

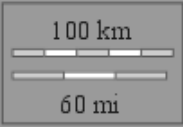
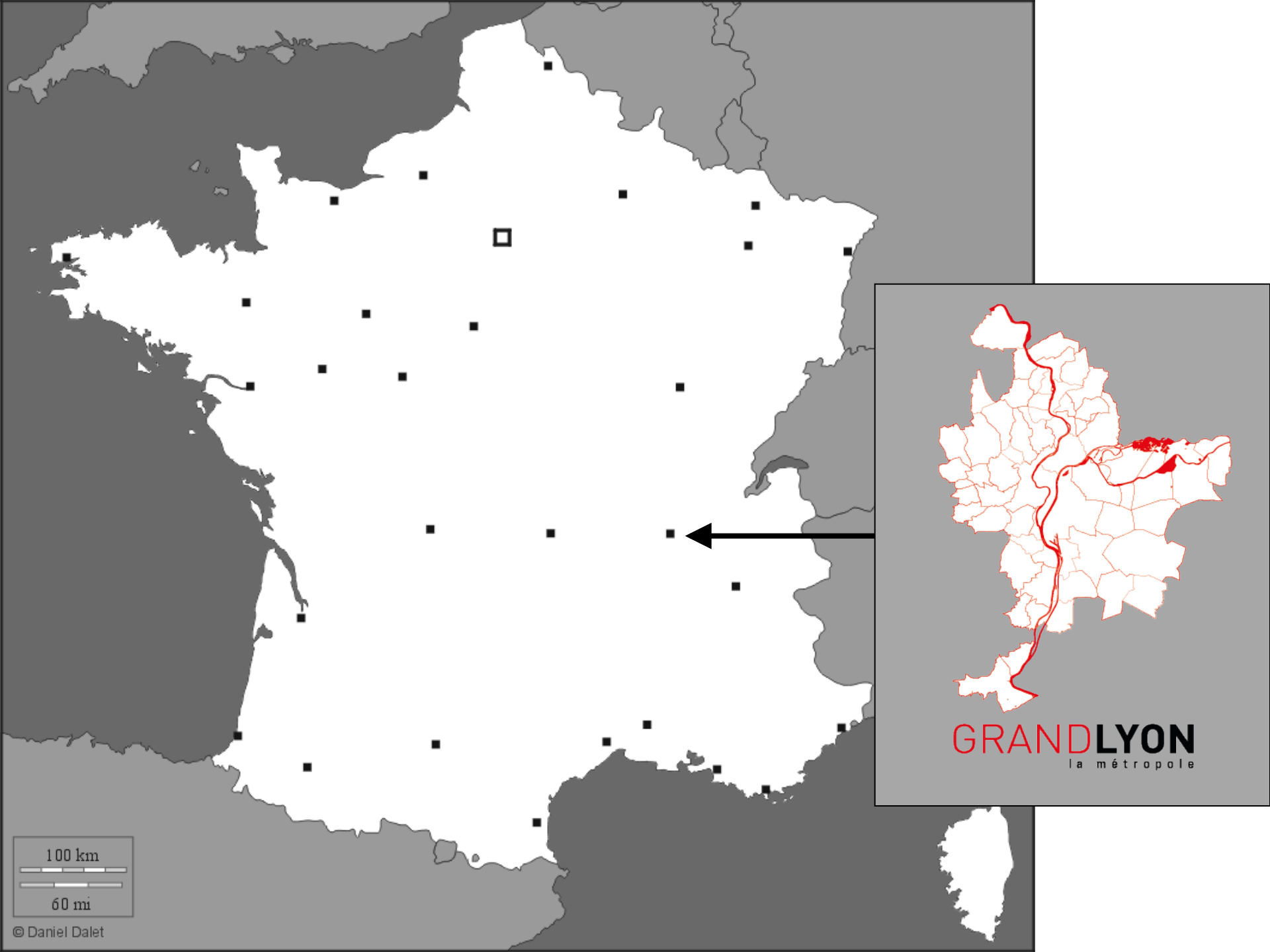
Climate Plan – Lyon Metropole

