

# Soil Moisture – atmosphere coupling from CMIP5 to CMIP6

<b>AMIP- Experiment</b>	<b>Atmosphere</b>	<b>Land-surface</b>	
APChoi	AP	Choi	CMIP5A
APctrl	AP	Ctrl	-
6Actrl	6A	Ctrl	CMIP6
6AChoi	6A	Choi	-

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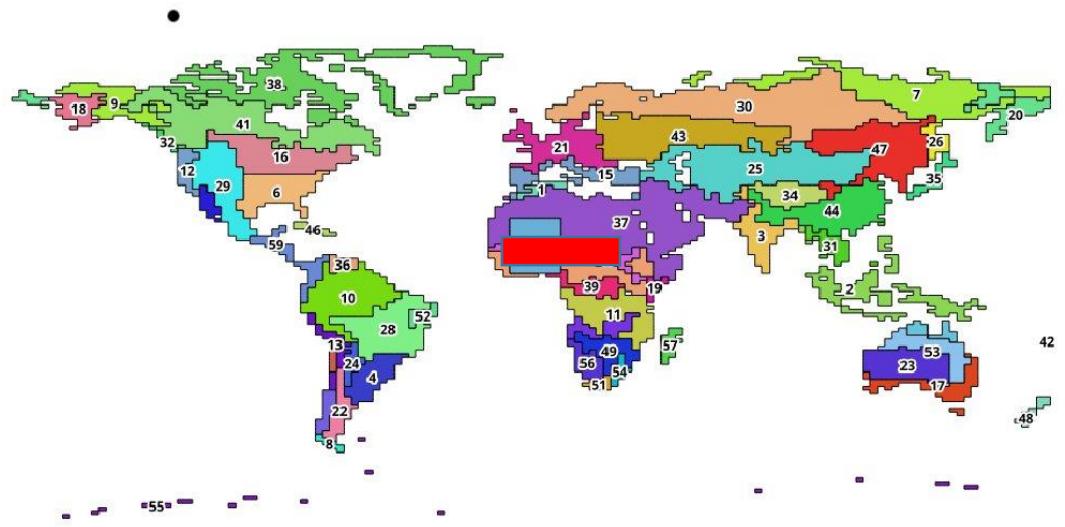
  

<b>Variable</b> (Monthly means)	Dataset	2001-2010 : All data available
SW radiation (net surface)	CERES-EBAF	
Precipitation	GPCP	
Evaporation	Jung	In Situ upscaled products
Evaporation	GLEAM	Data assimilation of satellite observations
Superficial soil moisture	CCI ESA	Blended Active and passive microwave retrieval
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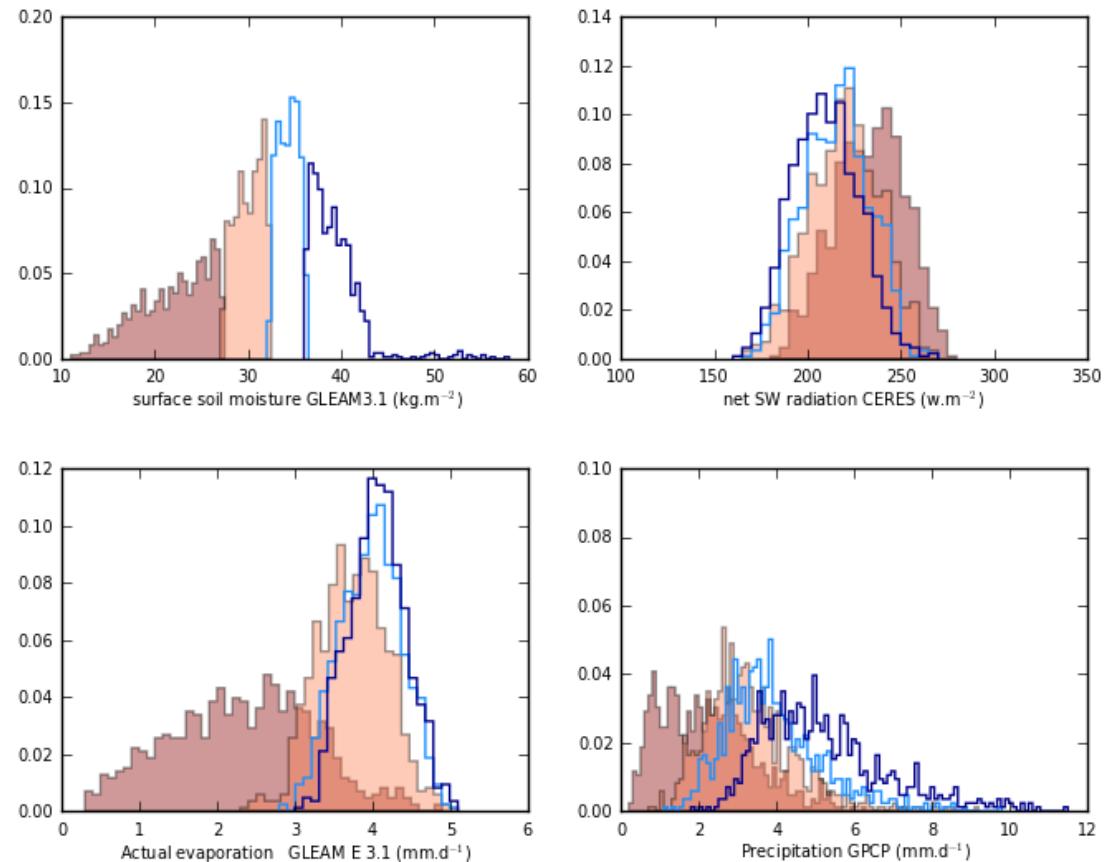
**Co-distribution: humidité superficielle du sol,  $SW_{net}$ , Evaporation, Precipitation (monthly, JJA) analysées par quartiles de l'humidité du sol à l'échelle régionale**



