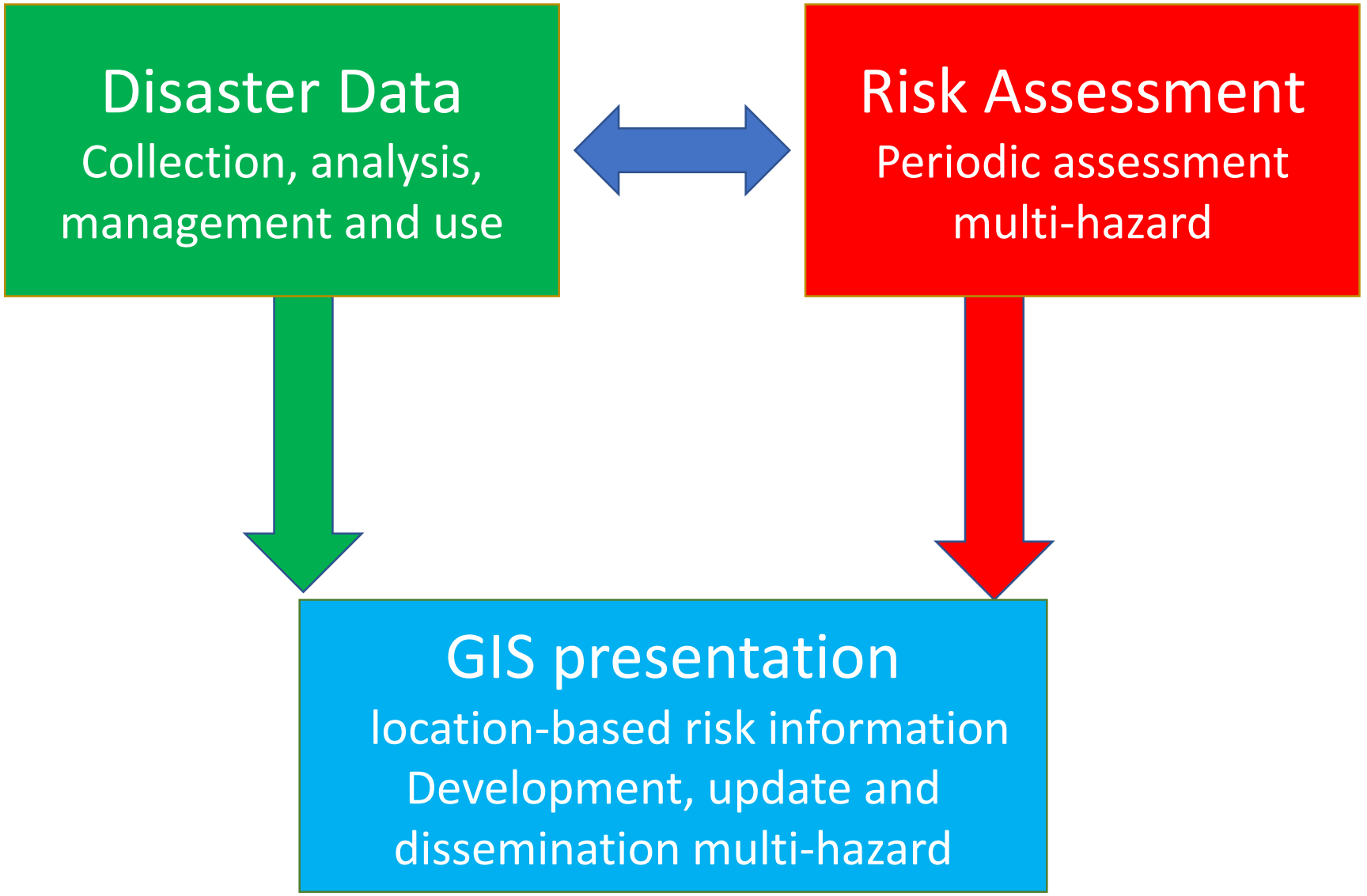
Scoping Workshop on
Science and Technology for Disaster Resilience 2017
Science Council of JAPAN/UNISDR

Priority 1: Understanding Disaster Risk

23 May 2017 at CANCUN, MEXICO

Understanding disaster risk



Present status

1. [Disaster Data] Disaster Loss and Damage Data is not systematically compiled in many countries

