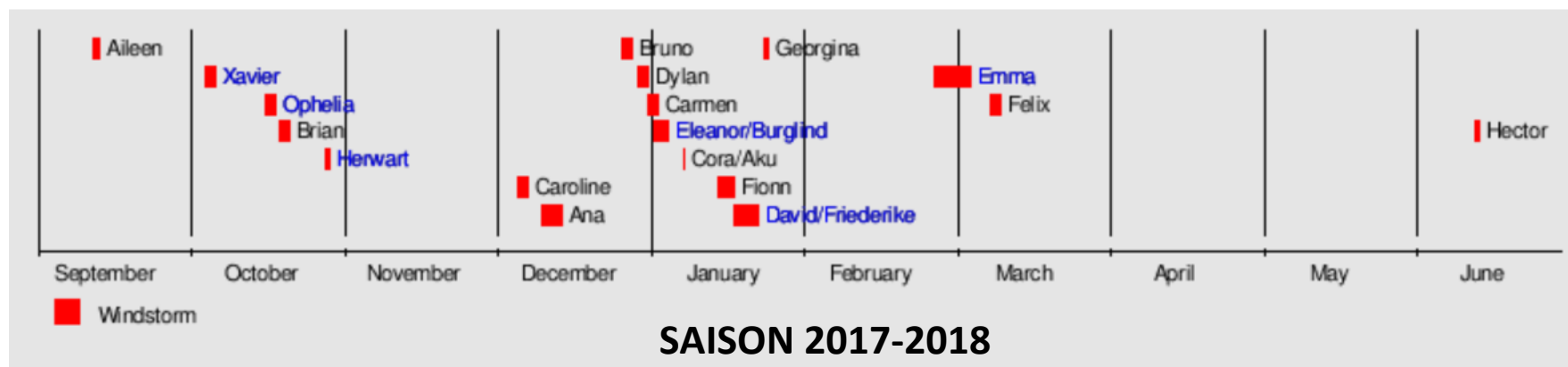


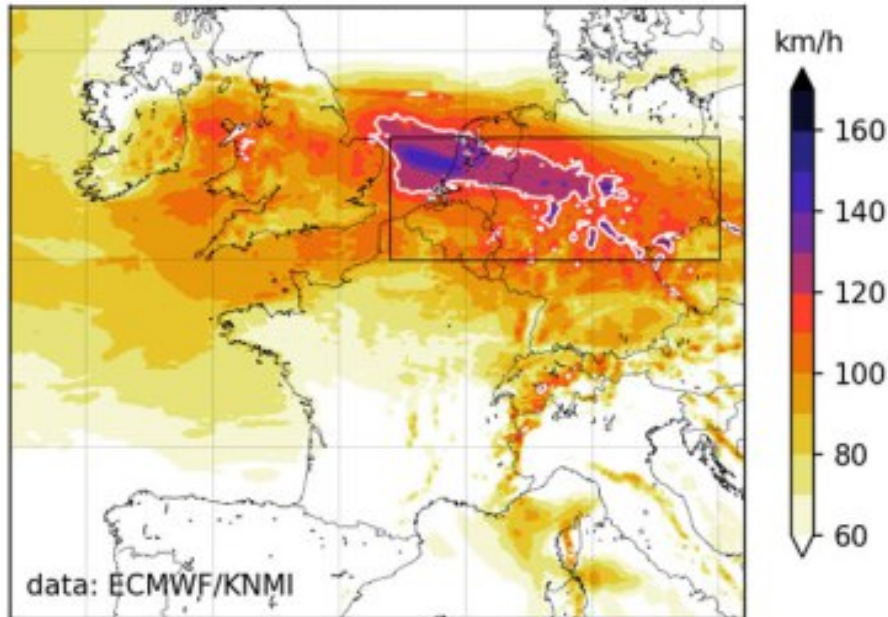
Les tempêtes de janvier 2018

IPSL, KNMI, Météo-France, Univ
Oxford, Red Cross



Les tempêtes Friederike et Eléonor

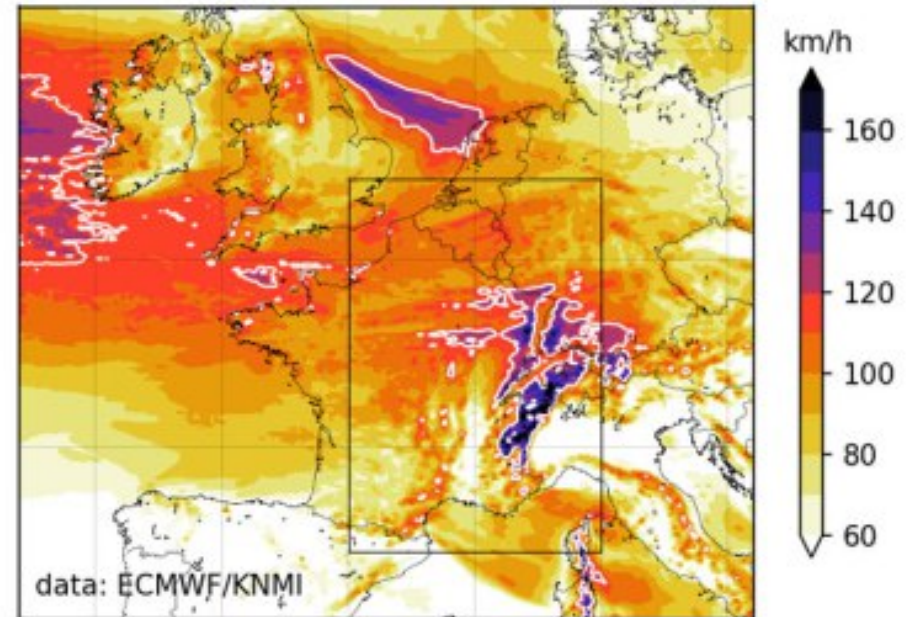
Friederike Daily max. wind gust (2018-01-18)
ECMWF det.forecast. analysis: 2018-01-18 00UTC



Storm Friederike industry loss nears €1.7bn, 77% of economic loss insured