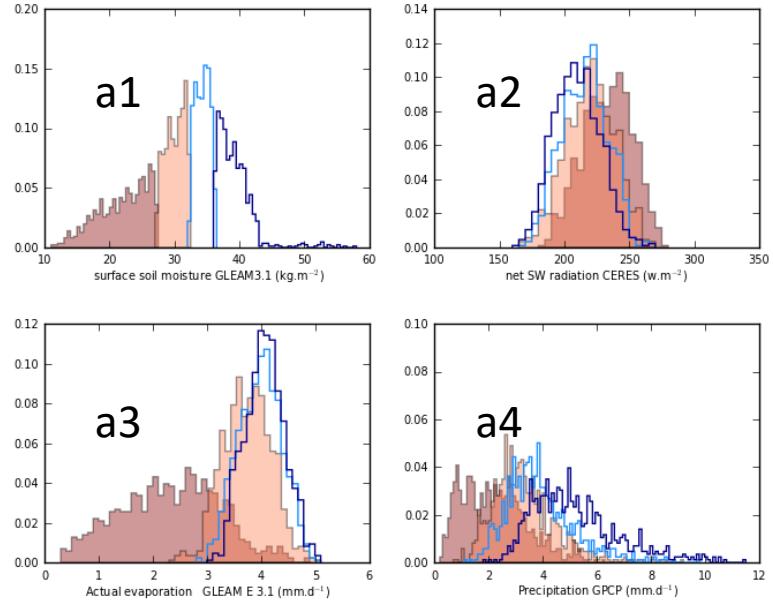
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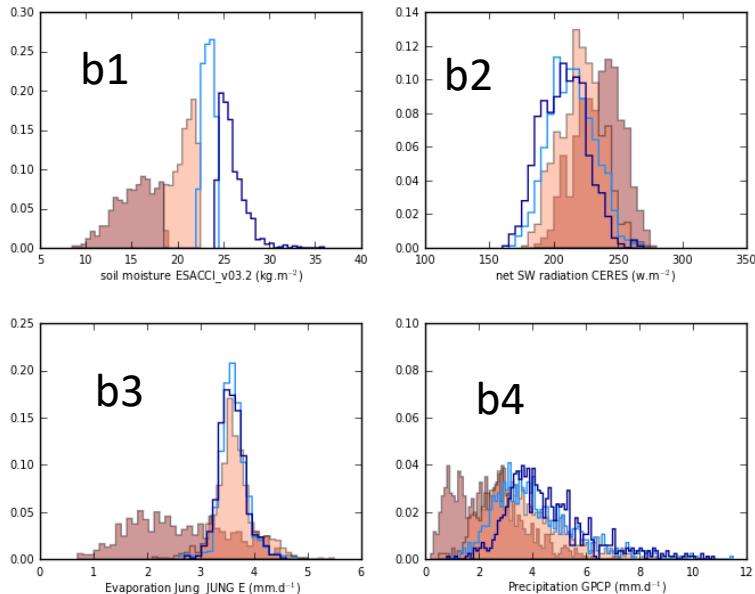
**Observations for the  
Region : Southern Great Plains (6) - for the months 6, 7, 8**



