



**Secrab**  
**Security Research**

*presents*



# Global Threats– now and in the future!

Dr. Bo Janson

Presentation at the "Säkerhetstinget" 2005



**If a path to the better  
there be, it begins with  
a full look at the worst**

Thomas Hardy

# Worldwide trends

- Regional conflicts
- The political influence of the UN is diminishing
- Strong knowledge and technology development
- More power to the "Market", less to governments and authorities
- Globalisation, re-localisation, outsourcing
- Increased dependence on transport (also globally)

# Worldwide trends II

- Regional imbalances
- Energy consumption, release of substances and pollution
- Diminishing oil assets and production
- Climate change
- Populations increasing, aging in the West
- New disease and dissemination patterns, antibiotics resistance
- Extermination of species in flora and fauna

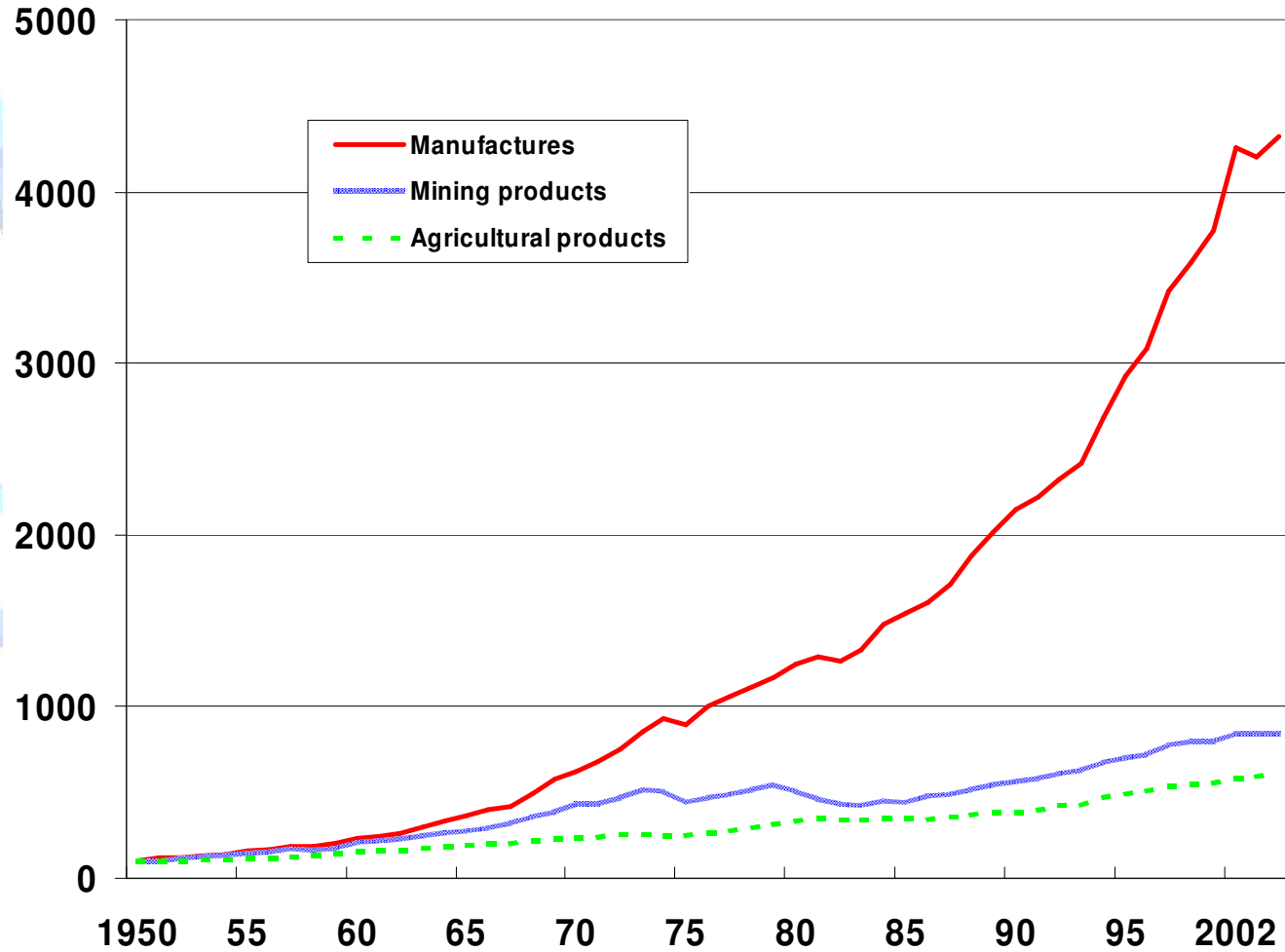
# Society's new vulnerability

- Nobody has full overview and responsibility for the entire system of society and its problems
- Increased dependence of IT and communications,
- Increased vulnerability to computer and network break-downs
- Increased mutual dependencies between functions and systems

# Society's new vulnerability II

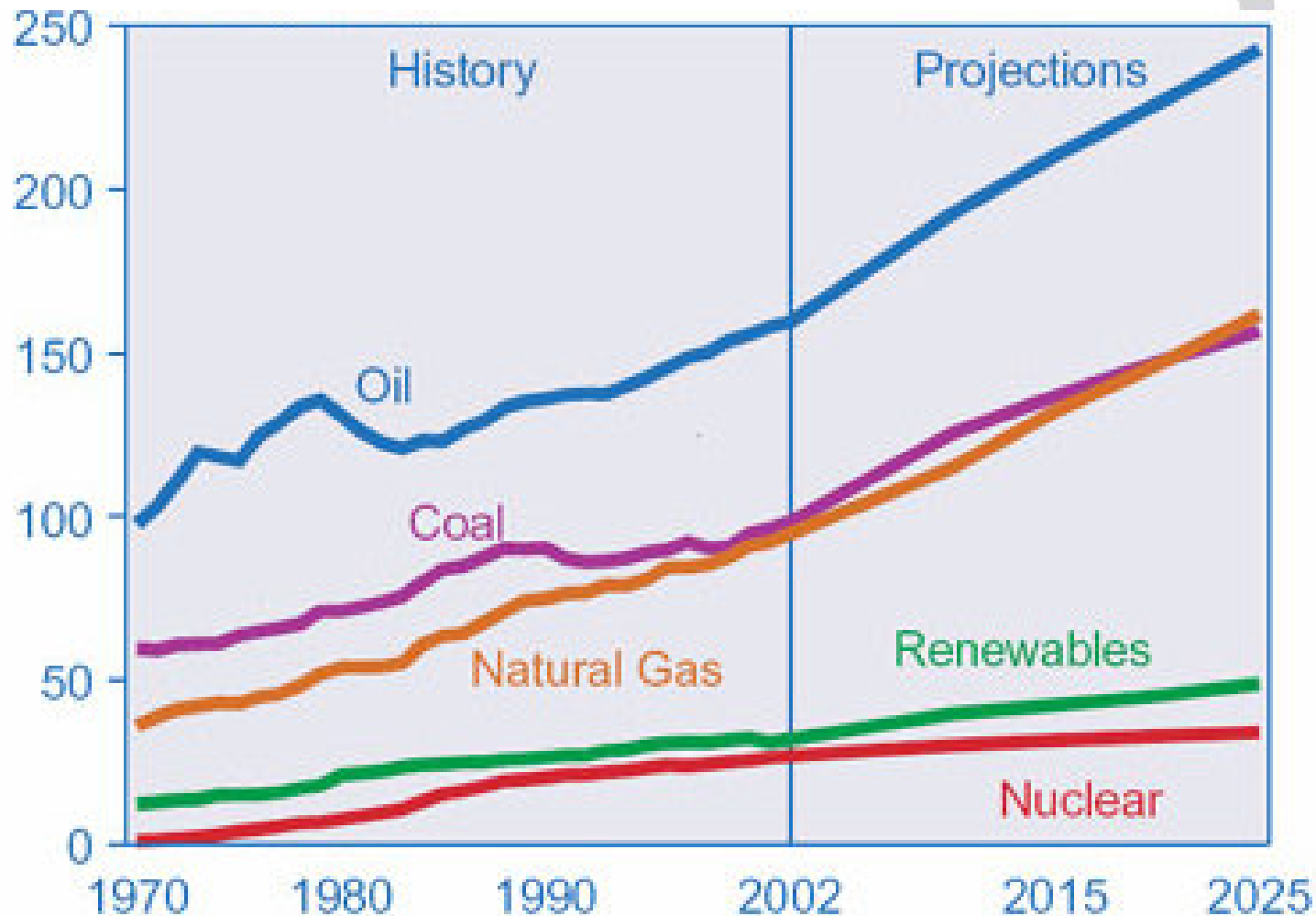
- New types of warfare, sabotage, terrorism, espionage, organised crime
- New weapons technologies
- Proliferation of weapons of mass destruction
- Grey zone between war and peace

