

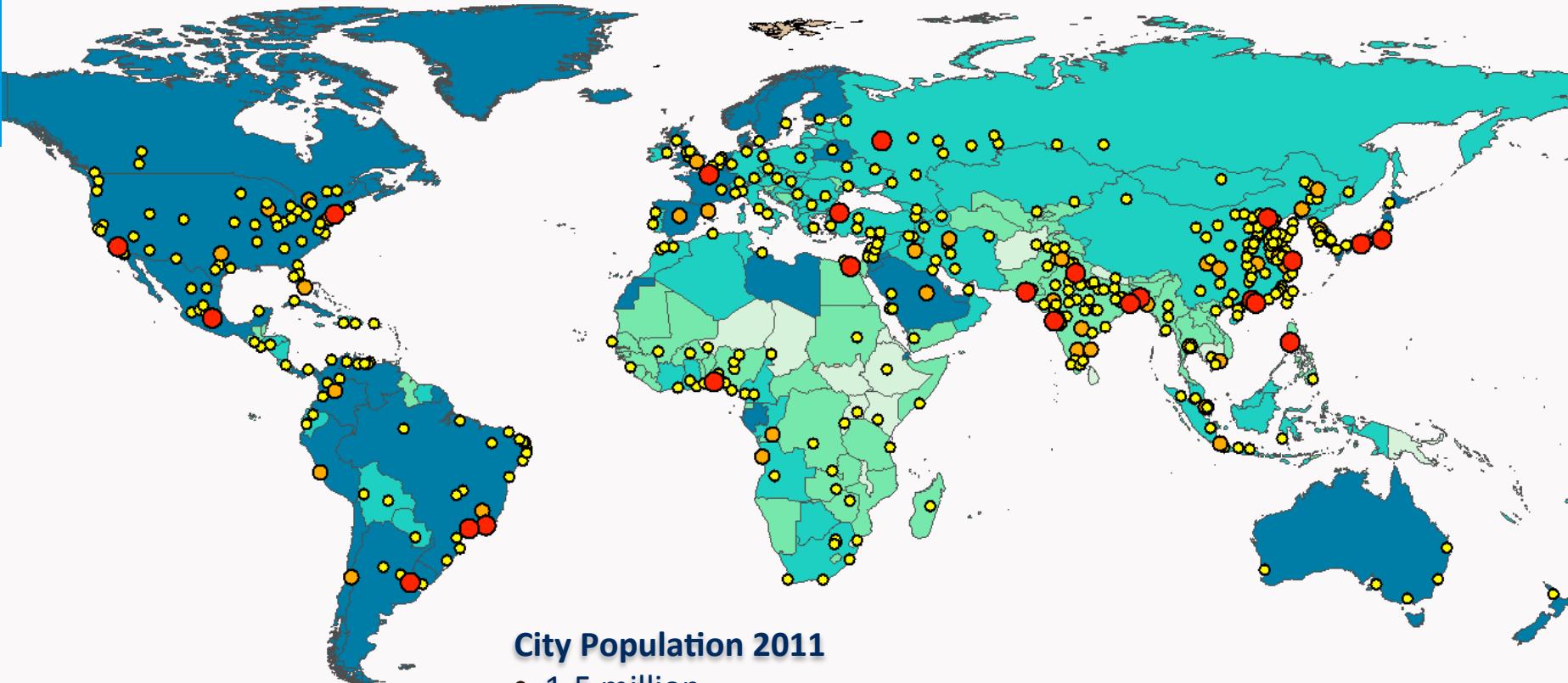
4 INN Water Interventions

Submodule Interventions Coasts

Judith Bosboom & Marcel J.F. Stive



Challenge the future