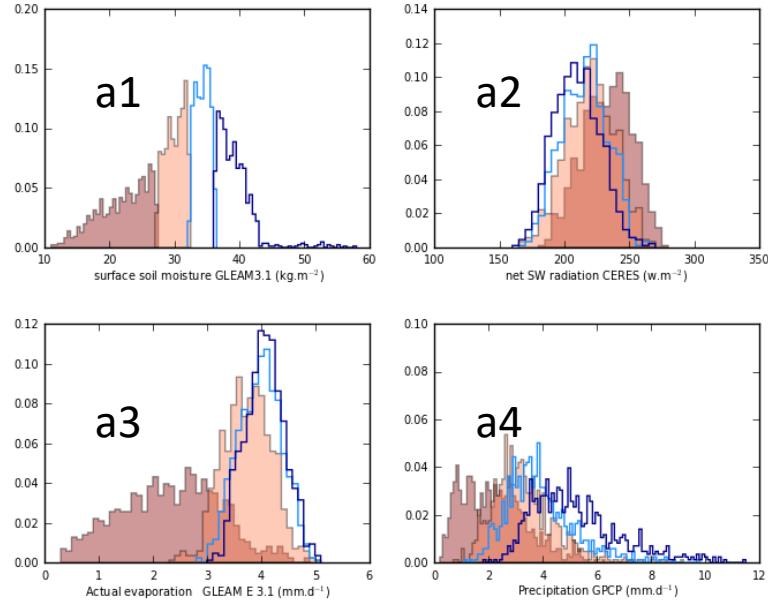
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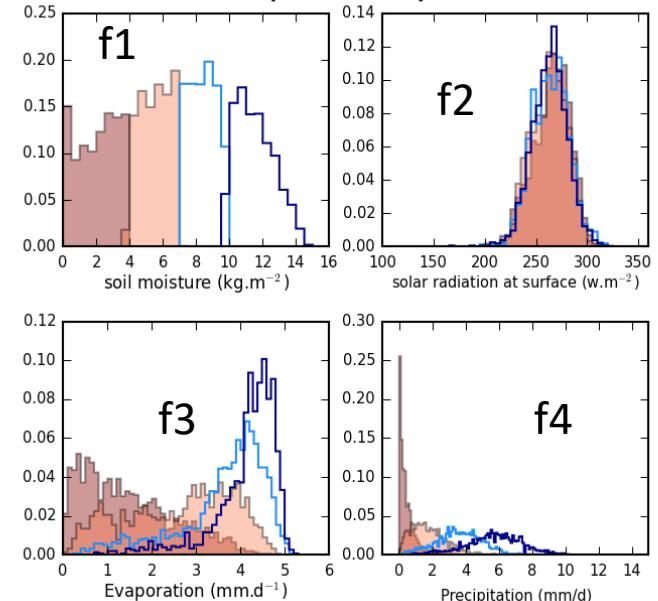
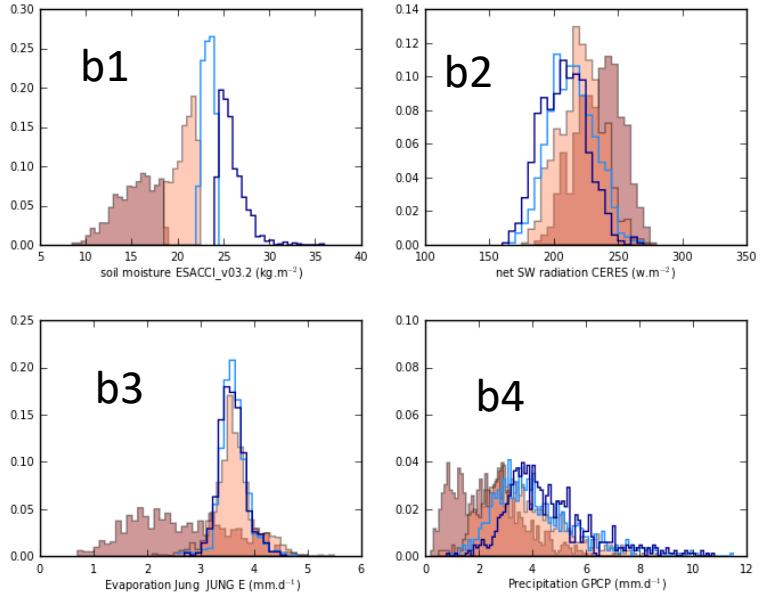
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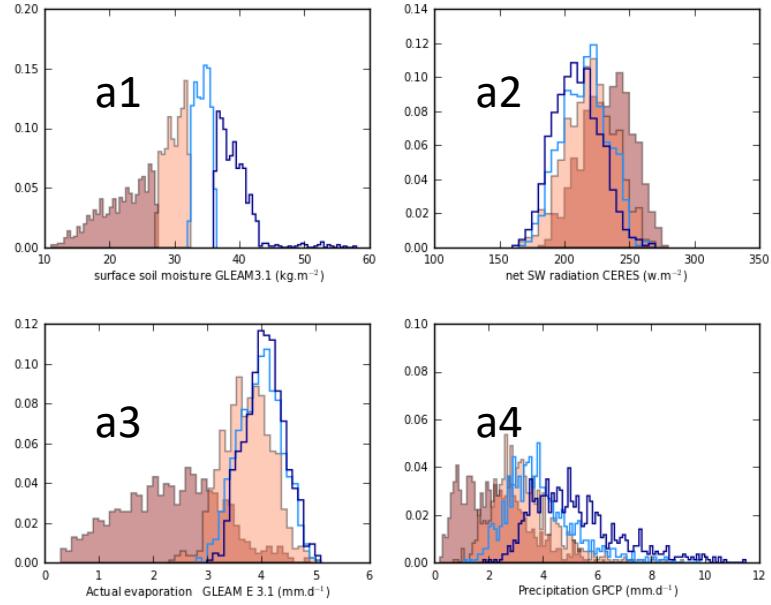
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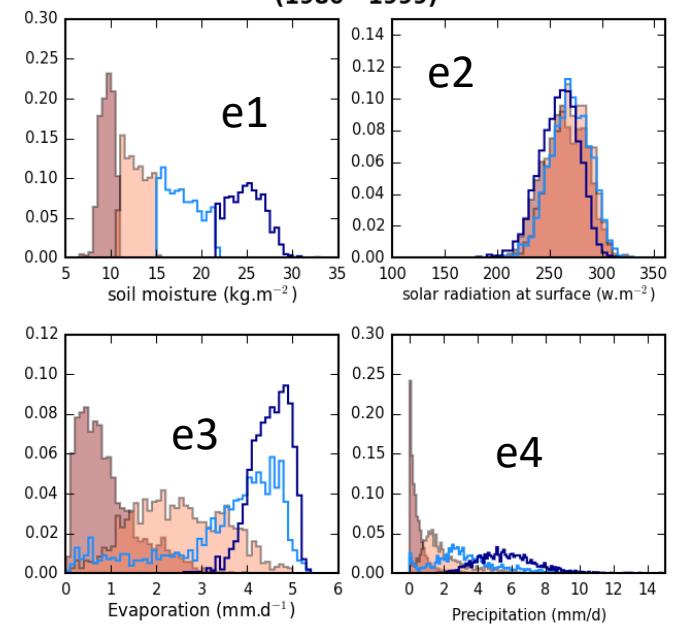
**Simulation LmdzOrChoiAP for the region 6 Southern Great Plains  
(1980 - 1999)**



