

# Global Trends in Satellite Based Emergency Mapping

... and how SEM can join forces with EM-DAT community

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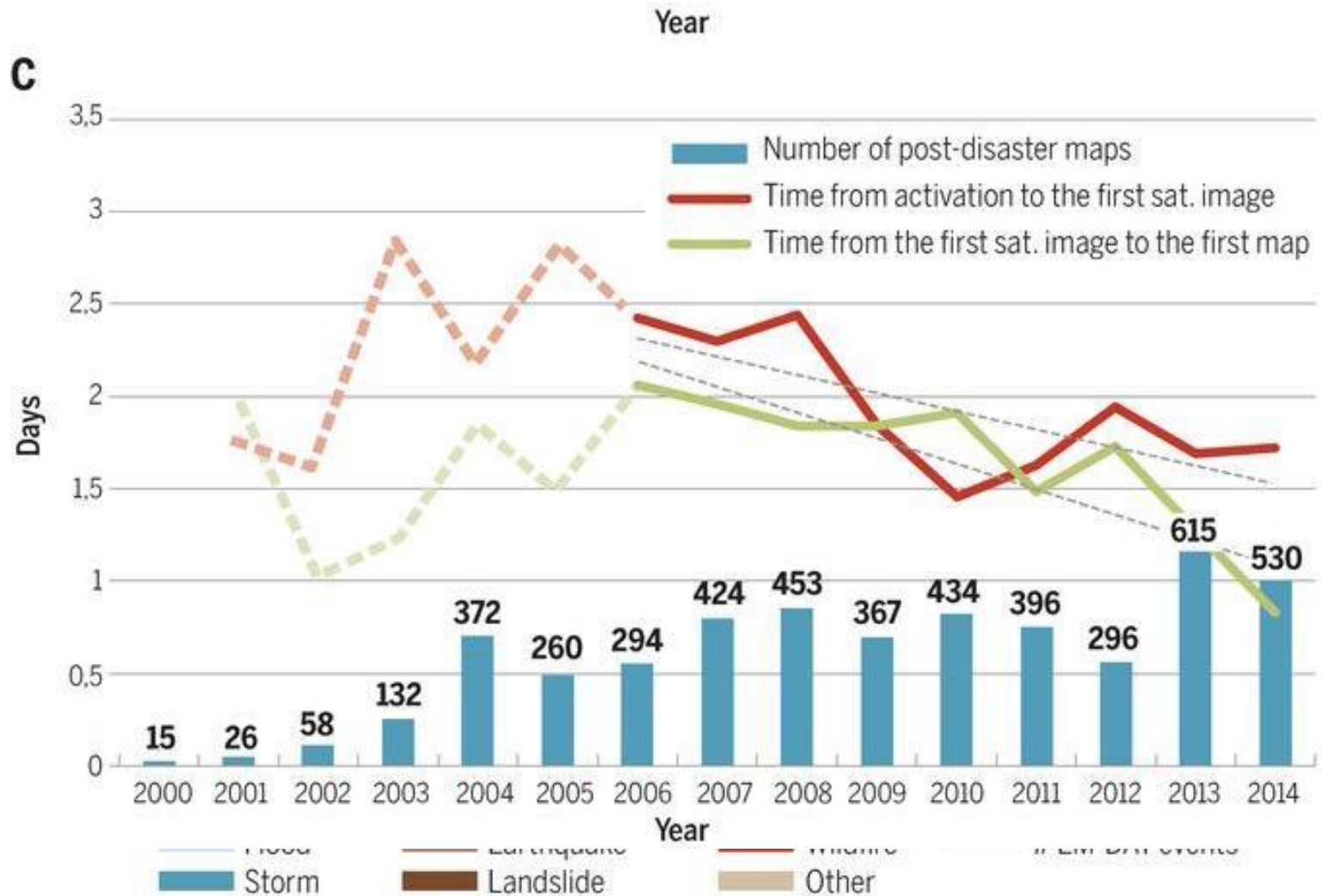
Washington D.C., Oct. 25, 2016



