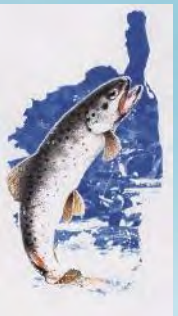


# The consequences of climate change for the mountain environment in Corsica



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[mori@univ-corse.fr](mailto:mori@univ-corse.fr) ; [orsini@univ-corse.fr](mailto:orsini@univ-corse.fr)

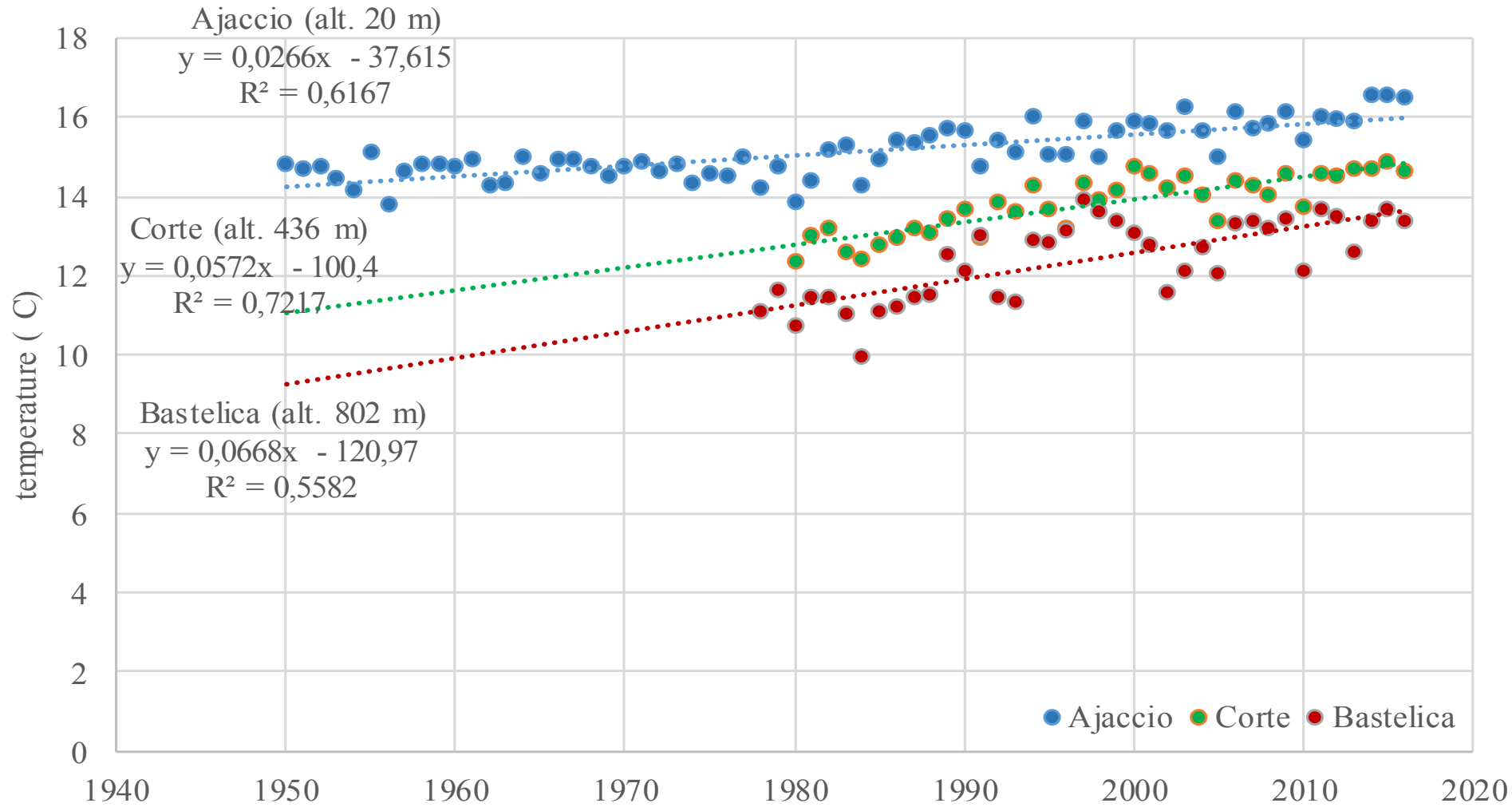




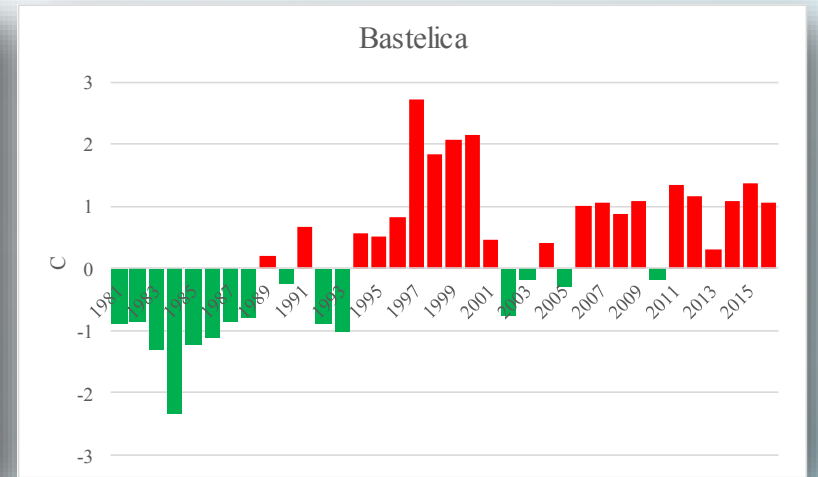
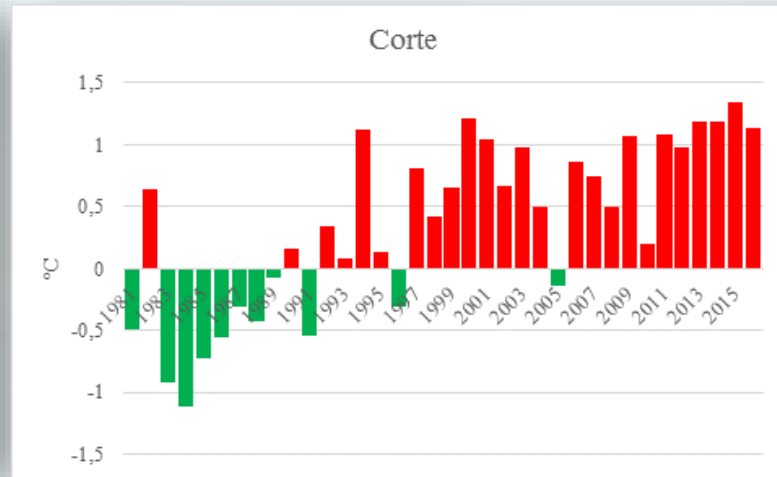
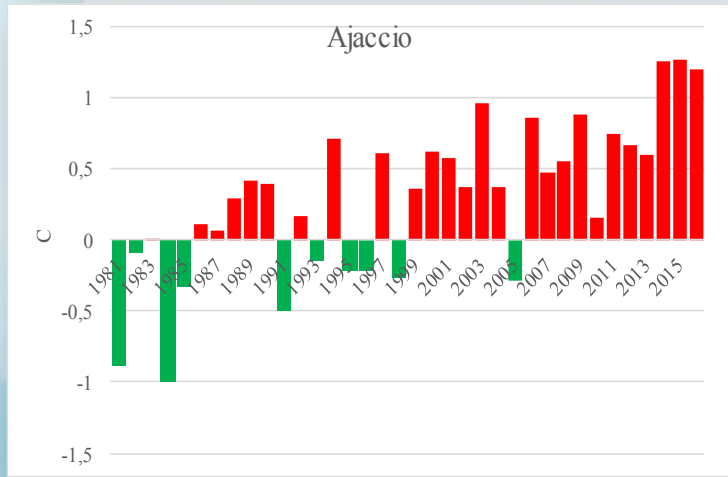
- Climatology
- Hydrology
- Ecology



