Swiss Re

Trends in Geo Intelligence

Geo Risk Seminar, 6th Sept. 2016, London

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Geo Intelligence (GeoInt) & my focus

Geospatial Intelligence is an intelligence discipline comprising the exploitation and analysis of geospatial data and information to describe, assess, and visually depict physical features [...] .

Geospatial Intelligence data sources include imagery and mapping data [...]that have locations on earth.

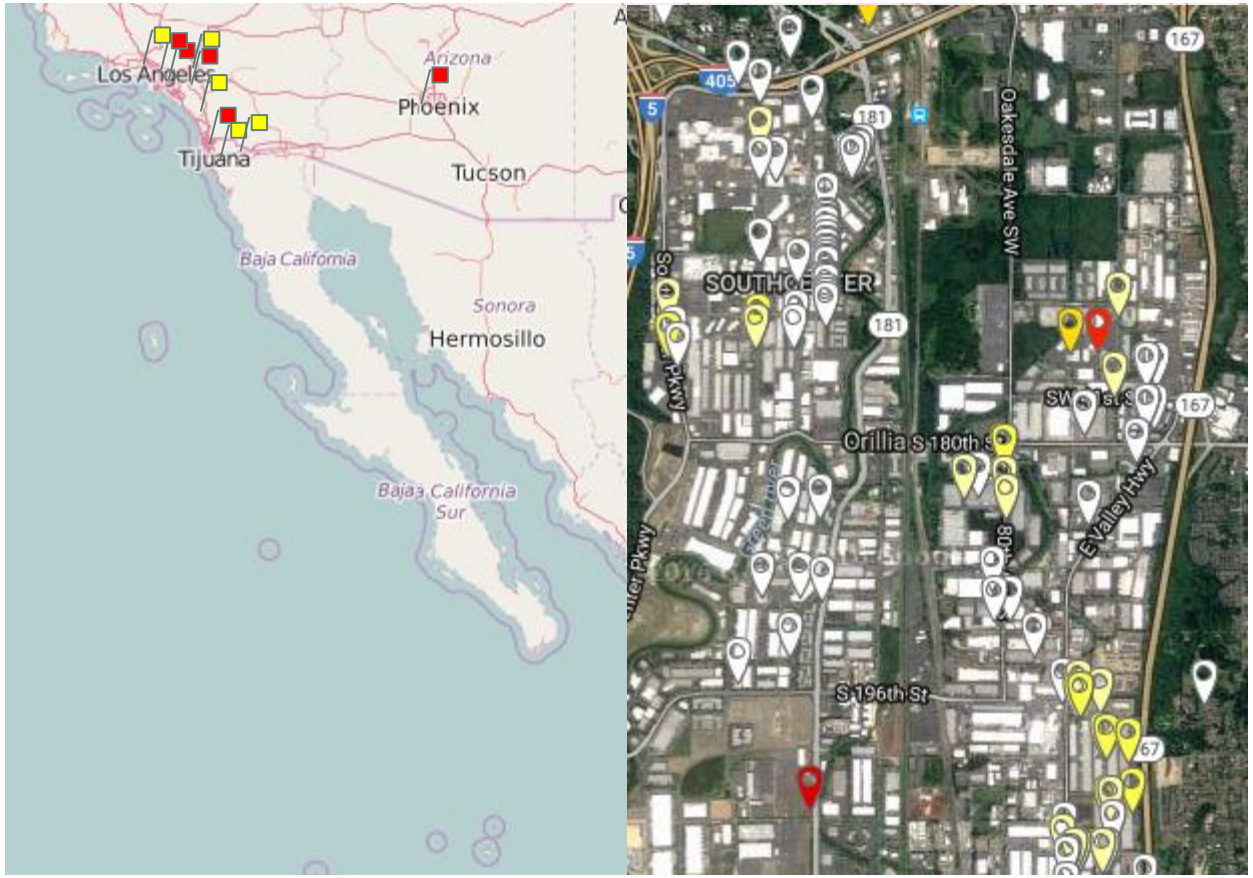
Source: Wikipedia

Focus on property & hazard

Swiss Re story of NatCat risk management and underwriting is based on locations

- Map & stickers – 1980
- CRESTA accumulation zones 1977
- *Impact probabilistic modelling (boost 1990ff catastrophes)* *1988*
- GIS in Swiss Re 1995
- *Impact internet* *2000*
- Swiss Re's CatNet® 2003
- *Impact Google maps* *2005*
- Link Cat Models & CatNet® 2010
- *Impact vendor GeoInt tools, data services, standards ...* *2015*