2. [Risk Assessment] Current and forefront knowledge is not fully utilized for disaster risk assessment

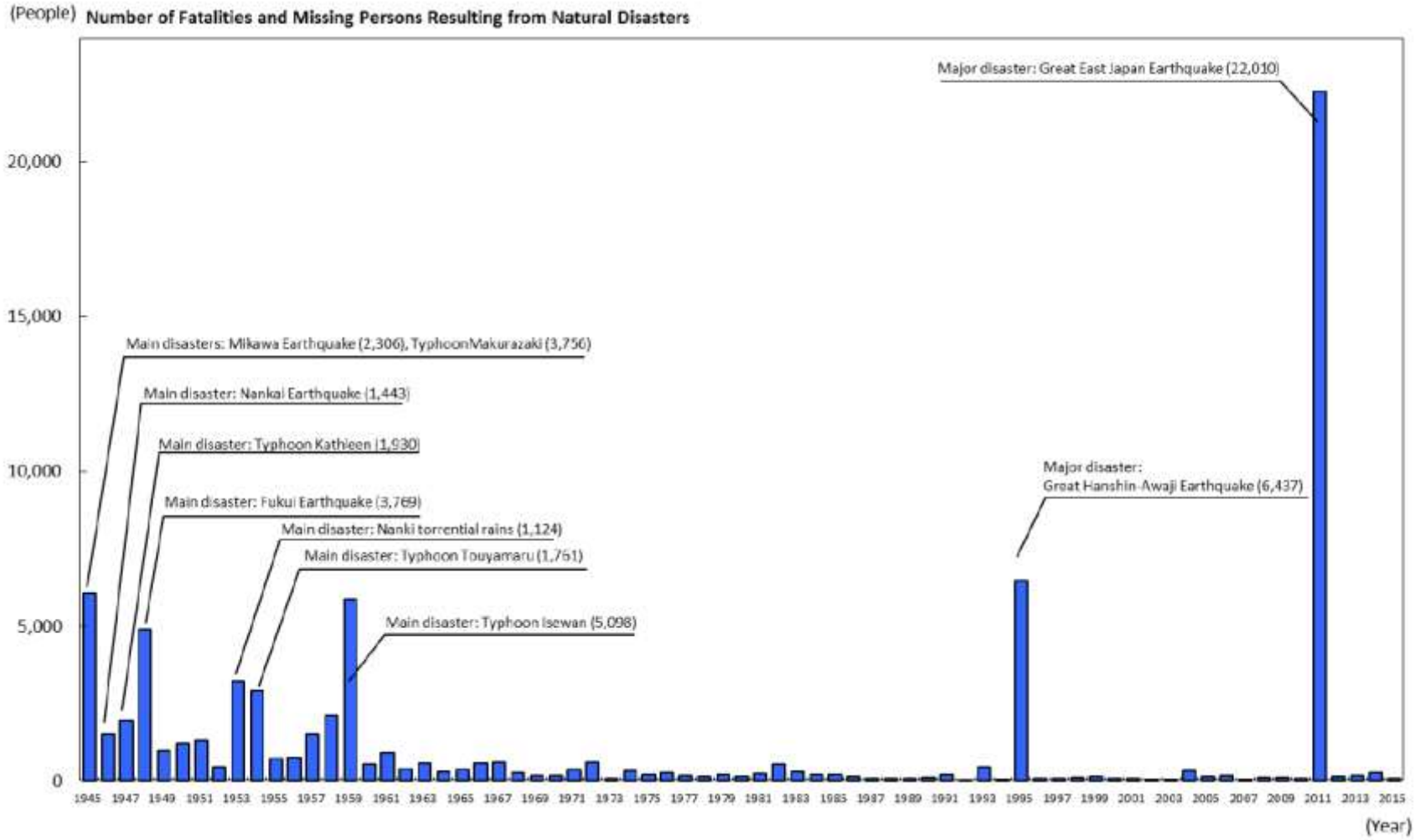
3. [GIS presentation] Geographic Information Systems and related tools are easily available and can be used more for disaster assessment such as hazard maps

