

COPERNICUS FOR URBAN RESILIENCE IN EUROPE: RESULTS FROM THE FIRST PHASE OF CURE PROJECT















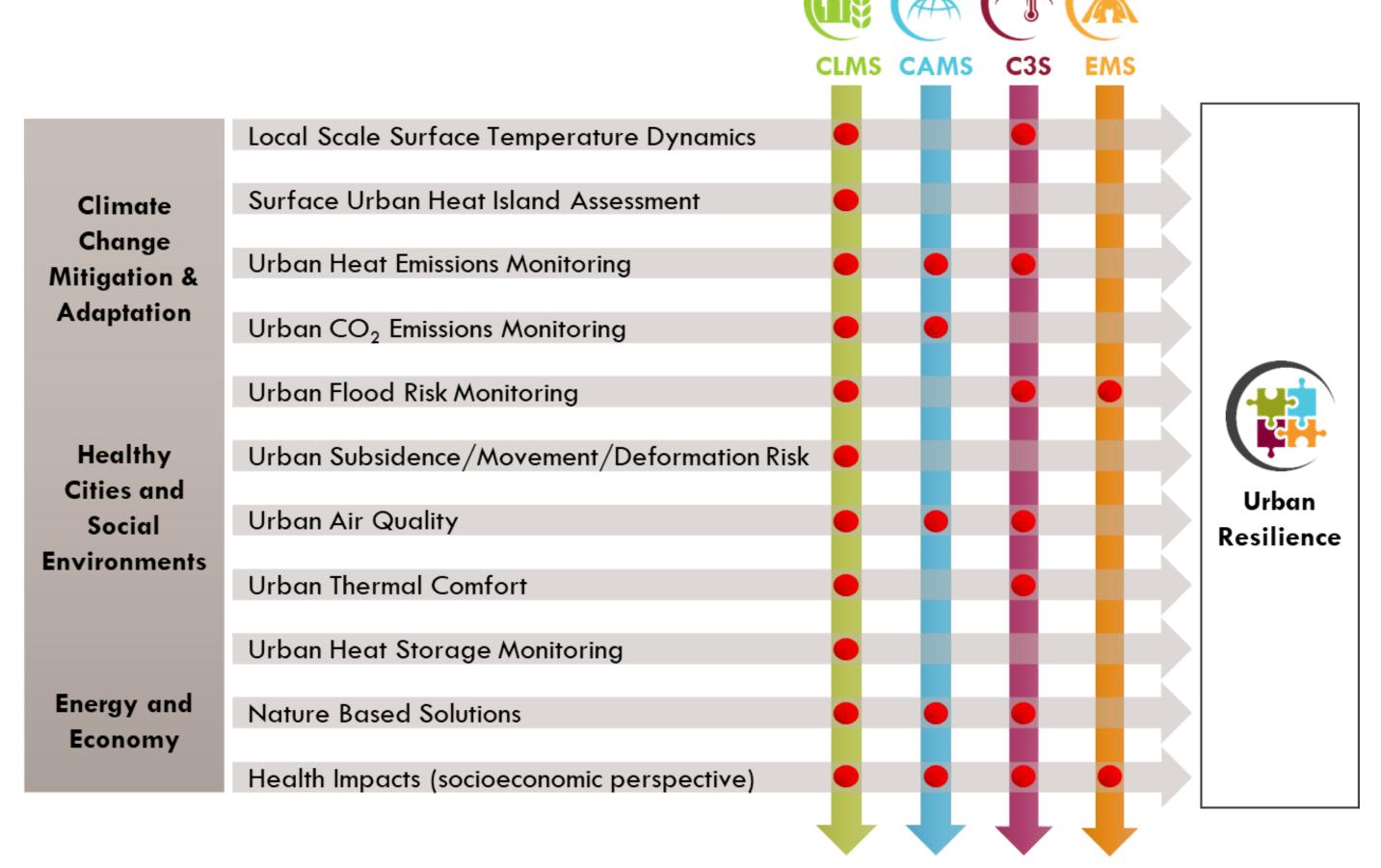




N. Chrysoulakis¹, Z. Mitraka¹, M. Marconcini², D. Ludlow³, Z. Khan³, B. Holt Andersen⁴, L. Kjær-Hansen⁴,T. Soukup⁵, M. Dohr⁶, A. Gandini⁷, J. Kropp⁸, D. Lauwaet⁹, C. Feigenwinter¹⁰