EQ Accumulation Control



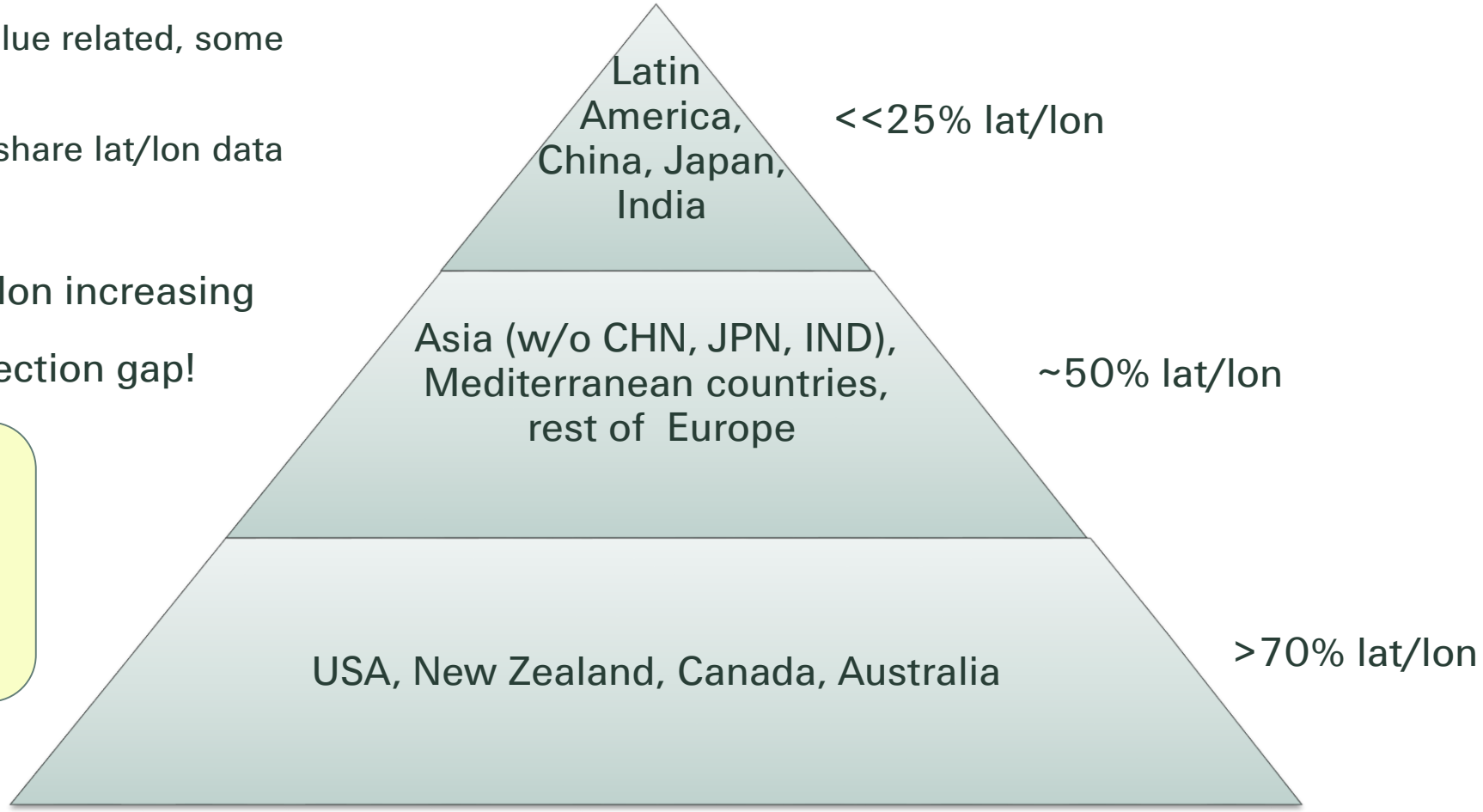
CatNet®, Open Streetmap, Google

Fuel of GeoInt in insurance: high resolution exposure data

- Deep dive into Swiss Re properta data,
  - ~ 4 bio. locations, insured value related, some double countings
  - Some direct insurers do not share lat/lon data
  - Year to year changes
- Changes 2014 -> 2016: lat/lon increasing
- Emerging markets with protection gap!

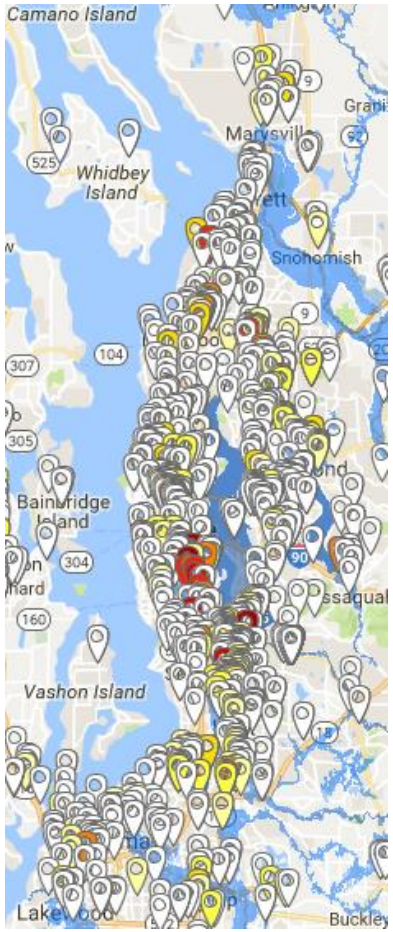
Many markets ready to step into GeoInt for property insurance!