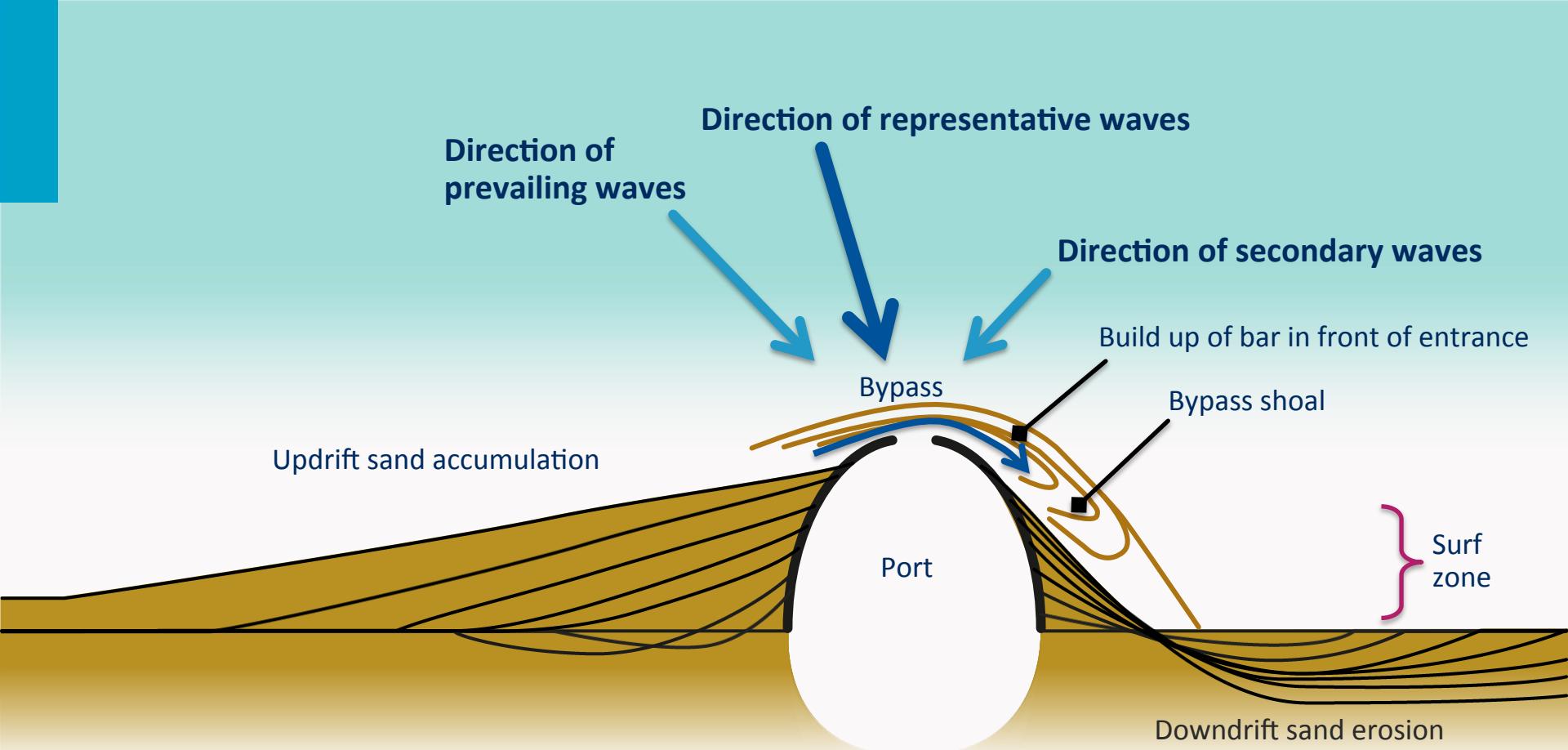
City Population 2011

- 1-5 million
- 5-10 million
- 10 million or more

Source: UN, ESA

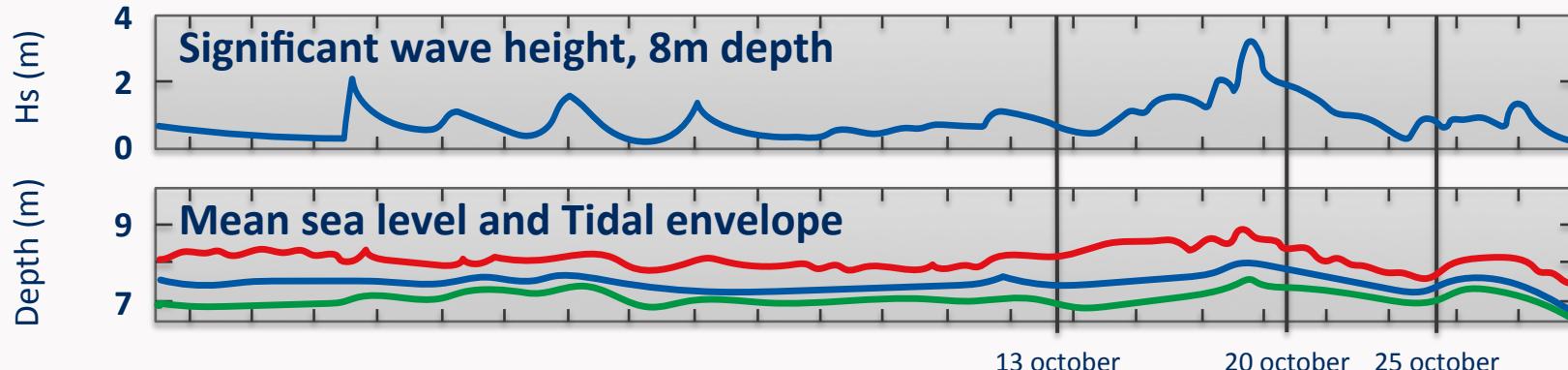
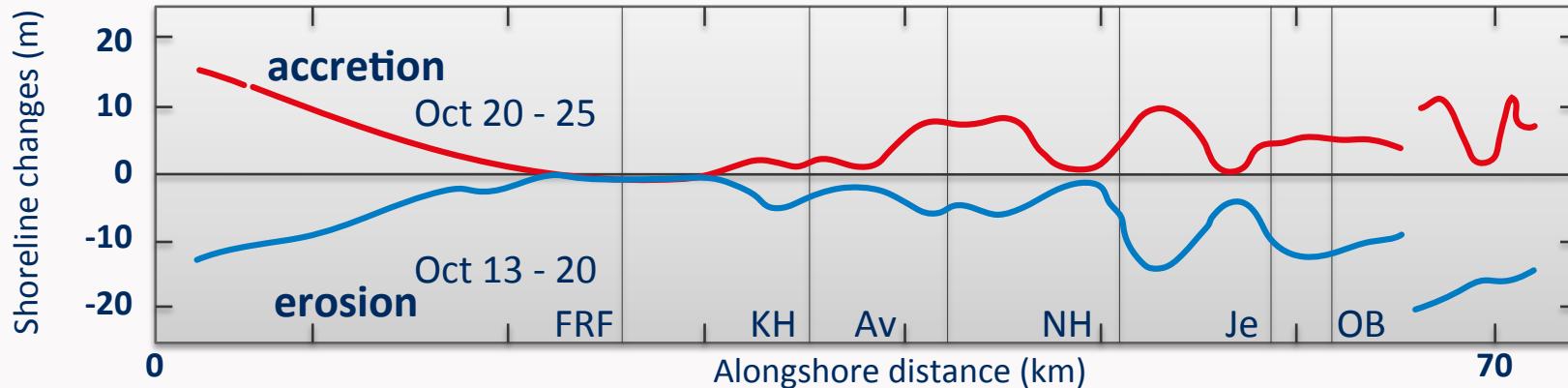
Three main types of problems

- Interventions due to coastal infrastructure
- Interventions due to coastal squeeze
- Interventions due to relative sea level rise

