



**Centre for Research on the
Epidemiology of Disasters
CRED**
A WHO Collaborating Centre

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**World Health
Organization**


Natural disasters 1994-2013 : Trends for OSCE countries

OSCE – Vienna, 27th January 2014

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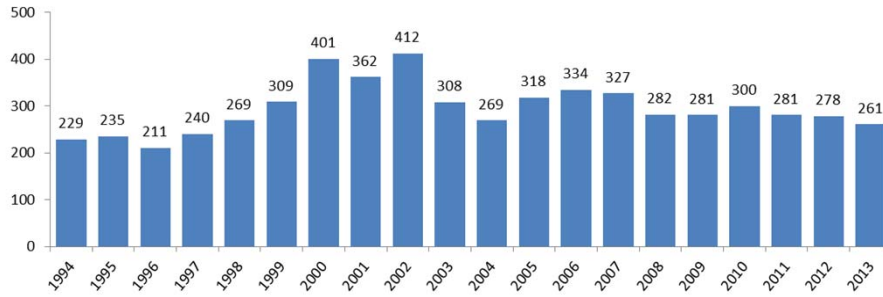
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OVERVIEW

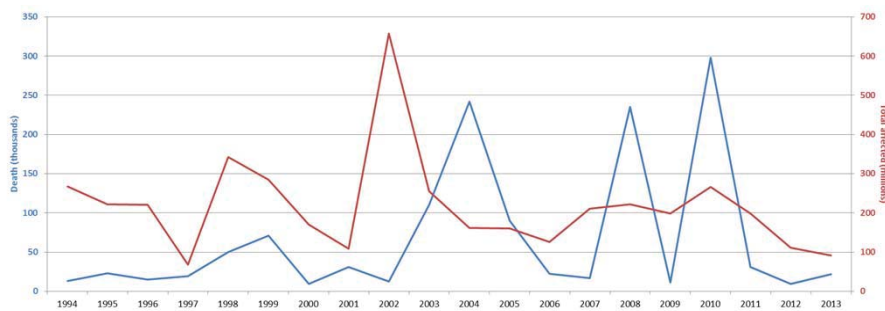
EM-DAT	Moving forward
<ul style="list-style-type: none">– 1900 – 2014– 184 countries– All natural and technological disasters– Systematic methods and definition	<ul style="list-style-type: none">- Mapping the footprint- Using standardise indicators and not absolute numbers- Evidence on cross border events- Community based risk profiles