Strengths and weaknesses of the Adaptation Strategy

23-24 november 2015

Climate + project





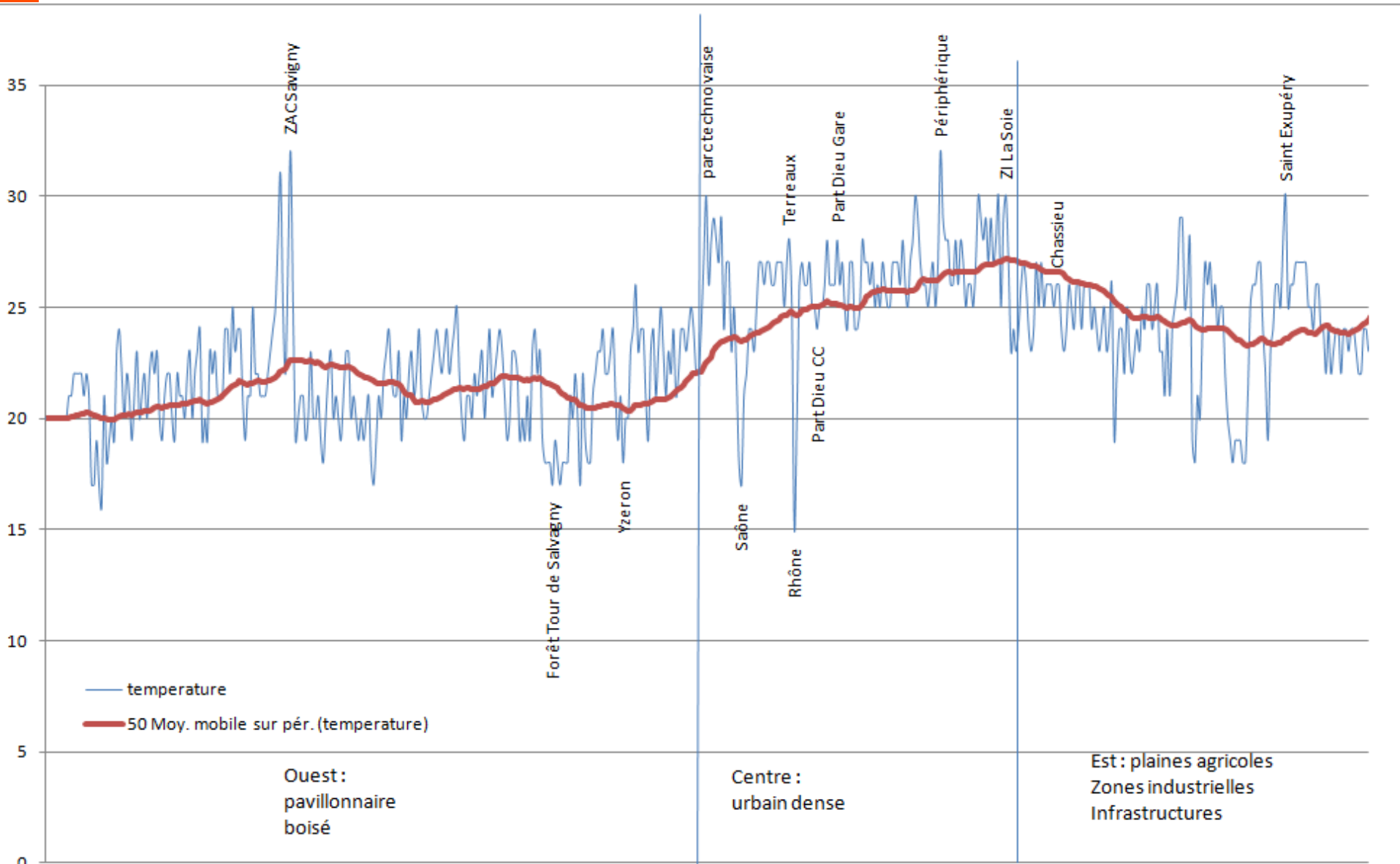


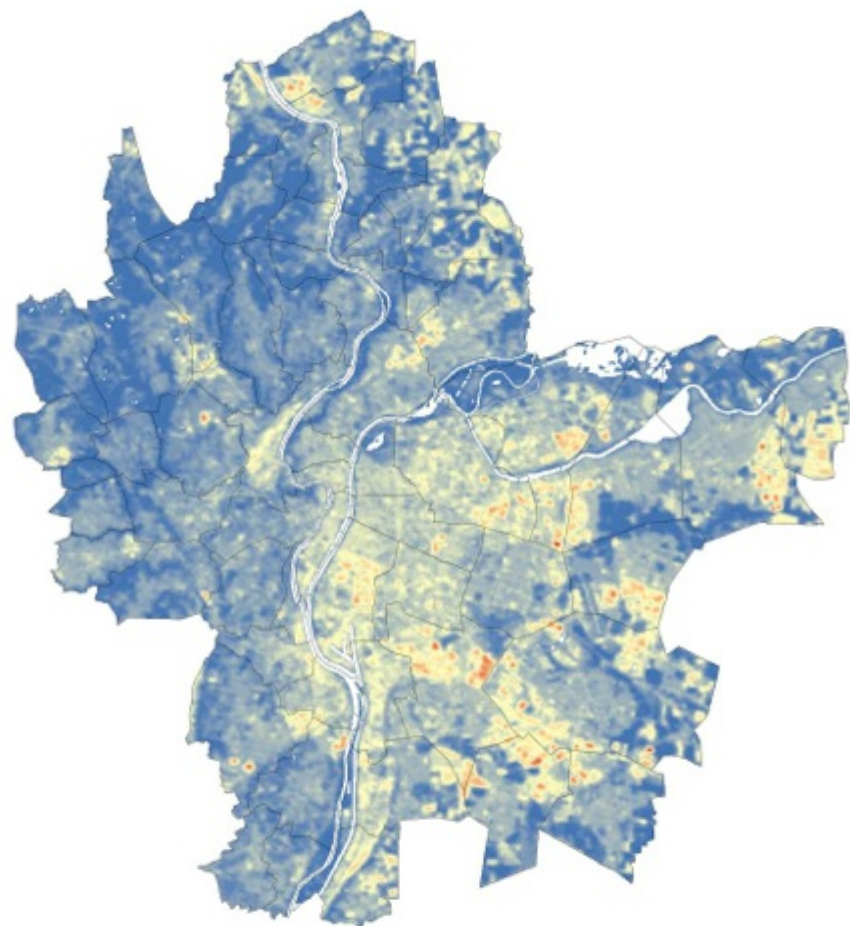


Strength 1 : Heat Island maps

Primary studies (20

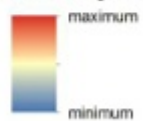






Températures de surface

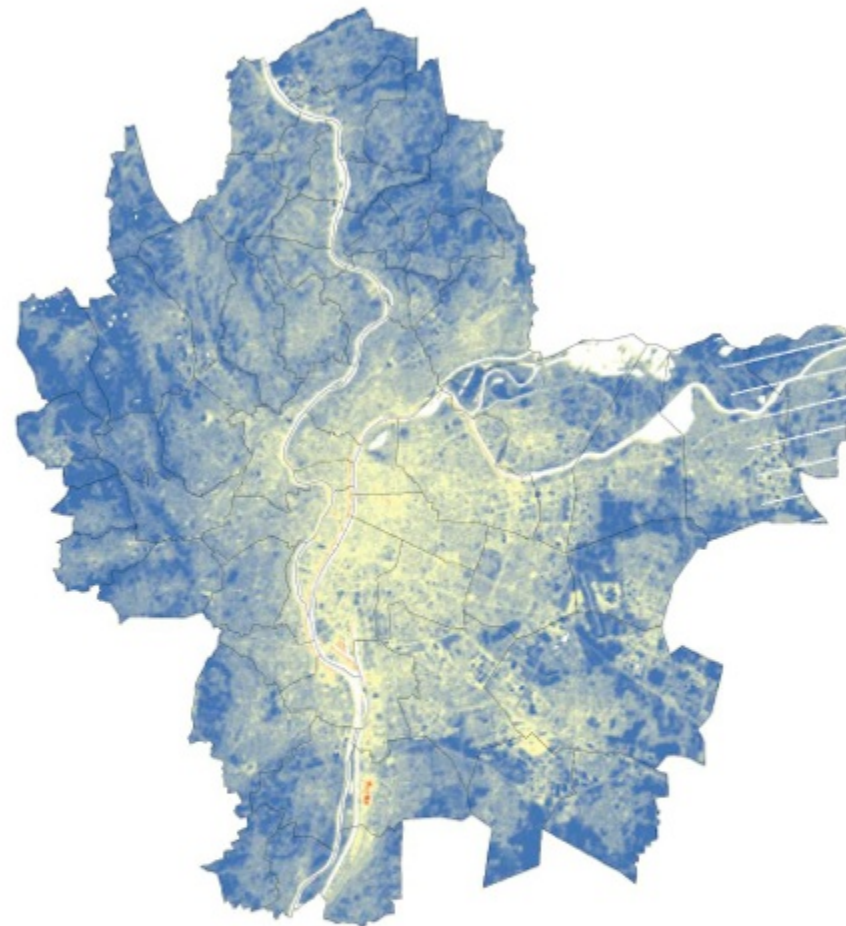
11 avril 2011 journée



Agence
d'urbanisme
pour le développement
de l'agglomération lyonnaise

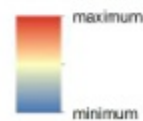
10 Km

Auteurs : Julita Dudek, Marc Lauffer



Températures de surface

30 avril 2011 nuit

