Munich RE

IUMI ZURICH 2010

Stock & Storage
An Underestimated Risk?

14 September

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CHALLENGES FOR THE MARINE CARGO BUSINESS

Focus on stock & storage

Source: Munich Re, Andreas Siebert, 2007

Marine & Property: Analogies?

- Yes, we are all agreed that in Marine everything is different!
- However: on second thoughts Marine Cargo insurance includes several coverage elements that have a clear overlap with Property business
- Pure storage in transit covers have changed to
  - extended warehousing (static storage)
  - stock throughput related storage
  - logistics related storage (allocation & distribution)

RECENT LOSS EXAMPLES

New Zealand – Coolstore fire

- Location: New Zealand, Tamahere
- Warehouse: Coolstore owned by local specialist operator
- Type: EPS coolstore; refrigerant: LNG
- Cargo interest: Cheese
- Cause of loss: fire, lasted 7 days
- Casualty: 1 fireman killed, 7 injured in the initial explosion of the refrigerant
- Insured losses: property damage: 3 m USD; “cargo” damage: 23 m USD
- Special cover feature: Cheese was in store for up to 2 years as it matured – all the while covered under the cargo policy!

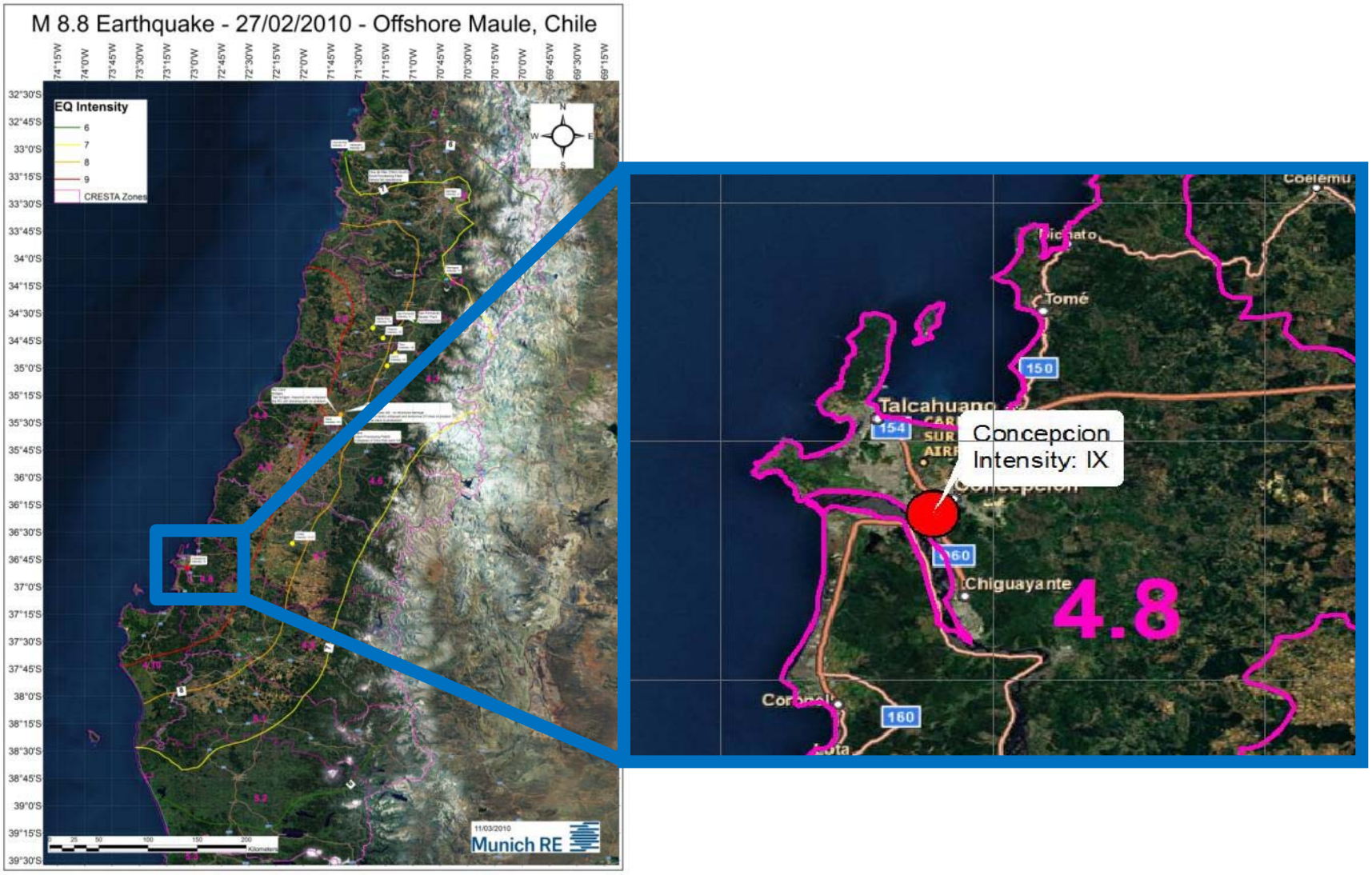
Australia – Storage depot for groceries

- Location of loss: Australia
- Cargo interest: groceries and other content
- Cause of loss: hailstorm broke the roof – roof with asbestos
- Problem: Entire contents of the warehouse have been condemned (no one is able to guarantee any of the contents are not contaminated by asbestos)
- Casualty: no
- Insured losses: property damage: 2 m USD; destroyed stock: 54 m USD
- Special cover feature: Property policy, but cover was also broked as a marine cargo risk, generating keen interest among the Cargo underwriting community.

Chile – Storage depot for technical products

- Location of loss: Chile
- Cargo interest: sensitive technical products in warehouse
- Cause of loss: Earthquake (27th of February, 2010) and secondary effects
- Casualty: no
- Insured losses: property damage: low; destroyed stock: total loss
- Special feature: although the warehouse “survived” the disastrous earthquake, the pallets failed and the value goods have been destroyed!