Natural disasters World : 1994 – 2013



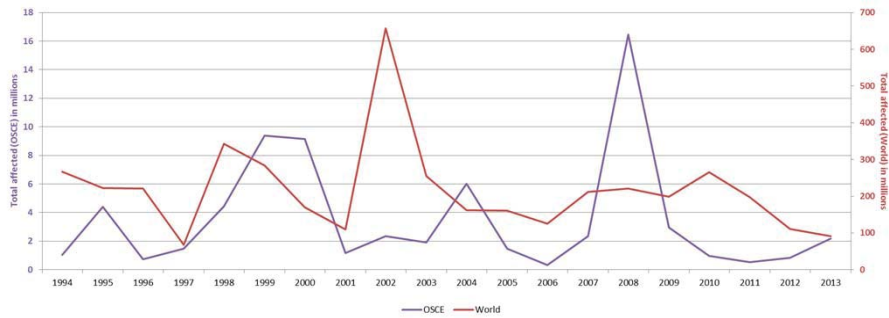
Source : EM-DAT

Death and affected due to disasters World : 1994 – 2013



Source : EM-DAT

Affected by disasters OSCE: 1994 – 2013



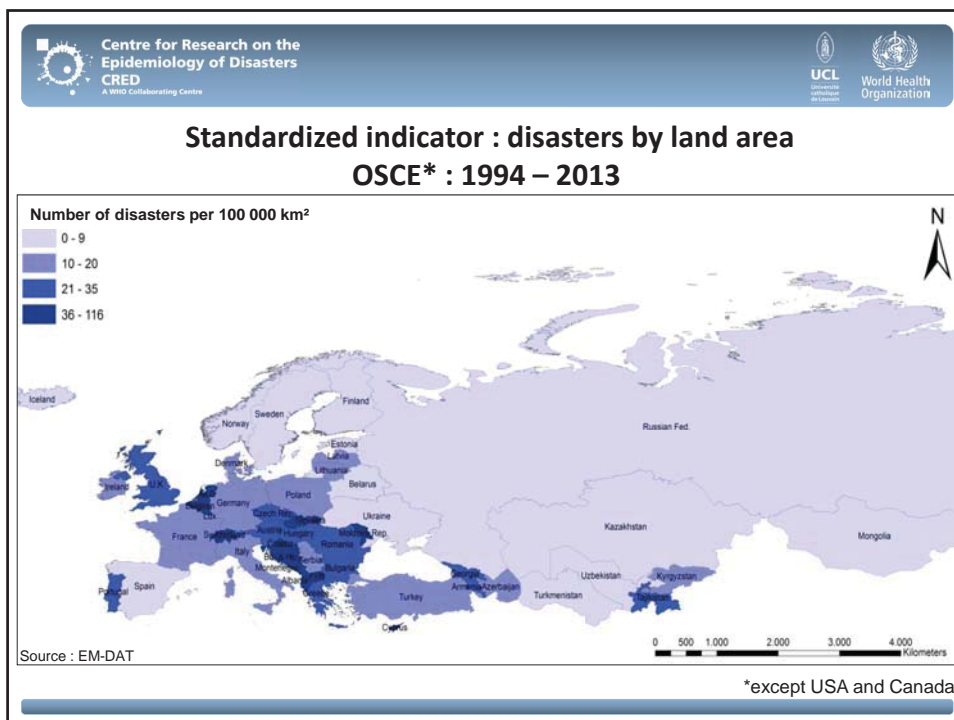
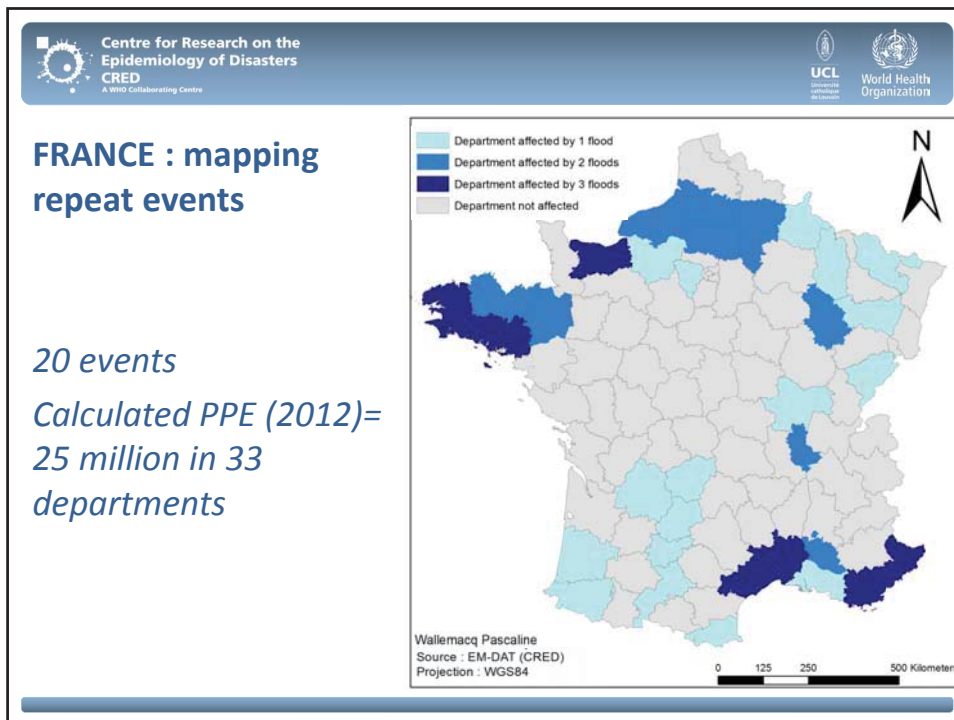
Source : EM-DAT

Georeferencing disaster impact for footprints

Data added to EM-DAT (Excel):

- admin code
- centroid coordinates
- precision of the georeferencing and details of the location

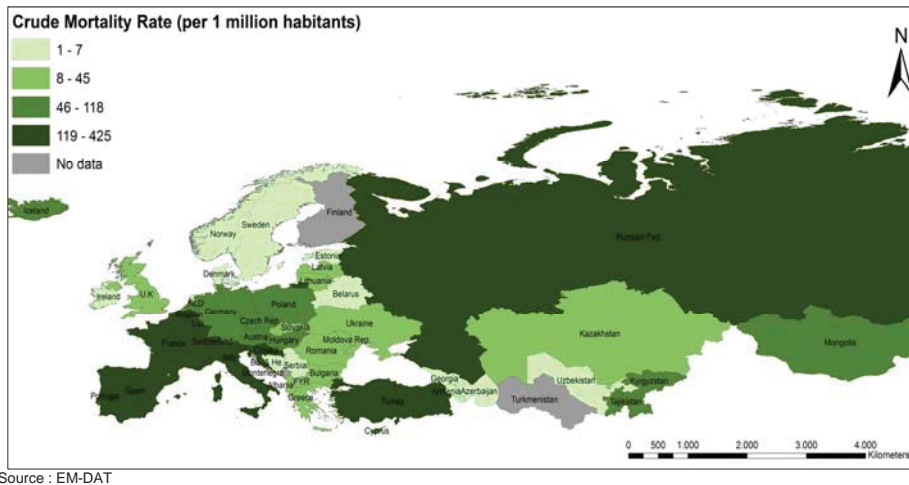
year	seq	country_name	location	Adm0_code	Adm1_code	Adm2_code	Adm3_code	Data_source_admin	Lat_centroide_lastadmin	Long_centroide_lastadmin	Precision	Details
2000	656	Japan	Tottori, Simane, Okayama, Saihaku (Saihakutyoo-Tottori district), Mizokuchi (Saihakutyoo-Tottori)	126	1691 1686 1680		-	GAUL2013	35,362162 35,078579 34,904057	133,849441 132,564292 133,814475	0	1
2000	743	Tajikistan	Khasanov village (Farkhor region, Khatlon province)	239	2848	37595	-	GAUL2013	37,409766	69,257375	1	1
2000	749	Papua New Guinea	East New Britain, New Ireland, Bougainville (Northern Solomons)	192	2292 2302 2304		-	GAUL2013	-5,144009 -3,478884 -6,152706	151,573431 151,927852 155,256827	1	1
2000	761	Indonesia	Pandelang, Lebak, Serang	116	73610	18020 18022 18024	-	GAUL2013	-6,642323 -6,587912 -6,141471	106,21343 105,742202 106,146727	1	0