1. FORTH, Institute of Applied and Computational Mathematics, Remote Sensing Lab, Greece, 2. DLR, Deutsches Zentrum für Luft- und Raumfahrt, Germany, 3. University of the West of England, Bristol, United Kingdom, 4. CWare, Denmark, 5. Gisat S.R.O., Czech Republic, 6. GeoVille Informationssysteme und Datenverarbeitung GMBH, Austria, 7. TECNALIA, Fundacion Tecnalia Research & Innovation, Spain, 8. PIK, Potsdam Institut fuer Klimafolgenforschung, Germany, 9. VITO, laamse Instelling voor Technologisch Onderzoek N.V., Belgium, 10. Universitaet Basel, Switzerland

The H2020-Space project CURE is a joint effort of 10 partners from 9 countries who exploit Copernicus Core Services for developing urban resilience crosscutting applications targeting climate change adaptation/mitigation, energy and economy, healthy cities and social environments. CURE applications cope with the required scale and granularity by integrating or exploiting third-party data, in-situ observations and modelling. CURE uses DIAS (Data and Information Access Services) for a web-based system hosting the CURE applications, capable of supporting downstream urban services development across Europe, enabling its incorporation into the Copernicus operational services.



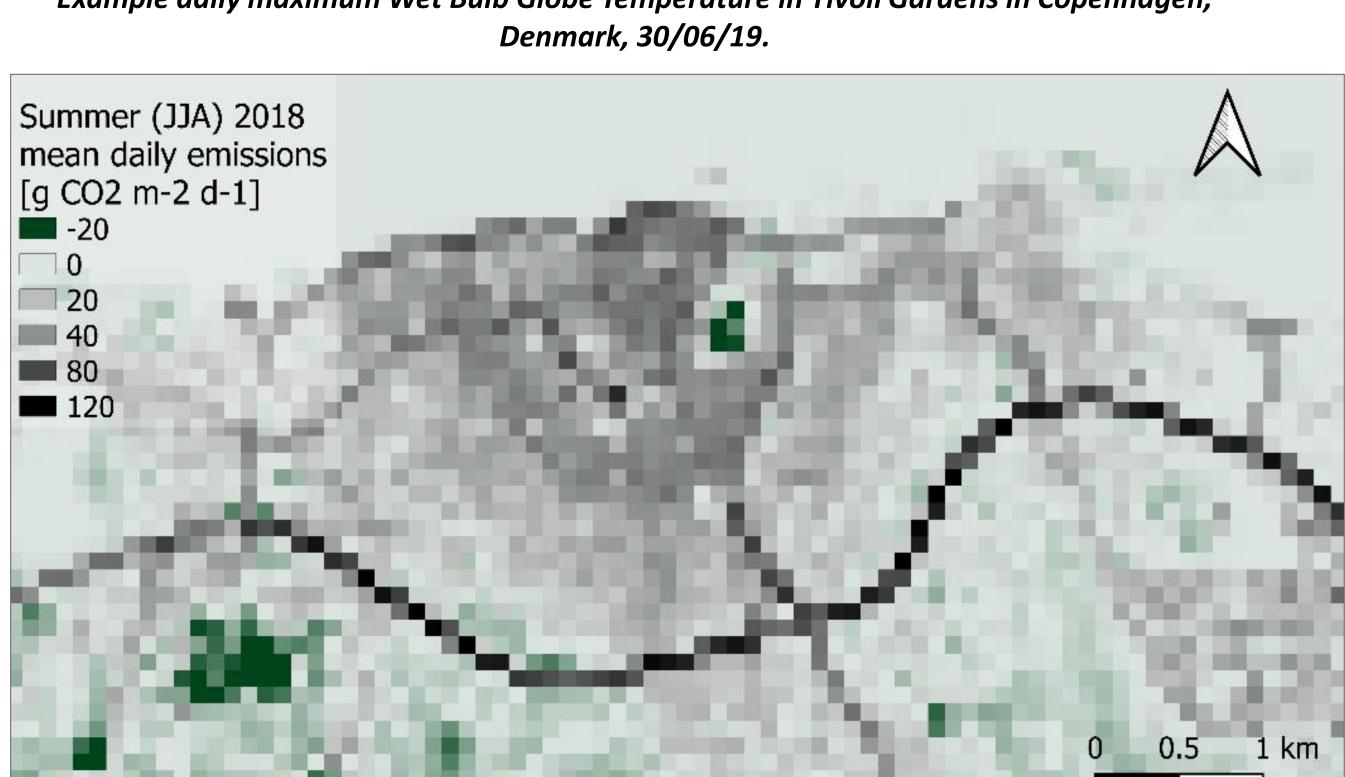
List of the 11 CURE cross-cutting applications and their Copernicus Core Services dependencies.