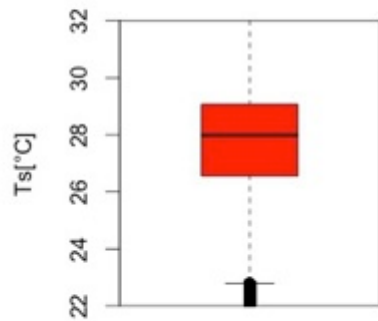


Agence
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pour le développement
de l'agglomération lyonnaise

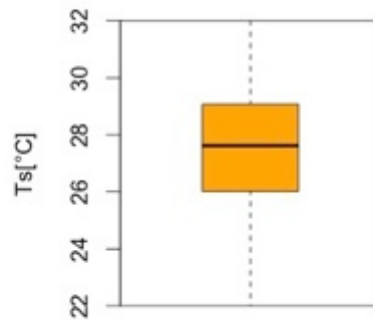
10 Km

Auteurs : Julita Dudek, Marc Lauffer

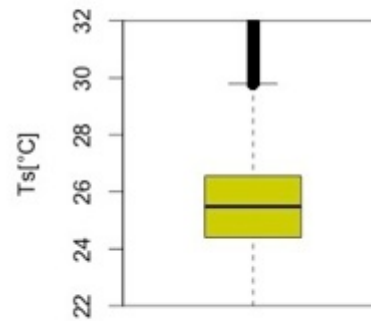
Températures de surface le 11 avril 2011 à 10h



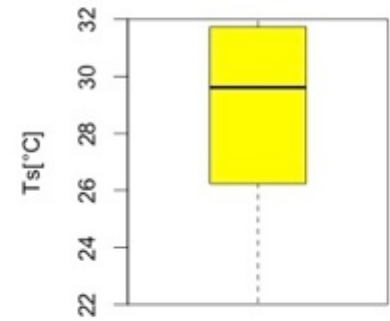
Centre ancien



Immeuble

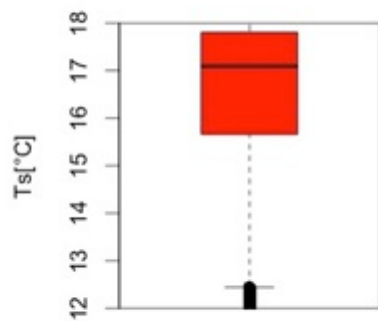


Pavillon

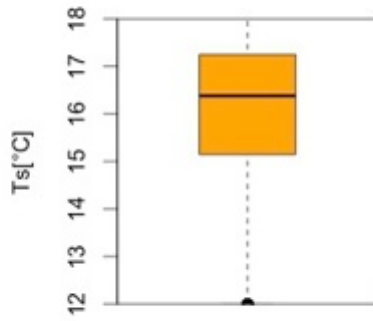


Activités

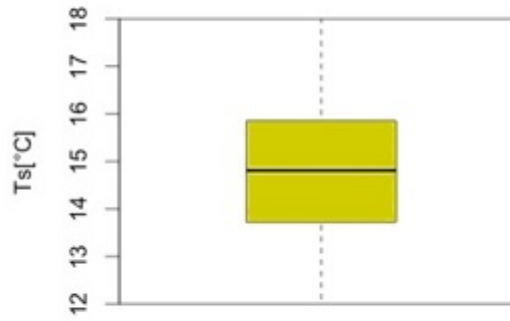
Températures de surface le 30 avril 2011 à 22h