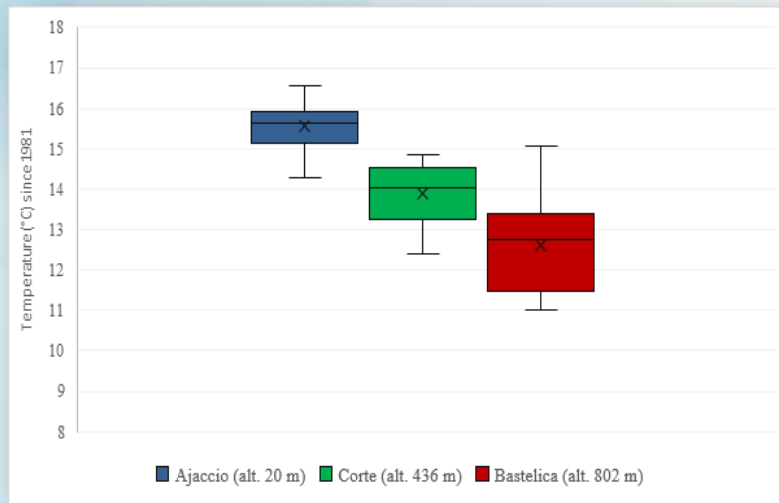




# Variation of the average air temperatures



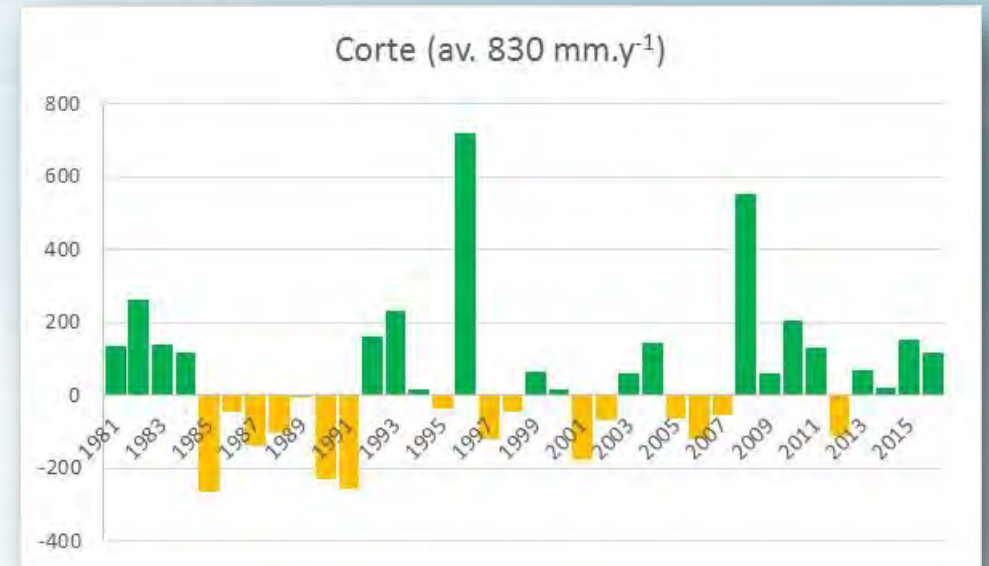
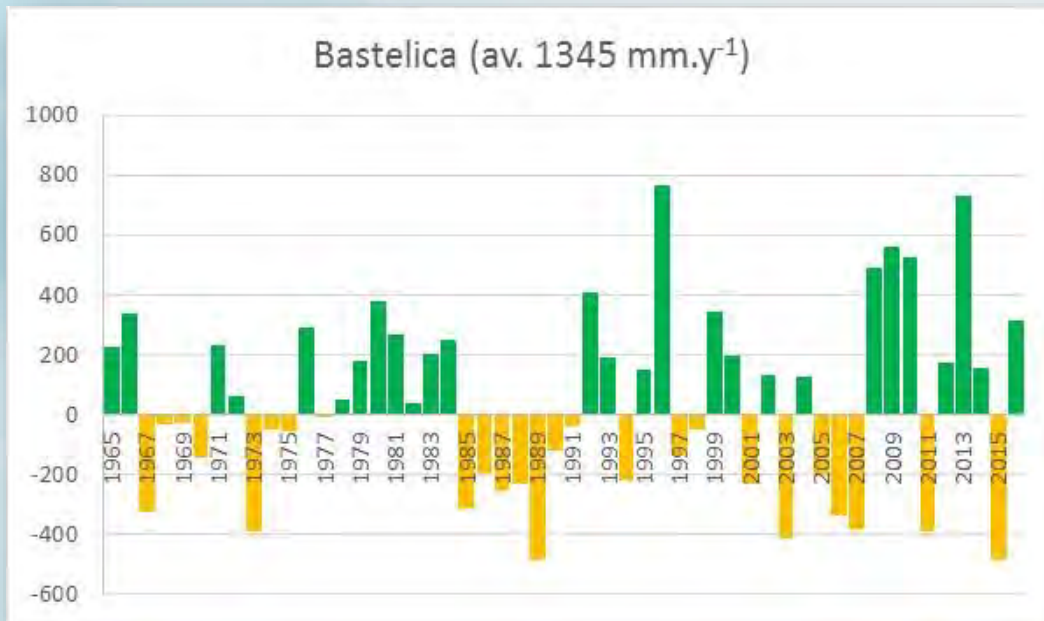
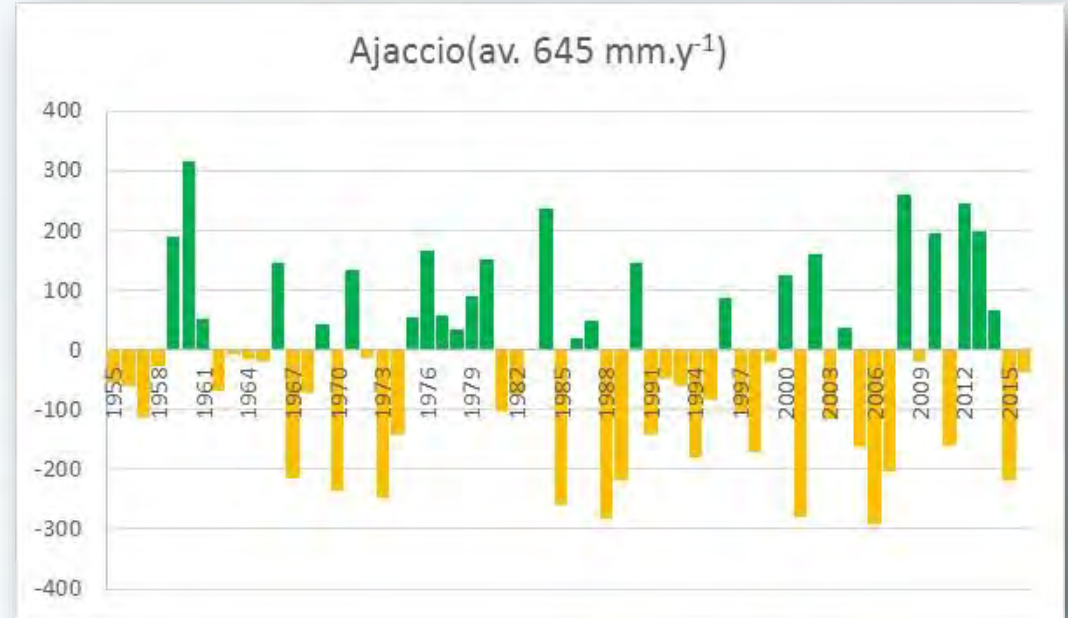
Variation of the average air temperatures in Ajaccio (alt. 20 m) Corte (alt. 436 m) Bastelica (alt. 802 m)