Sharing Practices, Examples

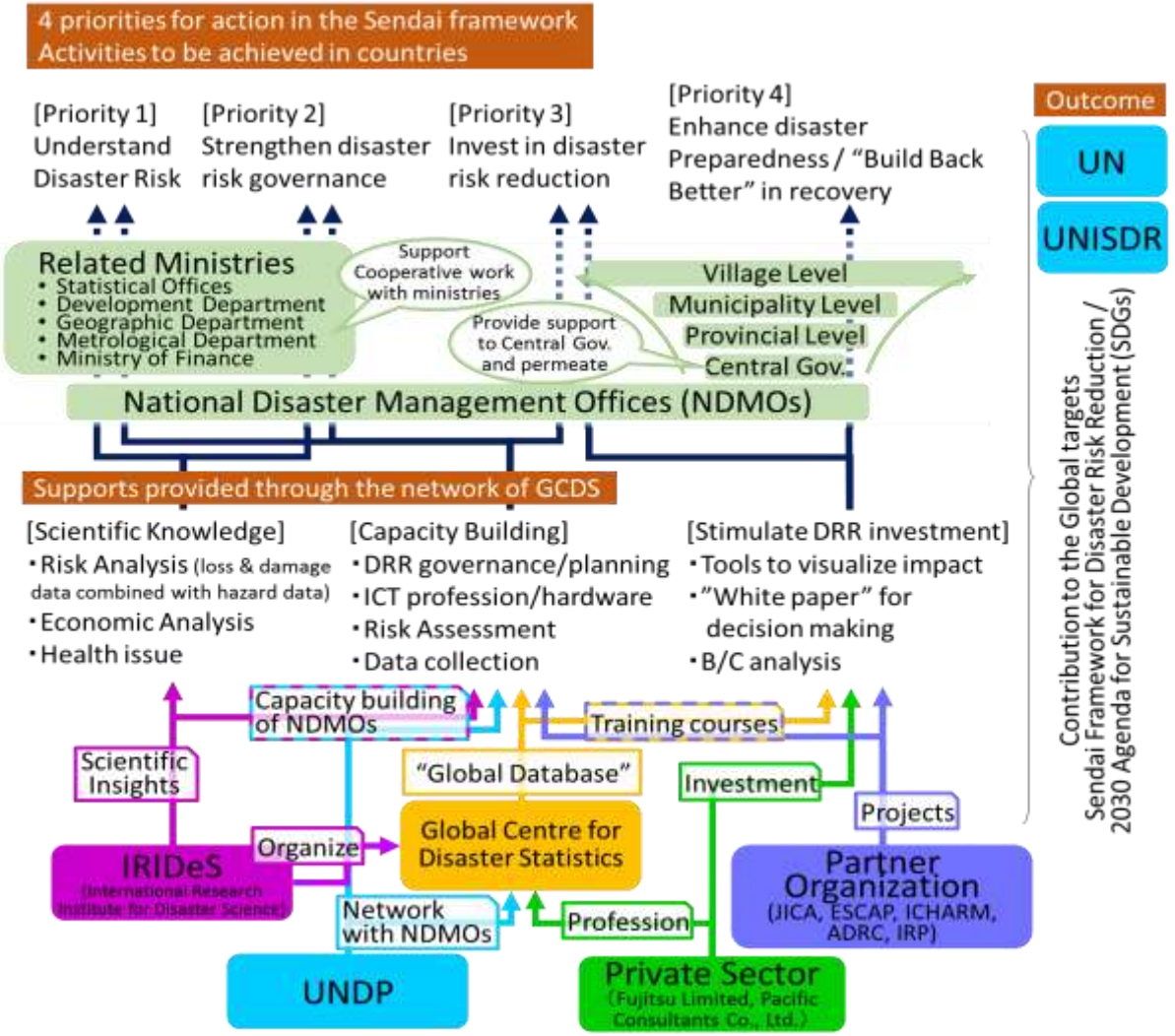
1. [Disaster Data]
   Example of disaster data in Japan
      White Paper and 2011 East Japan Disaster data
    Example of global disaster data
      GLIDE (ADRC), UN/ISDR