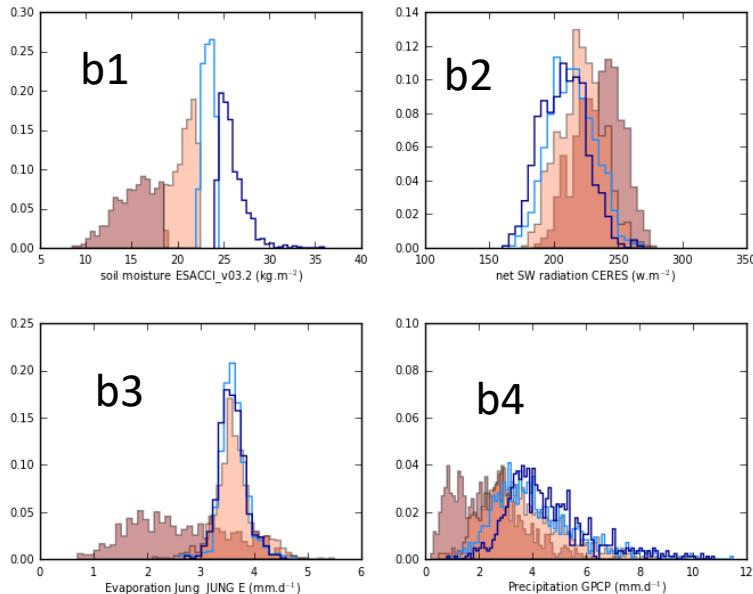
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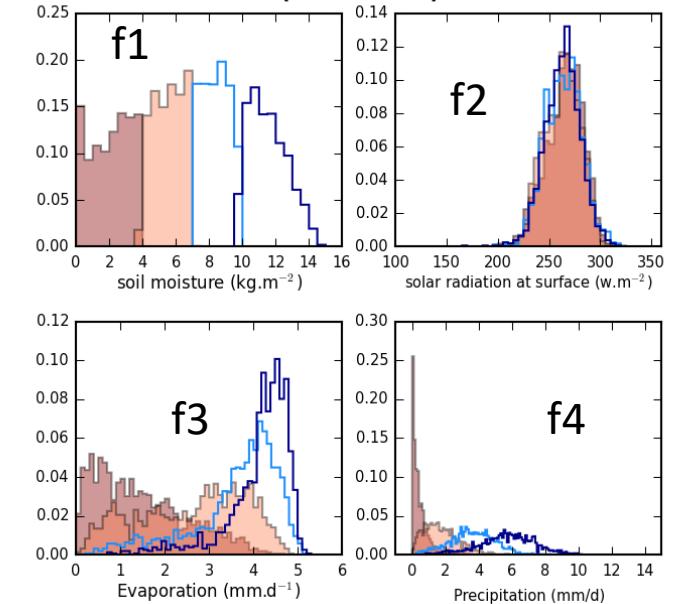
**Simulation LmdzOrAPctrl for the region 6 Southern Great Plains  
(1980 - 1999)**



