

# Supporting Information for "Projected climate-driven changes of water table depth in the world's major groundwater basins"

Maya Costantini<sup>1</sup>, Jeanne Colin<sup>1</sup>, Bertrand Decharme<sup>1</sup>

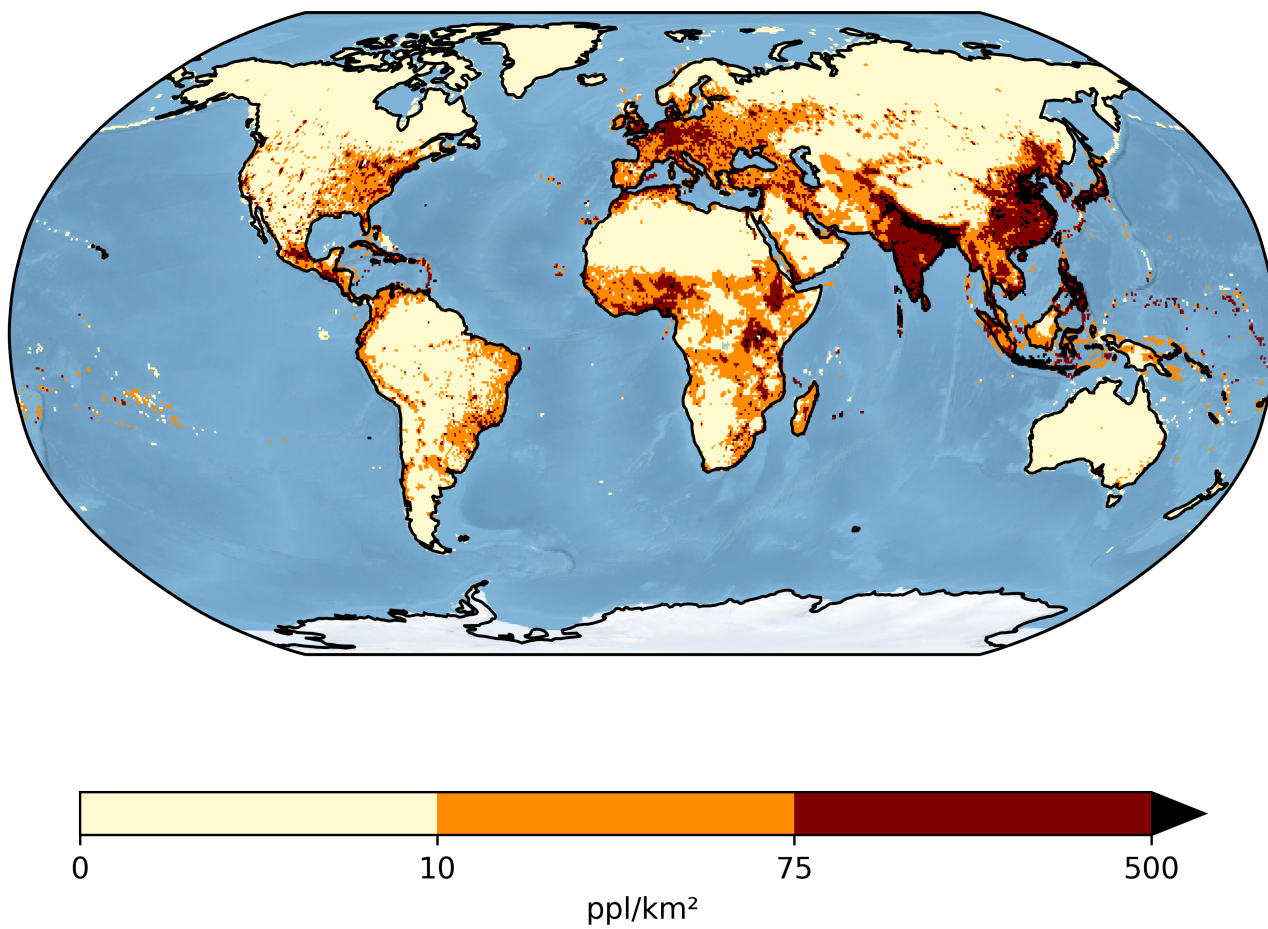
<sup>1</sup>Centre National de Recherches Météorologiques (CNRM), Météo-France/CNRS, Toulouse, France