Earthquake and Tsunami, Feb. 2010 in Chile



Talcahuano: Typical tsunami loss

Source: Munich Re - RMS Recon Trip, March 2010

Talcahuano: Typical earthquake/tsunami loss

Source: Munich Re - RMS Recon Trip, March 2010

Talcahuano: Typical warehouse loss

Source: Munich Re - RMS Recon Trip, March 2010

Content is highly vulnerable to earthquakes

Source: Munich Re, Andreas Siebert, 2007

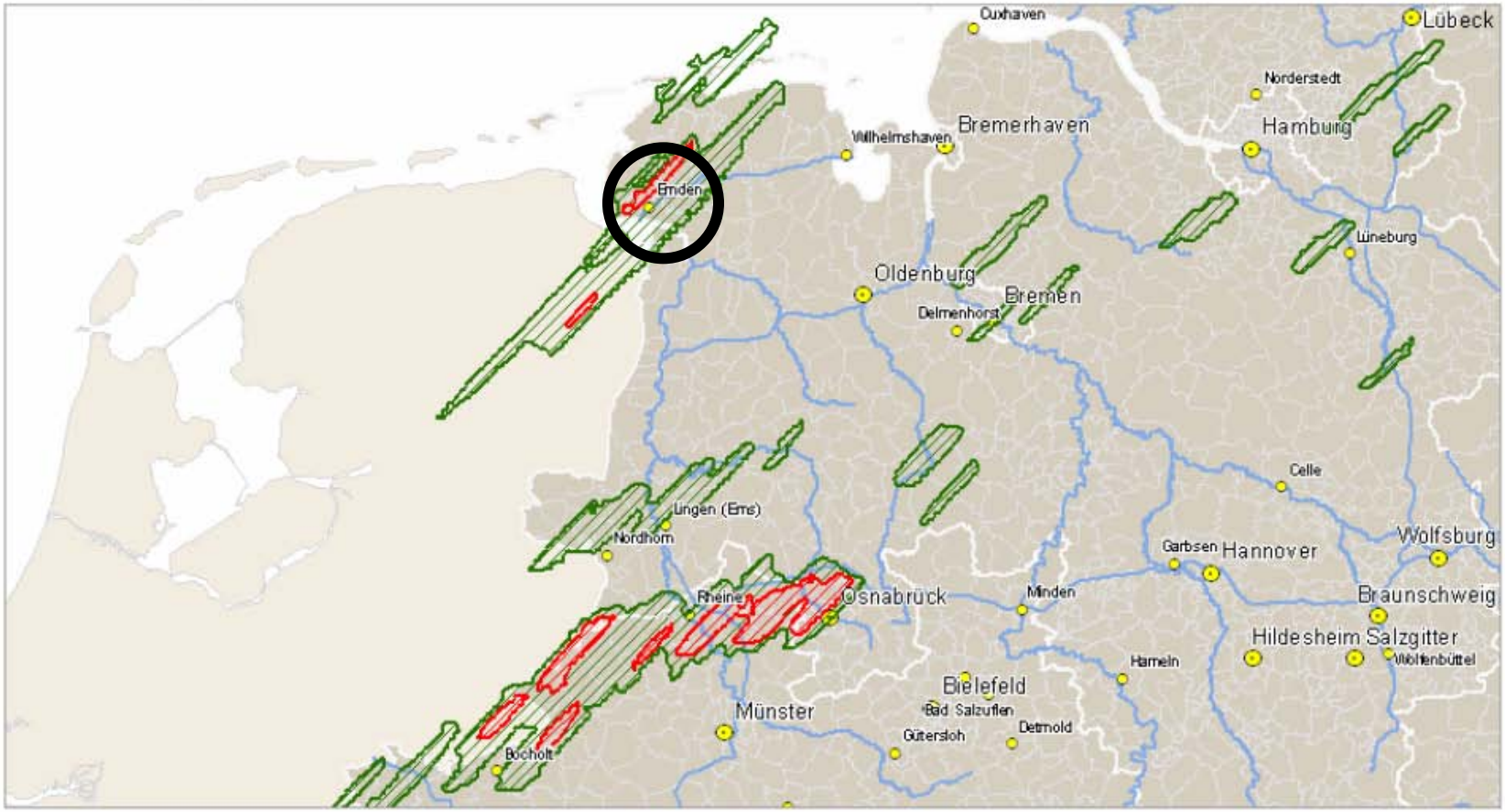
Germany – Vehicle Storage depot

- Location of loss: Germany, Emden
- Cause of loss: Hailstorm (22nd of June, 2008)
- Cargo interest: vehicles
- Casualty: no
- Insured losses: destroyed stock: 35.000 cars, approx. 108 m USD
- Special feature: typical “unexpected” accumulation loss in a low hailstorm hazard area!

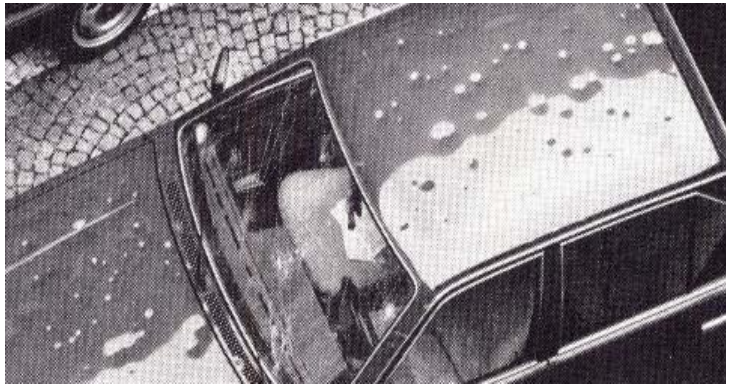
Marine Accumulation Scenarios
High exposures in harbours (car storage areas)

