

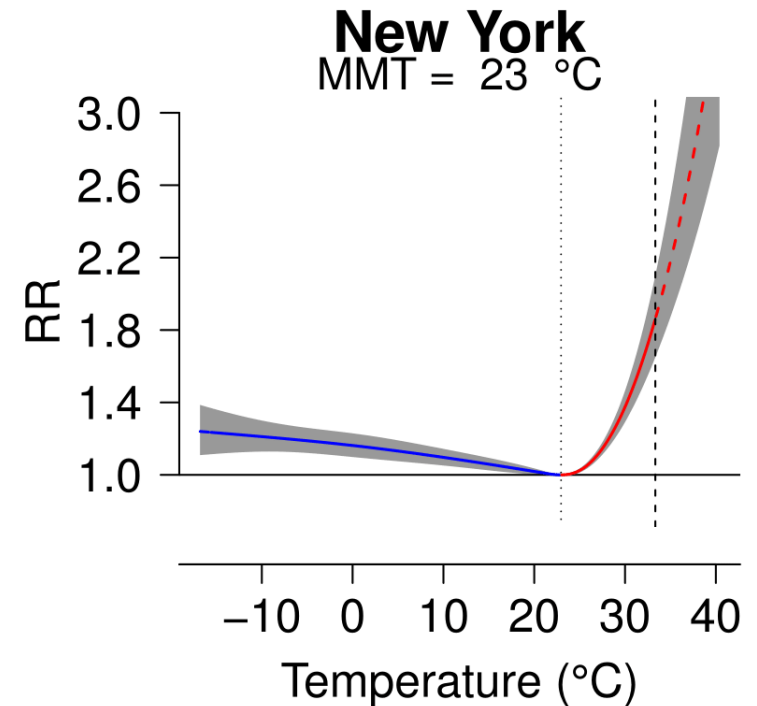
HAPPI-Health: The Paris Agreement avoids substantial extreme heat-related mortality

Eunice Lo

Dann Mitchell, Antonio Gasparri, Ana Vicedo-Cabrera

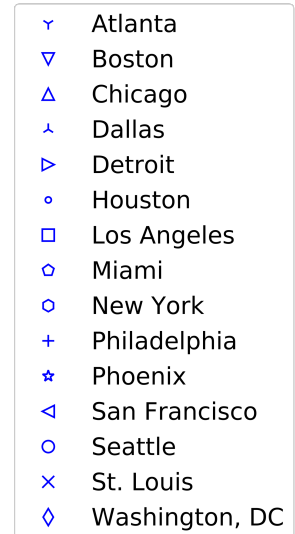
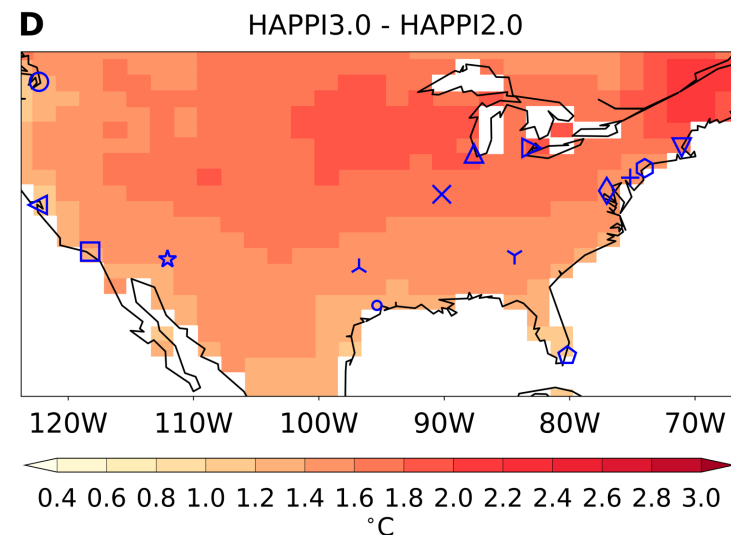
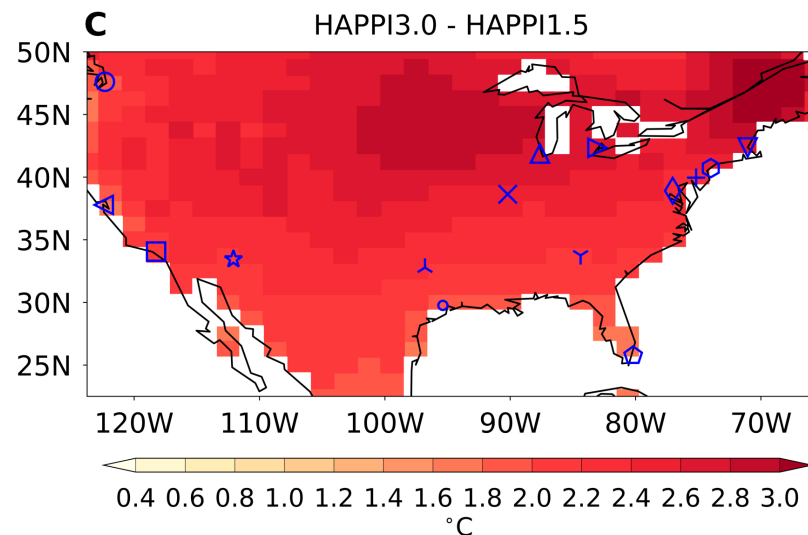
Heat and health