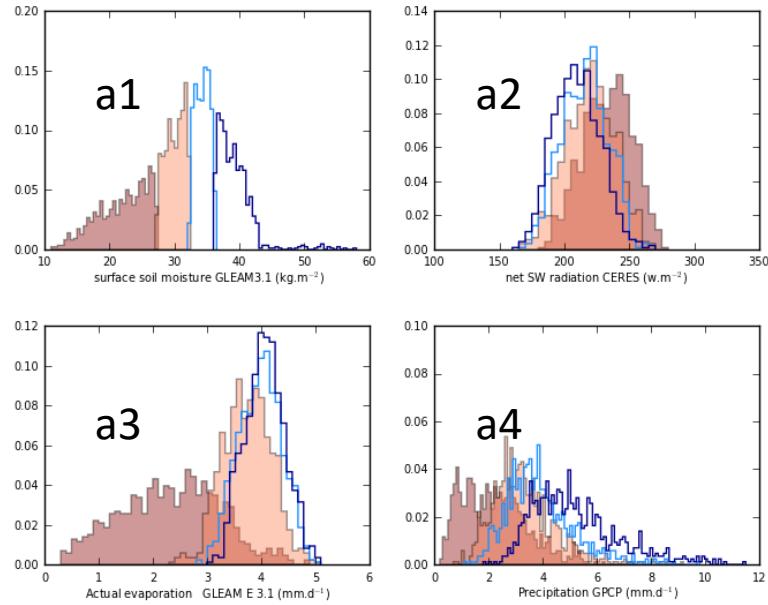
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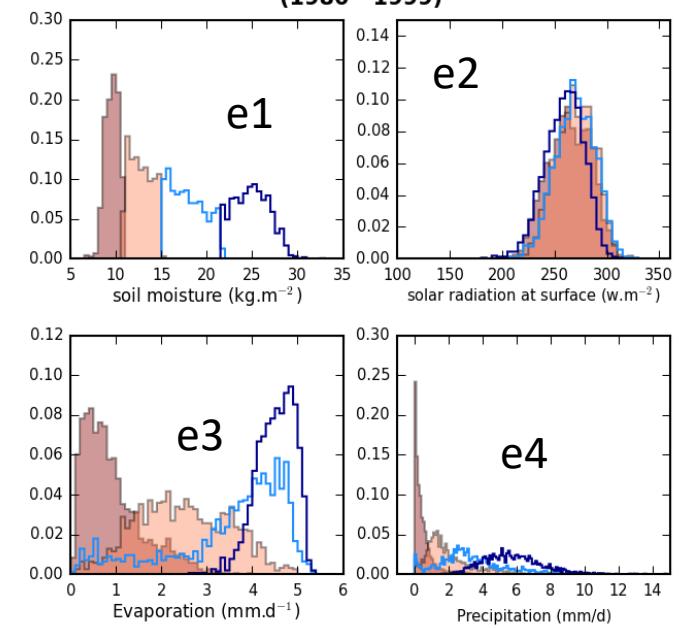
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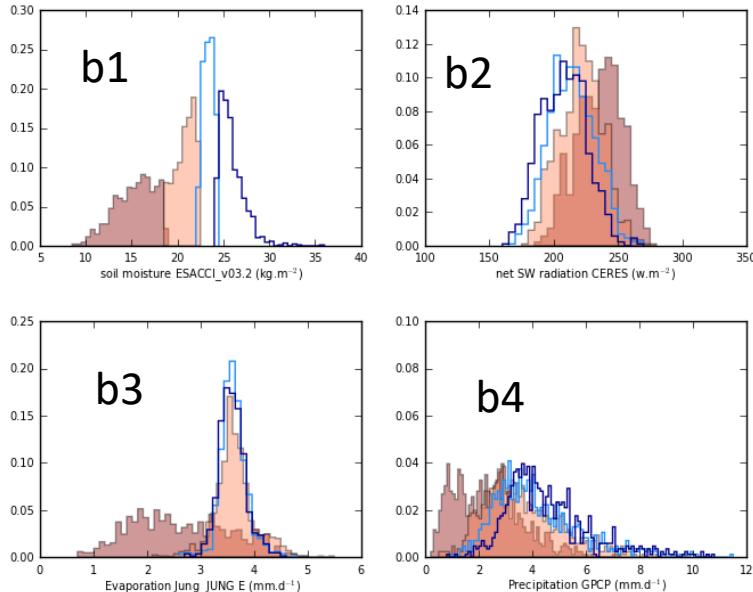
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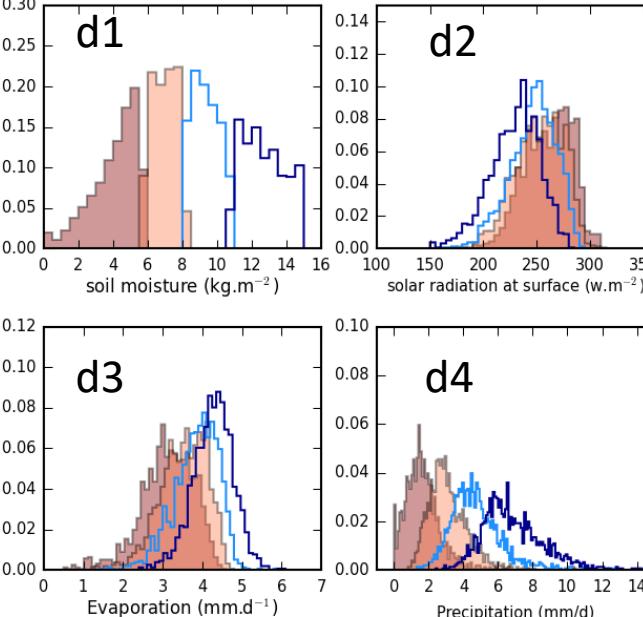
**Simulation LmdzOrAPctrl for the region 6 Southern Great Plains  
(1980 - 1999)**



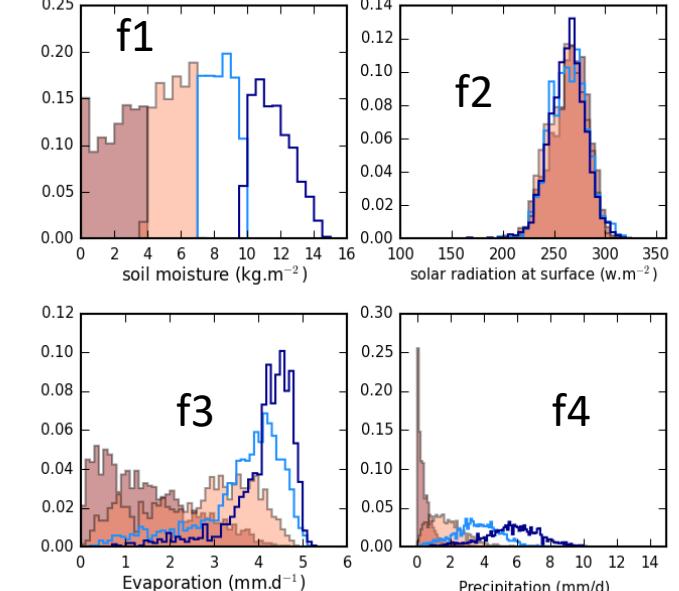
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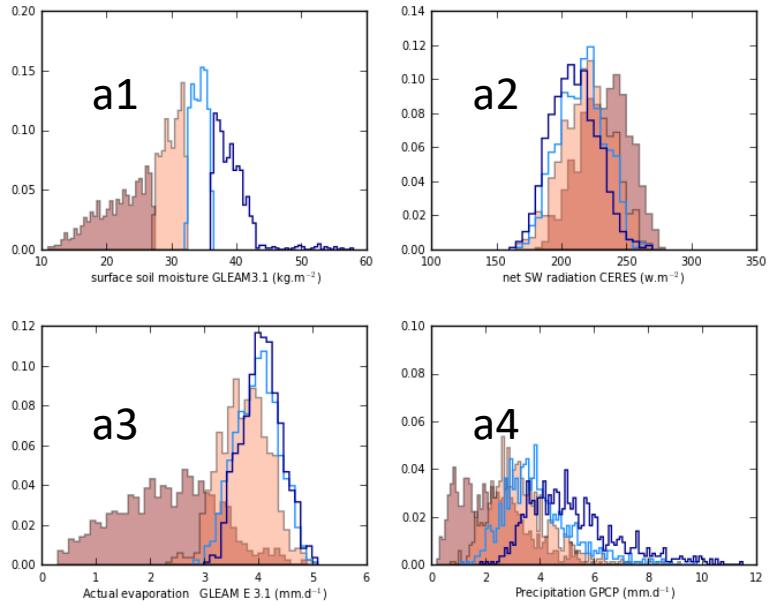
**Simulation LmdzOrChoi6A for the region 6 Southern Great Plains  
(1980 - 1999)**