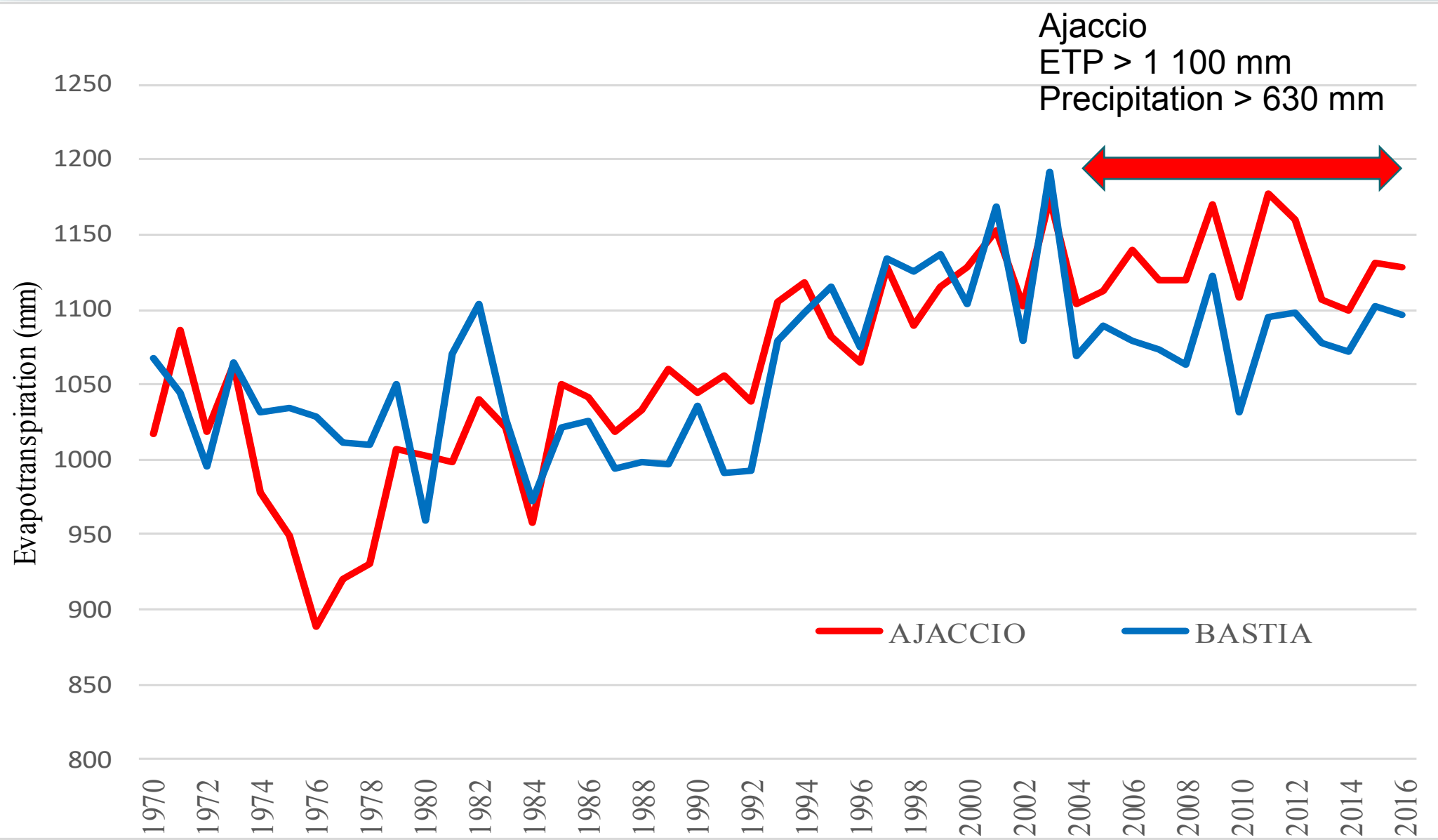


Variability of the air temperatures of Ajaccio, Corte and Bastelica since 1981

# Precipitations

- Precipitation (rain, snow) compared with the average