- High ambient temperatures are associated with increased mortality risks
- Heat-related health risks:
 - Heat exhaustion
 - Heat stroke
 - Coronary heart disease
- The relationship between low temperatures and mortality is less direct



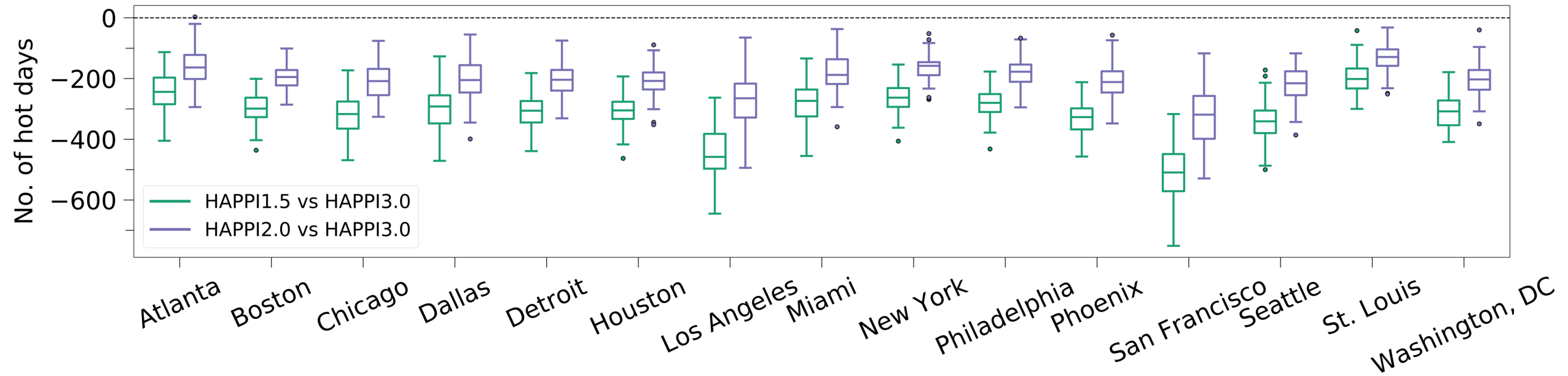
Targeted warming scenarios

- Half a degree Additional warming, Prognosis and Projected Impacts (Mitchell et al., 2017, 2018).
- HAPPI1.5, 2.0 & **3.0 (new)**: stabilization scenarios at 1.5 °C, 2°C and 3°C above pre-industrial levels. Bias corrected.