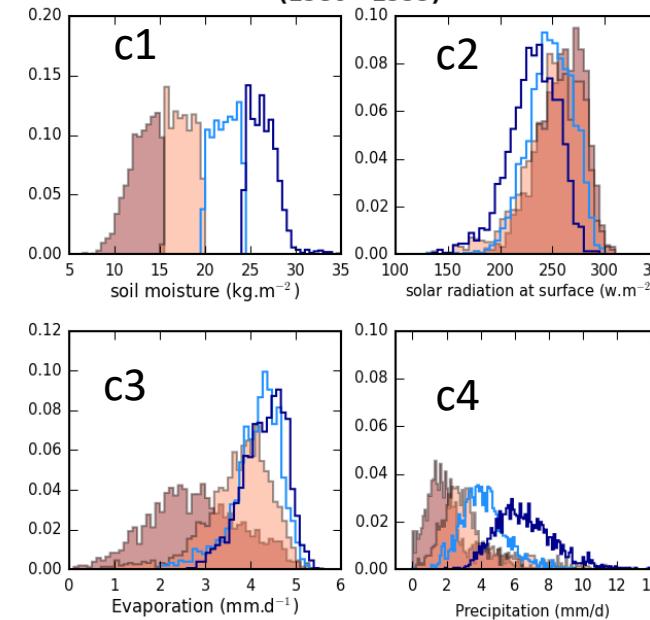
**Simulation LmdzOrChoiAP for the region 6 Southern Great Plains  
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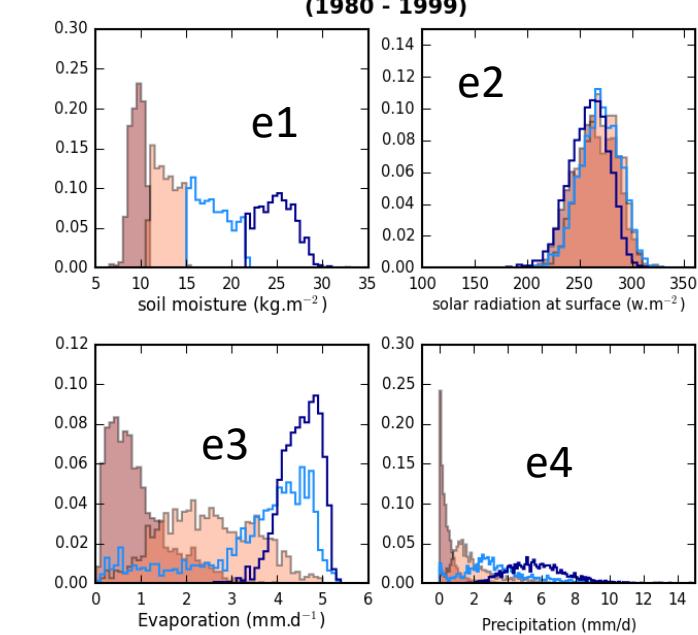
**Observations for the Region : Southern Great Plains (6) - for the months 6, 7, 8**



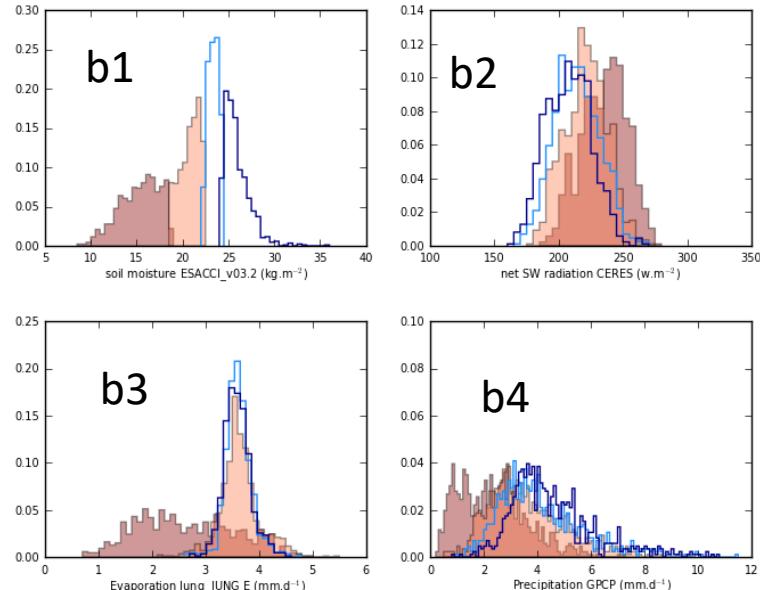
**Simulation LmdzOr6Actrl for the region 6 Southern Great Plains (1980 - 1999)**