17TH JULY 2018 - AUTHOR: ARTEMIS

Eleanor Daily max. wind gust (2018-01-03)
ECMWF det.forecast. analysis: 2018-01-03 00UTC



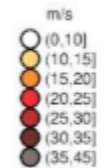
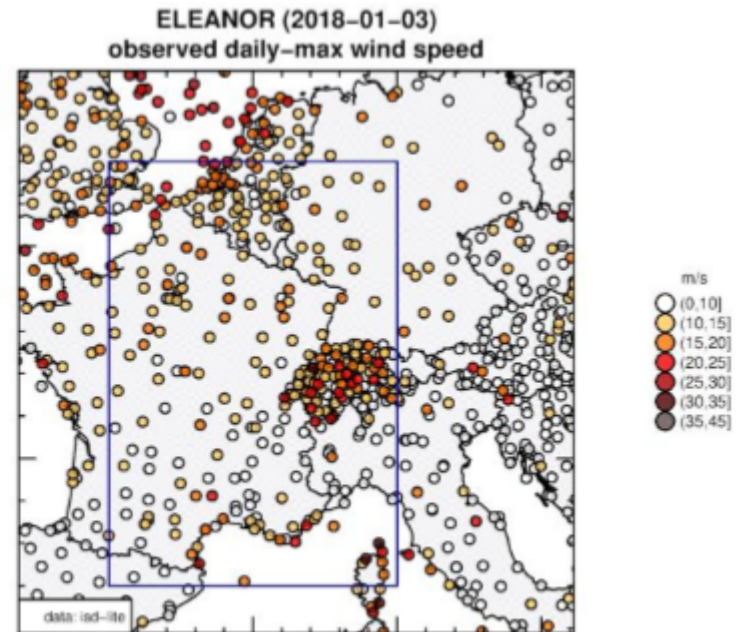
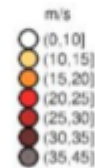
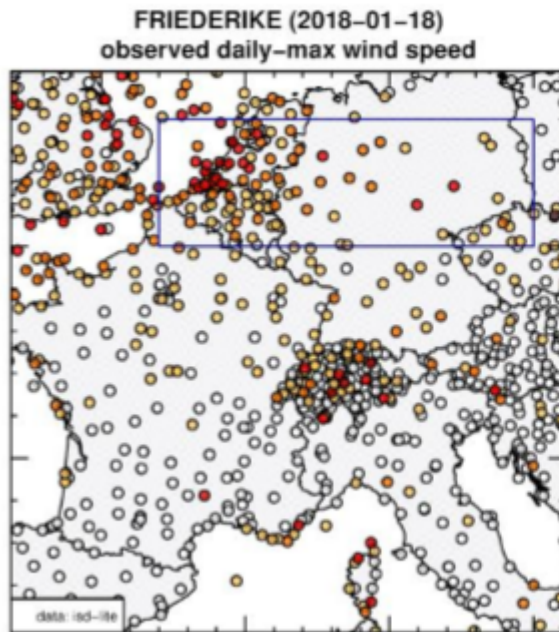
Storm Burglind (Eleanor) industry loss estimated at EUR 643m by PERILS

13TH FEBRUARY 2018 - AUTHOR: ARTEMIS

Share: 