- High Variability
- Droughts / Floods

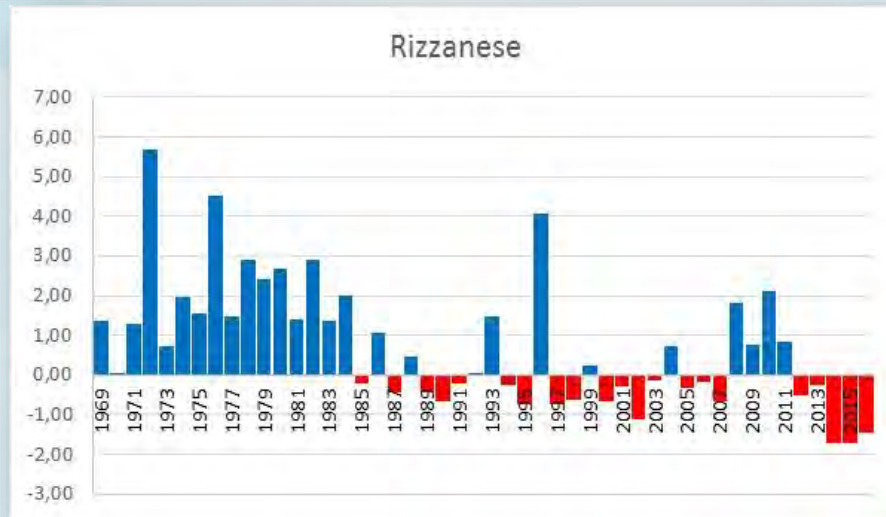
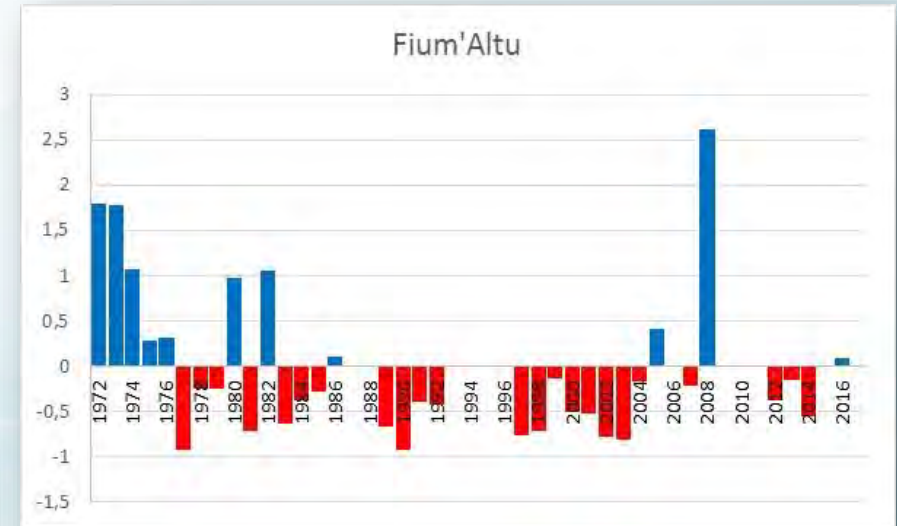
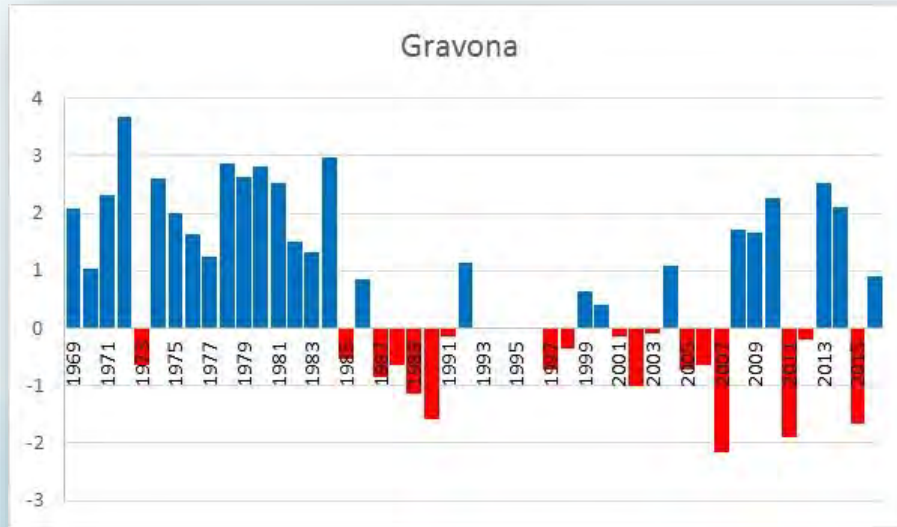