## Contents of this file

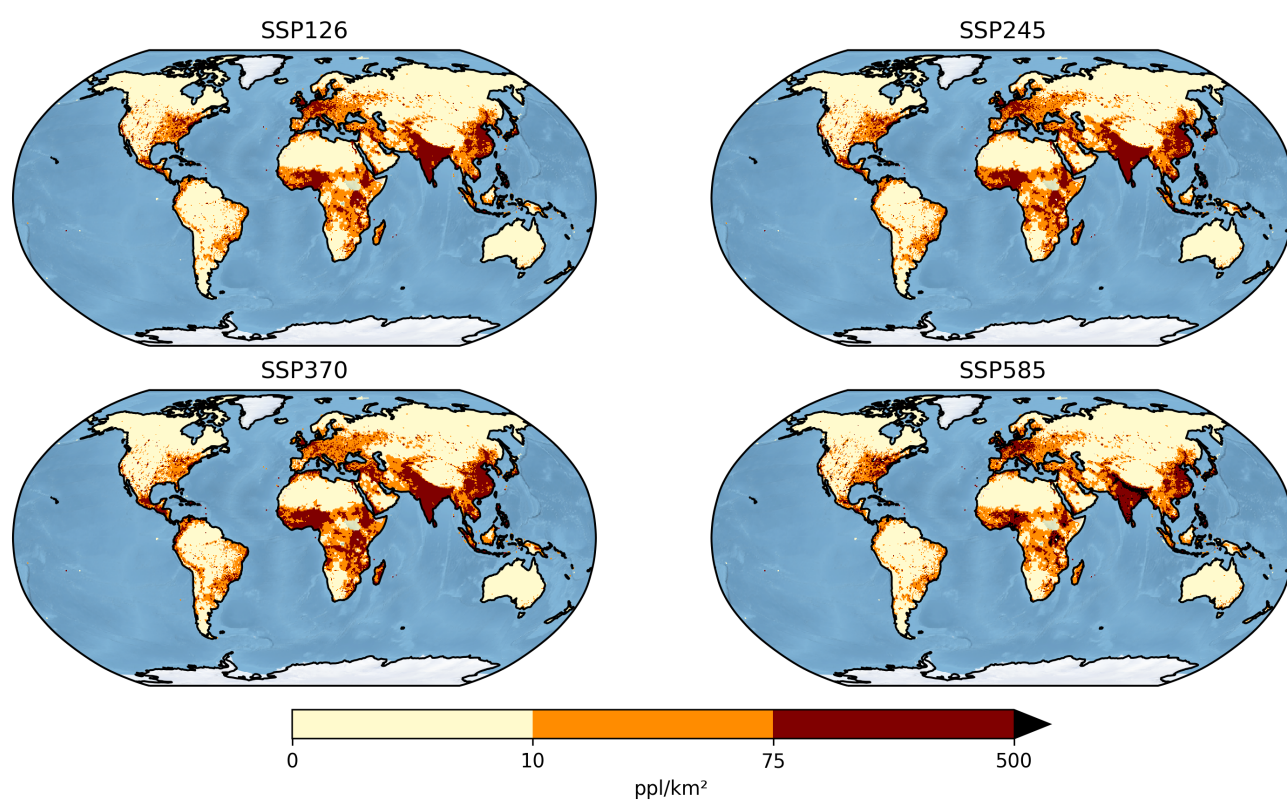
1. Figures S1 to S8

---

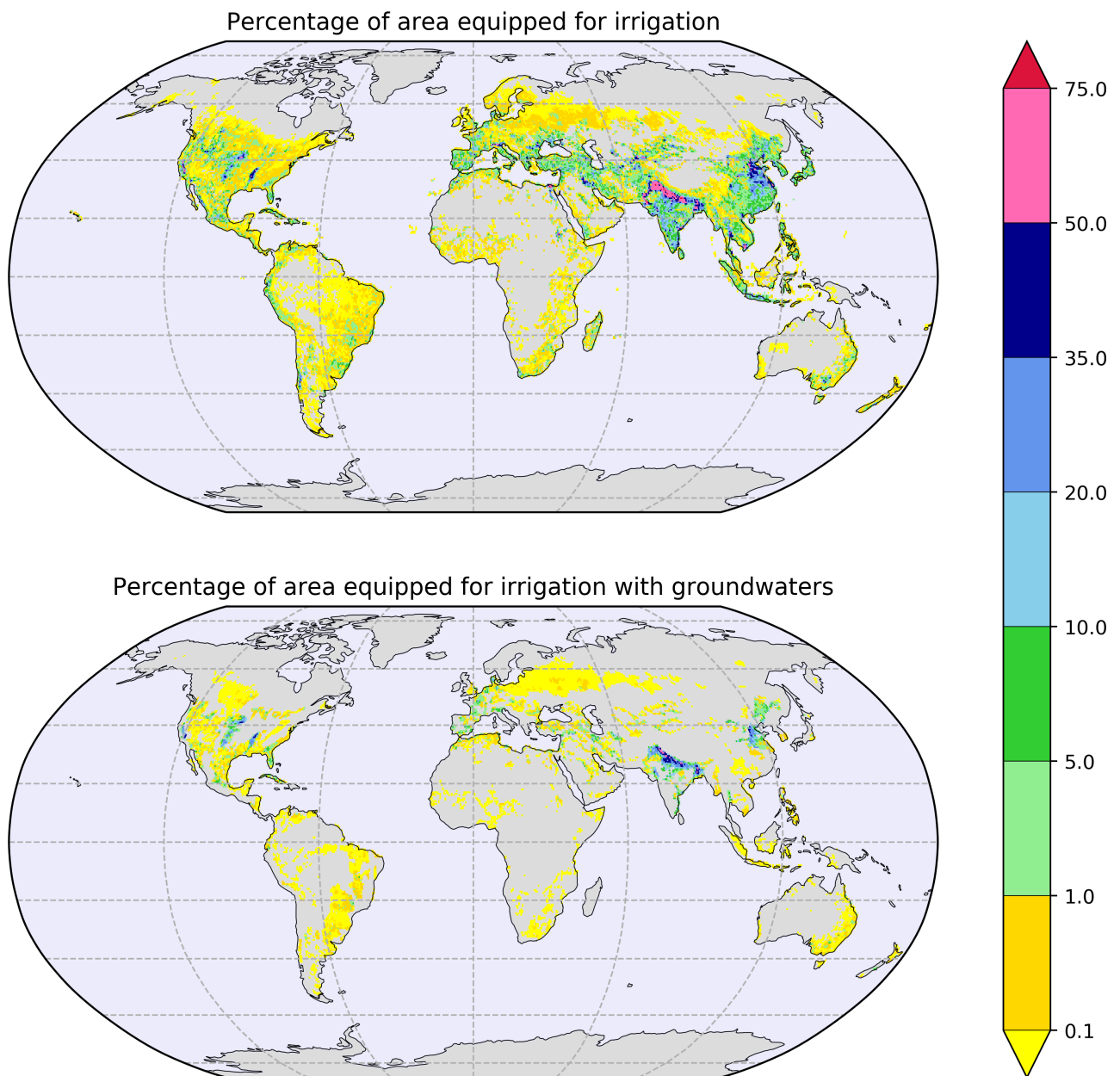
2015



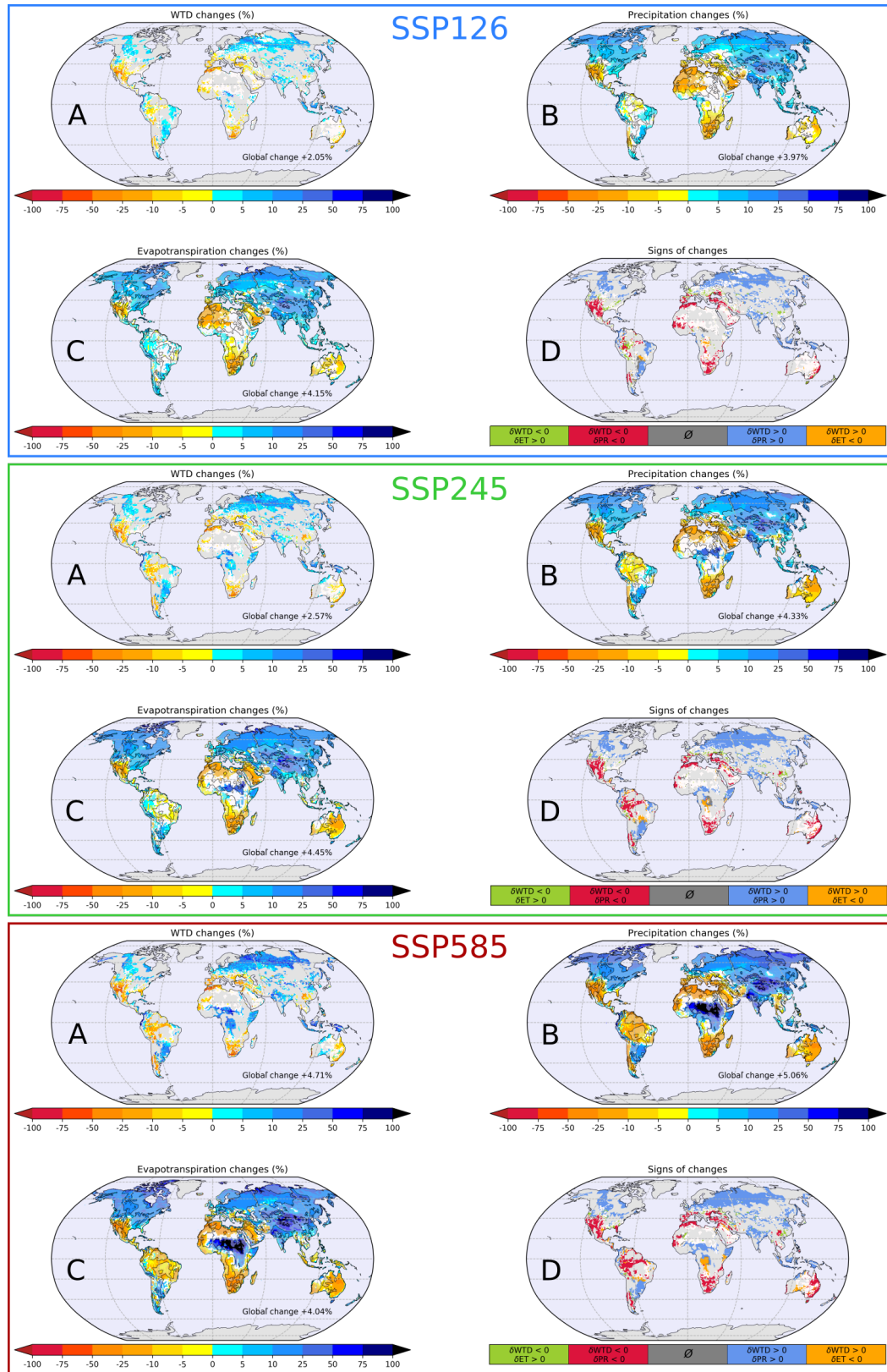
**Figure S1.** Population densities in people pr km<sup>2</sup> in 2015 provided by the SEDAC



**Figure S2.** Projections of population densities in people pr km<sup>2</sup> in 2100 for each SSP scenario



**Figure S3.** Present-day irrigation maps from FAO and Siebert et al. (2010), expressed in percentage of cell area. Top: Percentage of area equipped for irrigation. Bottom: Percentage of area equipped for irrigation with groundwater.