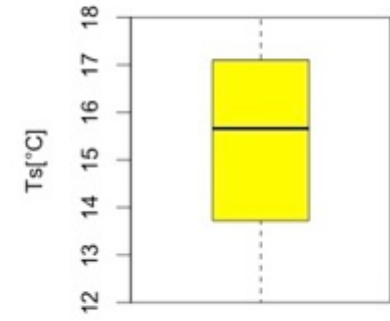
Centre ancien



Immeuble



Pavillon



Activités

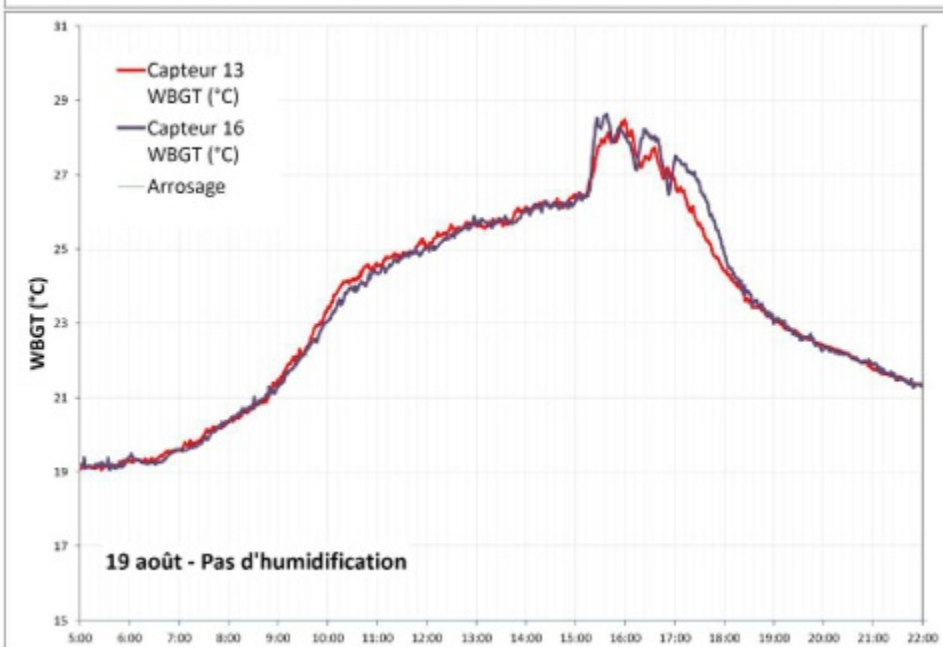
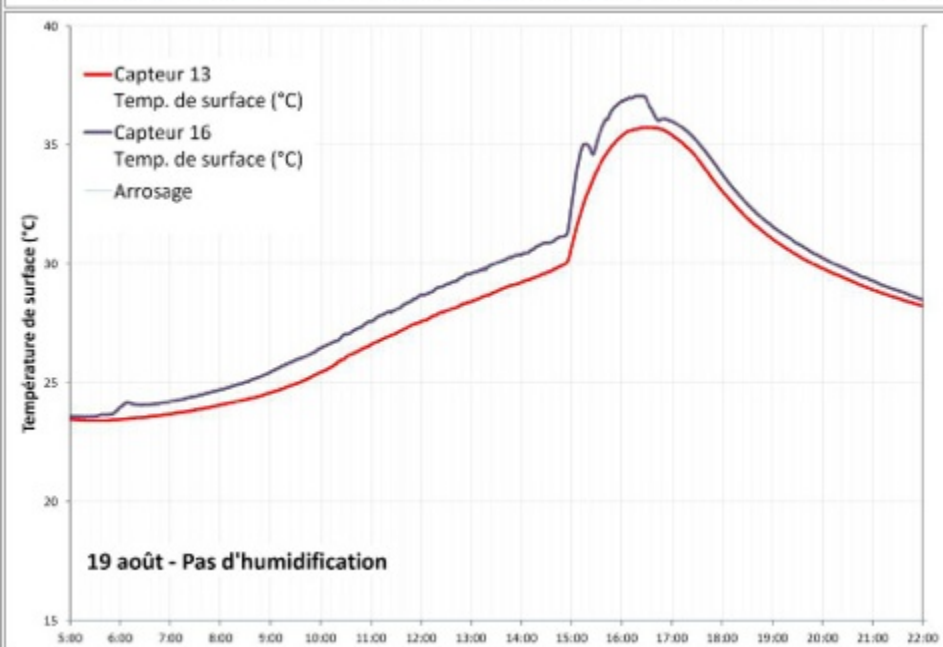
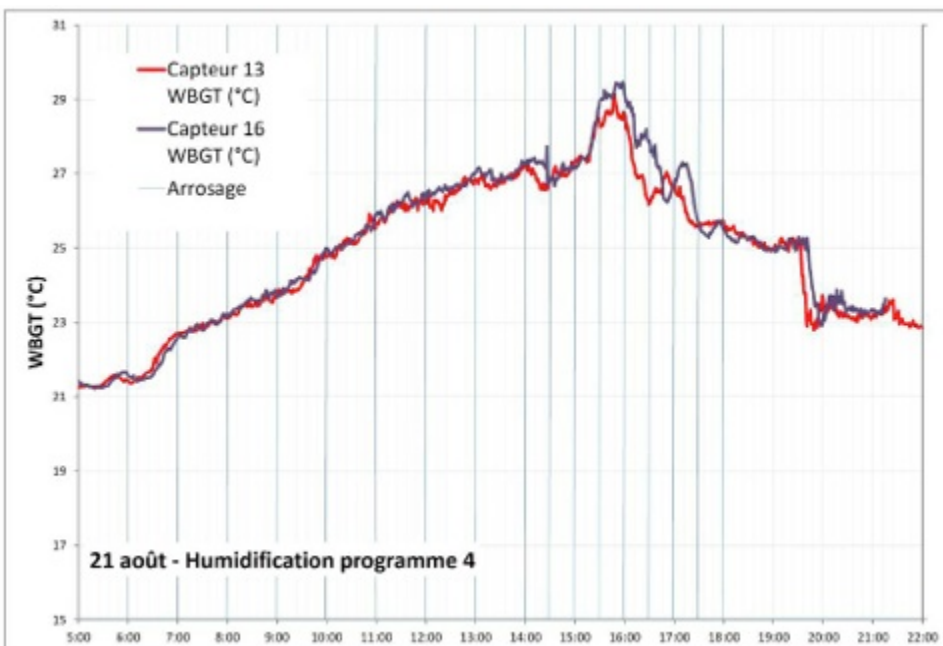
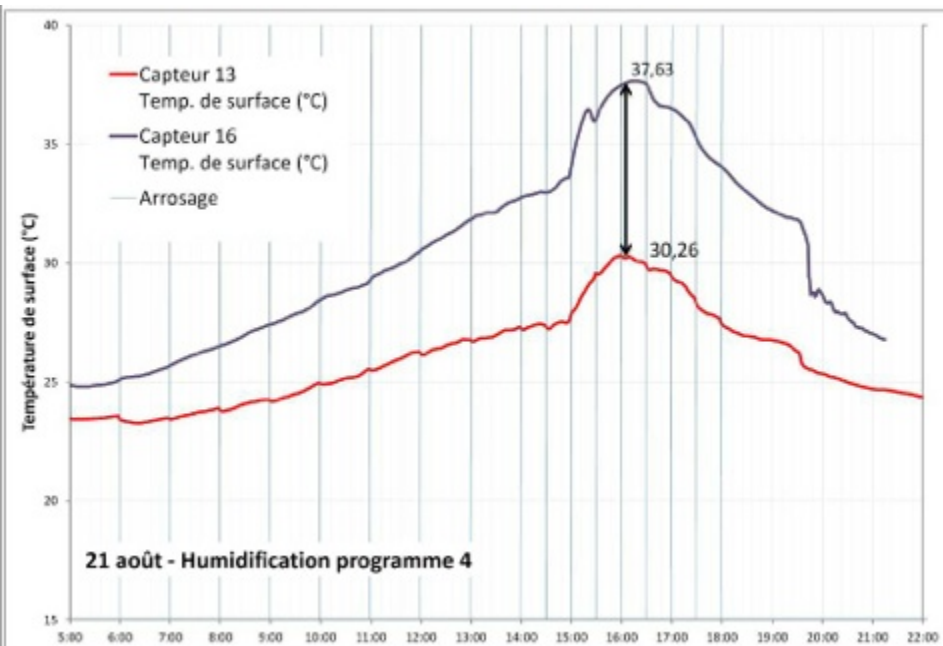
Julita Dudek's Thesis in 2011-2015