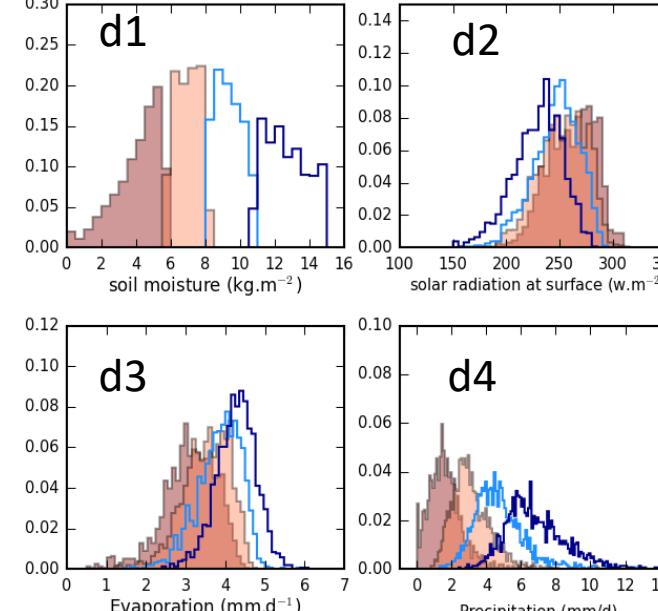
**Simulation LmdzOrAPctr1 for the region 6 Southern Great Plains (1980 - 1999)**



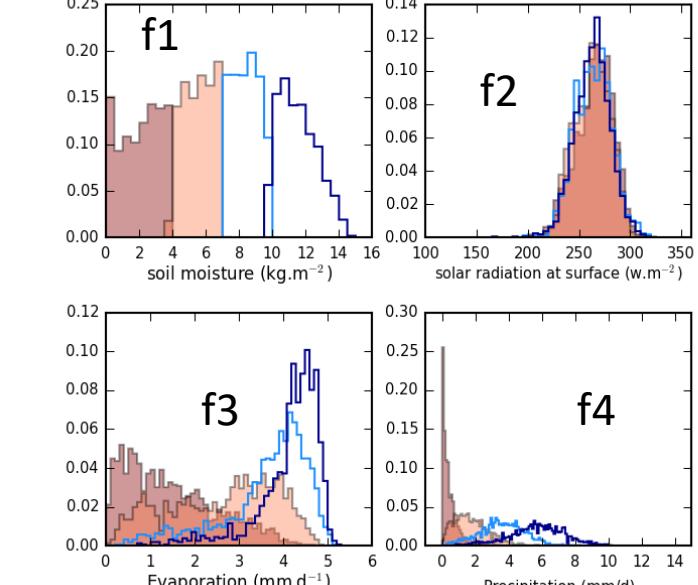
**Observations for the Region : Southern Great Plains (6) - for the months 6, 7, 8**