Source: Google Earth, 2010

Emden – Meteorological situation in June 2008



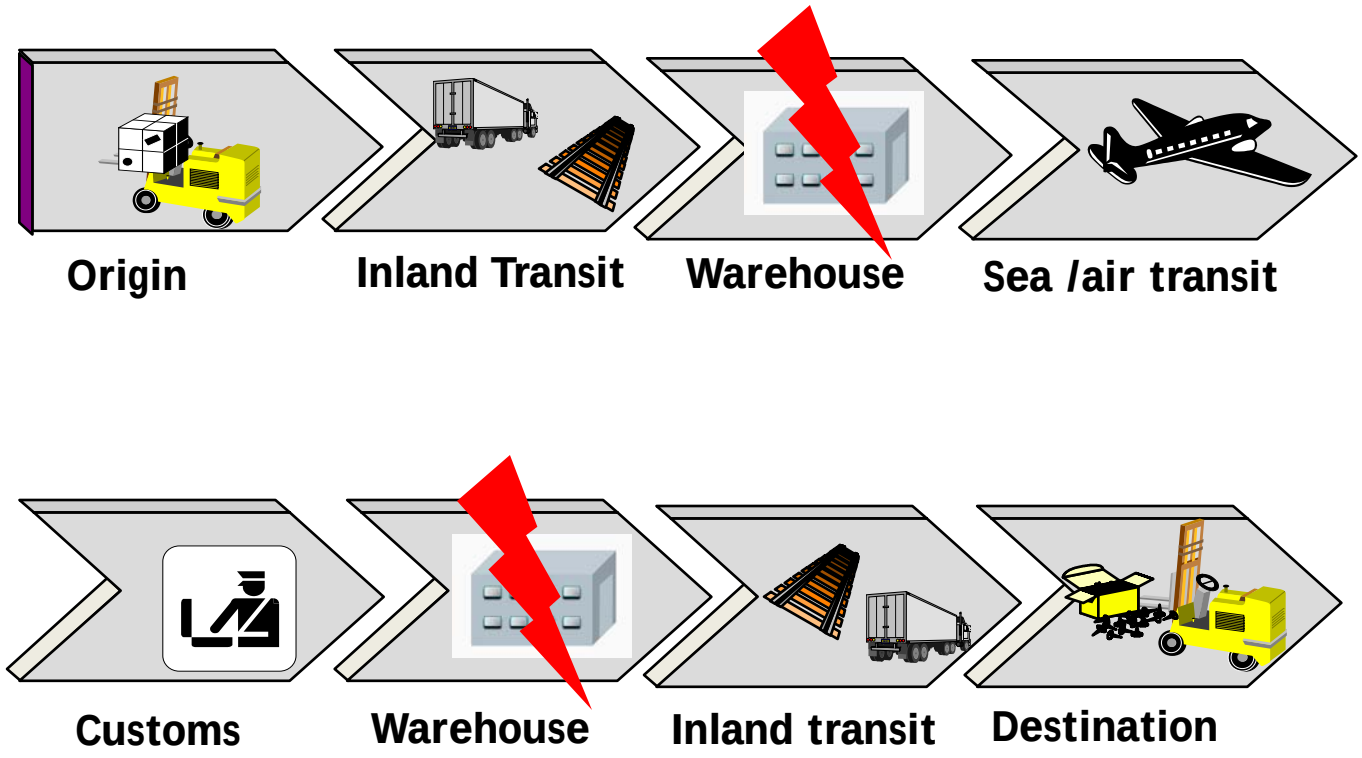
Emden – Hailstorm loss (35.000 cars affected)