la métropole
GRAND LYON



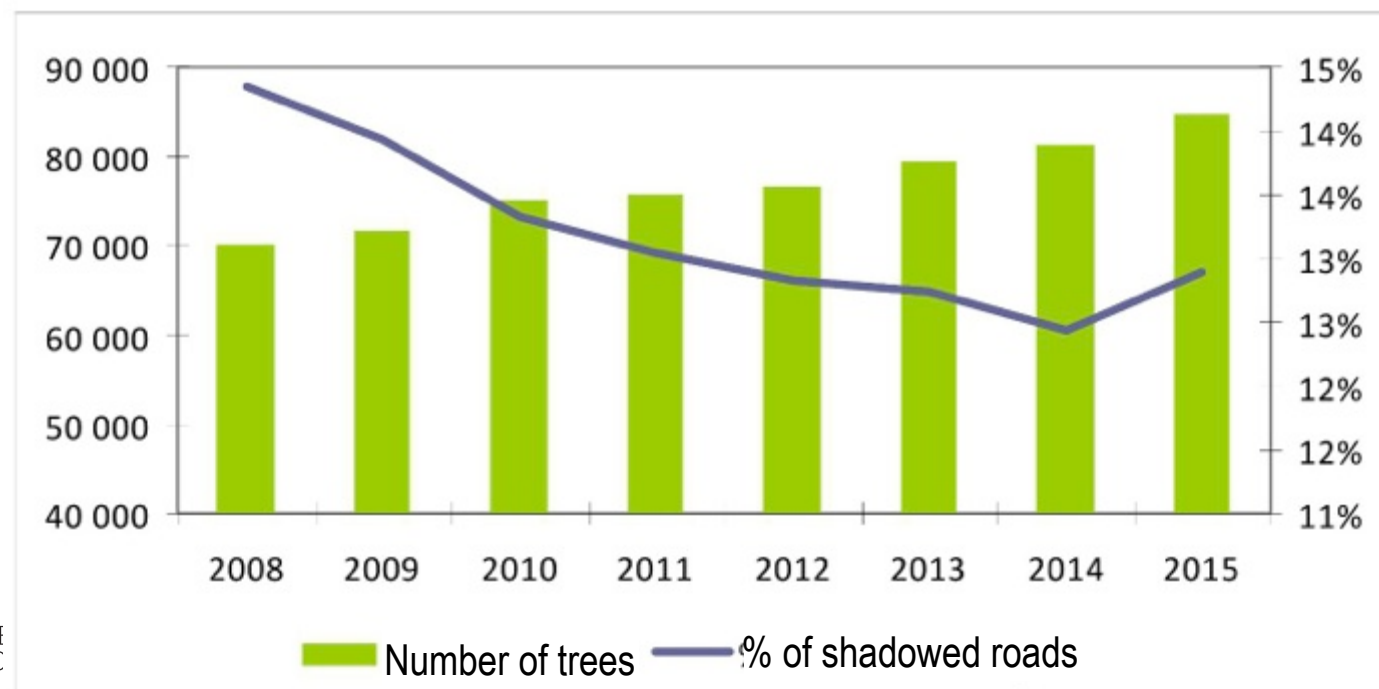
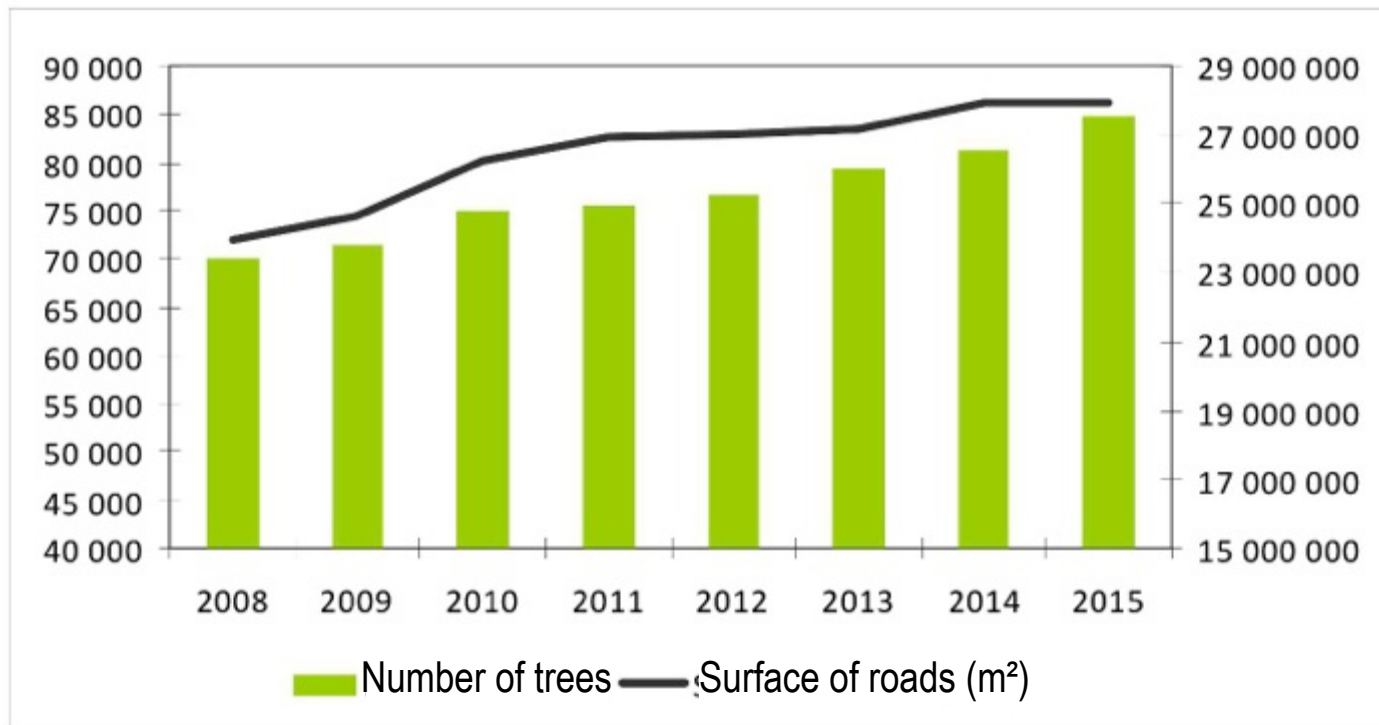
Strength 2 : on-site experimentation