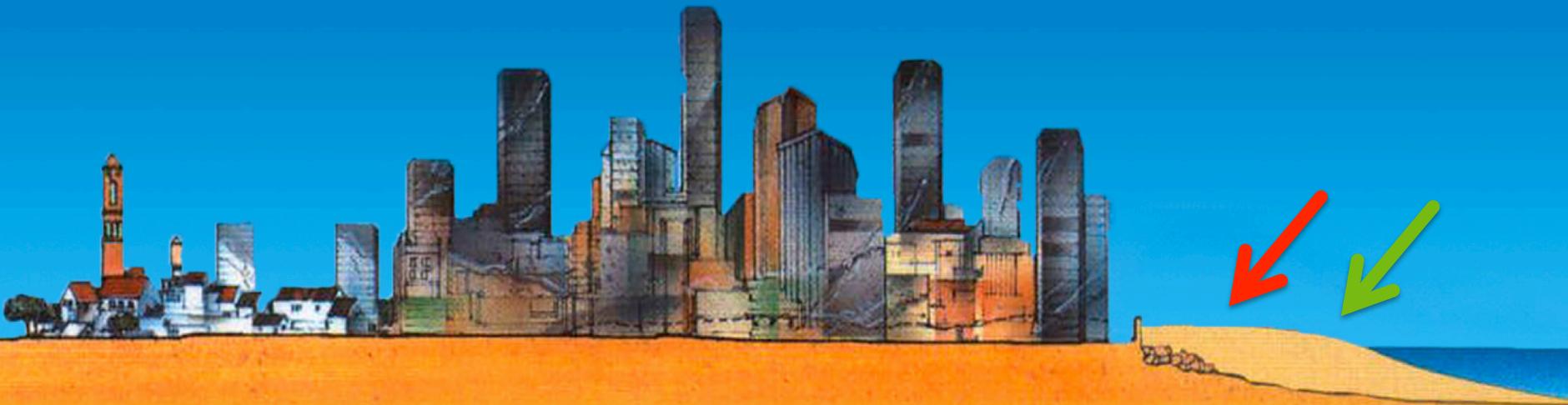


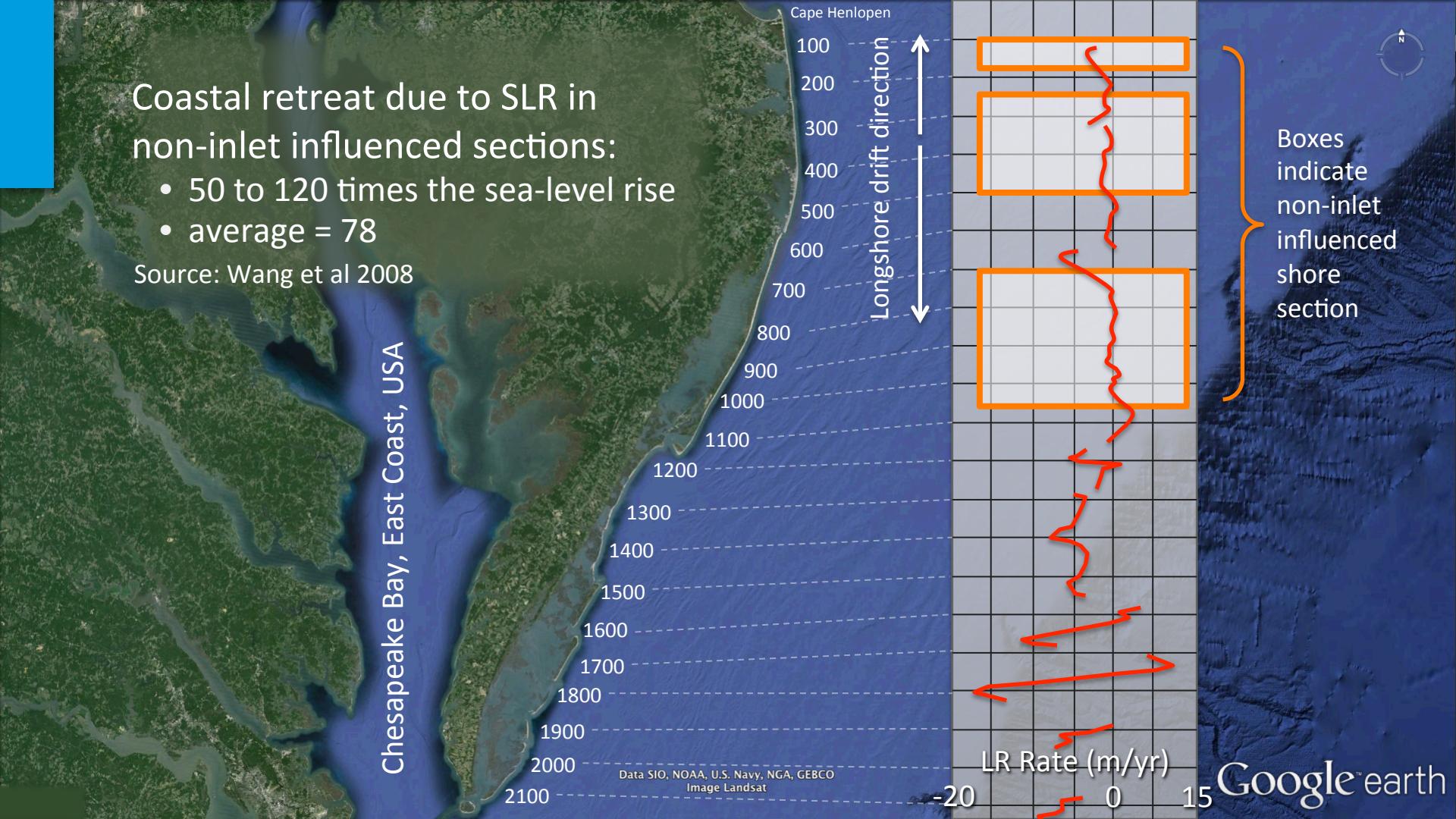
Source: Mangor 1984

Shoreline changes, source: Farris & List, 2005



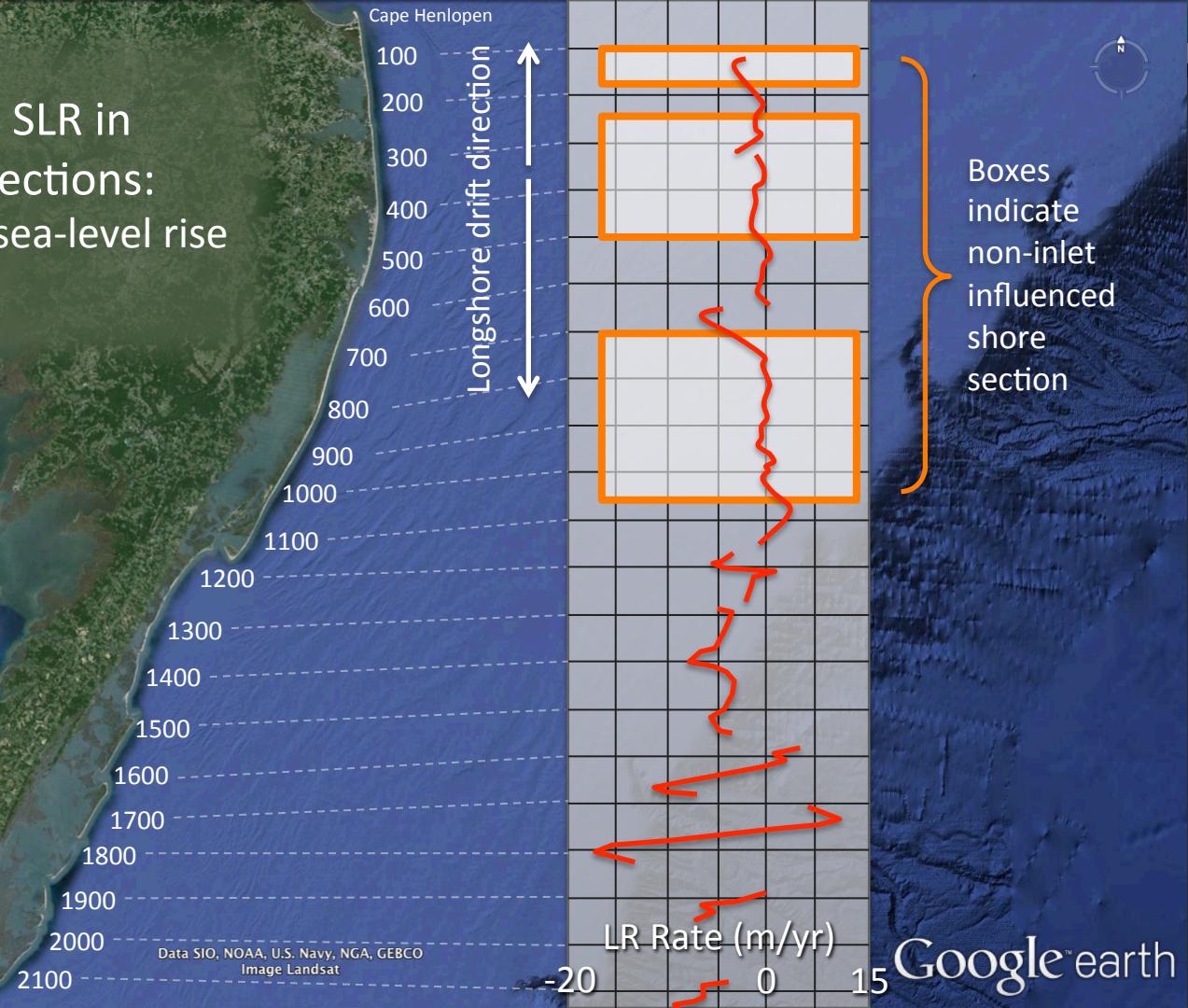
Mid 20th century situation
Massive urbanisation
The soft solution

