THEME ENV.2012.6.1-1

EUPORIAS

(Grant Agreement 308291)

EUPORIAS

EUropean Provision Of Regional Impact Assessment on a Seasonal-to-decadal timescale

Contents

Figures

Tables

Section 3, WP21, Task 21.2

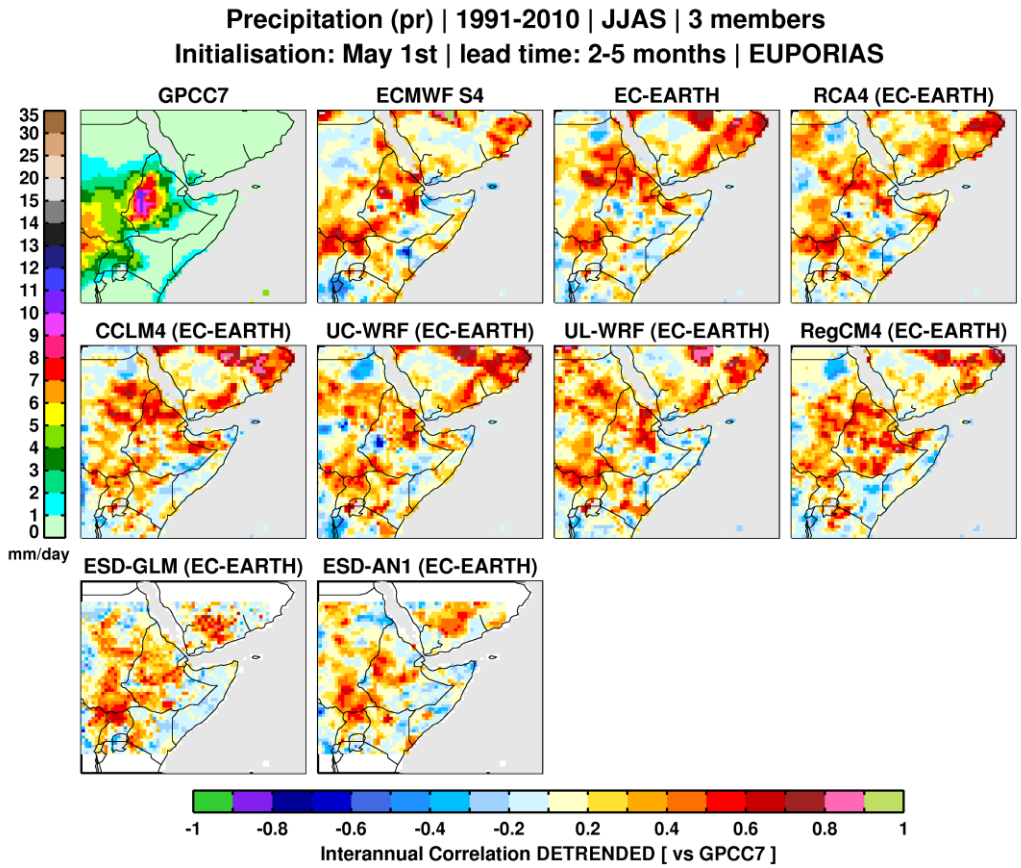


Figure 1: Observational GPCC7 mean June-September rainfall [upper left] and interannual correlation between GPCC7 and global hindcasts (ECMWF S4 and EC-EARTH), regional climate models (RCA4, CCLM4, UC-WRF, UL WRF and RegCM4) and statistical downscaling (ESD-GLM and ESD-AN1). All time series are detrended by removing linear trends. Hindcast members 1 to 3