# World trade

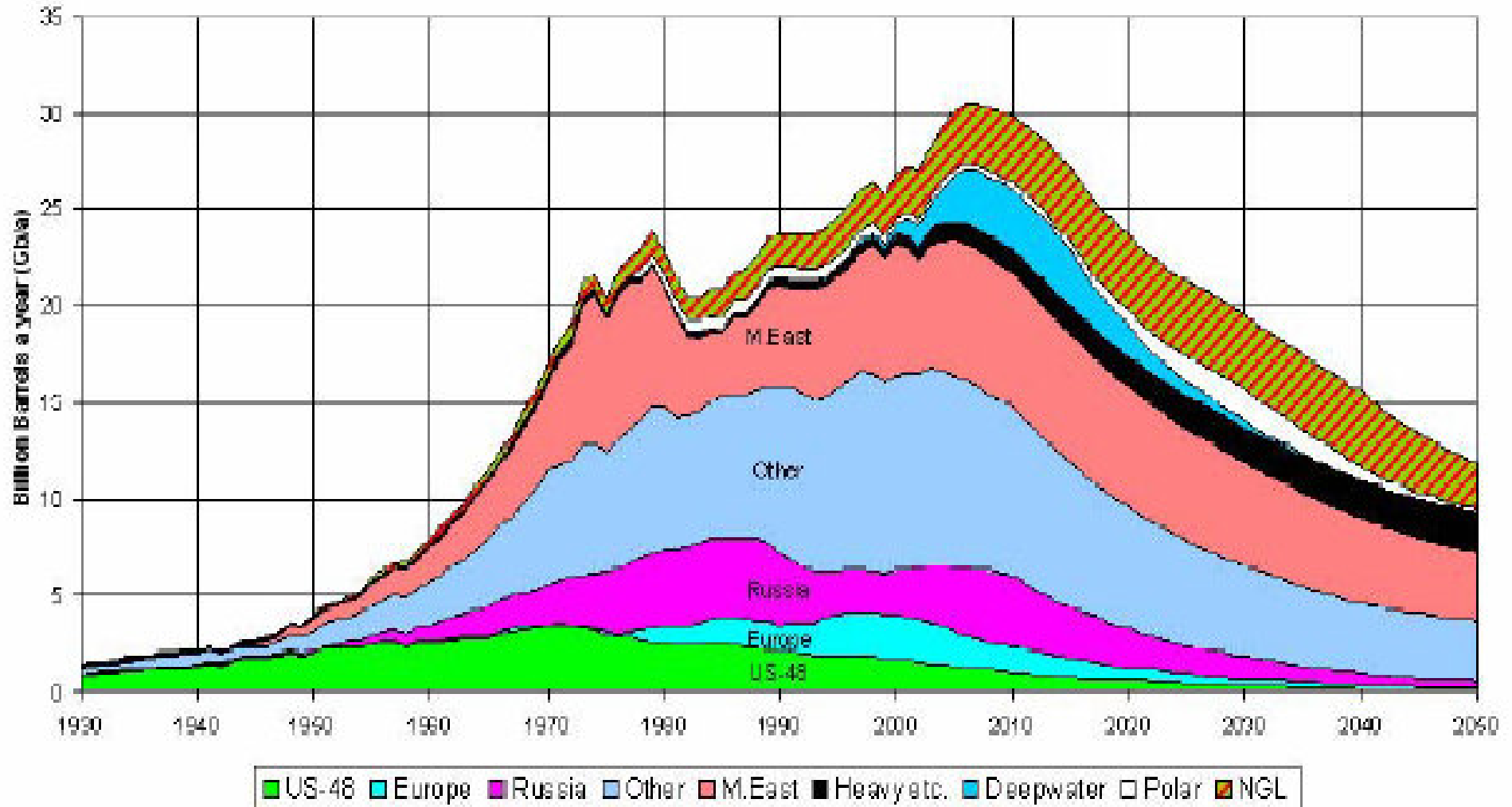




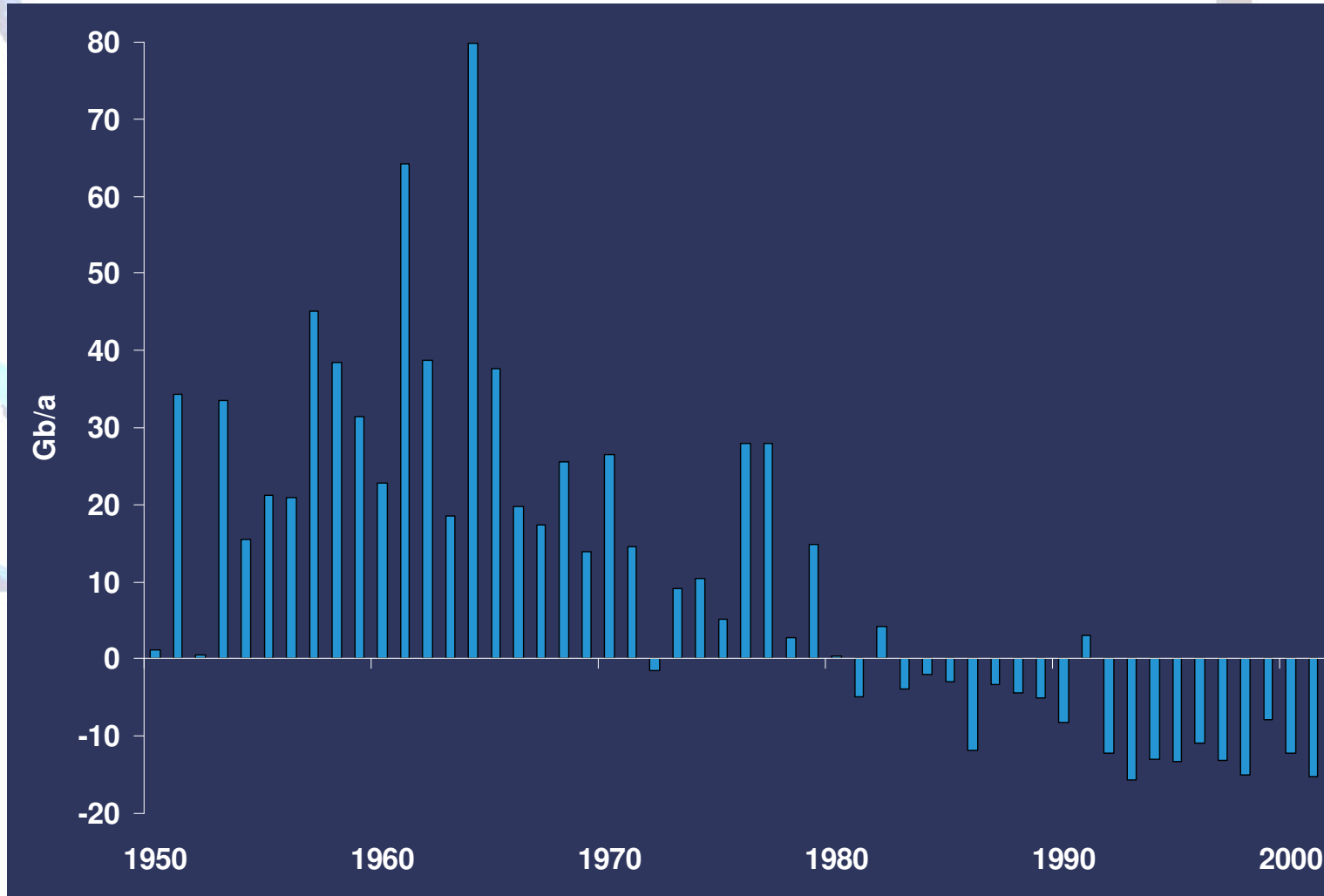
# World energy consumption



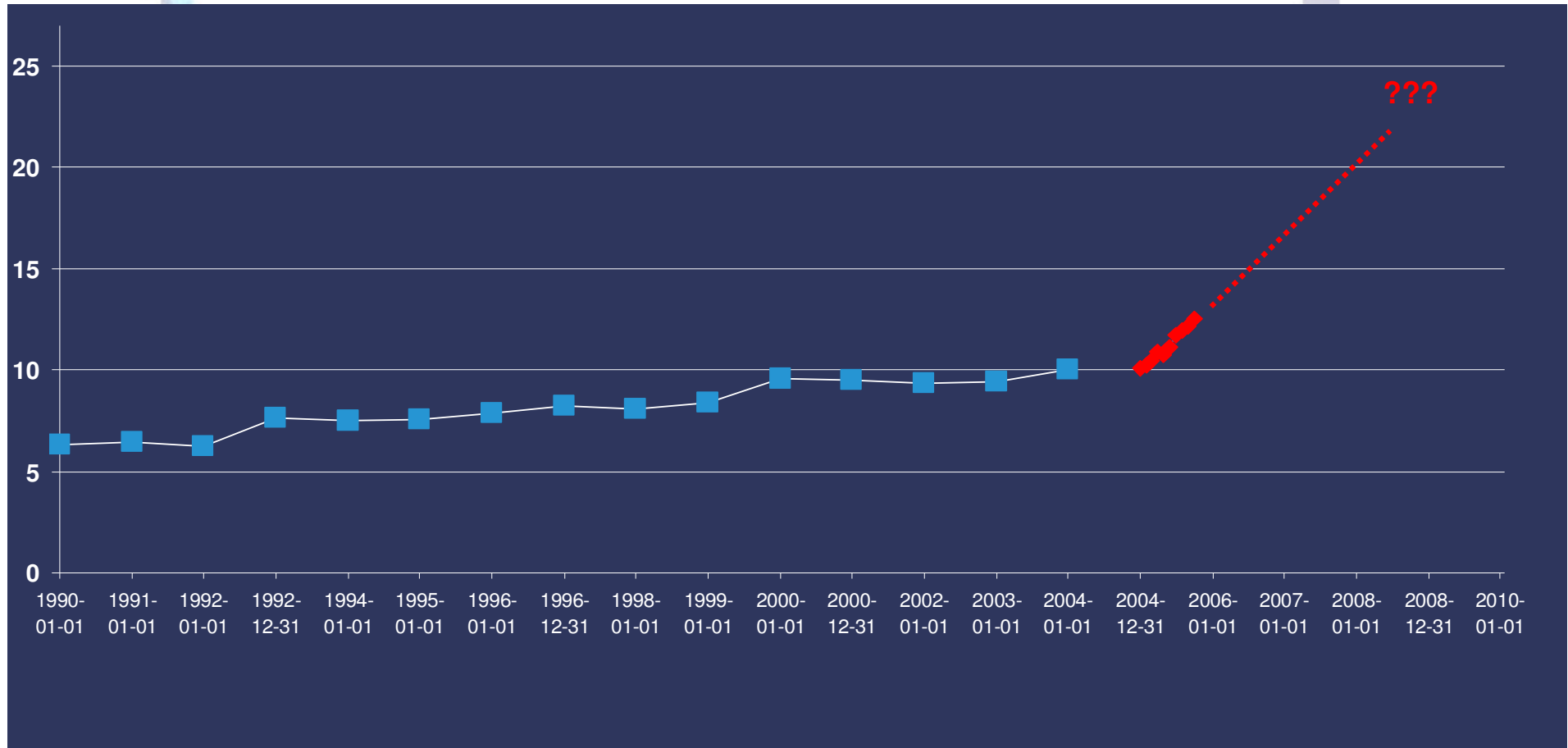
# World production of oil and