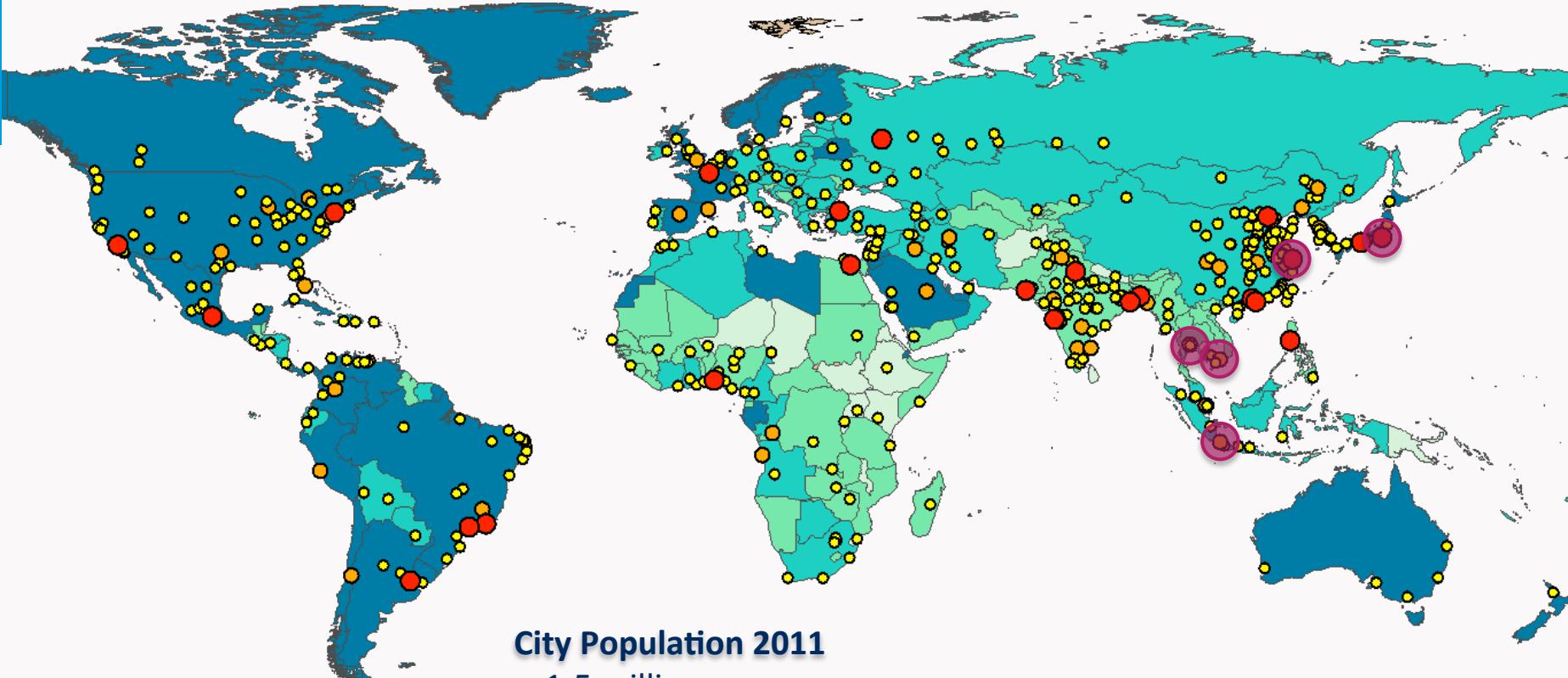


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- Coastal retreat due to SLR in non-inlet influenced sections:
- 50 to 120 times the sea-level rise
 - average = 78

Source: Wang et al 2008

Chesapeake Bay, East Coast, USA





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