Knowledge for Tomorrow



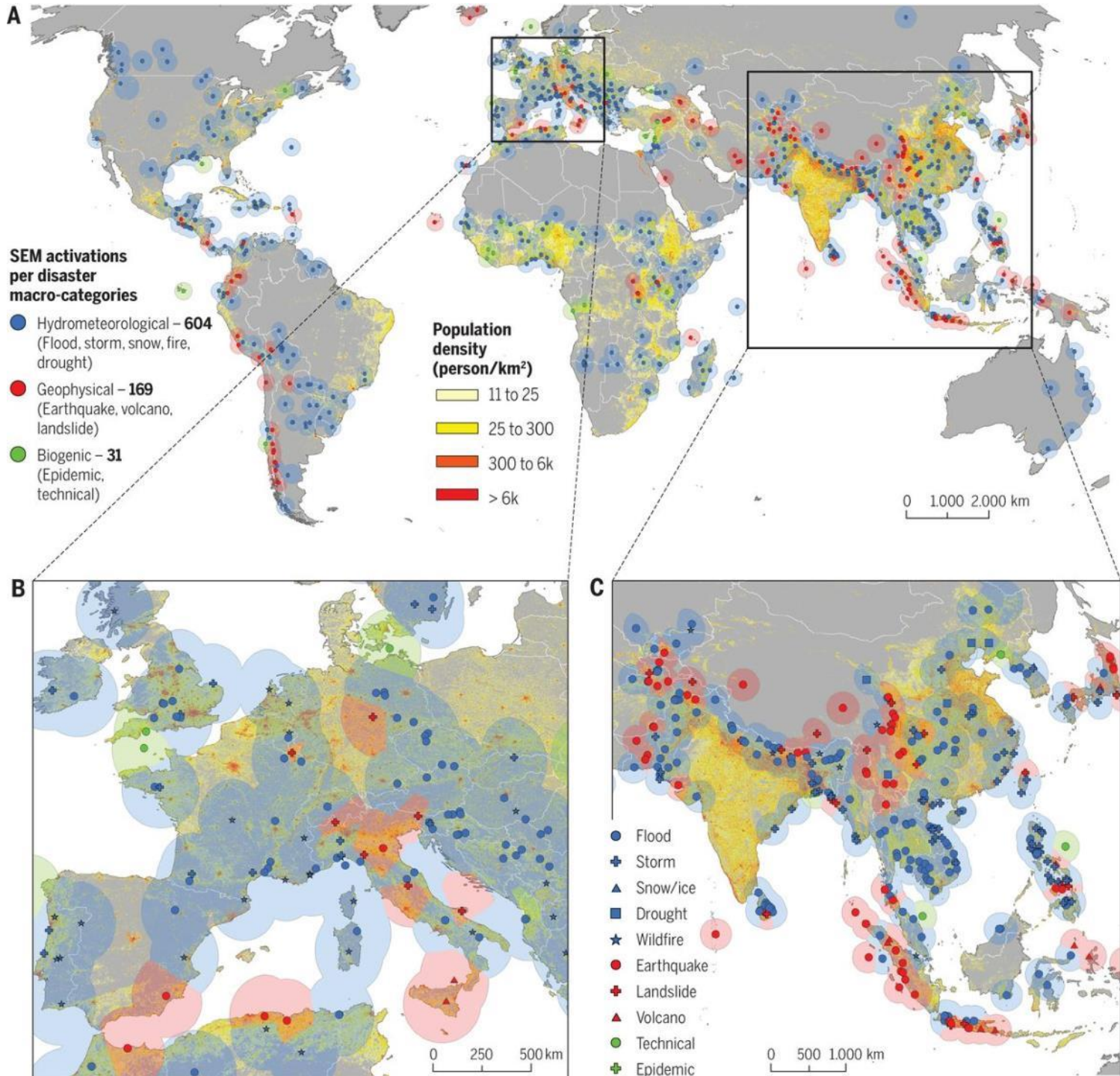
## SEM temporal trends during the study period 2000–2014