Section 3, WP23 & WP31

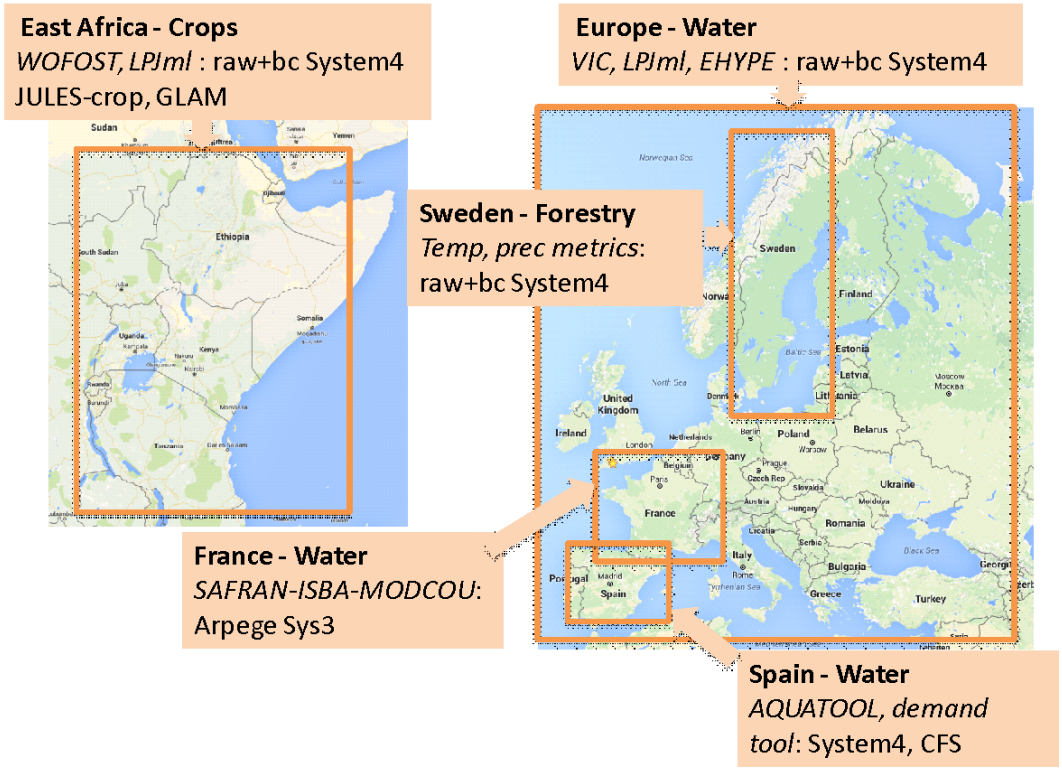
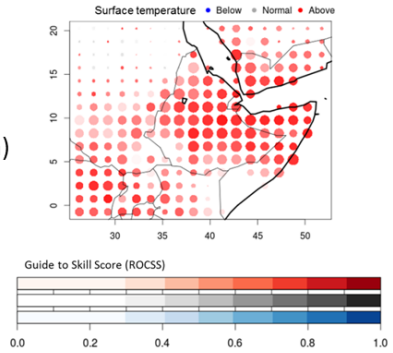


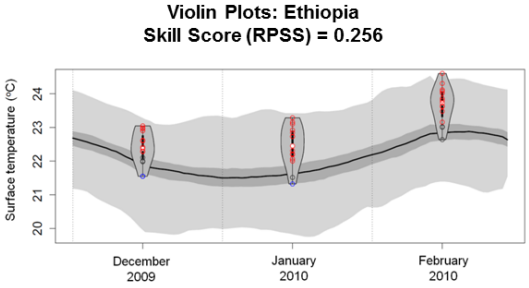
Figure 2: Schematic summarising impact modelling studies performed by work packages 23 and 31. The bounding boxes are purely illustrative and do not represent the actual study areas (for instance, in Spain, several small river basins are studied). "raw" means raw seasonal hindcast; "bc" means bias corrected seasonal hindcast, and the simulations also use WFDEI forcing for baseline simulations

Section 3, WP33

(a)



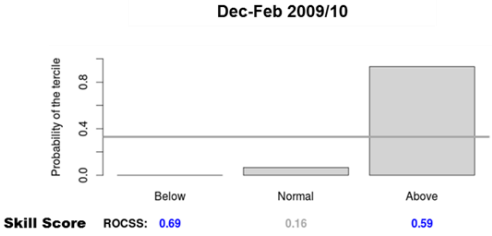
(b)



(c)

City	Cooler than average	Average	Warmer than average	Skill (RPSS)
Addis Ababa	0%	0%	100%	0.373
Adama	0%	0%	100%	0.480
Gondar	0%	0%	100%	0.232
Mekele	0%	7%	93%	0.308
Awassa	0%	0%	100%	0.512
Dire Dawa	0%	0%	100%	0.288

(d)



(e)

Confidence that winter temperatures will be warmer than average in Addis Ababa: 3

Confidence Score Guide

1	No clear indication yet
2	Small indication that temperatures will be warmer than average
3	Moderate indication that temperatures will be warmer than average
4	Strong indication that temperatures will be warmer than average

How the confidence Score is calculated

		Skill			
		None	Low	Medium	High
Likelihood	Very Low (under 30%)				
	Low (30-39%)				
	Medium (40-49%)				
	High (50% or more)			X	

(f)

Temperature	Likelihood	Skill
Colder than average	0%	Medium
Average	0%	
Warmer than average	100%	