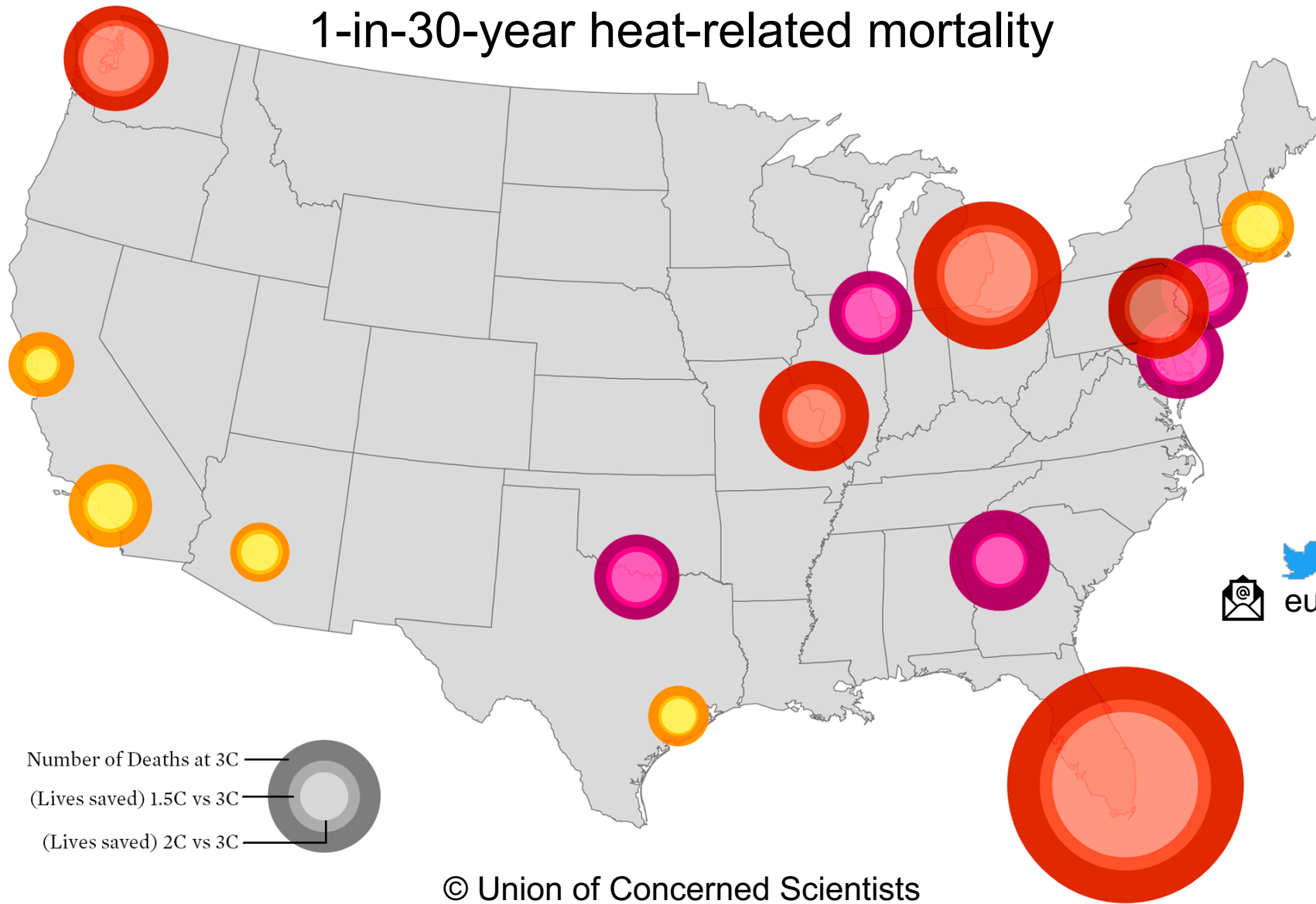




Paris targets = fewer hot days

- 1.5°C vs 3°C; 2°C vs 3°C (global warming)



1-in-30-year heat-related mortality



 @EuniceLoClimate
 eunice.lo@bristol.ac.uk

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Per 100,000 People

Number of Deaths at 3C

(Lives saved) 1.5C vs 3C

(Lives saved) 2C vs 3C

Miami

520

272

197

Detroit

204

95

69

St. Louis

113

38

26

Seattle

103

54

40

Philadelphia

95

44

32

This work is published in:

[Increasing mitigation ambition to meet the Paris Agreement's temperature goal avoids substantial heat-related mortality in U.S. cities](#)

BY Y. T. EUNICE LO, DANIEL M. MITCHELL, ANTONIO GASPARRINI, ANA M. VICEDO-CABRERA, KRISTIE L. EBI, PETER C. FRUMHOFF, RICHARD J. MILLAR, WILLIAM ROBERTS, FRANCESCO SERA, SARAH SPARROW, PETER UHE, GETHIN WILLIAMS

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