**Figure S4.** Same as Fig.3 but for the other SSP scenarios

		Groundwater Depletion				Groundwater Rising			
	Not Significant	<10 ppl/km²	[10;75] ppl/km²	>75 ppl/km²	all	<10 ppl/km²	[10;75] ppl/km²	>75 ppl/km²	all
SSP126	0.8%	0.6%	0.5%	2.7%	0.9%	0.1%	0.2%	5.9%	1.1%
SSP245	0.8%	0.4%	0.7%	2.7%	0.9%	0.2%	0.2%	4.9%	1.0%
SSP370	0.5%	0.2%	0.9%	2.0%	0.8%	0.2%	0.2%	4.8%	1.2%
SSP585	0.5%	0.3%	0.6%	2.8%	0.9%	0.2%	0.1%	5.4%	1.2%

**Figure S5.** The table gives, for each scenario and each section of the pie charts of Fig.8, the percentage of the area equipped for groundwater irrigation.



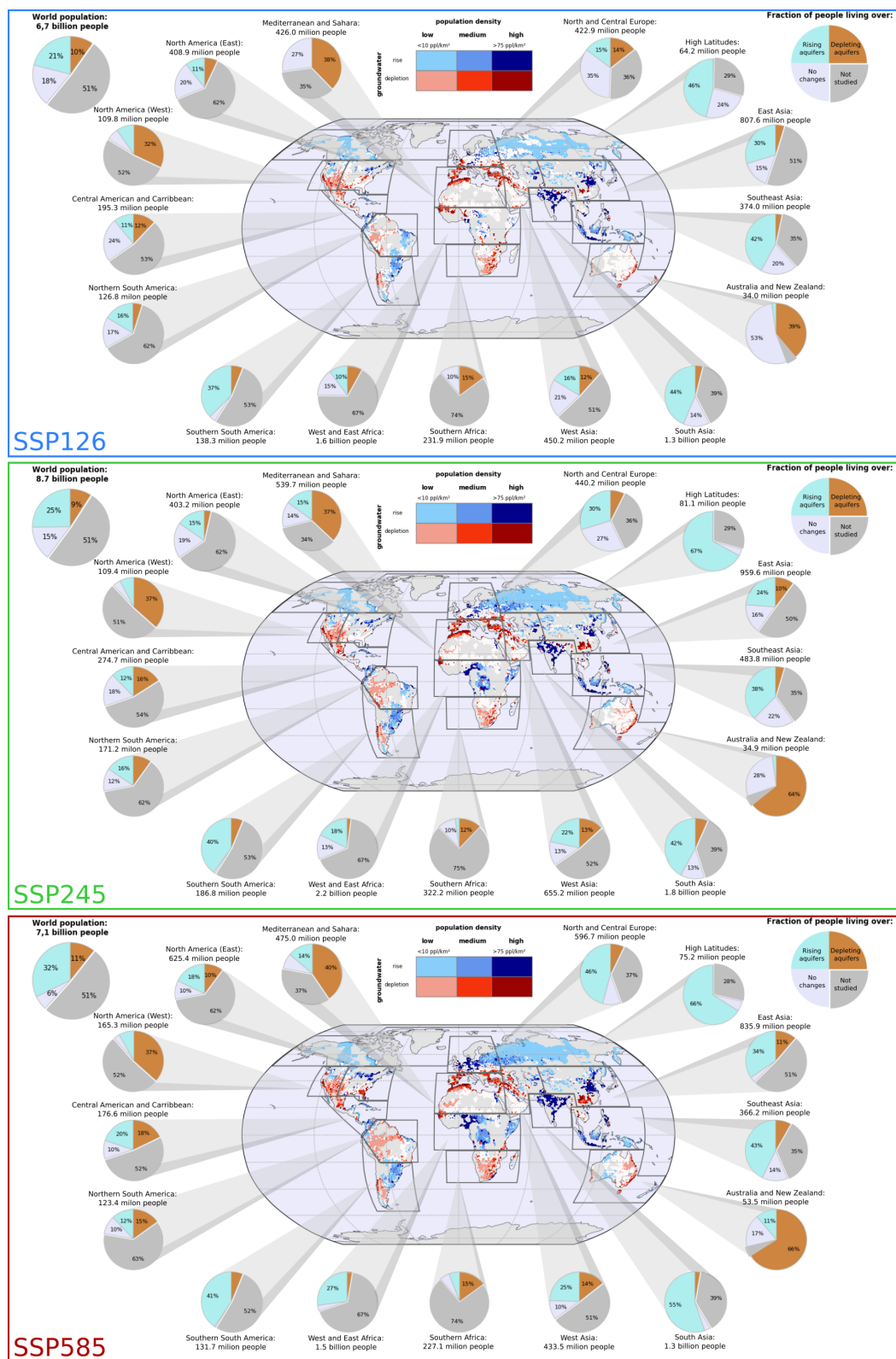
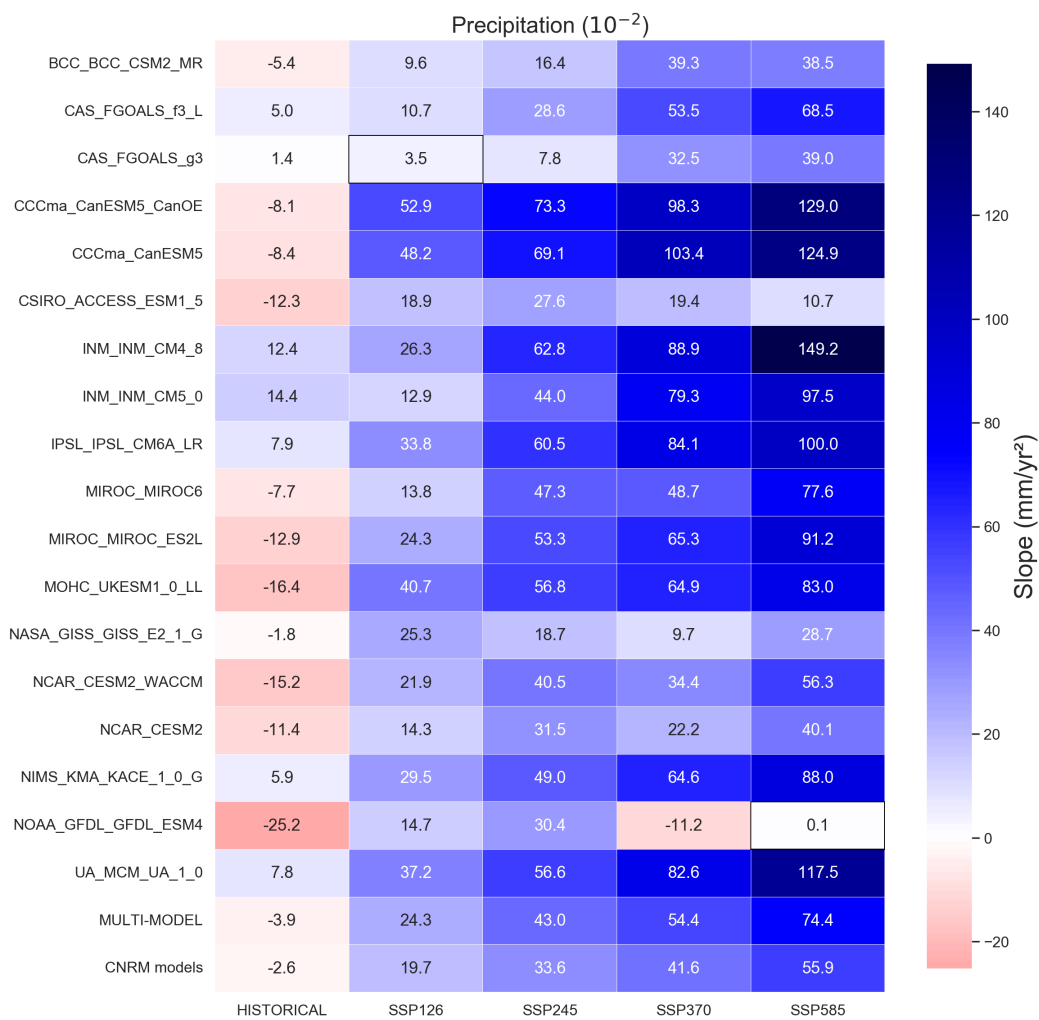
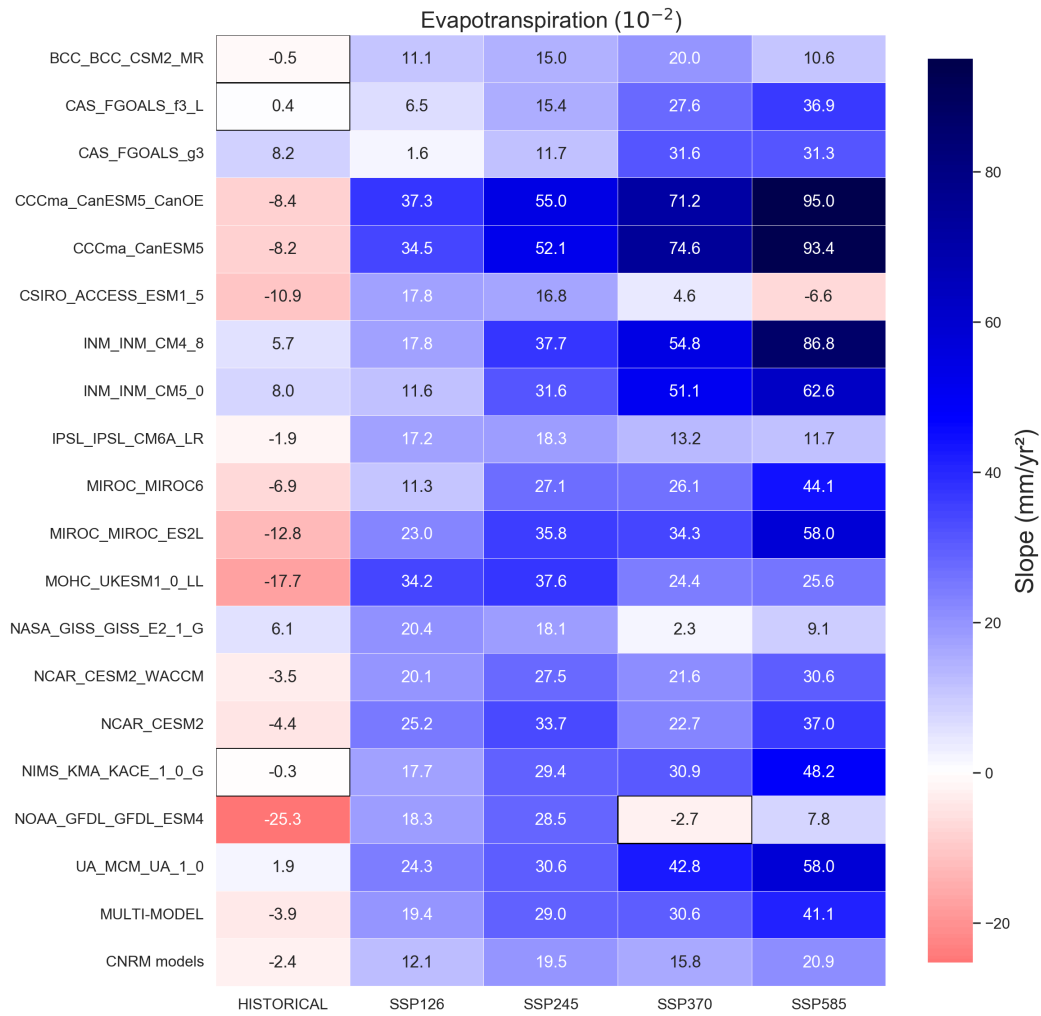


Figure S6. Same as Fig.9 but for the other SSP scenarios



**Figure S7.** Slope in mm/yr<sup>2</sup> of the linear regression of each time-series for all the models and all the scenarios presented in Fig.5. The encircled boxes indicates that the slope is not significantly different from 0.





**Figure S8.** Same as Fig.S7 but for the times-series presented in Fig.6.