Voigt et al. Science 2016;353:247-252

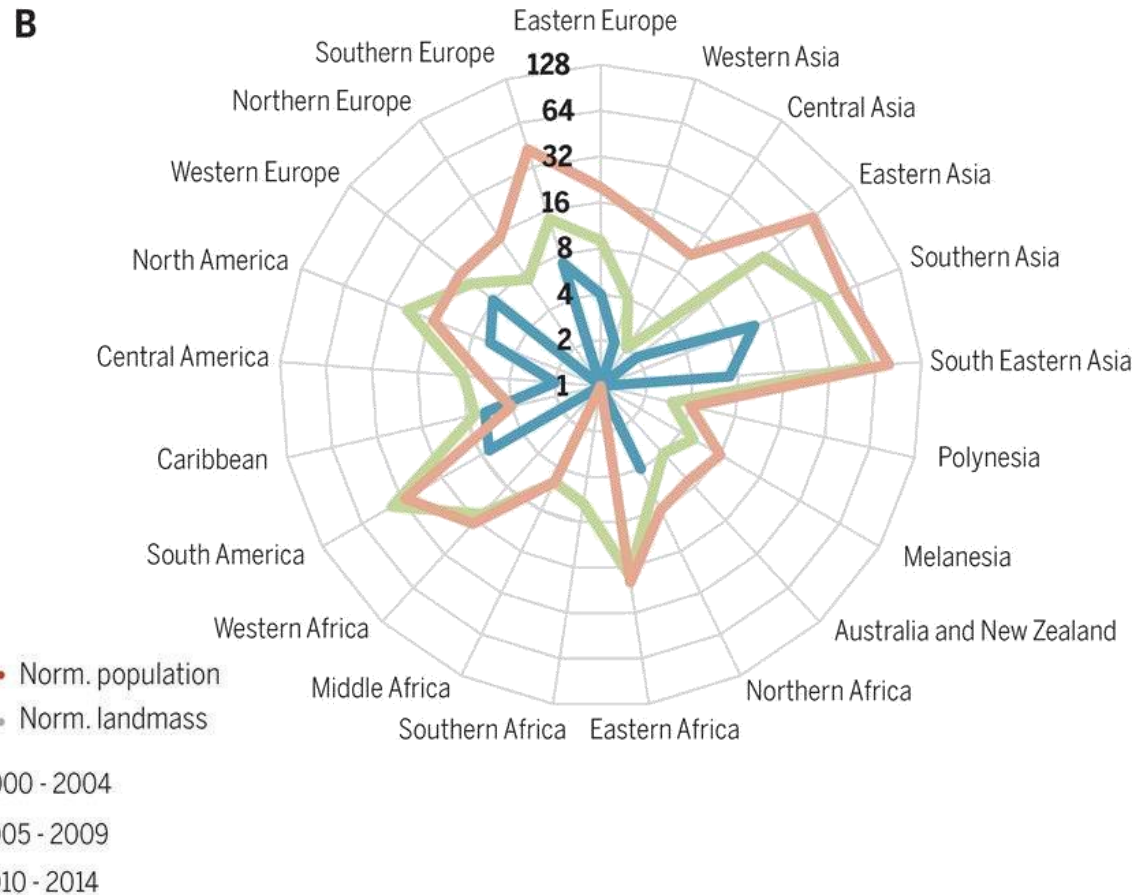
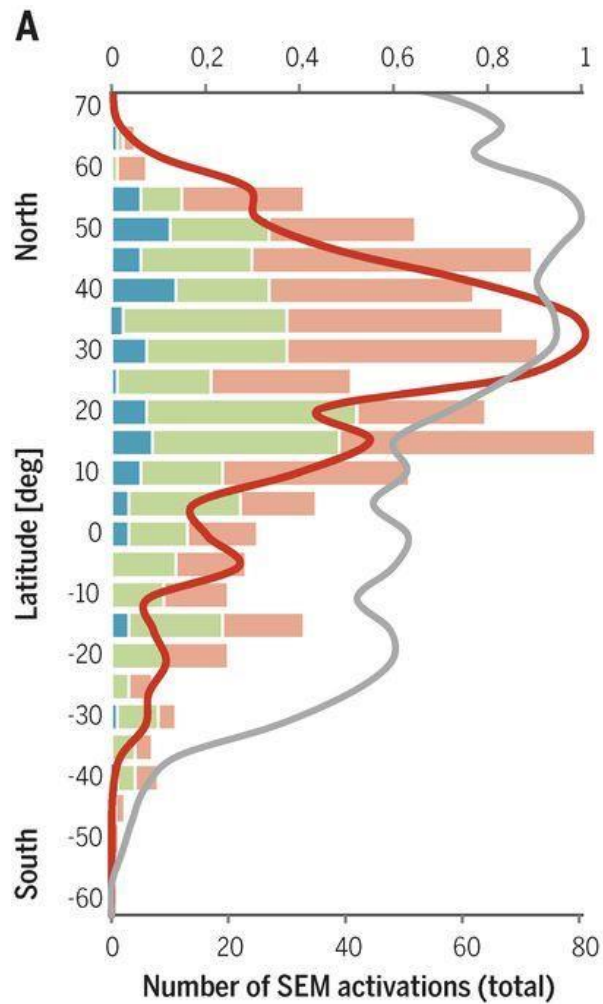


Spatial distribution  
of SEM activations  
by disaster type.