Strength 3 : trees' charter





Strength 4 : rainwater strategy and competence



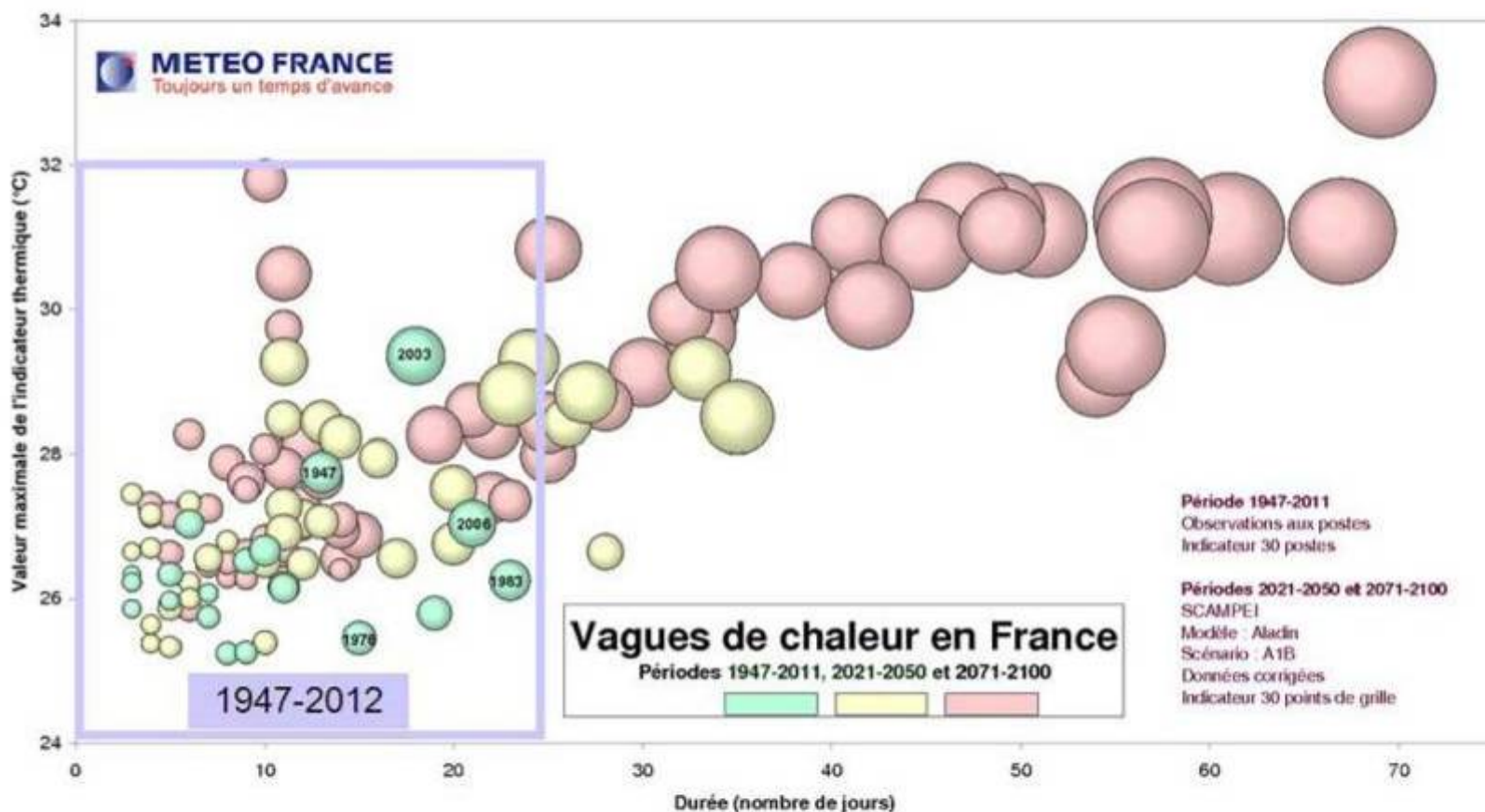
Elisabeth Sibeud, grand lyon

Strength 4 : rainwater strategy and competence



Strength 5 : town services for vulnerable people, heatwave plan

Evolution des vagues de chaleur entre 1947 en 2100 en France



La surface des sphères symbolise l'intensité globale des vagues de chaleur, les sphères les plus grandes correspondant aux vagues de chaleur les plus sévères

Strength 5 : town services for vulnerable people, heatwave plan



Elderly people (allowances, services)



Family (i.e. social workers helping new parents)



Strength or weakness? sensibility of town developers...



Weakness 1 : formalization of the plan (indicators, quantitative objectives, time horizon ?)