**Standardized indicator : affected per population
OSCE* : 1994 – 2013**



**Standardized indicator : total killed population
OSCE : 1994 – 2013**

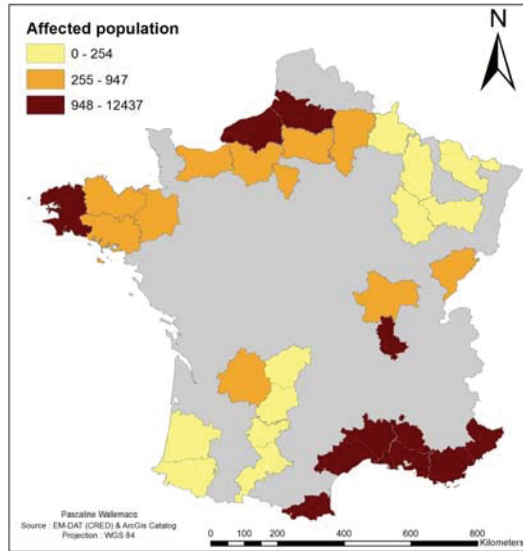


FRANCE: where is the
greatest concentration of
affected ??

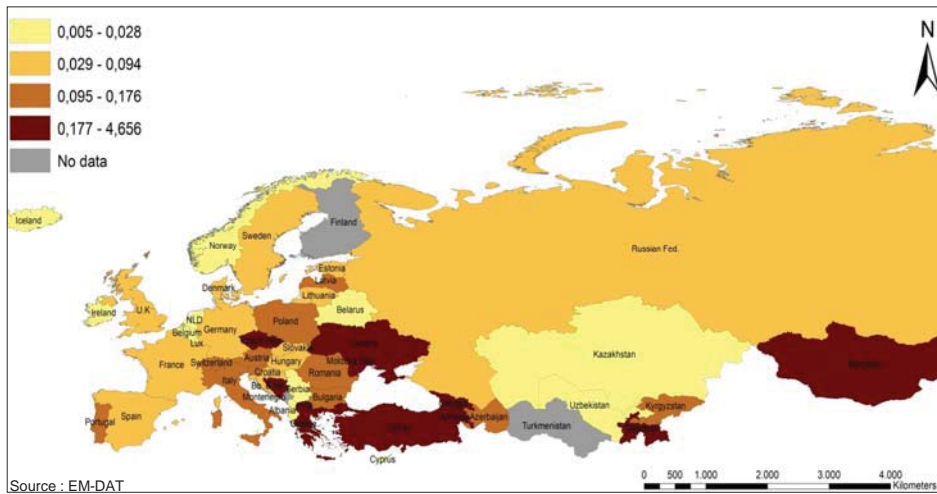
Distribution of the cumulative
affected over exposed population
(2000 - 2011).

$$\sum_{y=2000}^{2011} \frac{Tot. aff. pop. i \times PPE_{dpt}}{\sum_{x=1}^n PPE_i}$$

n = department affected by flood
i = event



**Standardized indicator : economic losses as % GDP
OSCE : 1994 – 2013**



Source : EM-DAT



CONCLUSION

Solidarity	Co-operating generally pays dividends
Incidents with cross border impact	Toxic or other forms of pollution; common watersheds planning; migration
Rationalising resources	Identify disaster types that cause most damage
Economic impact	most relevant in OSCE region

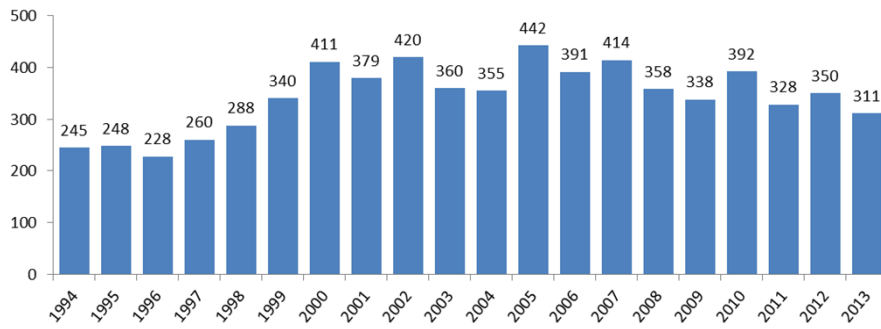


Thank you ...

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Natural disasters (by country) World : 1994-2013



Source : EM-DAT