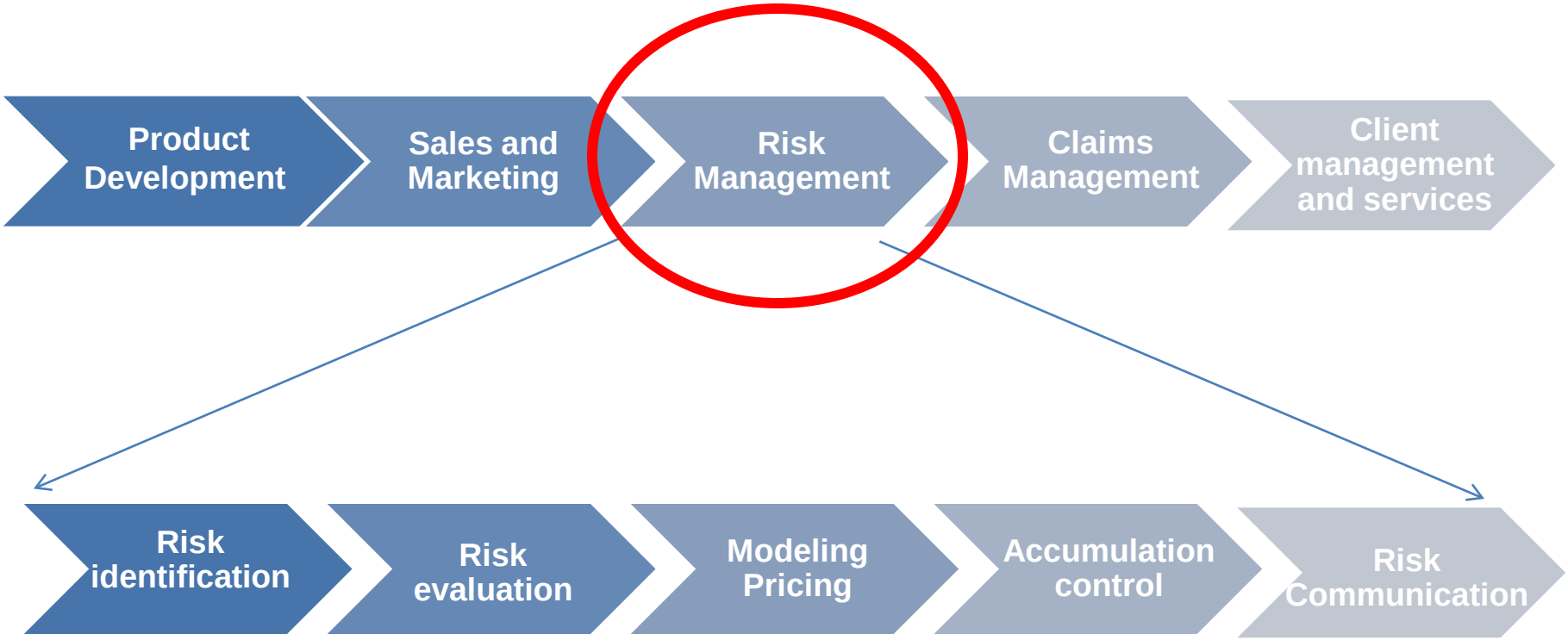
Sources: Munich Re

LESSONS LEARNT

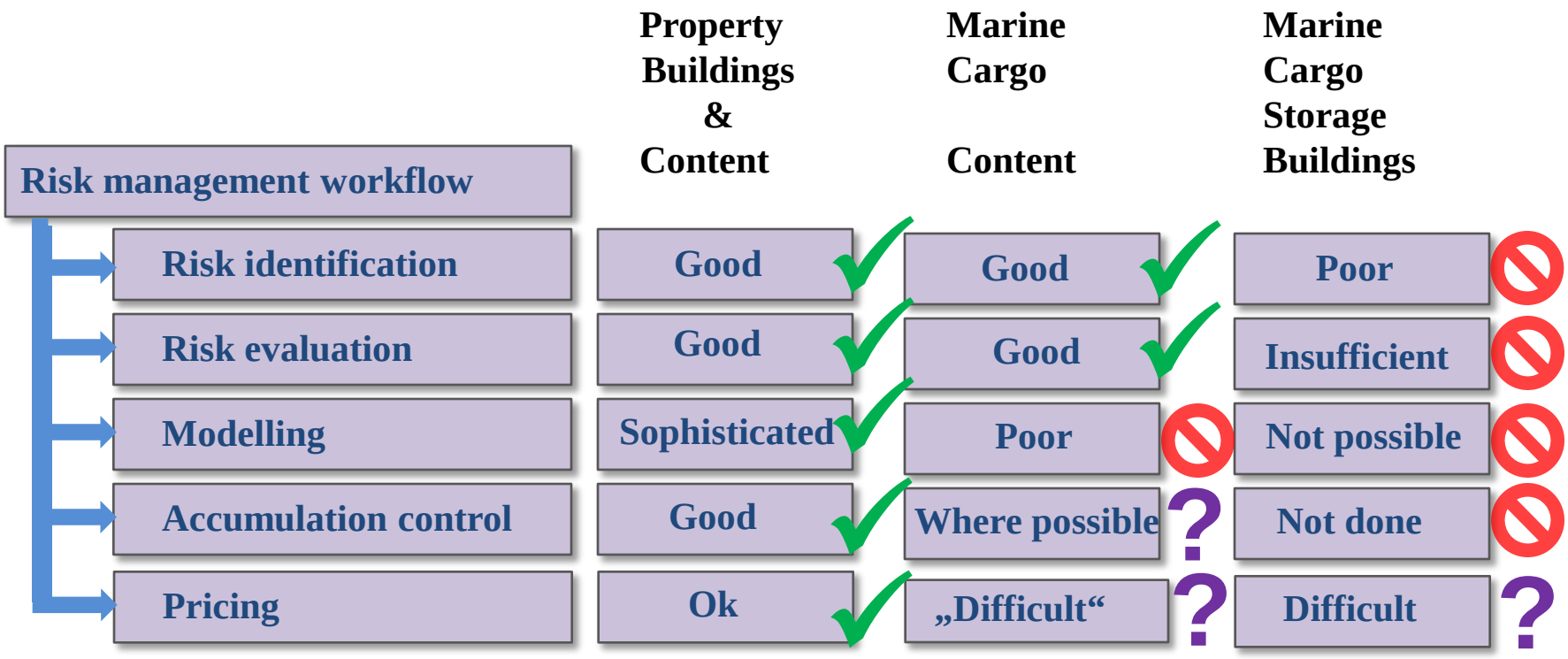
Definition of the transit chain



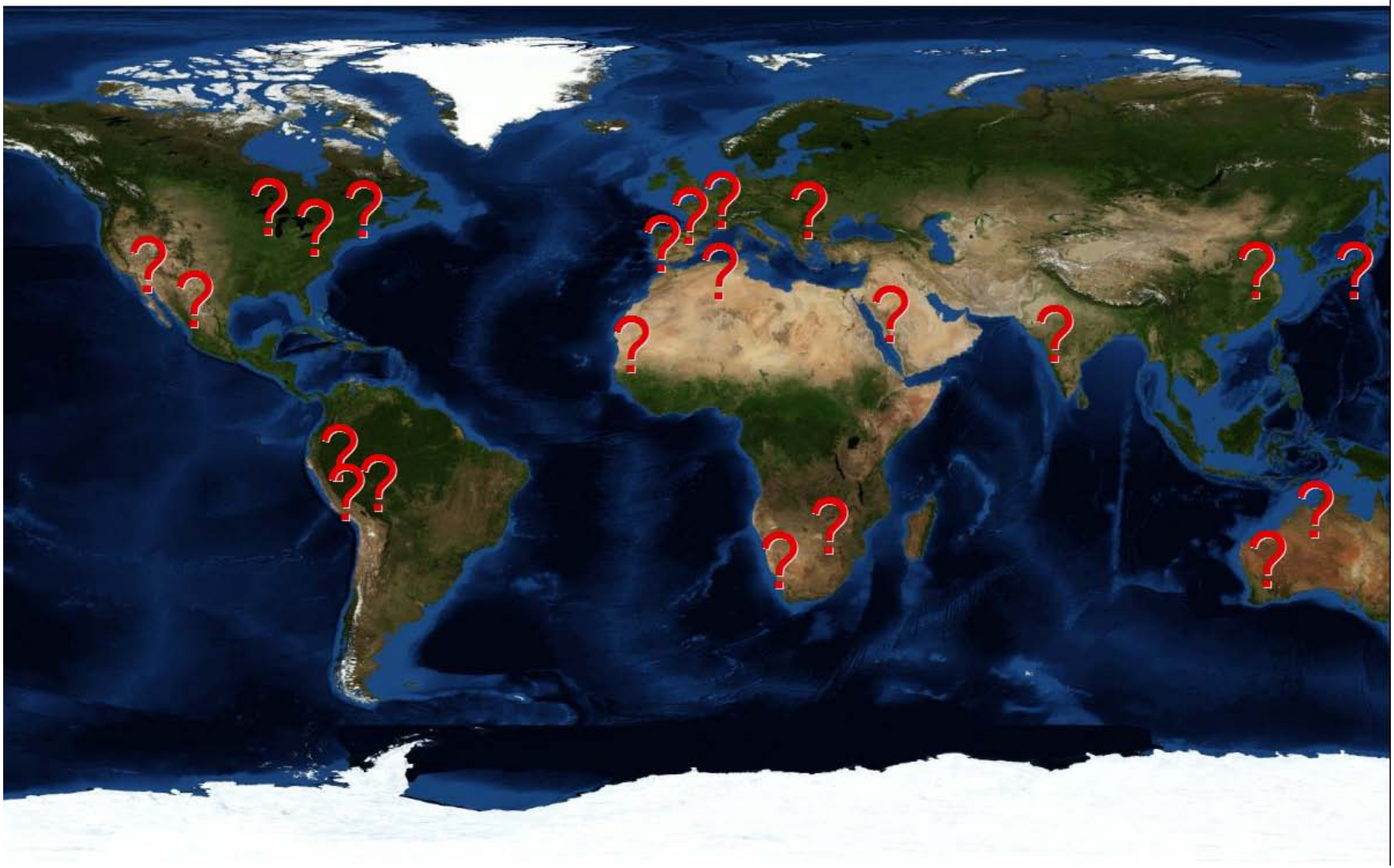