Figure 3a-f: *Formats presented in the Decision Lab a-c were presented to expert users of statistics only, d was presented to all participants, while e-f were presented to novice users of statistics.* ***(a) Bubble map:*** *colour represents most likely tercile, size of the bubble represents predicted likelihood according to forecast, and opacity indicates skill. Blank space indicates regions for which there is no skill or where all terciles are predicted to be equally probable.* ***(b) Violin plot:*** *a "Violin" comprising a pdf representing the spread of the ensemble members of the forecast is overlaid on climatology, coloured dots represent individual ensemble members colour coded to reflect the tercile that they fall into, with a white dot representing the median;* ***(c) Table:*** *likelihood of tercile is given as a percentage score, while Rank Probability Skill Score is provided for each region; (d)* ***Bar Graph:*** *bars represent tercile probability with a skill score (ROC Skill Score) for each tercile underneath;* ***(e) Confidence Index:*** *forecast skill is combined likelihood of threshold exceedance to provide a colour-coded index; and* ***(f) Qualitative Table:*** *likelihood of tercile is given as a percentage score, while skill score is given using a qualitative category*

Section 3, WP44, Task 44.2

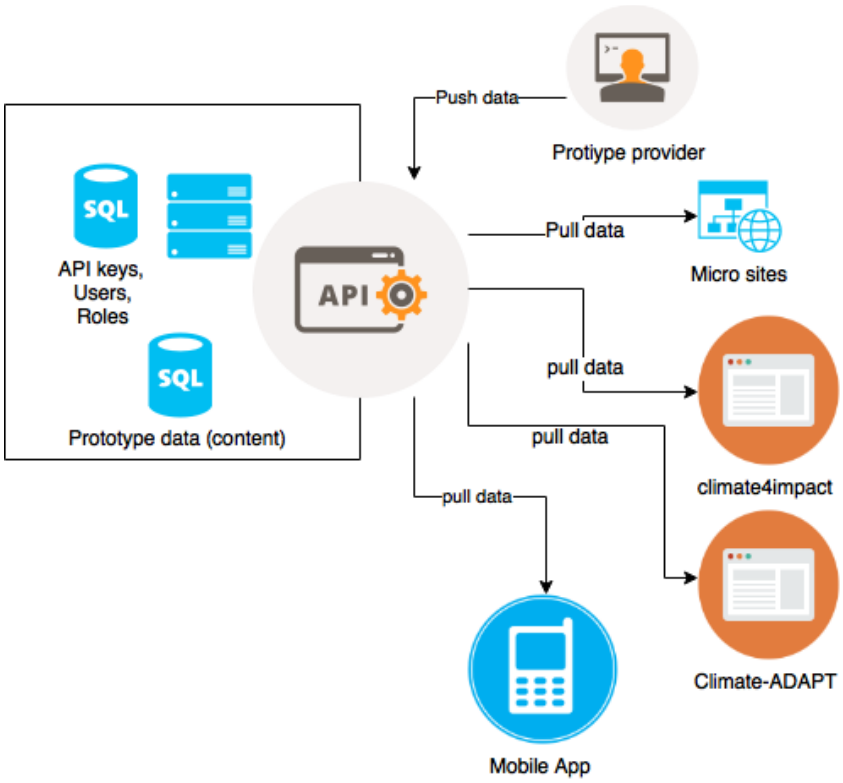


Figure 4: Schematic of the interactions that the API should support

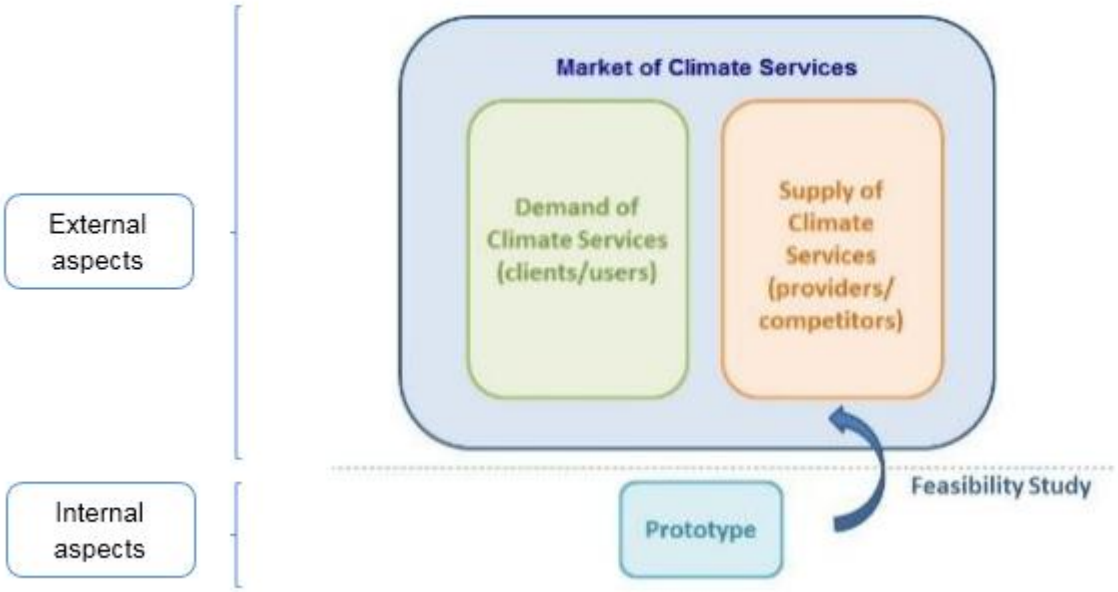


Figure 5: Approach followed on market analysis methodology

Figure 6: The BellHouse installation in the Met Office for the final EUPORIAS General Assembly

Section 4, Service Development, Development of successful climate service principles

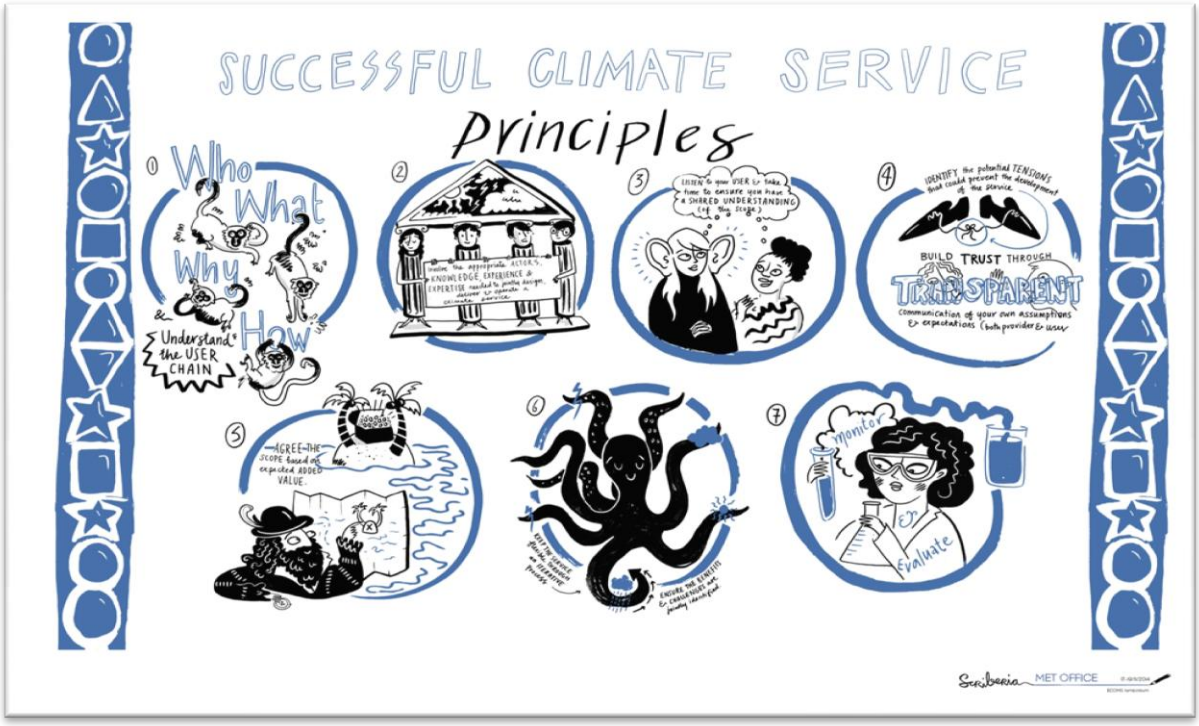


Figure 7: The seven principles of successful climate service development. Image courtesy of Scriberia

Policy impact, WFP LEAP cost benefit analysis

Table 1: Cost of response and summary of findings

	Total Cost 2003-2010	Average Annual Cost
Historic	$2,629,429,128	$328,678,641
LEAP Current	$4,009,751,010	$501,218,876
LEAP Forecast – cost only	$3,439,828,545	$429,978,568
LEAP Forecast – with cash and EWS benefits	$2,504,003,624	$313,000,453