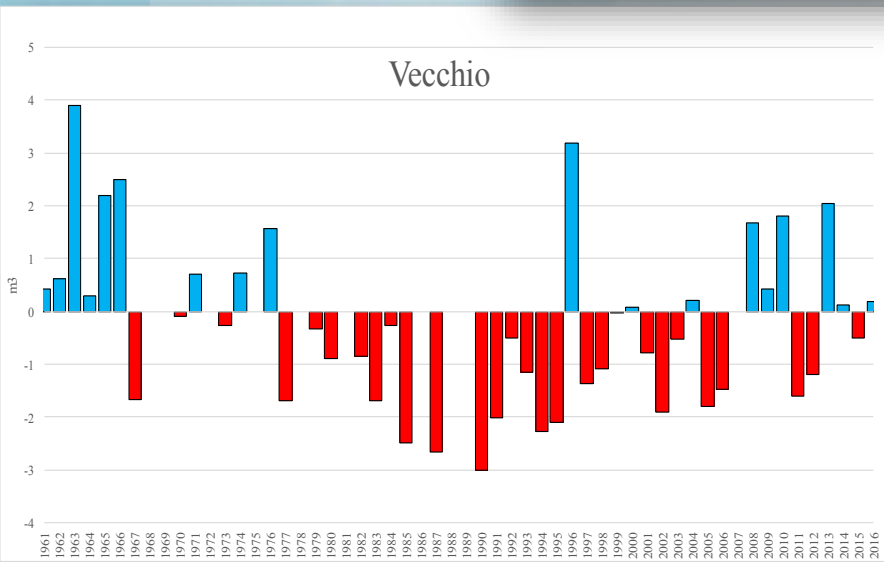
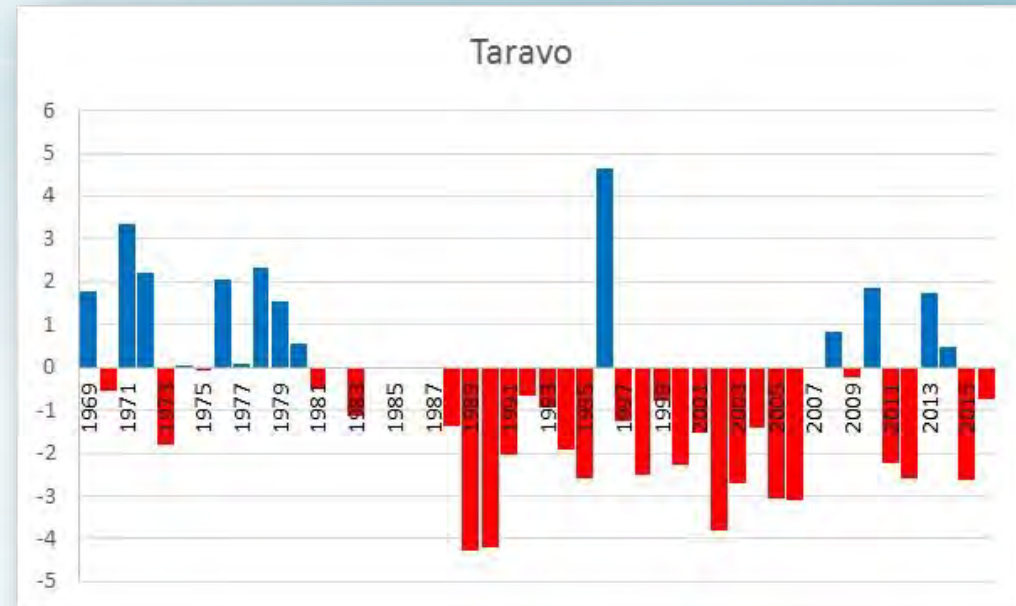
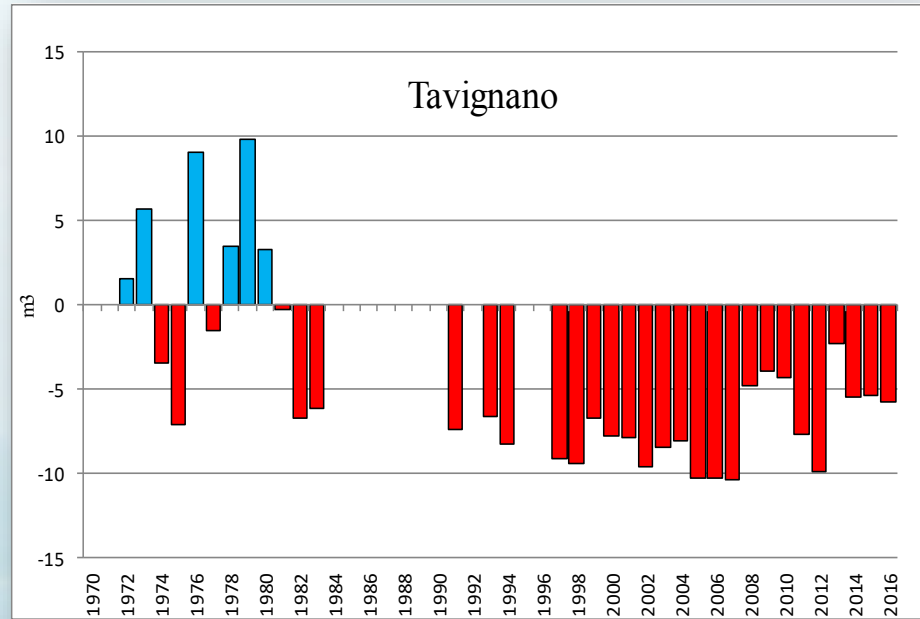
Evapotranspiration (mm) in Ajaccio and Bastia since 1970