Value chain in the insurance industry



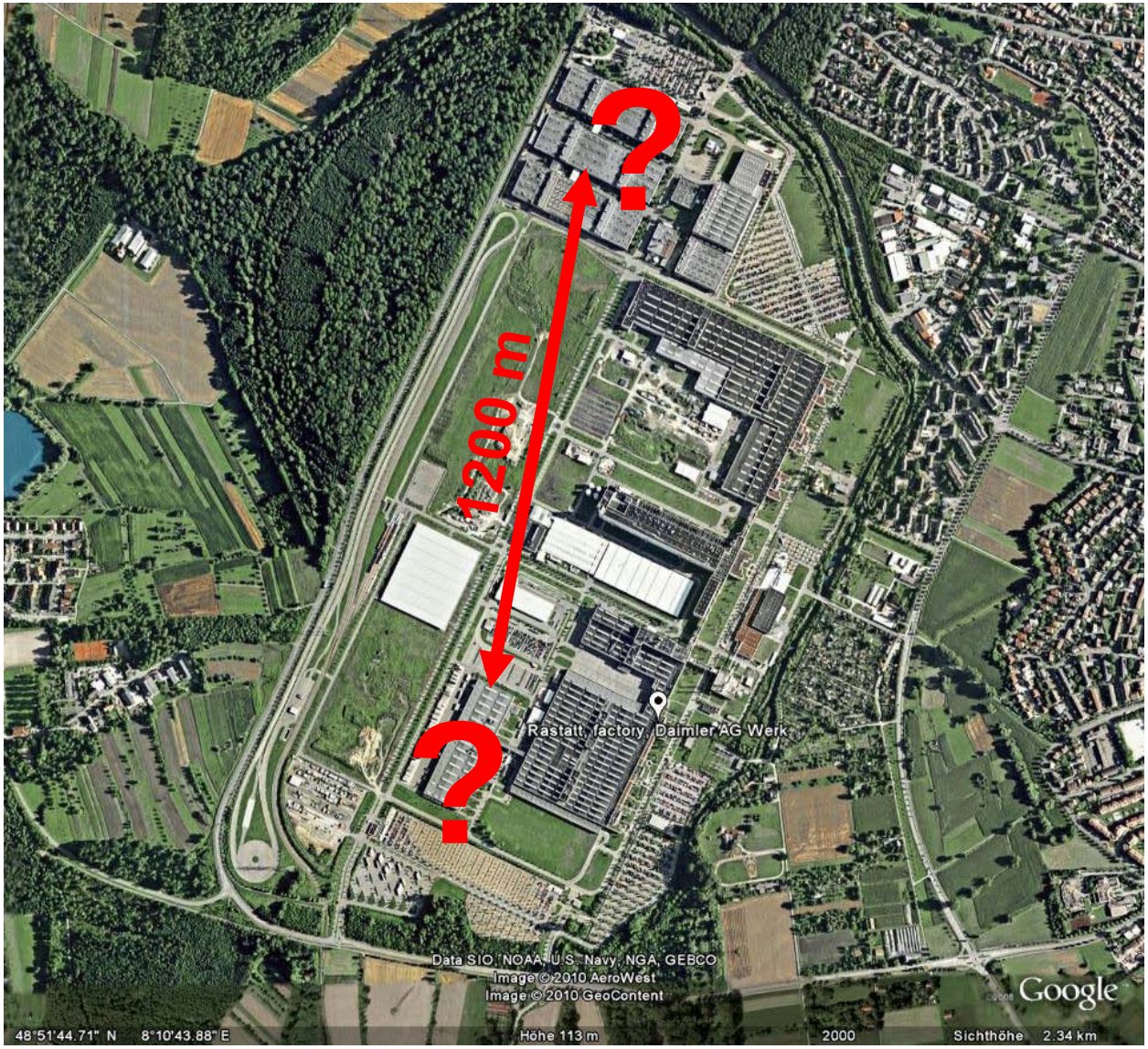
Risk management process
Comparison Property and Marine (Cargo)



Unknown risk locations (global scale)