NGL



# Balance discoveries – consumption (oil, world)



# Price for consumer petrol (Sweden)



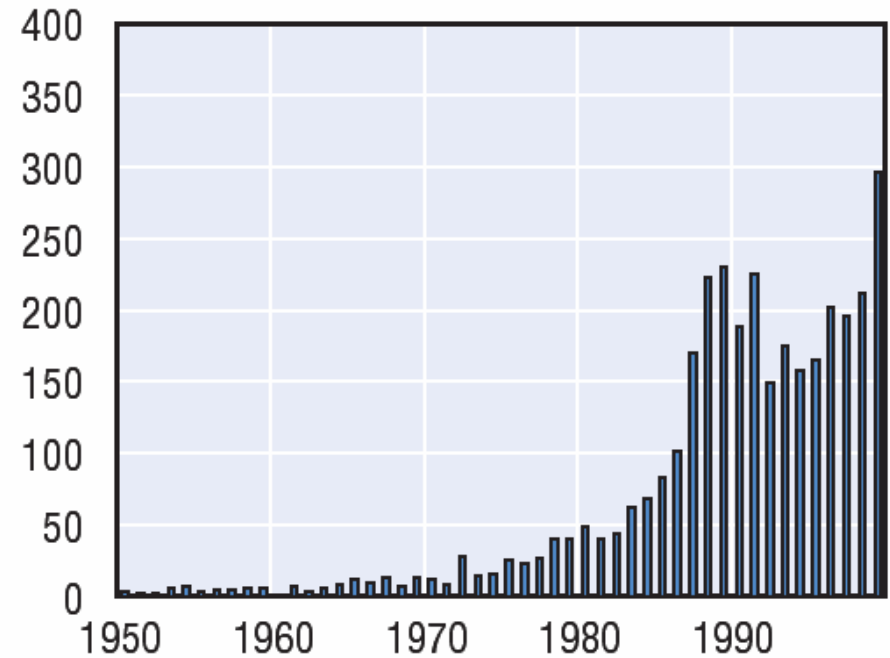
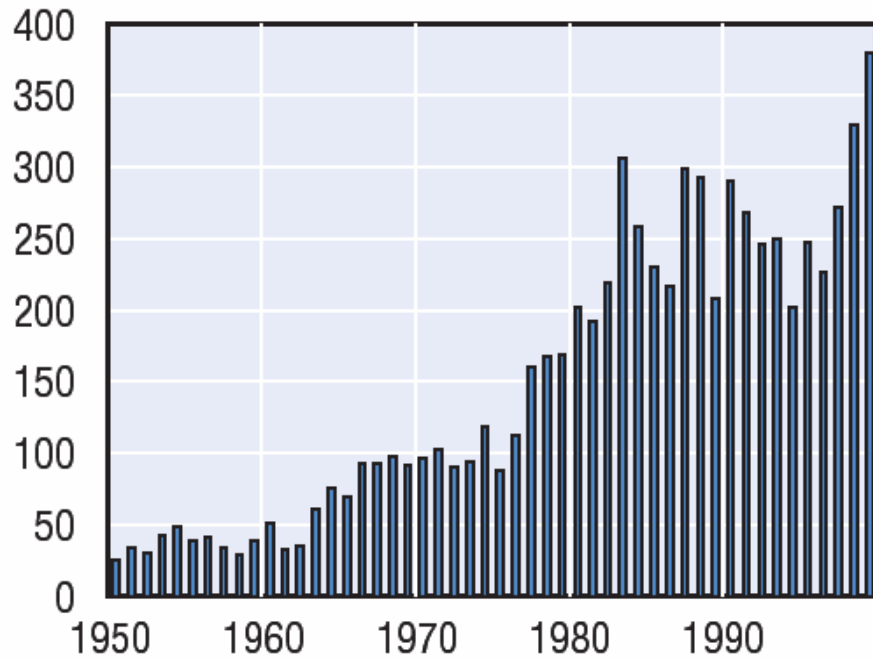
Source: OK, statistics