# Flow rate (m<sup>3</sup>) of several Rivers compared to the average (1960-1990)



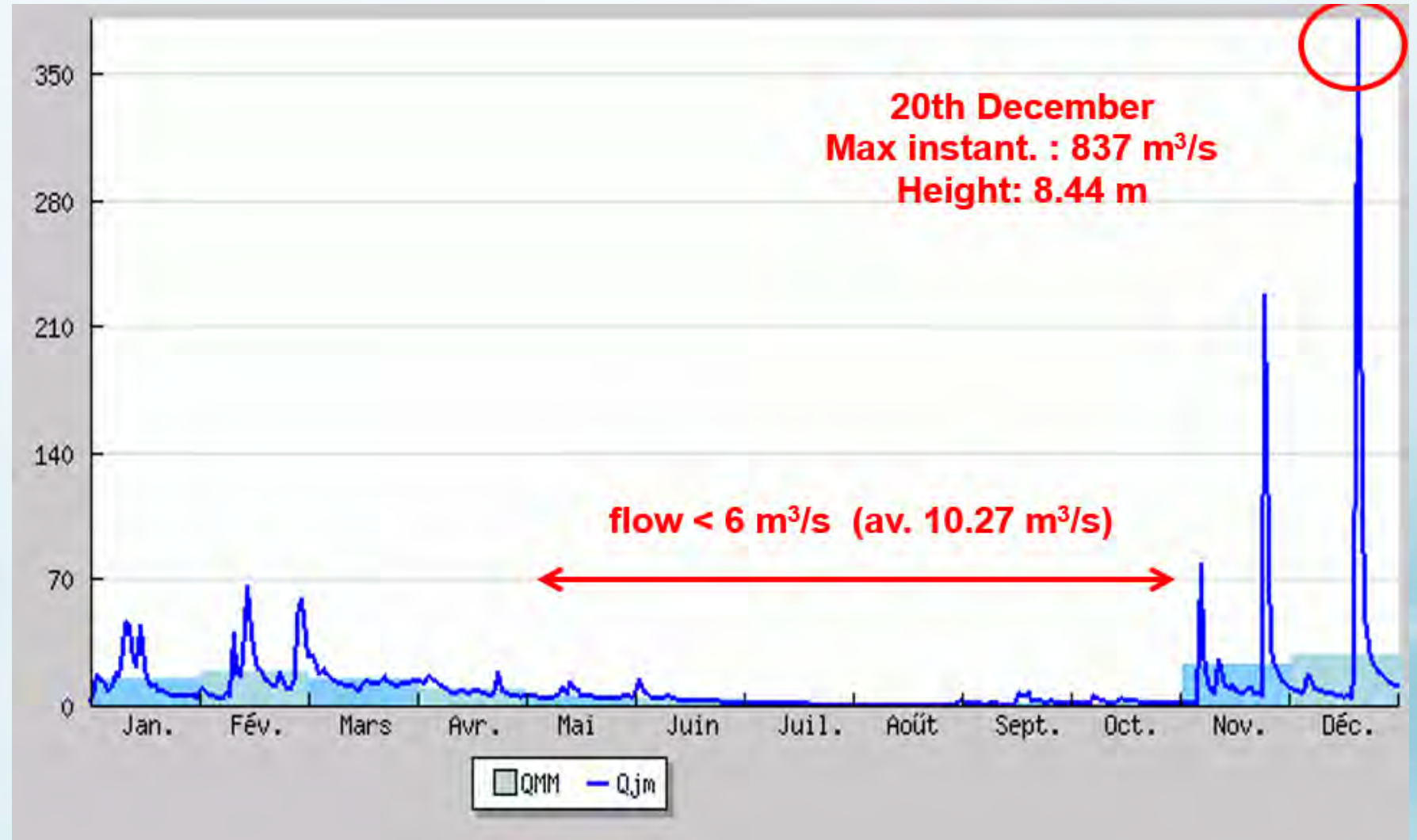
# Flow rate (m<sup>3</sup>) of several Rivers compared to the average (1960-1990)