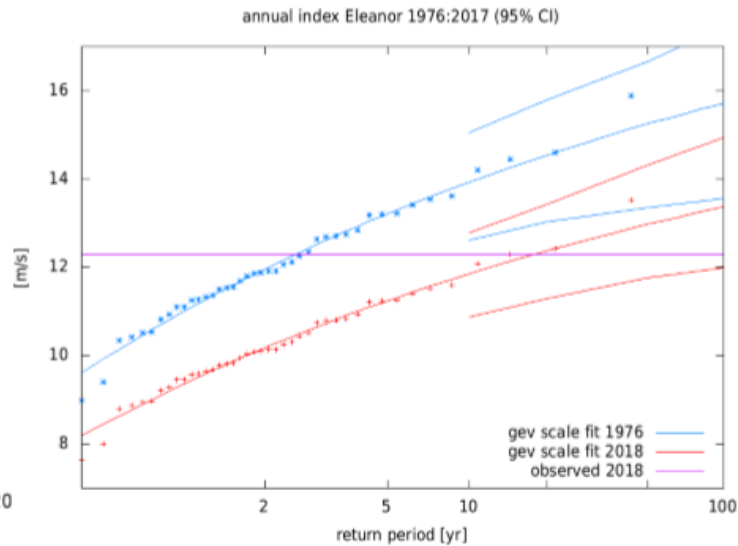
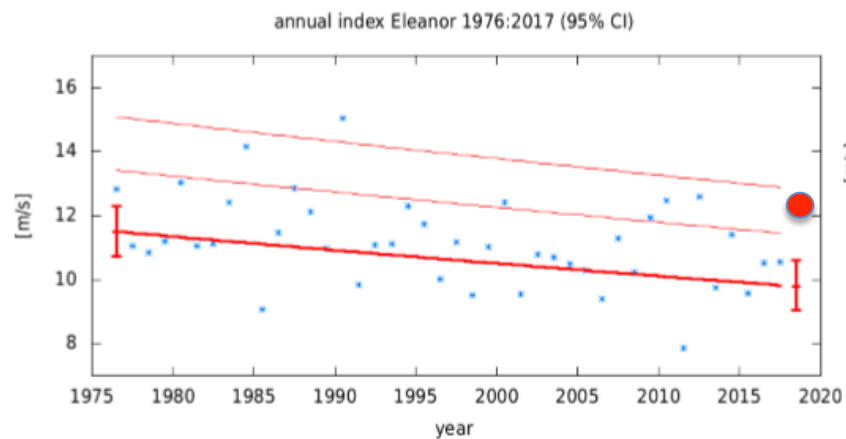
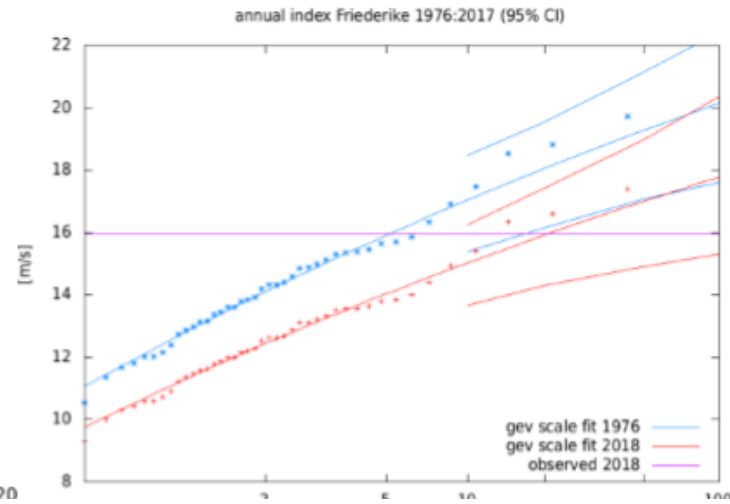
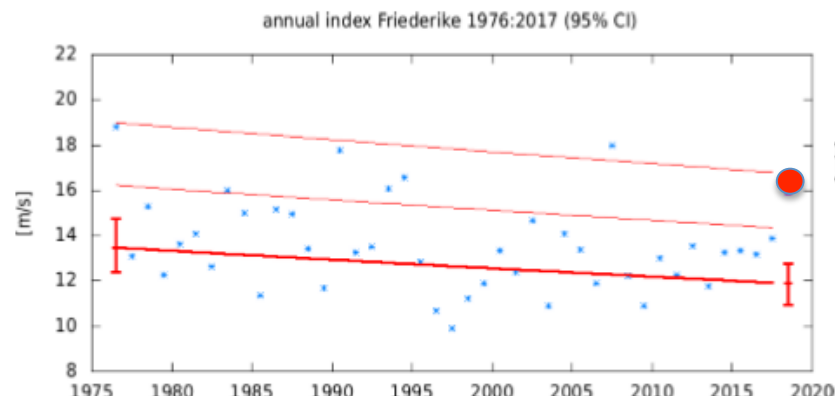
Indicateur: Maximum annuel de vent de surface (10m, 10mn)