# Disasters

## Number of events

### Natural disasters

### Technological disasters

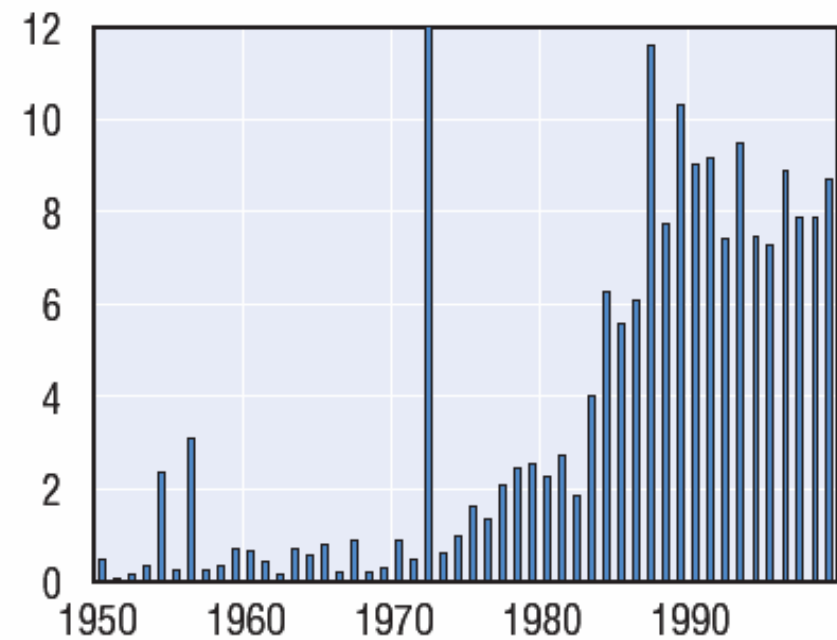
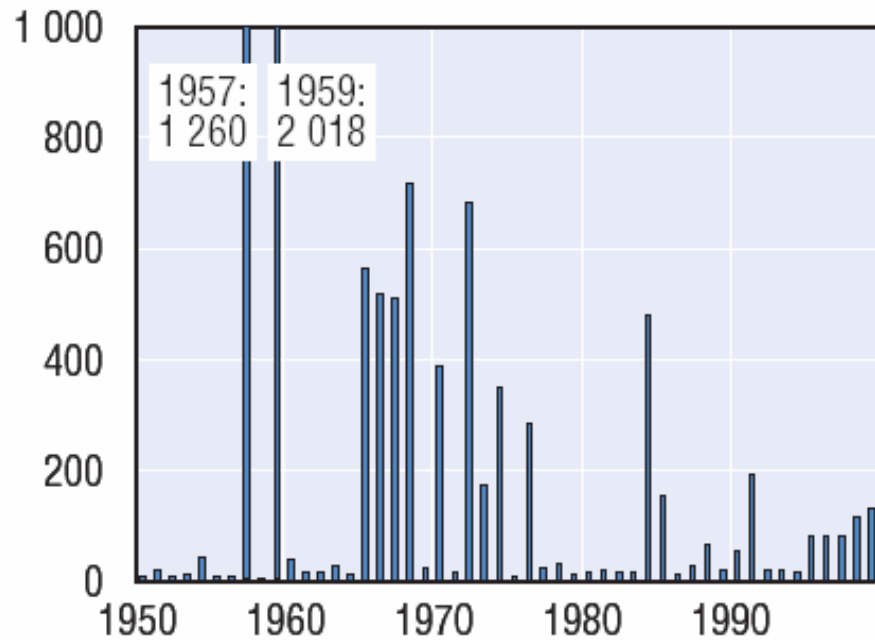


# Disasters II

Killed per annum, thousands

Natural disasters

Technological disasters



# Problems for States

- The resources needed to resist attacks and accidents, and to reduce vulnerability disappear out of the countries, to International markets, companies and organisations
- The possibilities to execute attacks and hit against the vulnerabilities penetrate inwards, down to individual level

# Widened Threat Picture

Global Threats

Non-state Actors

Military threats

Environmental Threats



# Asymmetric Conflicts

- Type of actors: States, or non-state (ethnic groups, organised criminals, terrorists etc.)
- Military means: Conventional weapons, weapons of mass destruction, information warfare
- View on losses: Is this an important restriction on warfare?
- Duration of war: Is it important to keep it short, or can it continue for a long time?