2. [Risk Assessment]
   Earthquake/tsunami risk assessment for the Nankai Trough
         Earthquake
   Probabilistic and multi-hazard assessment

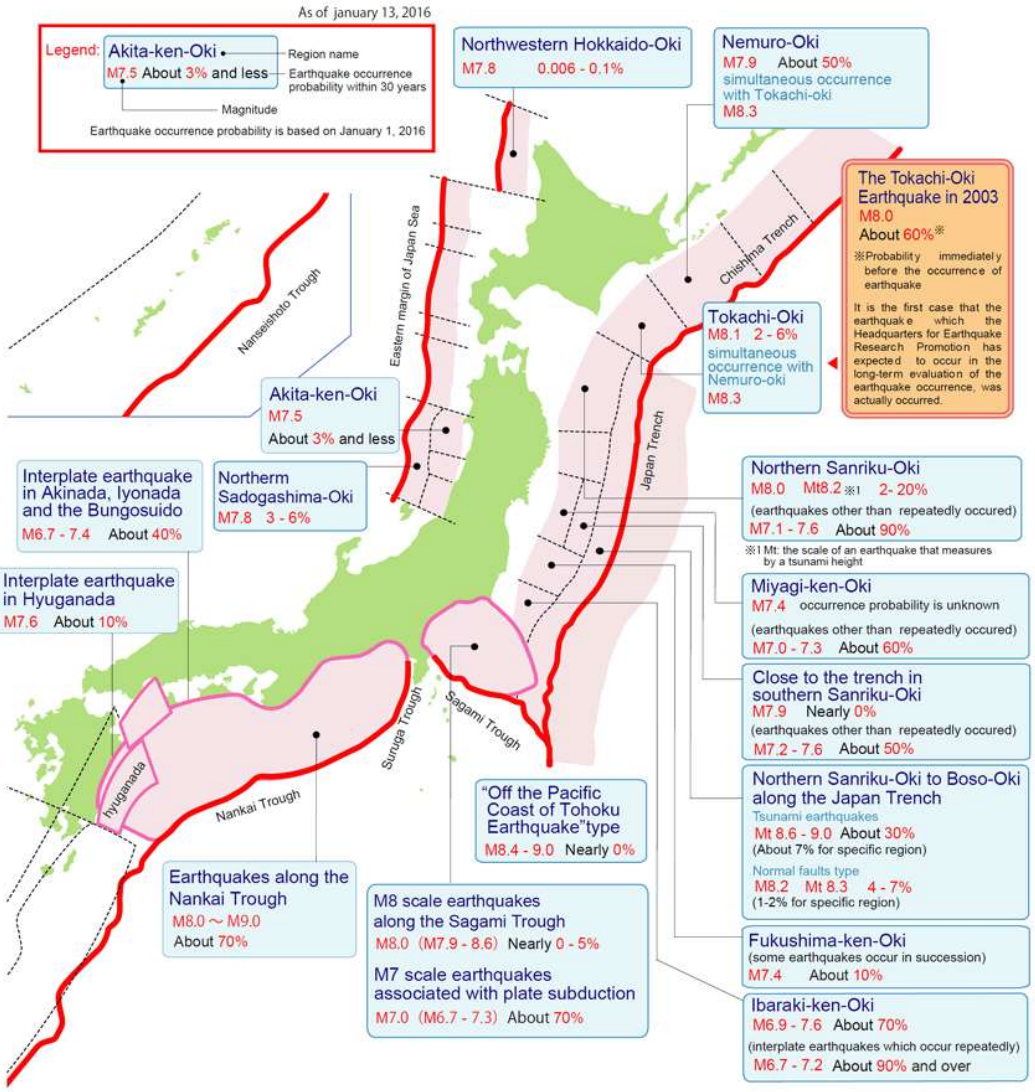
3. [GIS presentation]
   Japan: SIP4D of NIED
   Other countries: ESRI