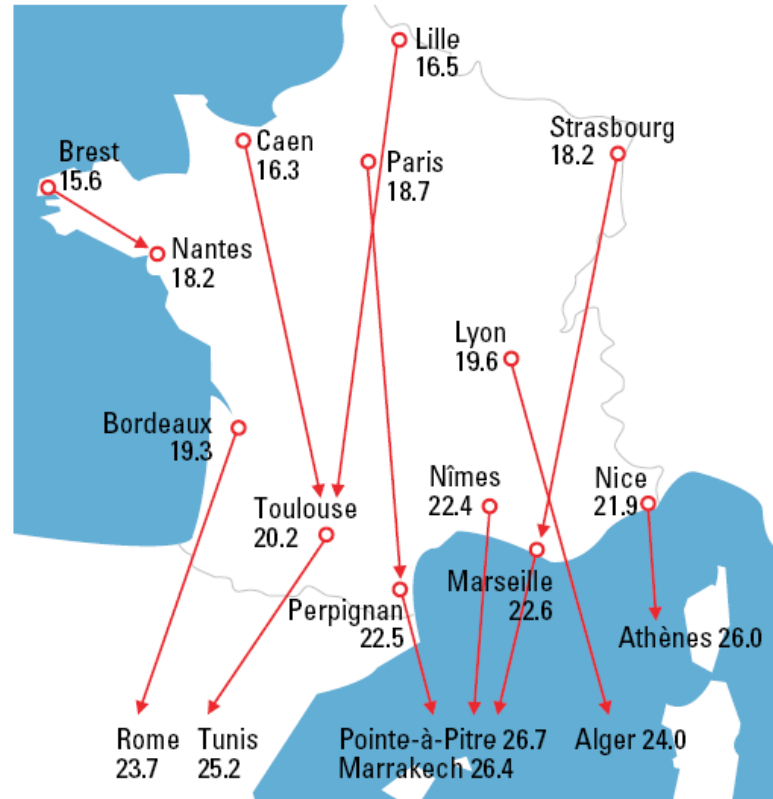


Figure 2 : prévision des températures moyennes à l'horizon 2070-2100.
Source : Météo France, 2009.

Weakness 2 : set up « source to sea » governance including economic actors



Rhône

Rhône's debit :

- 15 to - 30% on average
- 30 à - 40% in the summer

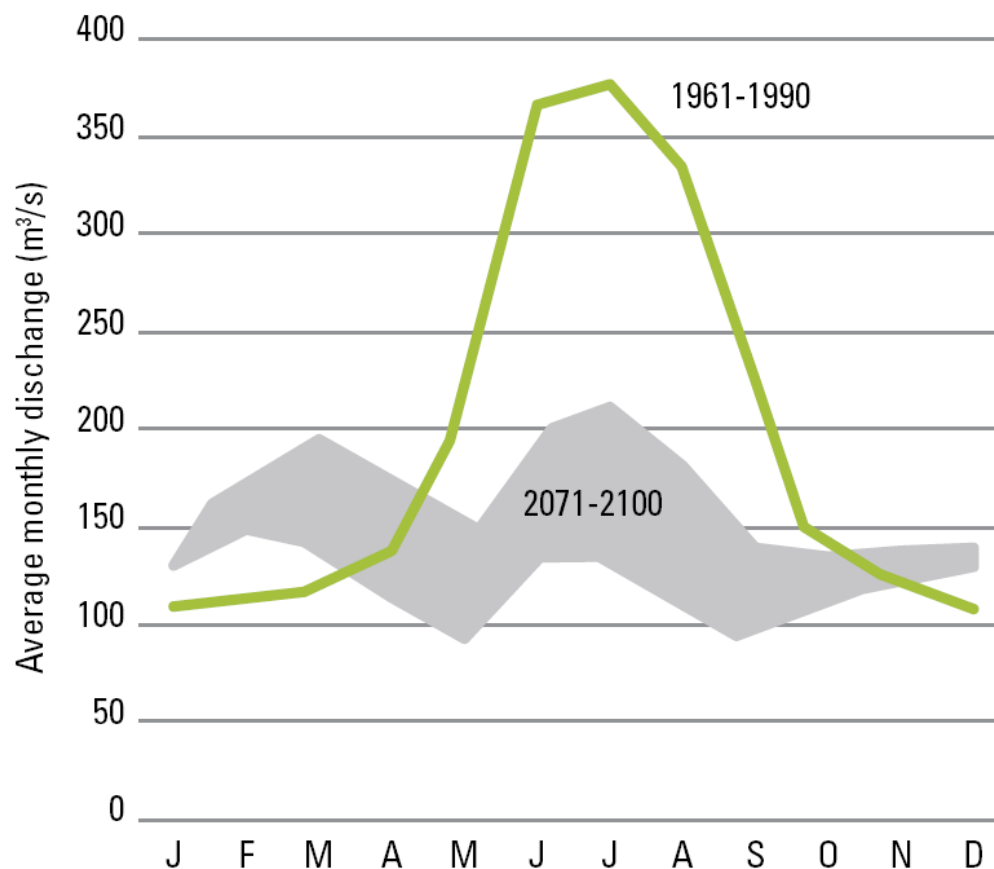
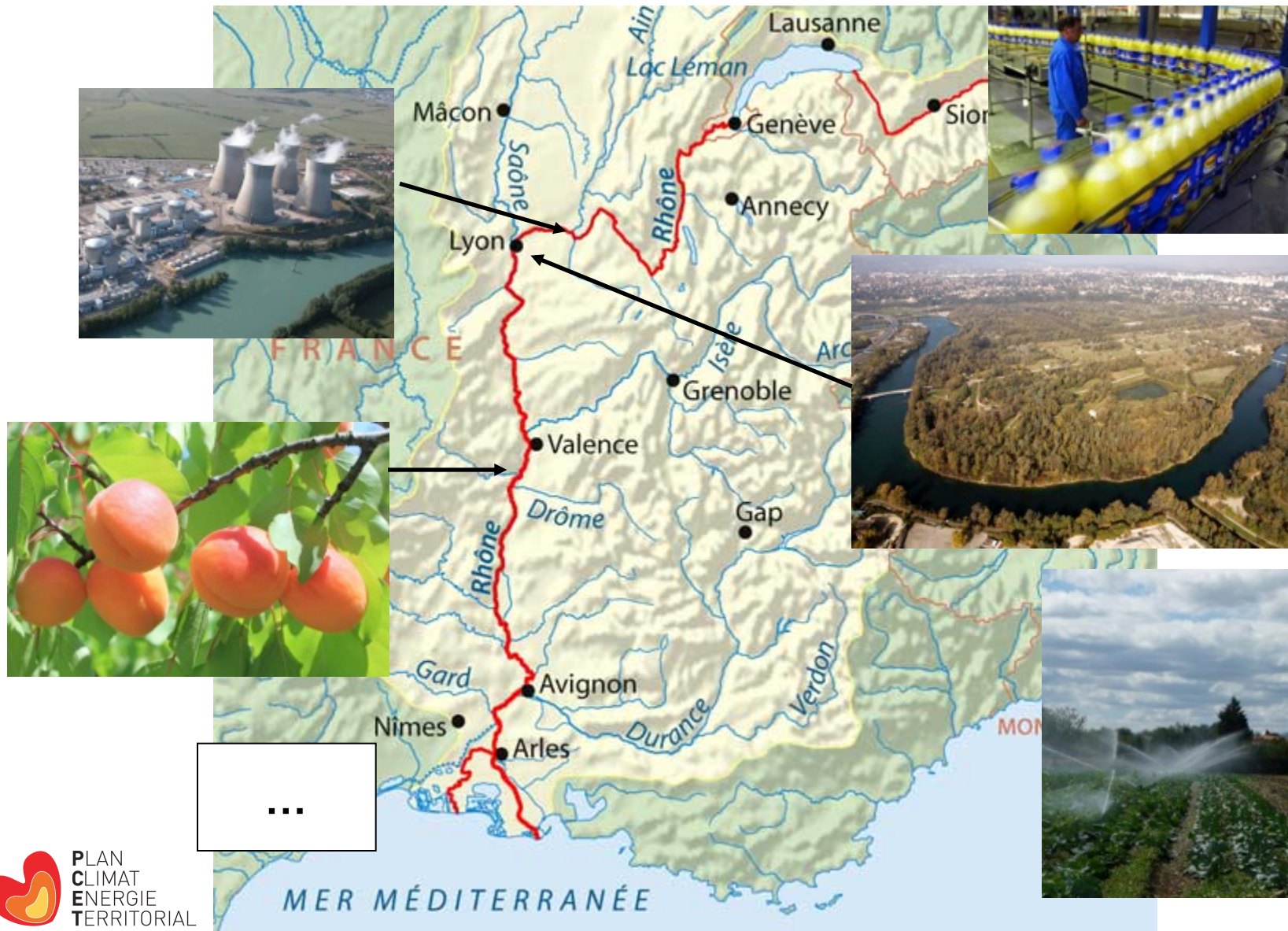