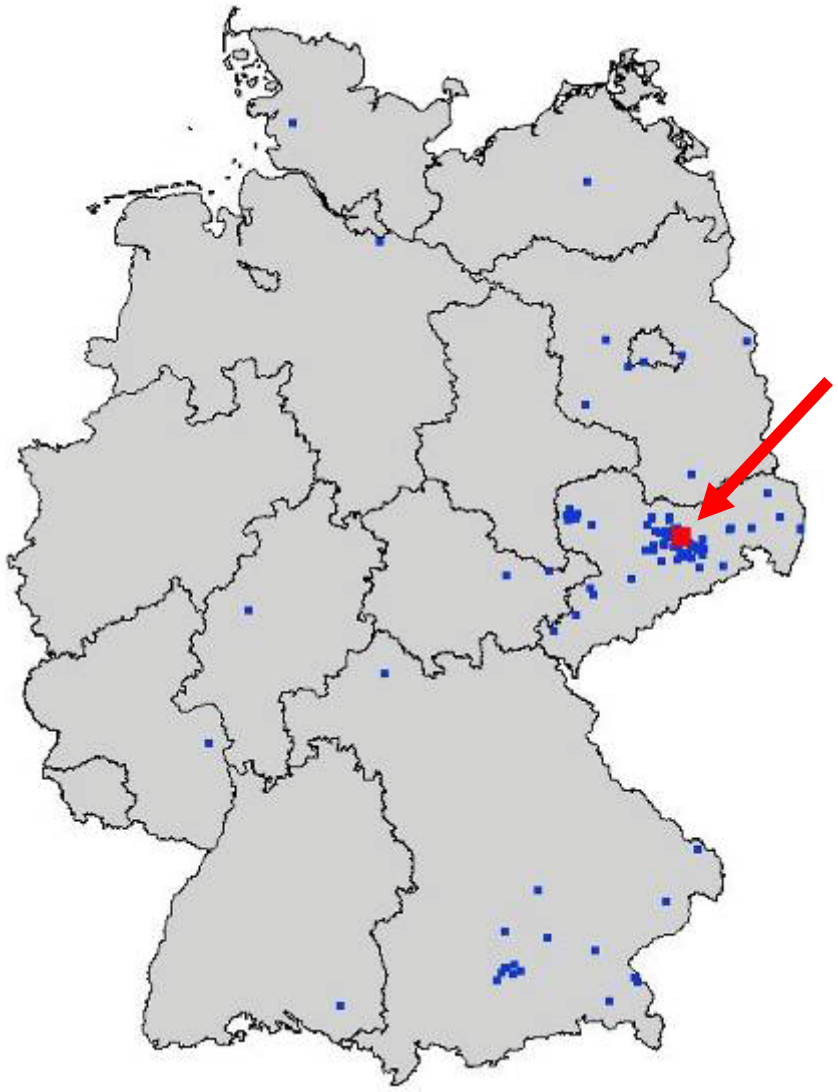


Unknown risk locations (local scale)