# Asymmetric Conflicts II

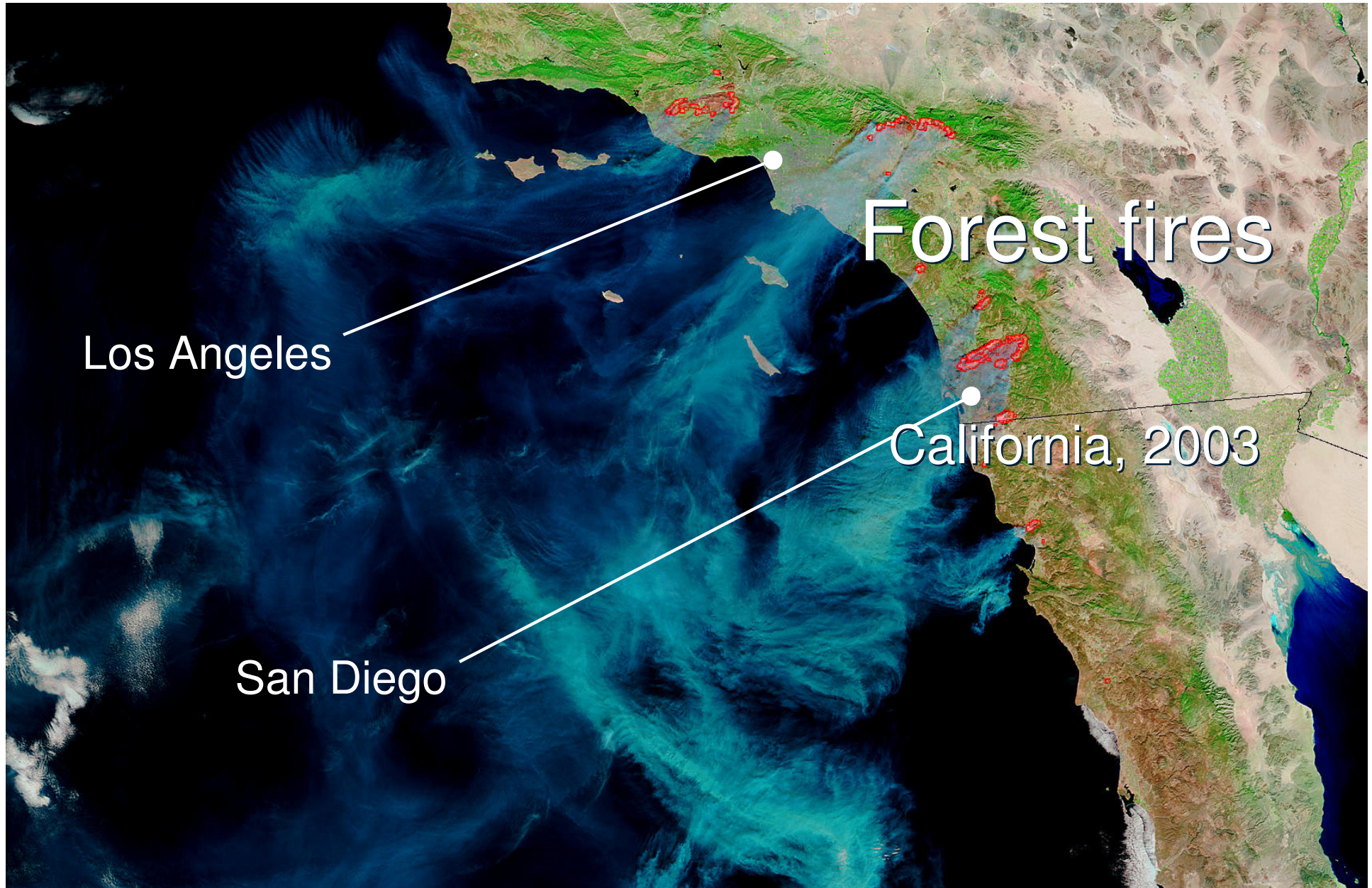
- Ethical limitations: Parties may have different views on legitimacy of types of warfare
- Operational goals: Is the foremost target the adversary's military units, or is the entire society, especially aiming at weak points
- Types of warfare: "Conventional" military operations, guerilla warfare, acts of terror etc.
- Type of combatant: Soldier (part of State army) or warrior (non-governmental organisations)

# Global heating

- Mean temperature increase (up to 10 degrees in Southern Europe?)
- Reduced precipitation in some regions
- Increased energy consumption for cooling
- Need for migration to the north in Europe