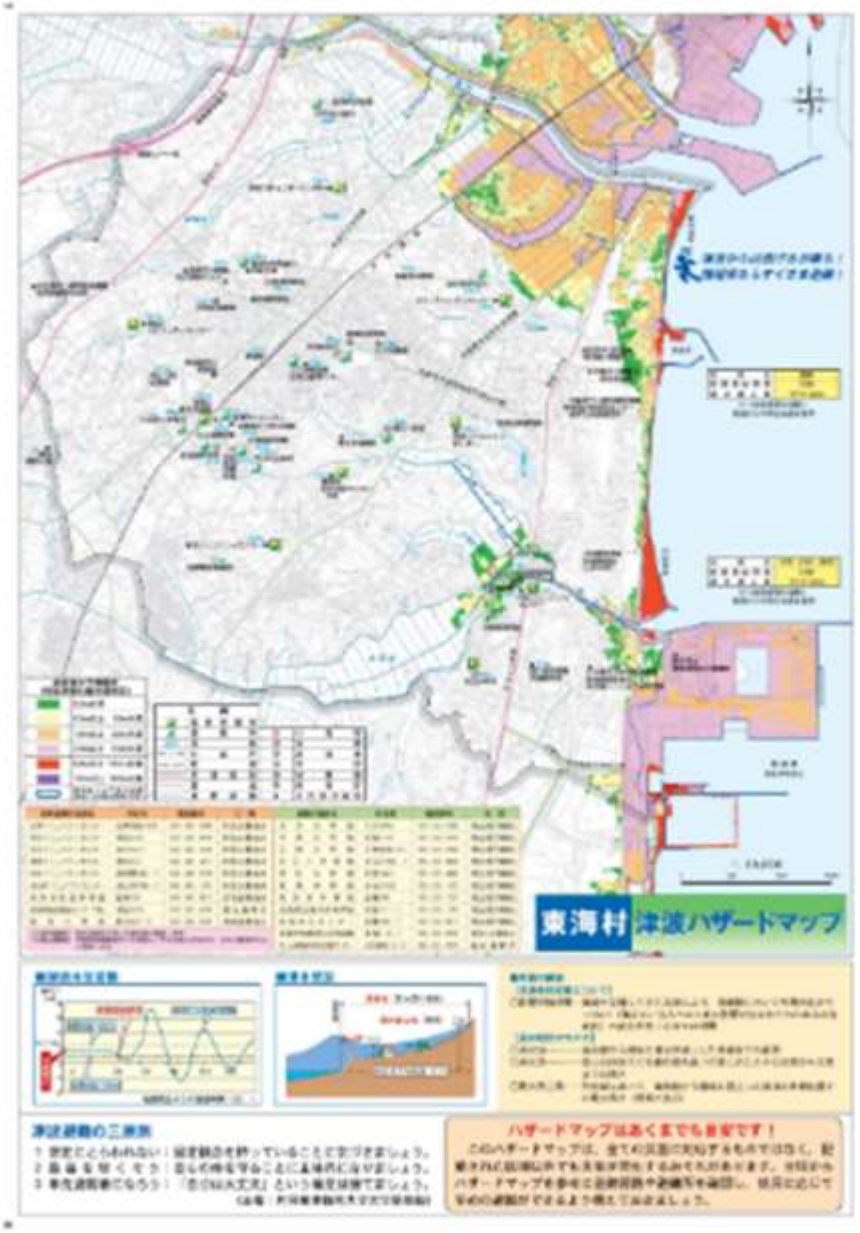
Number of Fatalities and Missing Persons Resulting from Natural Disasters in Japan, 1945-2015