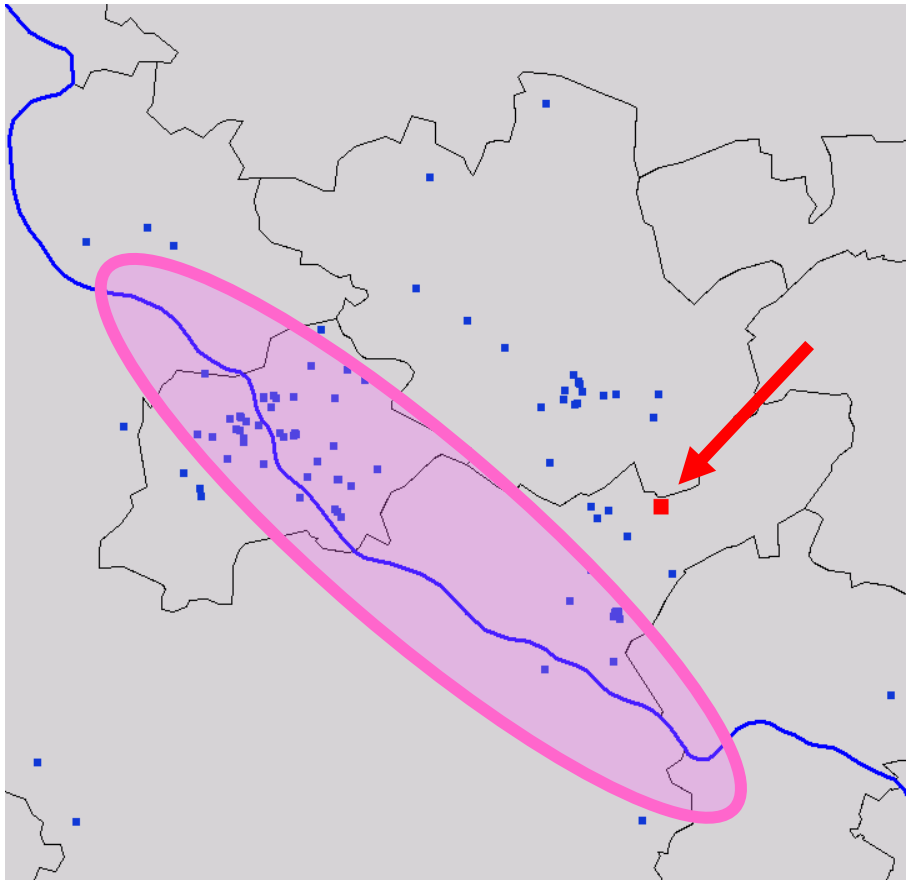
Source: Google Earth, 2010

Unknown accumulation
One mailing address, but many locations



Aggregated

Single risks



Unknown accumulation
One warehouse, several addresses

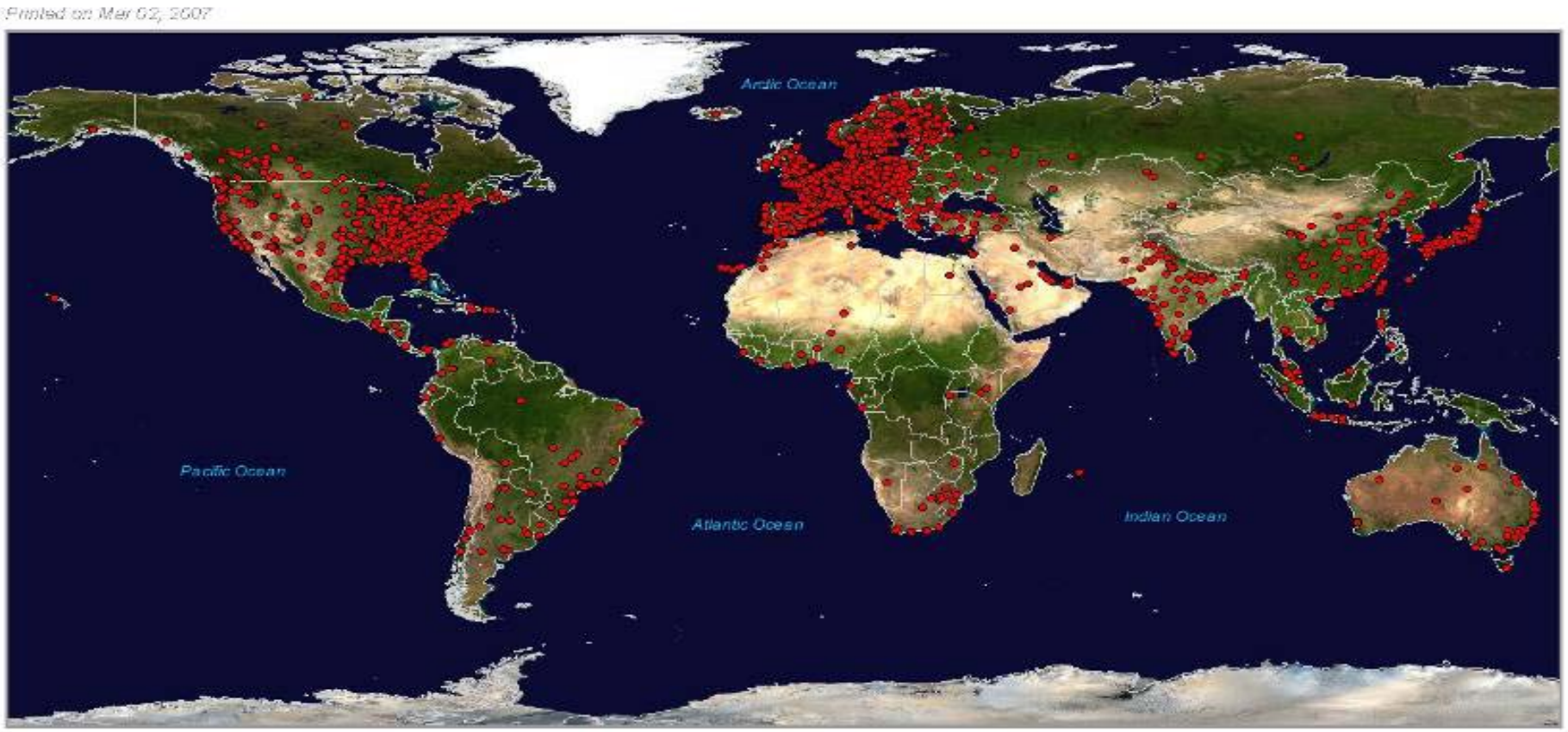
Source: Google Earth, 2010

Lessons learnt

- YES, Stock and storage risks are underestimated!
- Highly exposed to fire and natural perils
- Potential impact of warehouse quality often not sufficiently taken into account or even ignored
- What is often missing or to be improved in Marine Cargo risk management:
  - Systematic capturing of risk locations
  - Non-homogeneous data make risk assessment difficult or impossible
  - This leads to poor risk modelling and pricing capabilities
  - Unreliable accumulation control processes

CONSEQUENCES AND SOLUTIONS

Requirements for risk modeling: geocoded risks



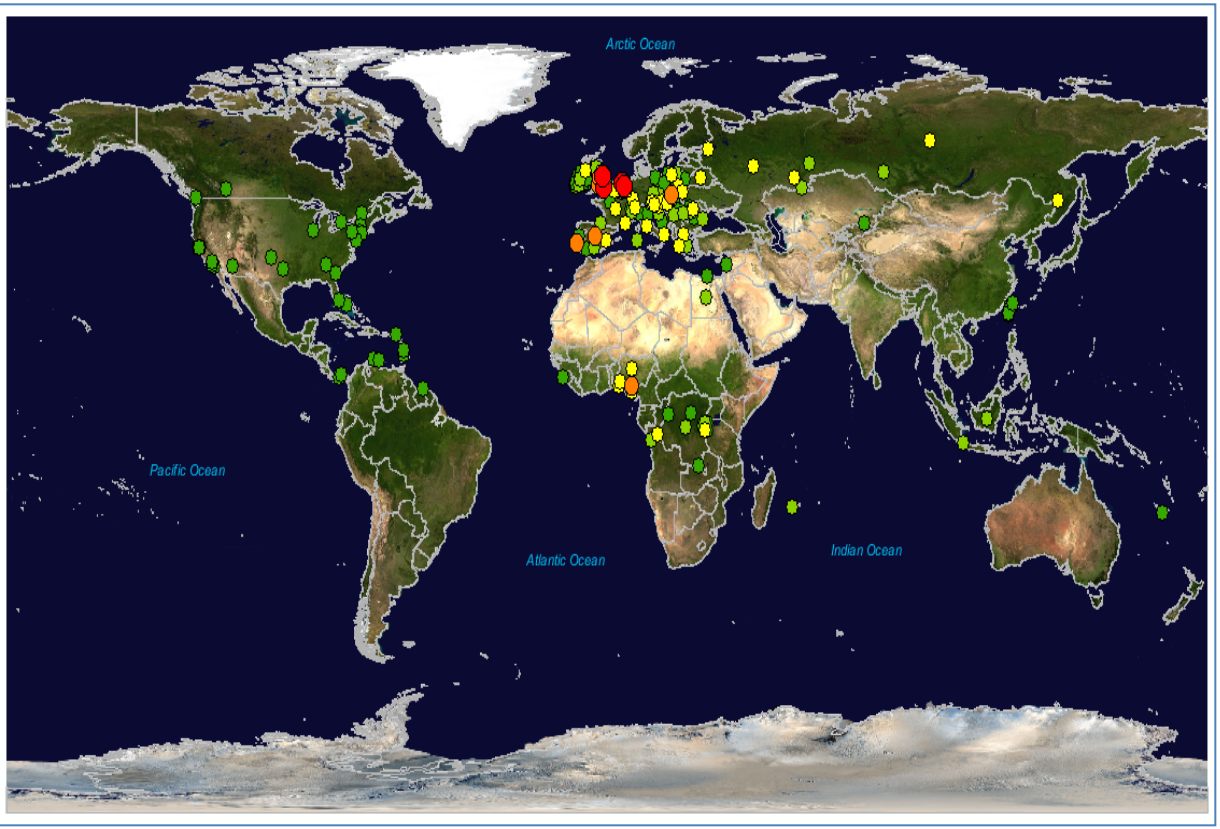
Risk locations are available! Ask for them!