# More extrem weather

Hurricane Isabel, 2003



Los Angeles

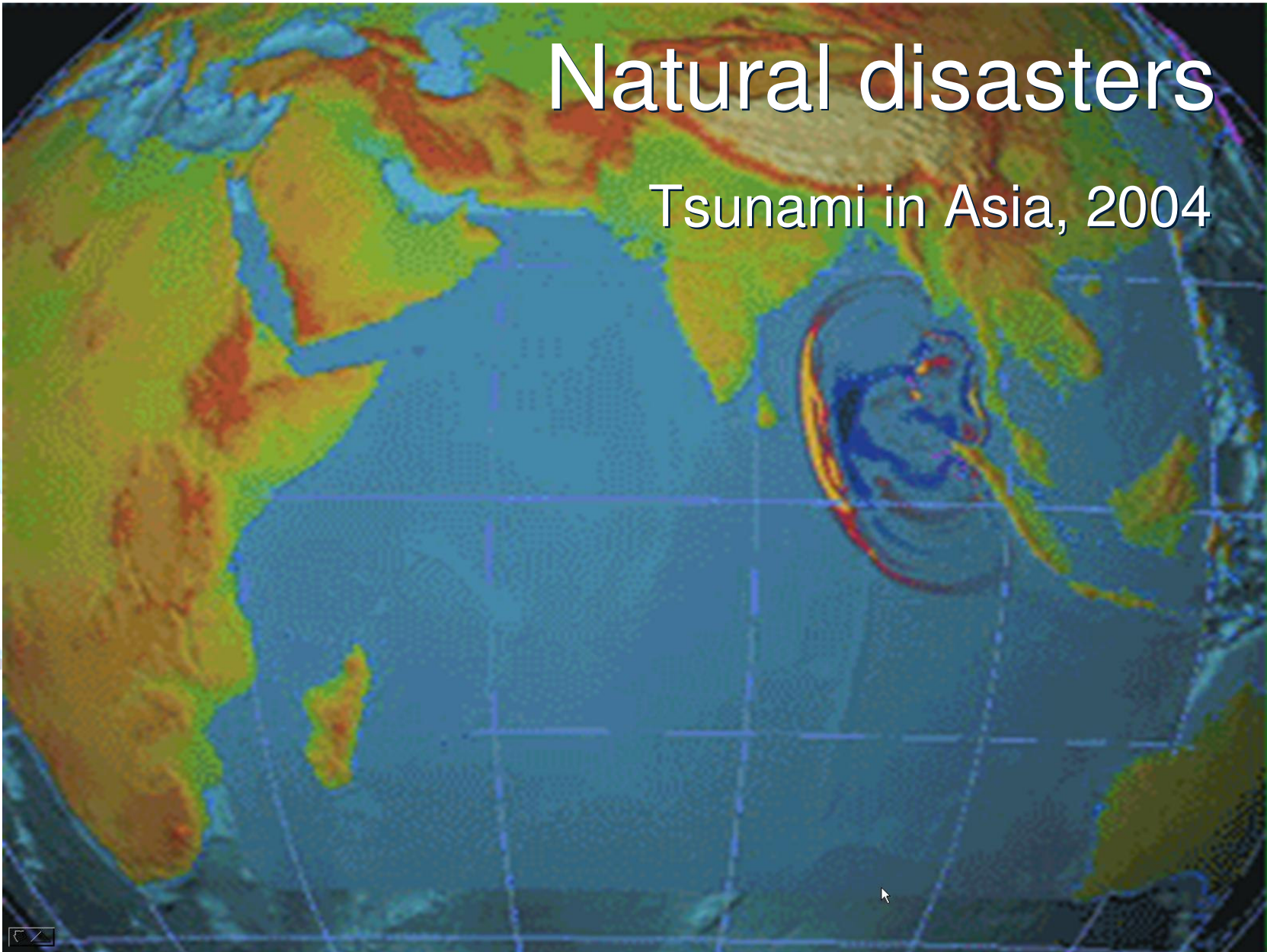
Forest fires

California, 2003

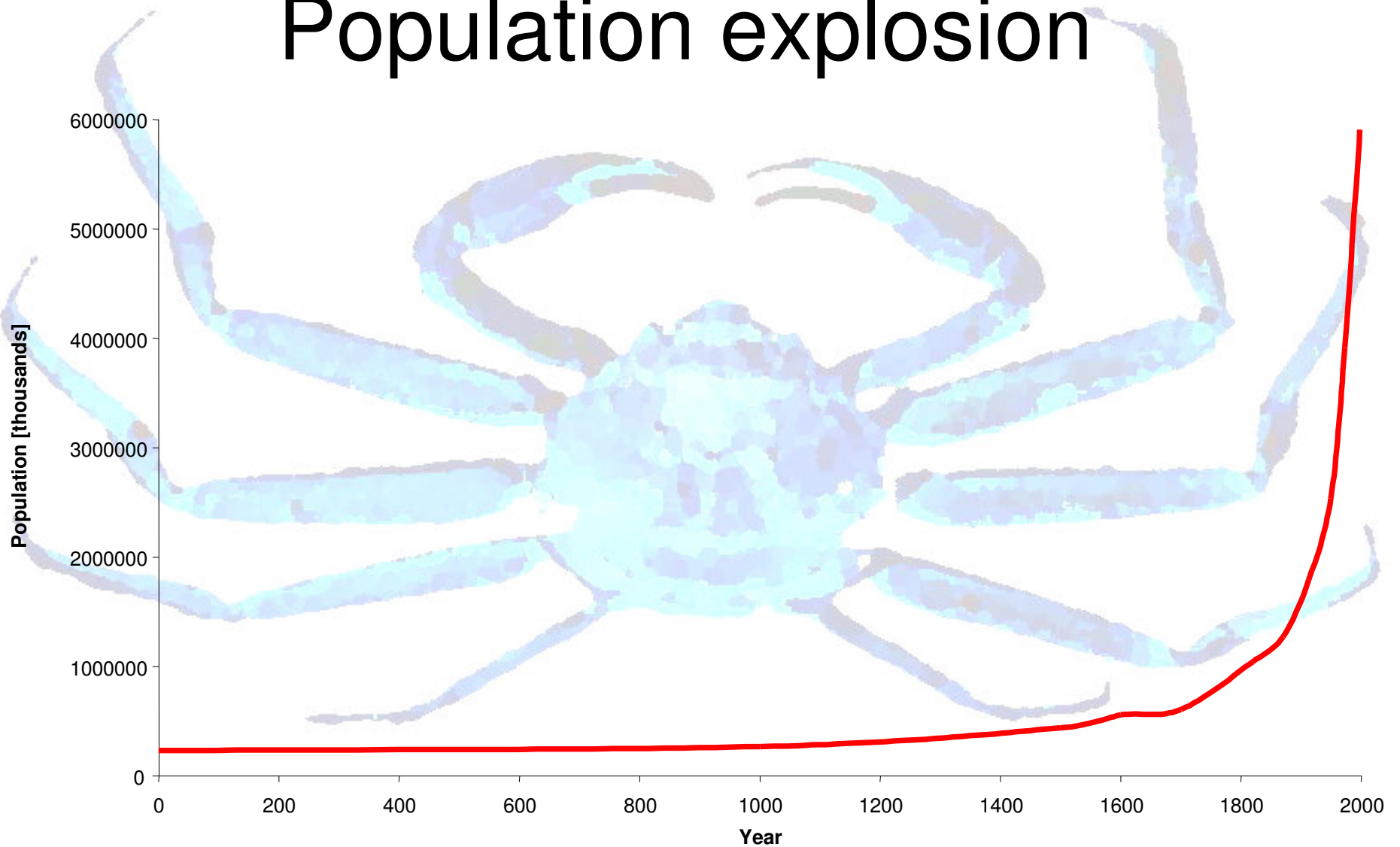
San Diego

# Natural disasters

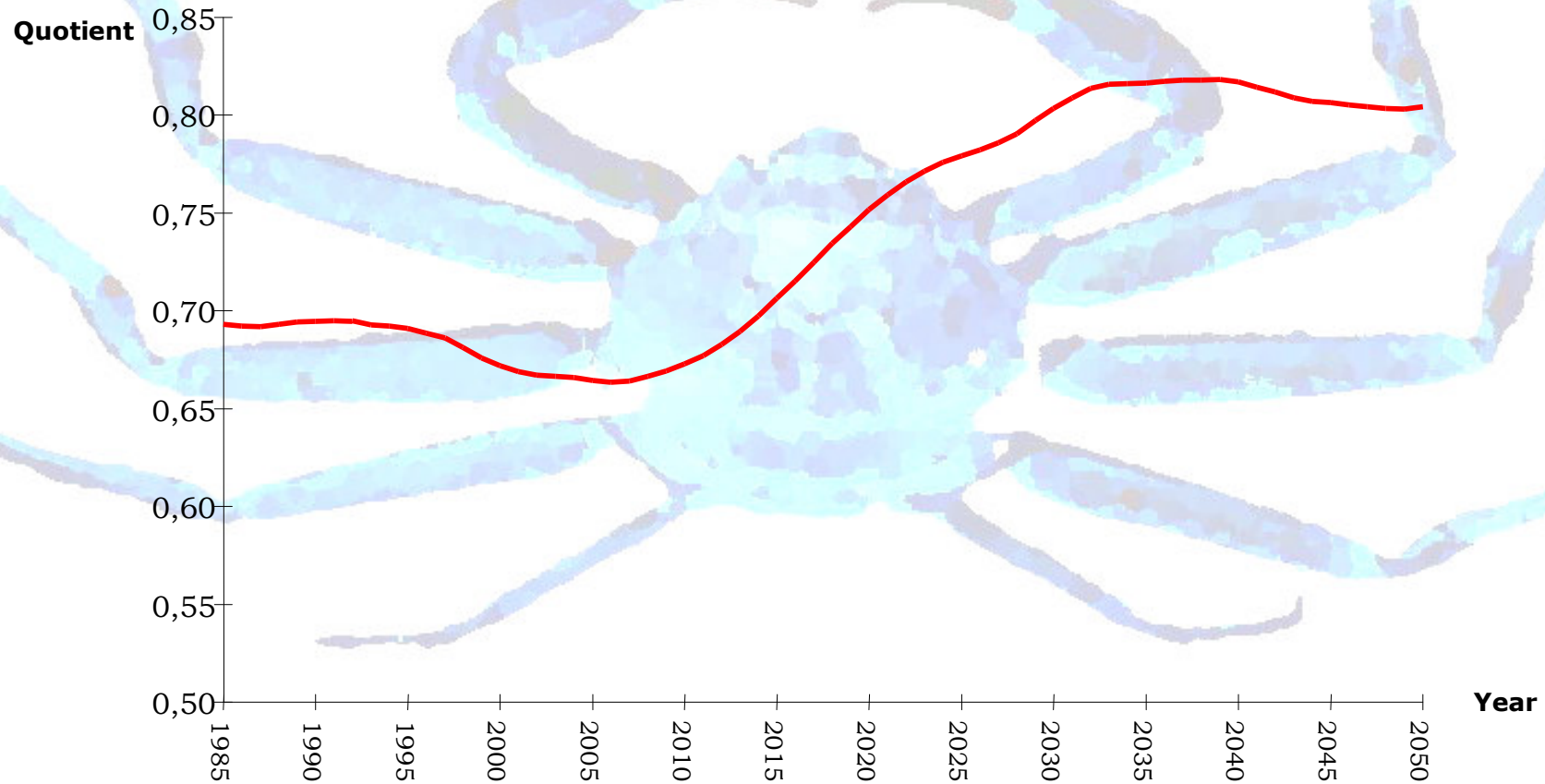