Global Centre for Disaster Statistics

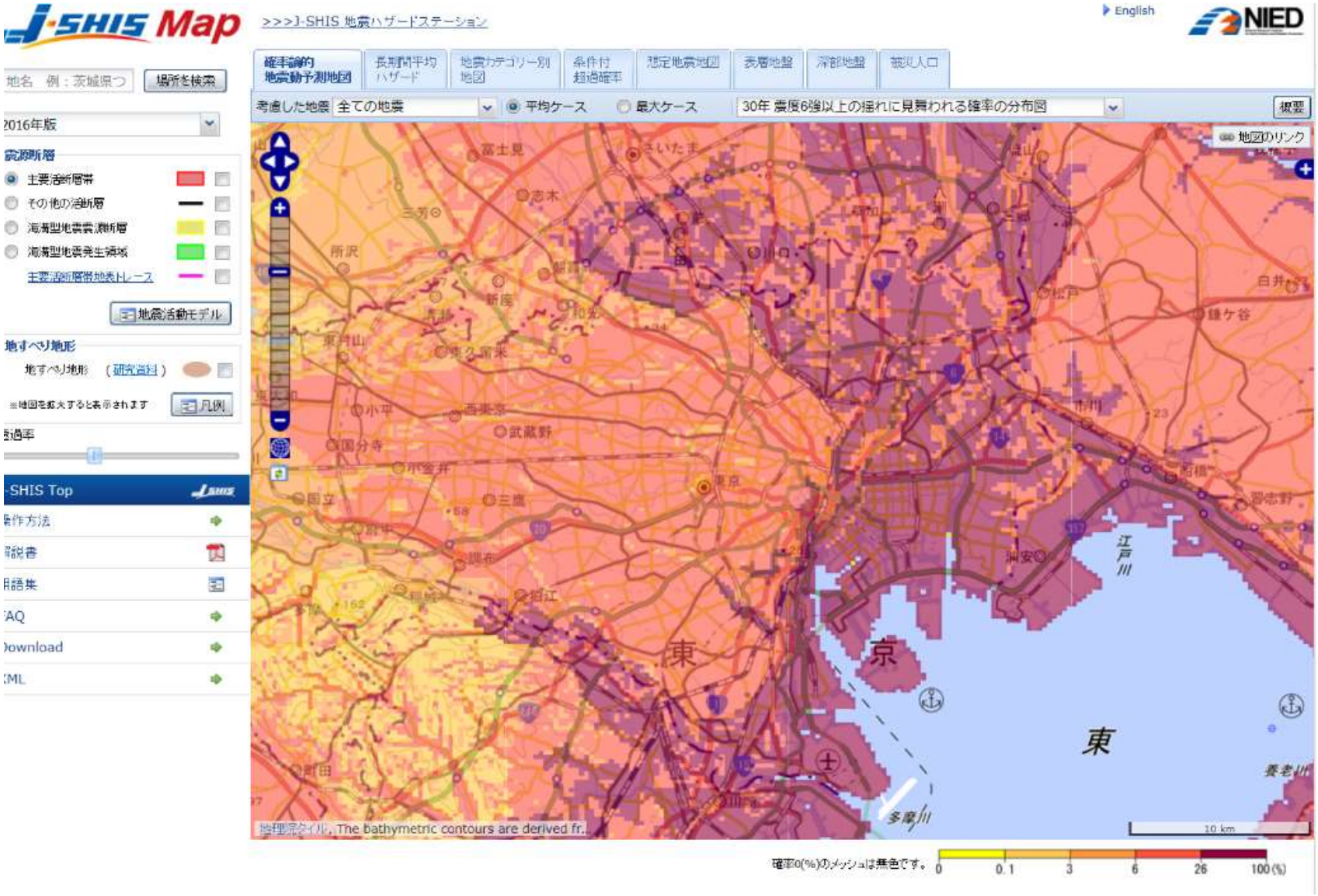


Probabilistic seismic hazard assessment in Japan



Multi-hazard map in Tokai-mura, Japan (this is a map for tsunami hazard)

Location-based disaster risk: use of GIS



30-year Probabilistic Map in case of earthquake with Japanese seismic intensity 6+ in Tokyo area

Discussion Framework

1. [Disaster Data]
   How to collect disaster data, standardization
   How to analyse the data and contribute to policy making
   Role of international organizations

2. [Risk Assessment]
   How to define risk, vulnerability and hazard
   How to define multi-hazard, multi-risk
   How to make use of probabilistic assessment
   How to make periodic assessment
   How to shift from planned management to adaptive management

3. [GIS presentation]
   How to use GIS for dissemination of disaster risk assessment
   G-based technology available throughout the world?

Expected Inputs to National Platform Guideline and Synthesis Report

1. [Disaster Data]
   Manuals and guidelines
   for data collection, analysis, management and use
   Standardising the terms
   Global Centre for Disaster Statistics
   Scientific contribution to readiness review, technical guidance

2. [Risk Assessment]
   Manuals and standardisation
   of risk assessment, periodic assessment

3. [GIS presentation]
   SOPs for the use of G-info for disaster risk assessment