Figure 10 : débits mensuels du Rhône en amont du Lac Léman en climat actuel (1961-1990) et à l'horizon 2080 (2071-2100) selon le scénario A2 du GIEC. La zone grisée représente les incertitudes associées à la projection.

Source : Beniston, 2012.



Weakness 2 : set up « source to sea » governance including economic actors



Weakness 3 : who will care for « nature in the city » ?



Areas to reinforce

Uncertainty about the health impact (other than heat waves) :

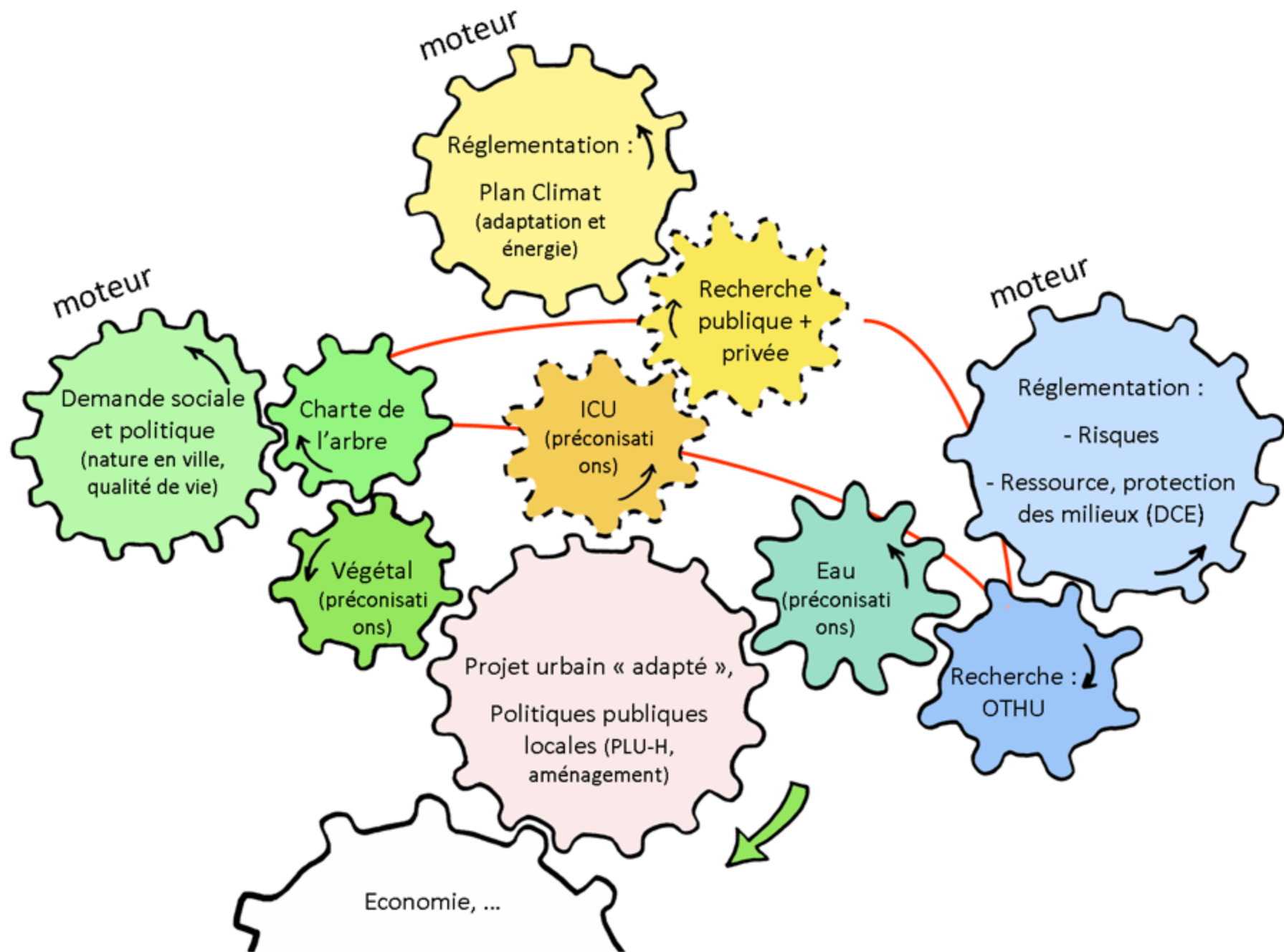
- interaction with pollution
- new diseases



Thank you for your attention !

Contact :

lponsar@grandlyon.com



Number of « heatwave » days