# Global 5-year totals of SEM activations by latitude and world region.



Voigt et al. Science 2016;353:247-252



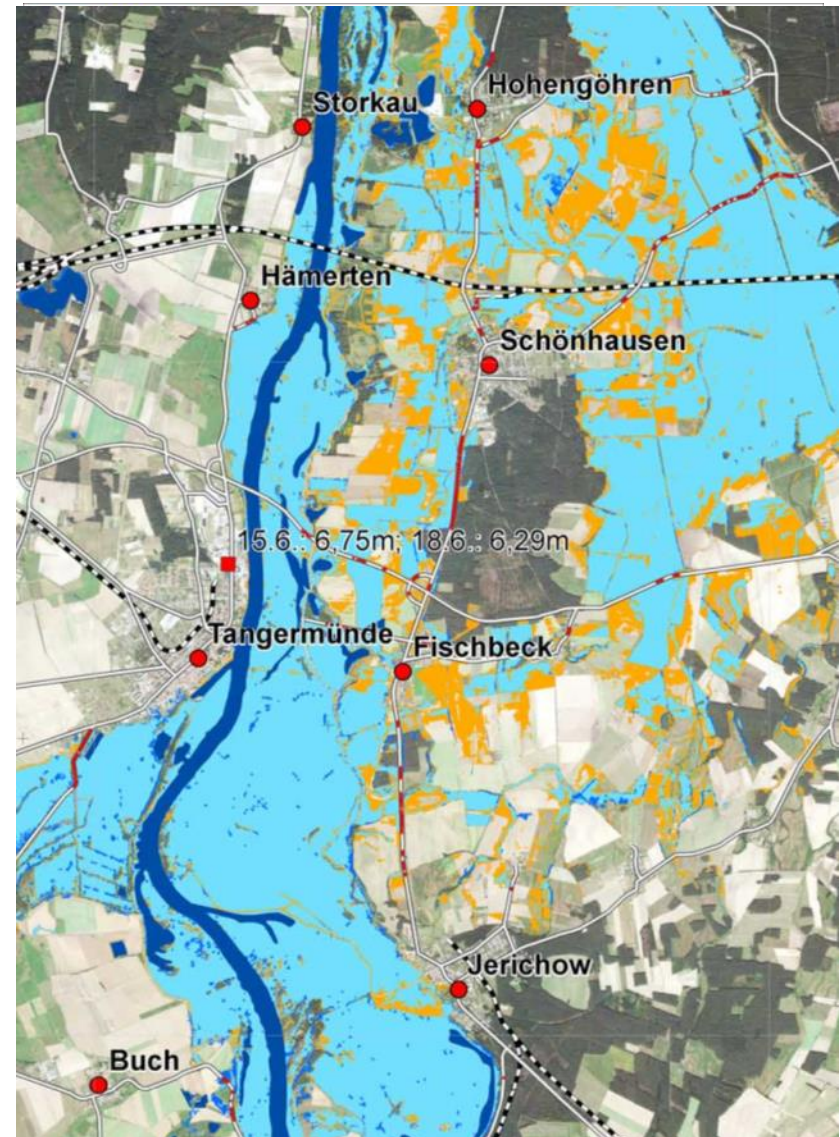
# SEM can provide: geo-spatially explicit information on major disasters globally

- Satellite imagery
- Disaster extent/grading maps
- GIS vectors
- Available within a few days

## SEM mechanisms/networks



COPERNICUS  
Emergency Management Service



# What SEM and EM-DAT can bring to the table

	EM-DAT	SEM
+	<ul style="list-style-type: none"><li>• Local / in-situ information</li><li>• Global in scope</li><li>• Complete (more or less)</li></ul>	<ul style="list-style-type: none"><li>• Satellite imagery</li><li>• Disaster extent/grading maps</li><li>• GIS vectors</li><li>• Available within a few days</li></ul>
-	<ul style="list-style-type: none"><li>• Limited information on spatial extent or distribution</li><li>• Off-line in character</li></ul>	<ul style="list-style-type: none"><li>• Event based / not fully systematic</li><li>• SEM mechanisms have specific foci</li><li>• “Top-view” only</li></ul>



# How to join forces...

- There is a lot disaster statisticians and SEM community can do together
- We need to **keep adapting our language** and need to increase mutual understanding and insight
- **Build on the first exercises** for bringing satellite and EM-DAT stats together and start developing joint data bases
- **Define a concrete pilot project** to implement the synergy of EM-DAT and satellite information:
  - **Set up a project team** between EM-DAT and SEM expert centres/mechanisms
  - Define a **test region and period** (historic and future)
  - **Define an experimental set up** and concrete questions of concern to complement data/information of given disasters
  - **Generate funds** to implement the project
  - **Carry out pilot project**, take lessons learnt **and take it to scale**





# Synergies of EM-DAT and Satellite Mapping (SEM)