**Simulation LmdzOrChoi6A for the region 6 Southern Great Plains (1980 - 1999)**

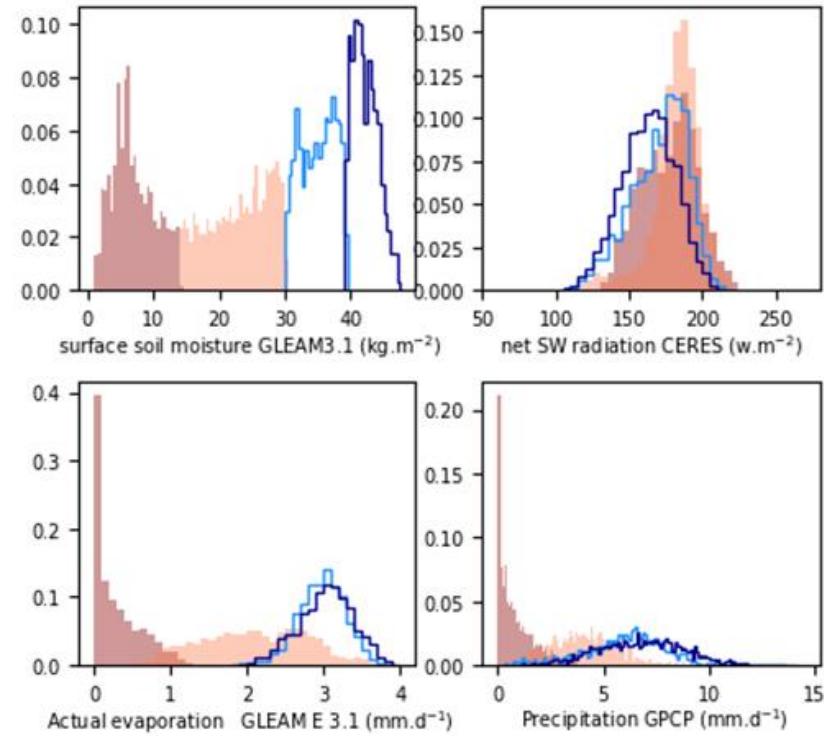


**Simulation LmdzOrChoiAP for the region 6 Southern Great Plains (1980 - 1999)**

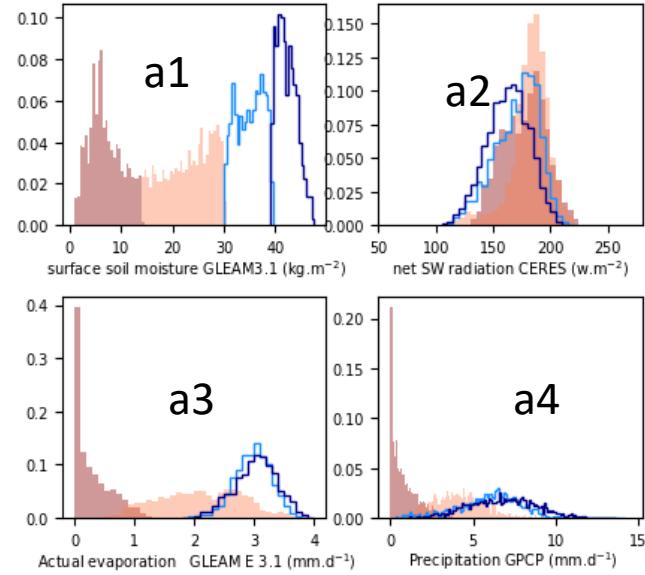




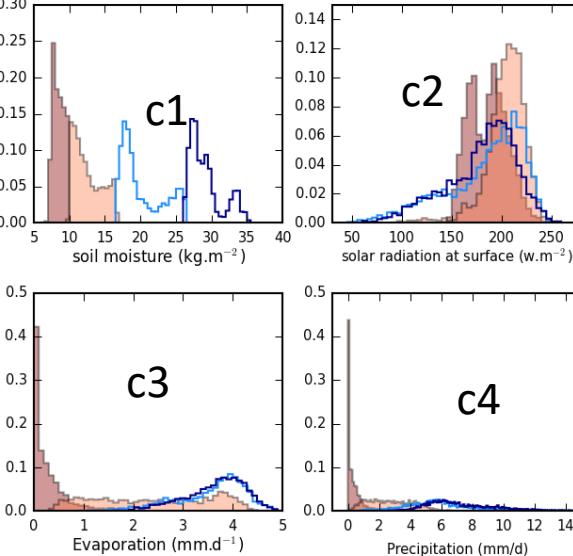
**Observations for the  
Region : Sahel (60) - for the months 6, 7, 8**



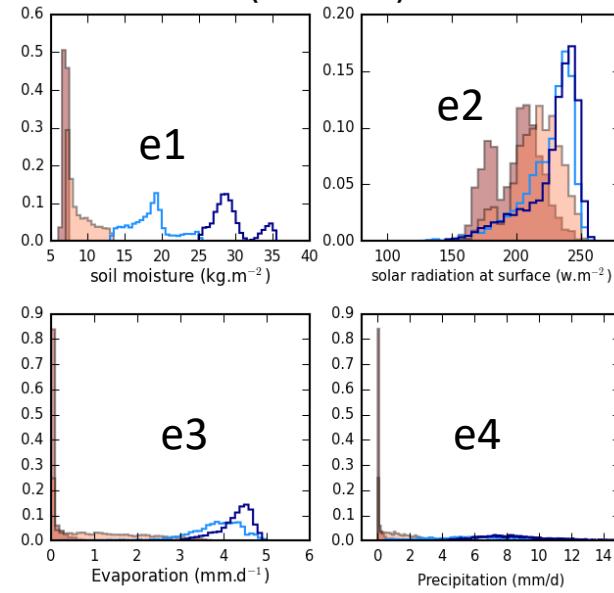
**Observations for the Region : Sahel (60) - for the months 6, 7, 8**



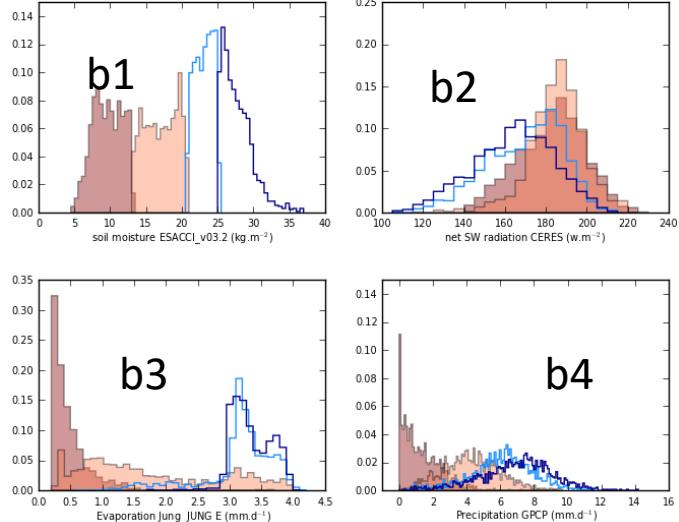
**Simulation LmdzOr6Actrl for the region 60 Sahel (1980 - 1999)**



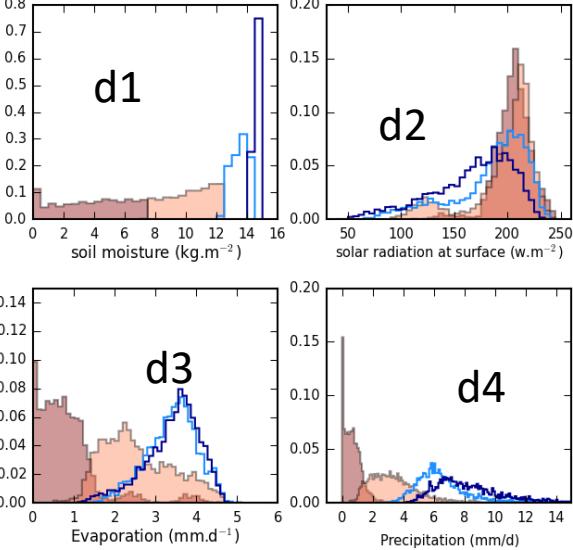
**Simulation LmdzOrApctrl for the region 60 Sahel (1980 - 1999)**



**Observations for the Region : Sahel (60) - for the months 6, 7, 8**



**Simulation LmdzOrChoi6A for the region 60 Sahel (1980 - 1999)**



**Simulation LmdzOrChoiAP for the region 60 Sahel (1980 - 1999)**