Ce que disent les observations



Observations ISD-Lite (online, non homogénéisées)

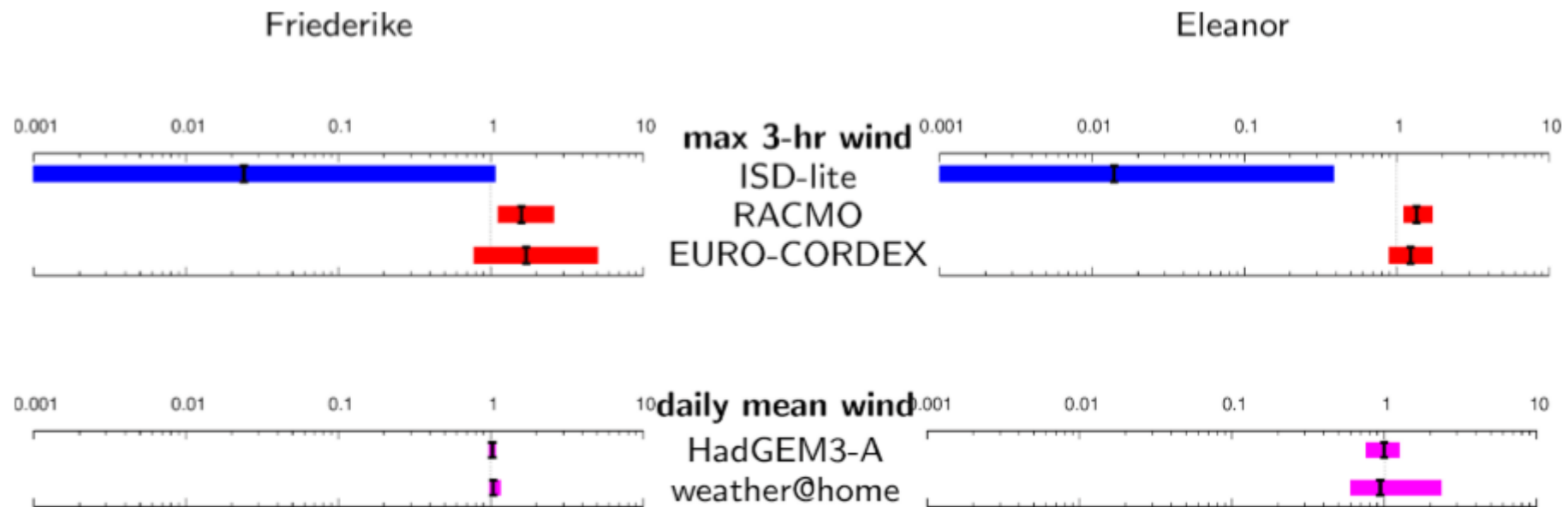
Une tendance au déclin depuis 1975



Evaluation des modèles

Model/ensemble Values in m/s	WXm <i>WMm</i>	WX95 <i>WM95</i>	WX99 <i>WM99</i>	WXm <i>WMm</i>	WX95 <i>WM95</i>	WX99 <i>WM99</i>
	Friederike			Eleanor		
OBS (ISD-Lite) Daily max **	6.4	11.4	13.5	6.1 [5.8]	9.7 [9.5]	11.1 [11.]
Daily mean	4.5	8.4	10.1	4.1	6.6	7.7
RACMO (16 members) [Stations]	6.8	10.9	12.6	5.3	8.2	9.4
RACMO (16 members) [Area]	6.6	10.4	12.0	5.5	8.5	9.8
HADGEM3A*(15mem.) [Stations]	4.4	8.1	9.6	3.5	5.7	6.7
HADGEM3A*(15mem.) [Area]	3.9	7.6	9.0	3.1	5.4	6.3
bc-EURO-CORDEX(pooled) [St.]	5.9	10.2	12.0	4.7	7.5	8.7
bc-EURO-CORDEX(pooled) [Ar.]	5.6	9.7	11.5	4.7	7.8	9.1

Utilisation de simulations régionales haute résolution (12 km) et HadGEM3-A



Modèles: légère tendance à l'augmentation, peu significative, un peu plus significative dans les projections

Conclusions

- Les observations montrent un déclin d'intensité des fortes tempêtes comme Eléonor et Friederike
- Ce déclin pourrait être lié à d'autres phénomènes que le CC
- Les modèles représentent les statistiques d'extrêmes mais pas les tendances, opposées aux observations
- Aucune conclusion possible sur le rôle du changement climatique