High-level ranking location data resolution (TIV)

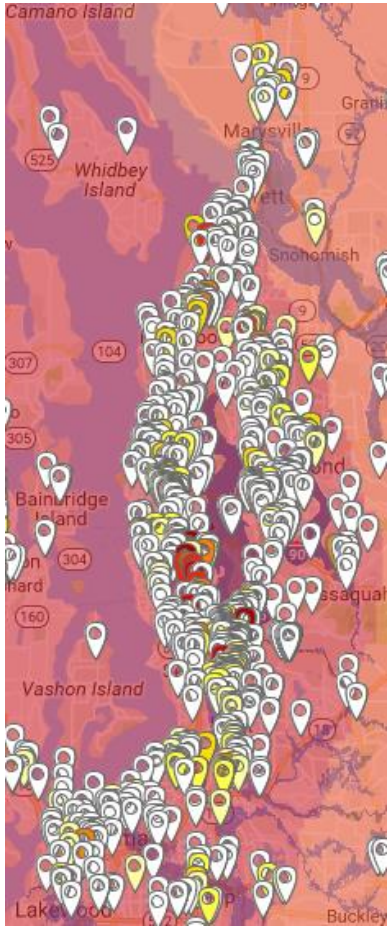


Outlook 2020 – We have the data, now let's implement GeoInt!

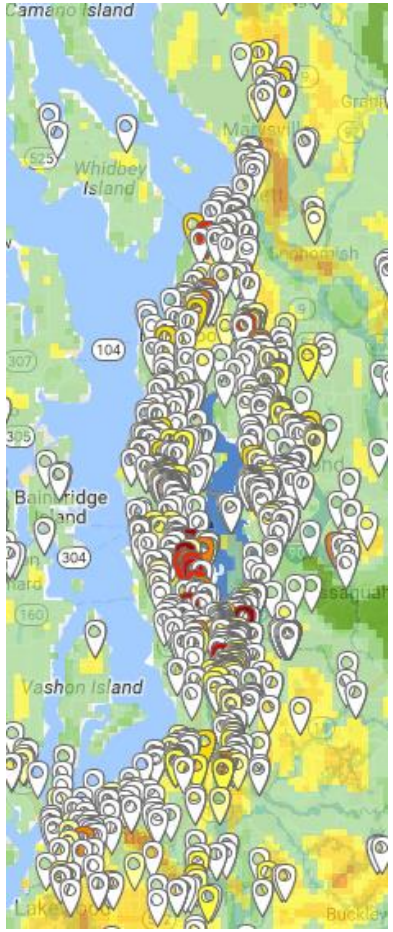
Flood zones



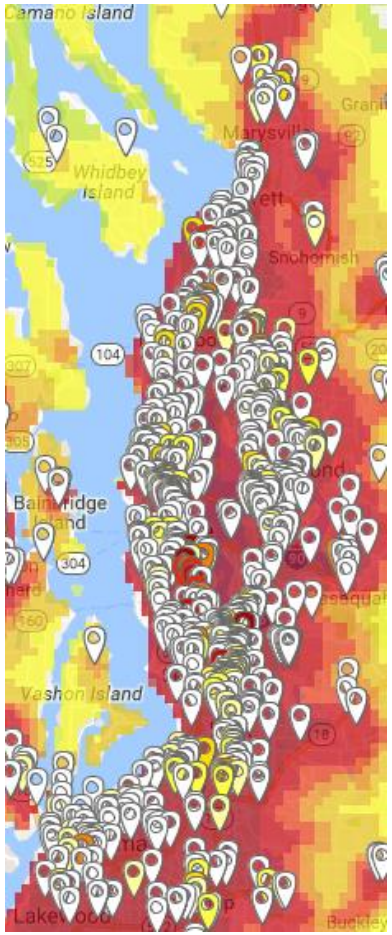
Seismicity



Soil



Scenario



CatNet®, Google

- Upload/filter/aggregate ... the data
- Visualize the results
- Draw standard reports

- Easy to handle & share
- Easy to interpret
- Easy to combine with other processes (modelling, marketing etc.)

Conclusions

Good lat/lon data, improve data base. Some challenging markets.

Invest now!

Leaner processes, improved risk management & underwriting, new products ...

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