Tsunami in Asia, 2004



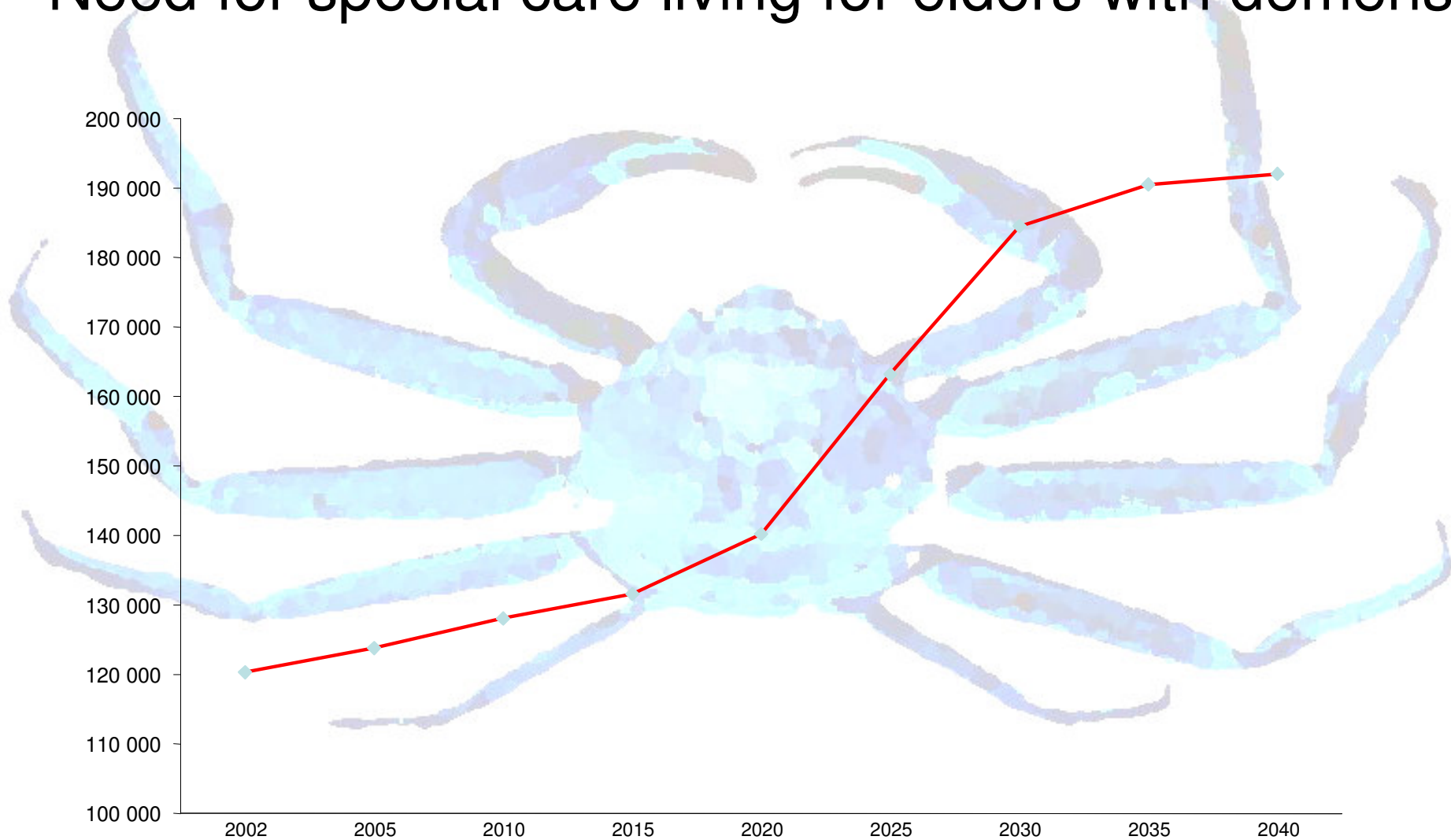
# Population explosion



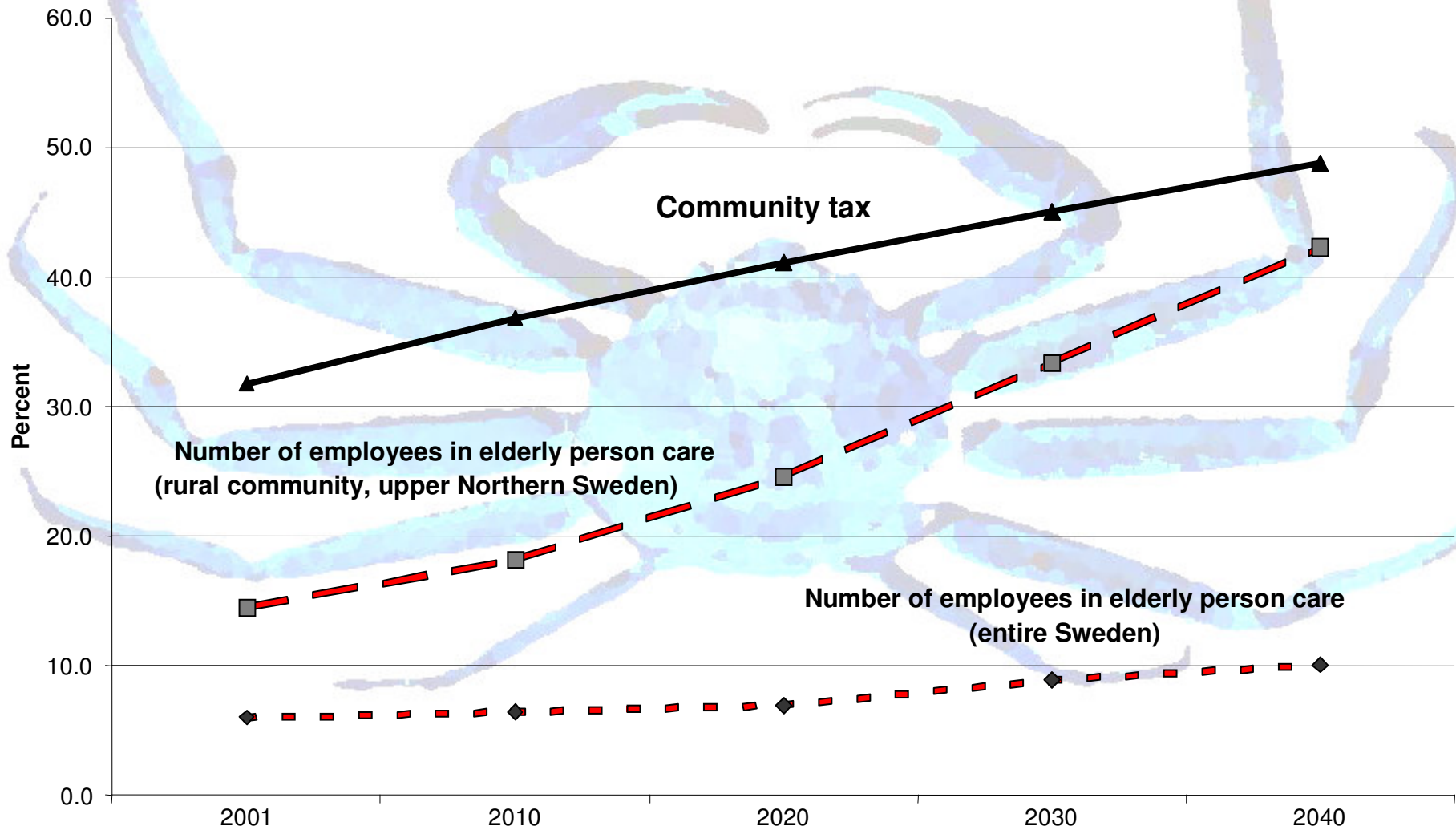
# Number of young and elders (“non-productive”) relative to population 19-64 years (Sweden)



