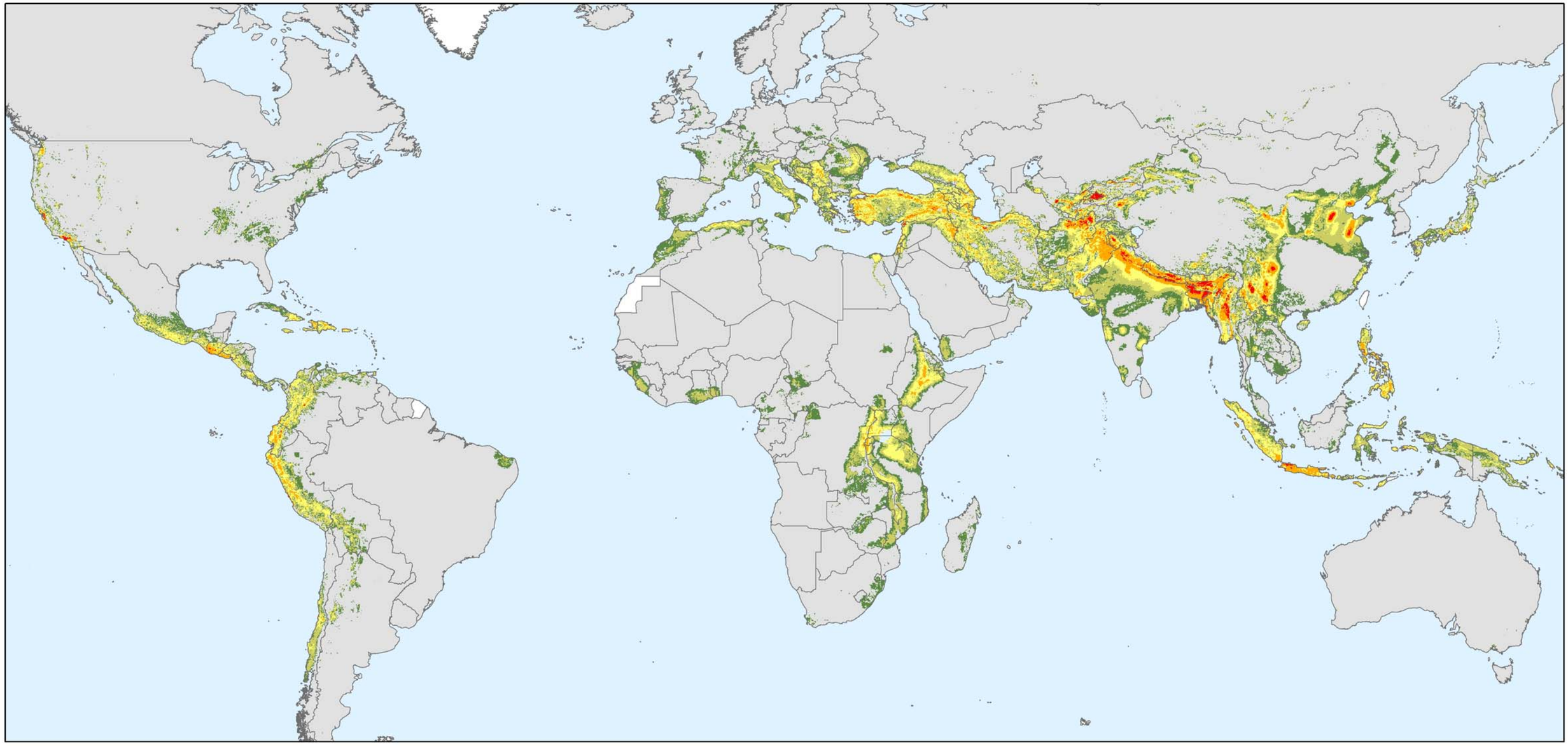
Earthquake Risk

- risk estimation of the loss of lives due to earthquakes -

Map 2



Legend

Risk of loss of life due to earthquakes

- minor risk
- very high risk
- no data
- no risk
- water

Map production:
2006
by Stefan Schneiderbauer
as part of the Doctoral thesis:

"Risk and Vulnerability to Natural Disasters - from Broad View to Focused Perspective - "

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Scale 1 : 80,000,000

Projection: Miller Cylindrical World
Datum: WGS 1984

Data sources:

Landscan 2002:
LandScanTM Global Population Database.
Oak Ridge National Laboratory.
Available at http://www.ornl.gov/sci/landscan/

Global Seismic Hazard Assessment Program (GSHAP):
launched by the International Lithosphere Program (ILP) with the support of the International Council of Scientific Unions (ICSU).
Data release: 1999
Information: http://www.seismo.ethz.ch/GSHAP/

Methodical explanation:

The map shows the estimated risk of loss of life due to earthquakes in pixels of approxemately 6' size (ca. 12 km at the equator). The pixel values are based on the equation:

R = H x V x E [R = risk, H = hazard, V = vulnerability of people, e = Exposure]

Underlying information:

Hazard:	The Global Seismic Hazard Map
Vulnerability:	Composite Indicator at national scale based on the following sub-indicators: Human Development Indicator (HDI), HIV / AIDS prevalence, Trade (% of GDP), External balance on goods and services (% of GDP), Missing sub-indicator values, Military expenditure (% of GNI), Number of armed conflicts, Corruption, Agriculture value added per worker, Rural population density.
Exposure:	Lanscan population density data