

# Modeling and Analytics

RMSI provides modeling and analytical solutions to global clients for managing their risks associated with natural and man made hazards, by applying innovative methods and global best practices.

We have a focused multi disciplinary group that possesses extensive experience in modeling earthquake, cyclone, flood, and other natural hazards; providing IT solutions in disaster management including GIS and spatial technologies; and data cleansing, enhancement and analysis, for the quantification and management of physical and economic risks.

We have worked extensively with Governments and multilateral funding agencies such as the World Bank, the Food and Agriculture Organization, and the United Nations Development Program amongst others.

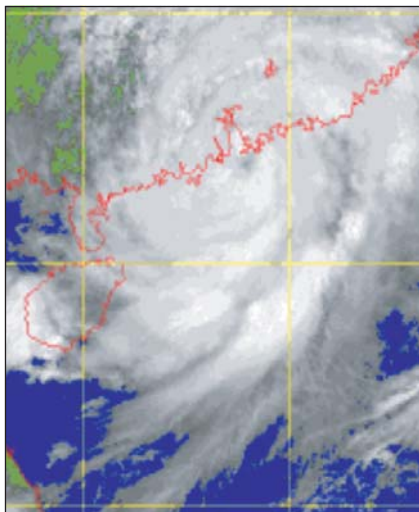
## Areas of domain expertise

- Government and Funding Agencies
- Insurance
- Property

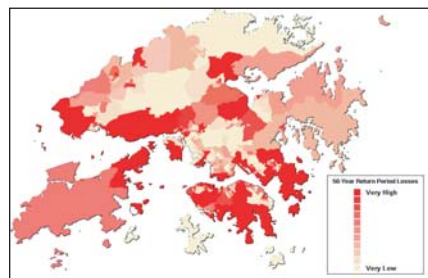
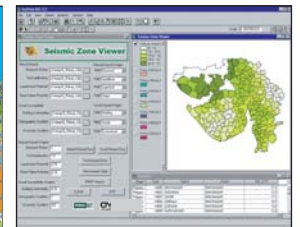
*"I was most impressed with the commitment to excellence and the emphasis on timely project completion shown by the RMSI Risk Management Group. This culture is carefully nurtured and supported by the management team. This makes the working relationship a very enjoyable one."*

Christian Mortgat, Principal Scientist,  
Risk Management Solutions

- Developed catastrophe risk models to assess, analyze, and study Maldives' high level of vulnerability to natural disasters
- Undertook a study to assess the potential impact of increased climate variability and change on the agricultural and water sectors in India



Enhancing  
data  
interpretation  
- improving  
decision  
making





## Disaster Management

RMSI provides solutions, including models, maps, and software tools, for all phases of the disaster management cycle, with activities ranging from response, recovery, development, prevention, mitigation, and preparedness. These solutions allow rapid damage assessment, real-time forecasting, vulnerability analysis, post-event diagnosis, and mitigation studies.

## Risk Modeling

We have extensive experience in developing quantitative models to assess potential losses from natural hazards. These models are based on catalogues of historical events, physical processes of hazards, local site conditions, exposures, building characteristics and damages in the past. Our capabilities include:

### Modeling natural hazards

- Tropical cyclone
- Earthquake
- Flood
- Tornado and hail
- Weather
- Drought

### Developing exposures

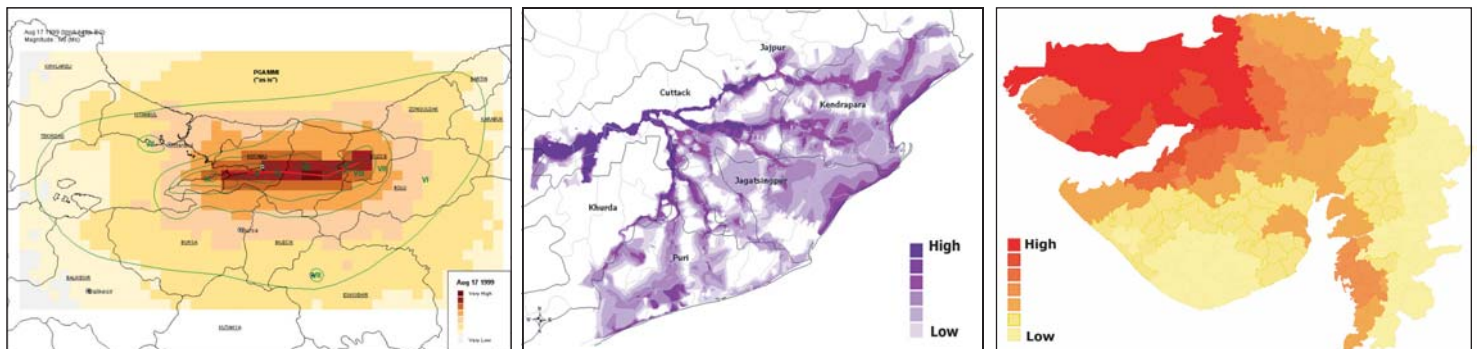
- Population
- Buildings, structures and infrastructure
- Agriculture
- Livestock

### Analyzing vulnerabilities

- Physical
- Economic
- Social

## Analytical Services

RMSI has a team of senior analysts from the statistics, mathematics, economics, finance, and engineering disciplines that offer portfolio risk analysis; data mining including spatial and temporal analysis; data cleansing and enhancement, and customized analytical tools development. Our services help the insurance, property and the government sector, in managing their portfolio databases and risks.



For more information on RMSI, please contact [info@rmsi.com](mailto:info@rmsi.com) or visit [www.rmsi.com](http://www.rmsi.com)