# Need for special care living for elders with demens



# Prognosis for community tax etc.

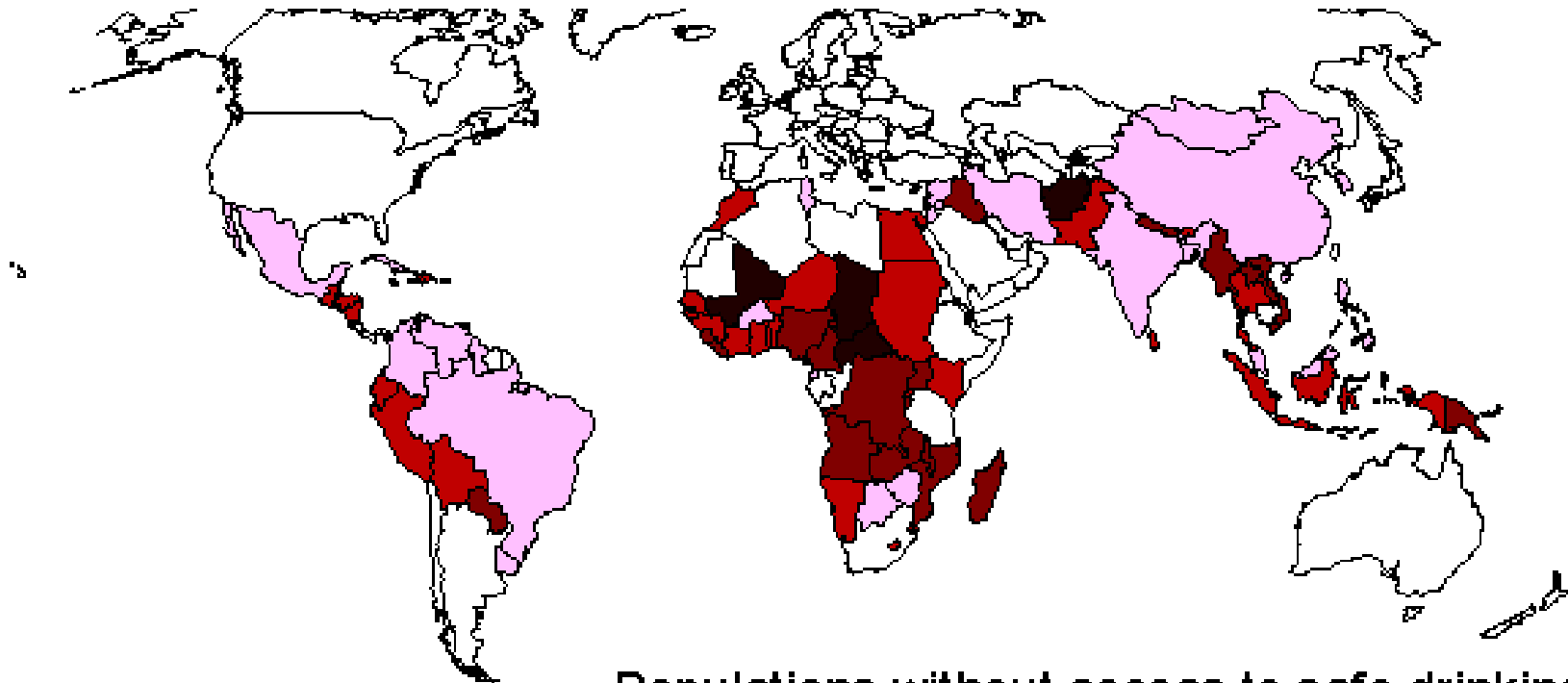


# Infectious diseases

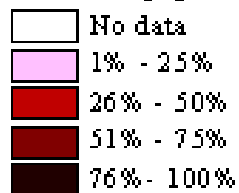
- Influenzas (new types, can cause pandemics)
- HIV
- BSE ("Mad cow disease")
- SARS
- MRSA – multi-resistant staphylococci
- Malaria
- Dengue (can cause dangerous hemorrhagic fever)
- West Nile fever (causes meningitis)

All spread  
by mosquitoes!

# Lack of potable water



Percent of population without access



**Populations without access to safe drinking water**

*from The World's Water  
The Biennial Report on Freshwater Resources  
(Gleick 1998)*

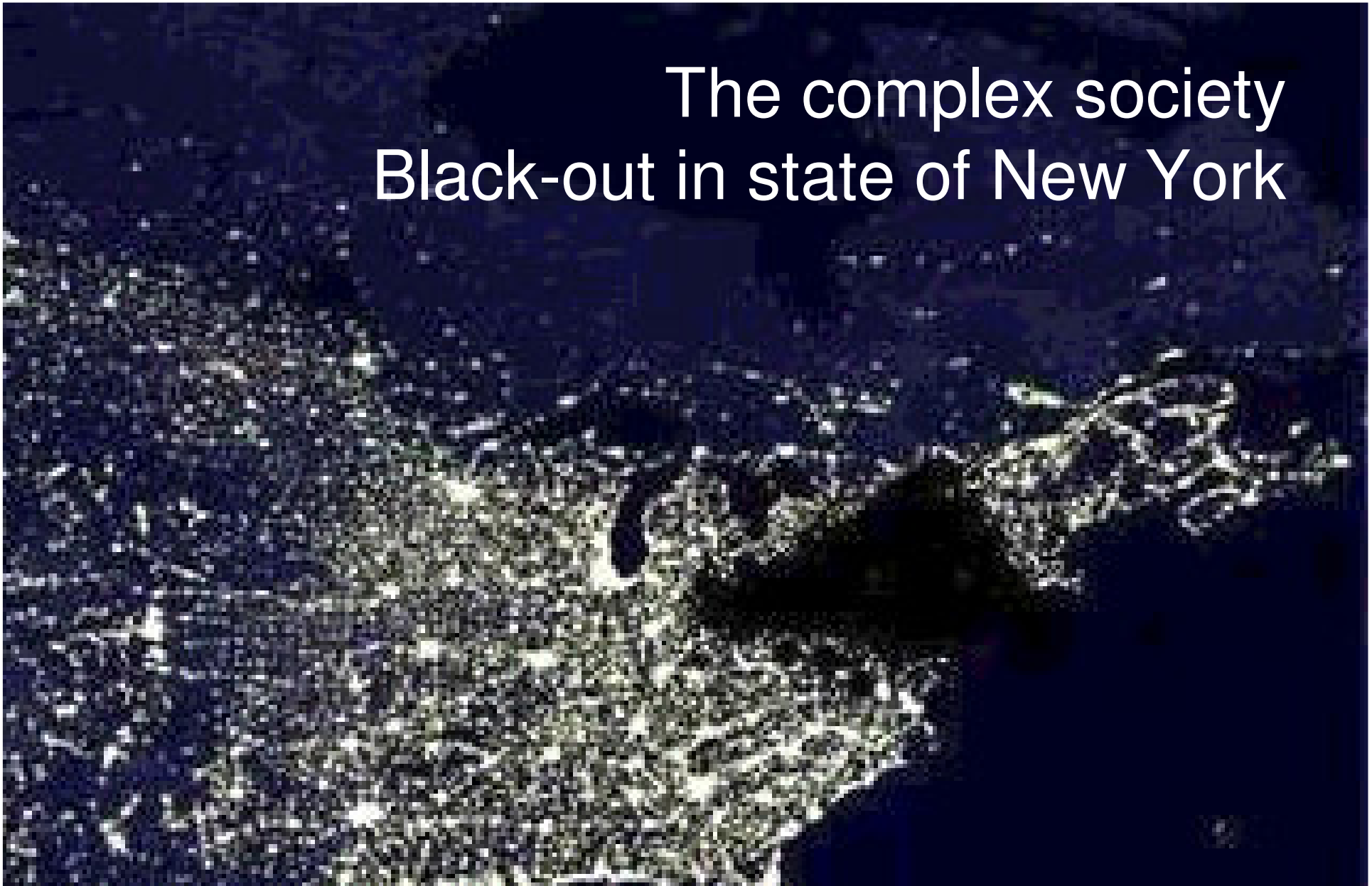
# The complex society



- Electric power grid
- Electronic communication
- Water and sewage
- Transport systems
- Financial systems

Mutual dependencies → vulnerability

# The complex society Black-out in state of New York



# The complex society

"It appears that a computer ran wild!"