Source: Google Earth, 2010

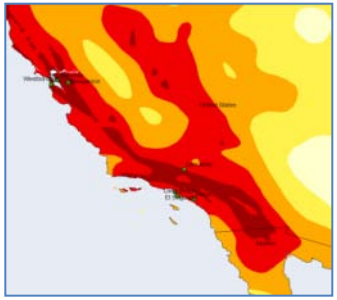
Use all sources for a holistic risk assessment

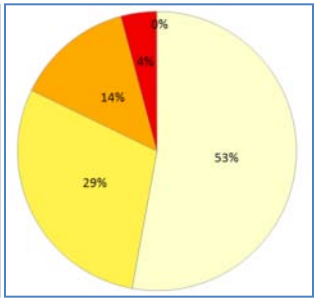
Source: Google Earth, 2010

Geocoded risks allow a better risk assessment



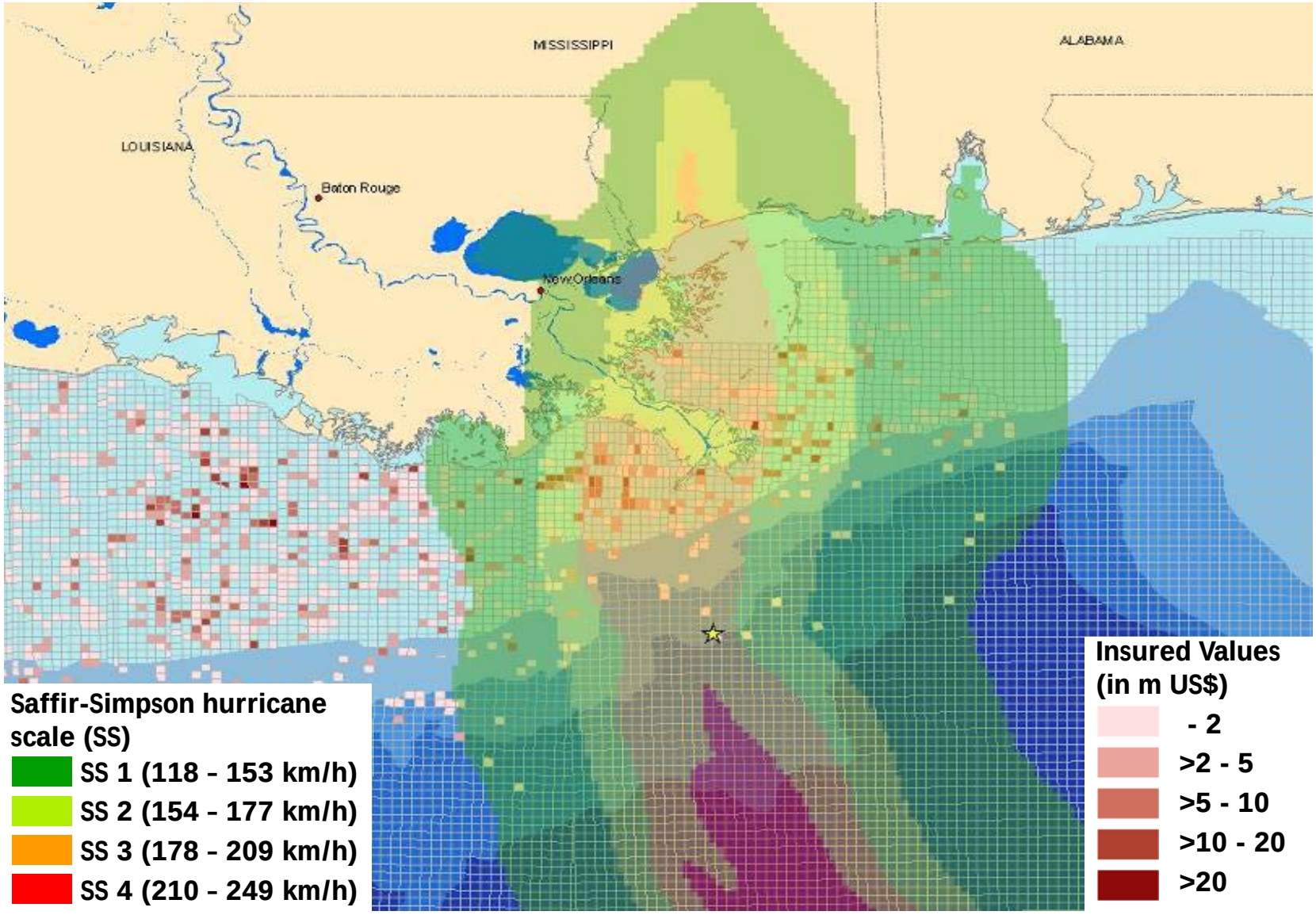
Quantitative analysis of exposed risk locations





EQ	Locations	Sum PD TSI	Loading
Zone 0	120	7.163.044.720	0
Zone 1	70	3.970.989.382	50
Zone 2	43	1.849.545.546	100
Zone 3	17	556.629.741	500
Zone 4	4	7.922.628	1000
Sum	**254**	**13.548.132.017**	

Geocoded risks allow a better risk modeling



Consequences and solutions

- Talk to the insured, there is much more risk information available, than we expect
- Get broker to obtain relevant information
- Make use of free available data sources
- Have a 360° risk management view for a holistic risk assessment

You must occasionally act like a Property underwriter, to be a successful Marine underwriter!

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Thank you!

14 September

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Munich RE

Backup

Die GPS Koordinaten für das Hotel Helmhaus lauten:

47°22'08.29" N

8°32'39.26" E