# Hydrology

- Hydrologic year 2016
- become...
- Common year



Changes in the daily average flow rate of the Tavignano 2016

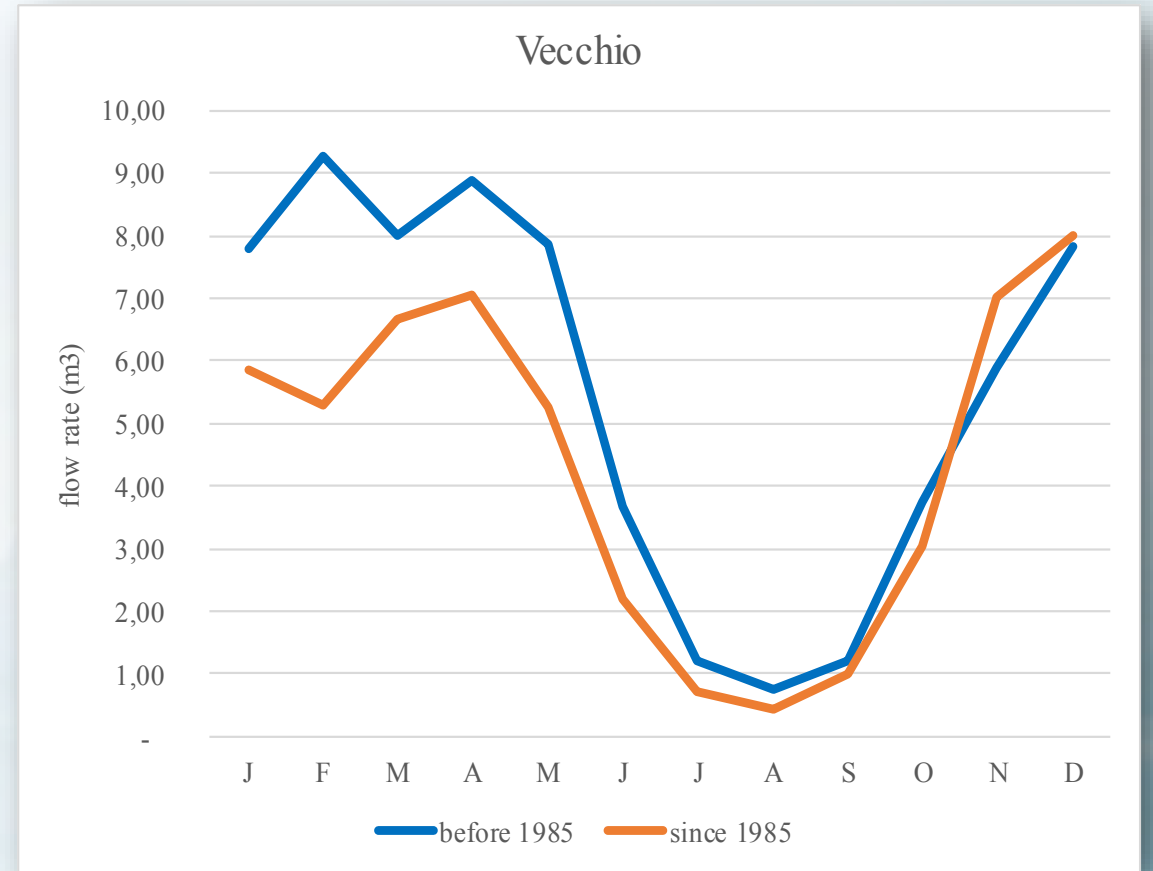
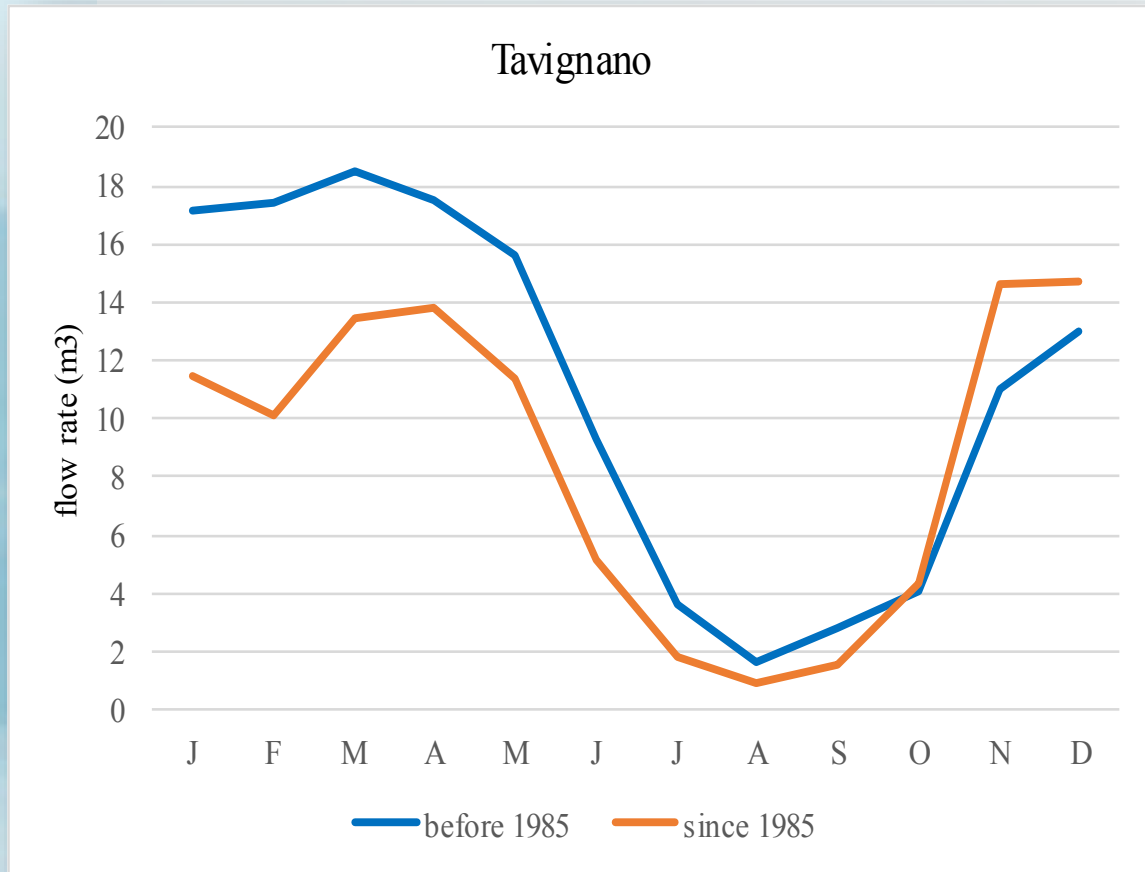