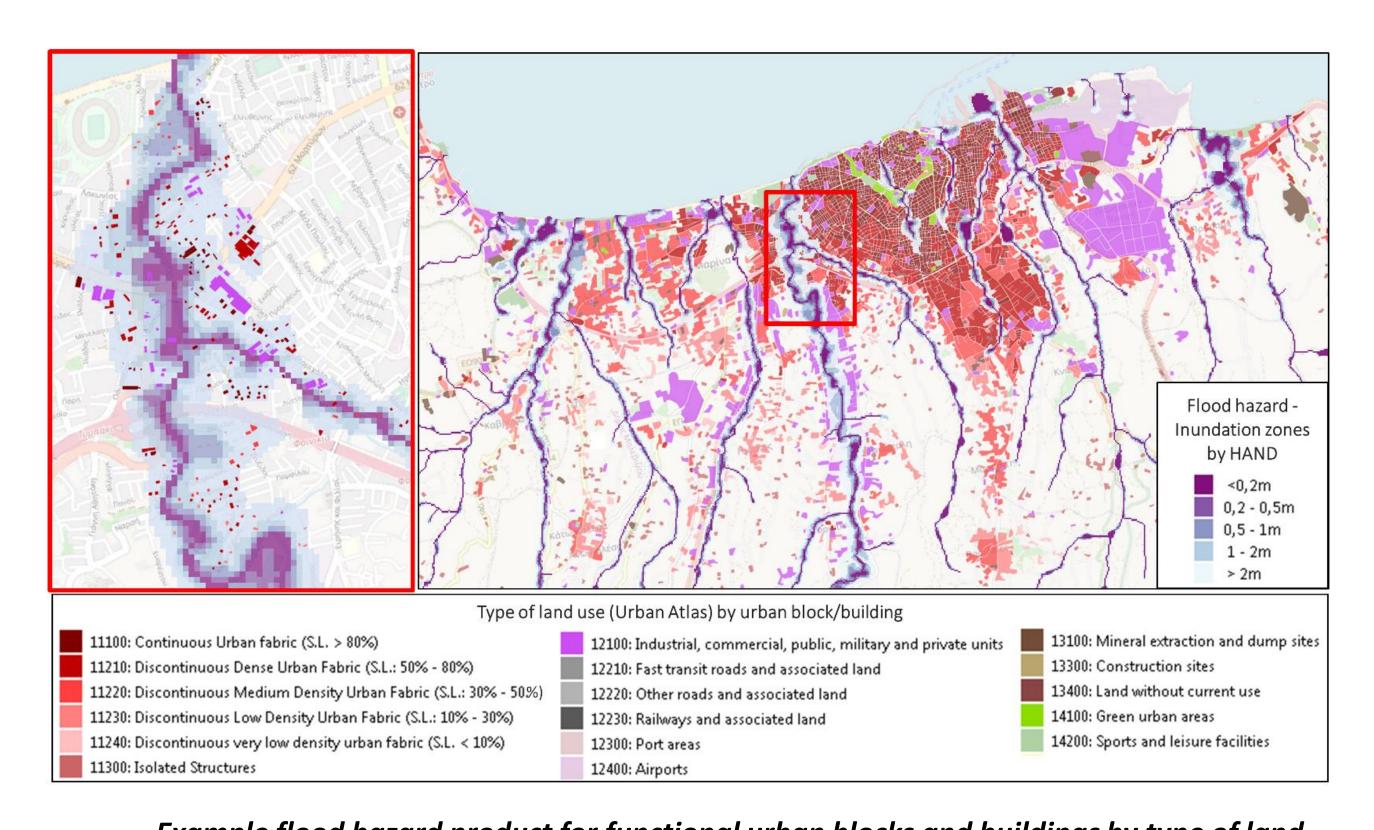
Four front-runner cities (blue) for which CURE applications are developed and six follower cities (green) for which CURE applications are applied.



Example daily maximum Wet Bulb Globe Temperature in Tivoli Gardens in Copenhagen,



Example mean daily CO₂ emissions for the summer season 2018, for Heraklion, Greece.



Example flood hazard product for functional urban blocks and buildings by type of land use for Heraklion, Greece.