Flood of  
Tavignano  
2016



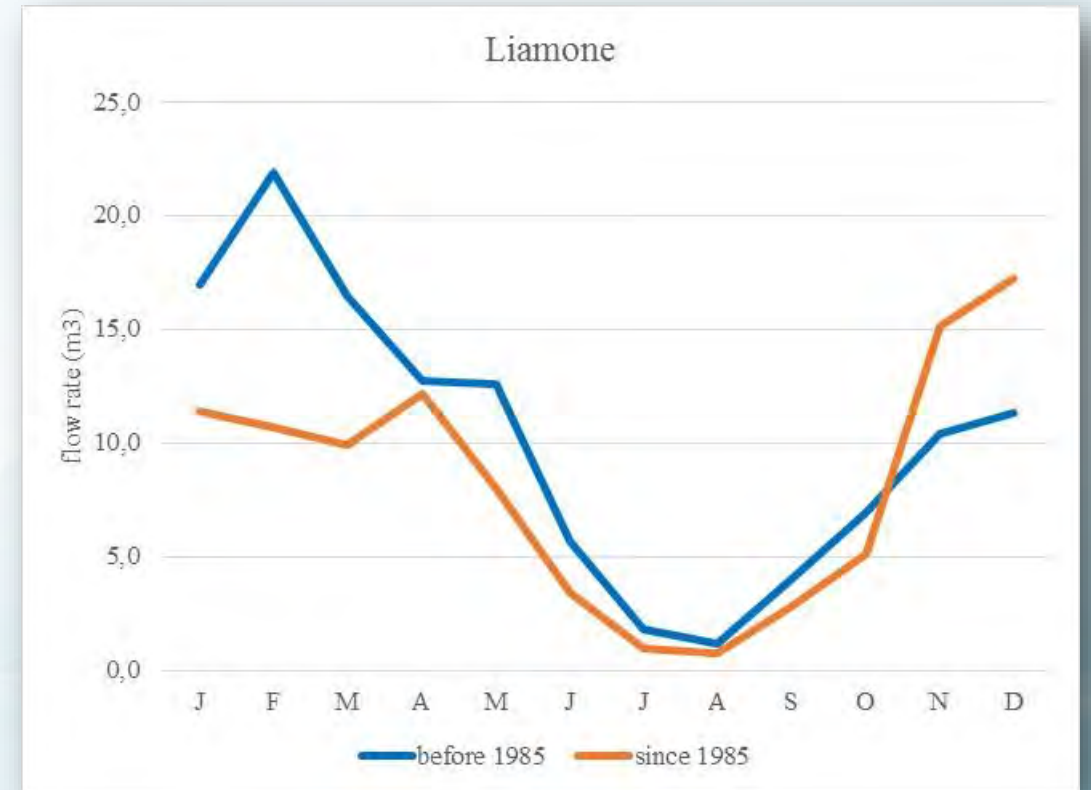
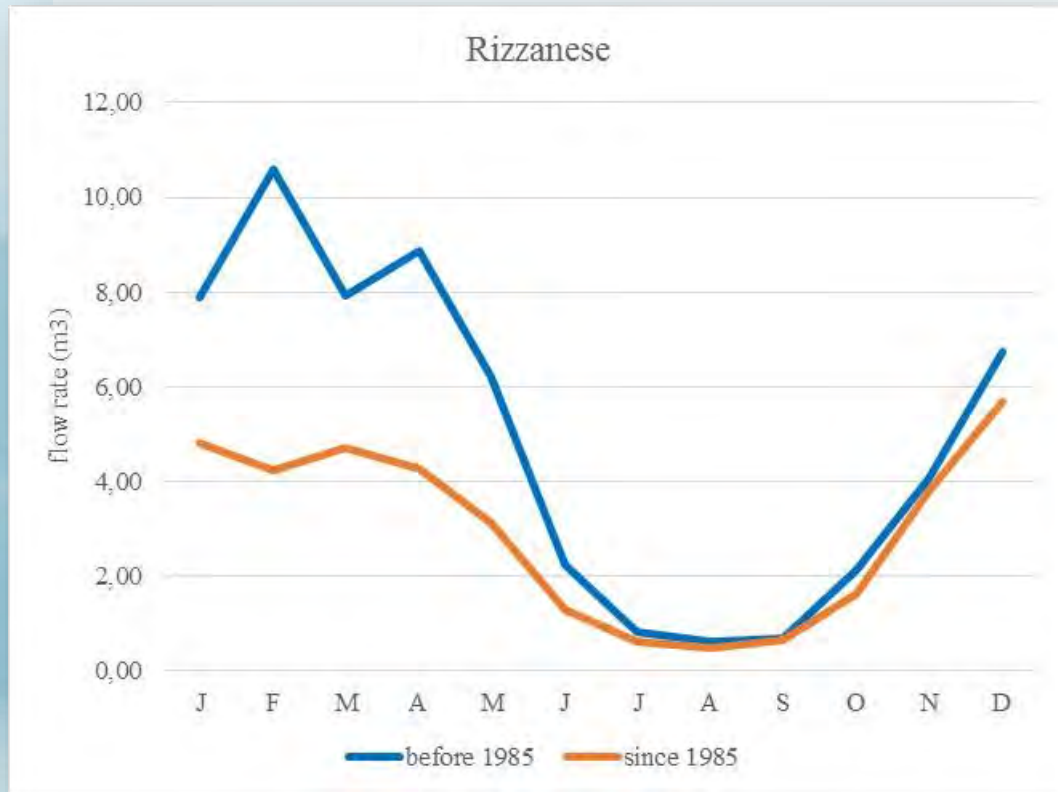
- Hydrological year before 1985
- Hydrological year since 1985



Annual hydrological flow (m<sup>3</sup>) of Tavignano River and Vecchio River



- Hydrological year before 1985
- Hydrological year since 1985



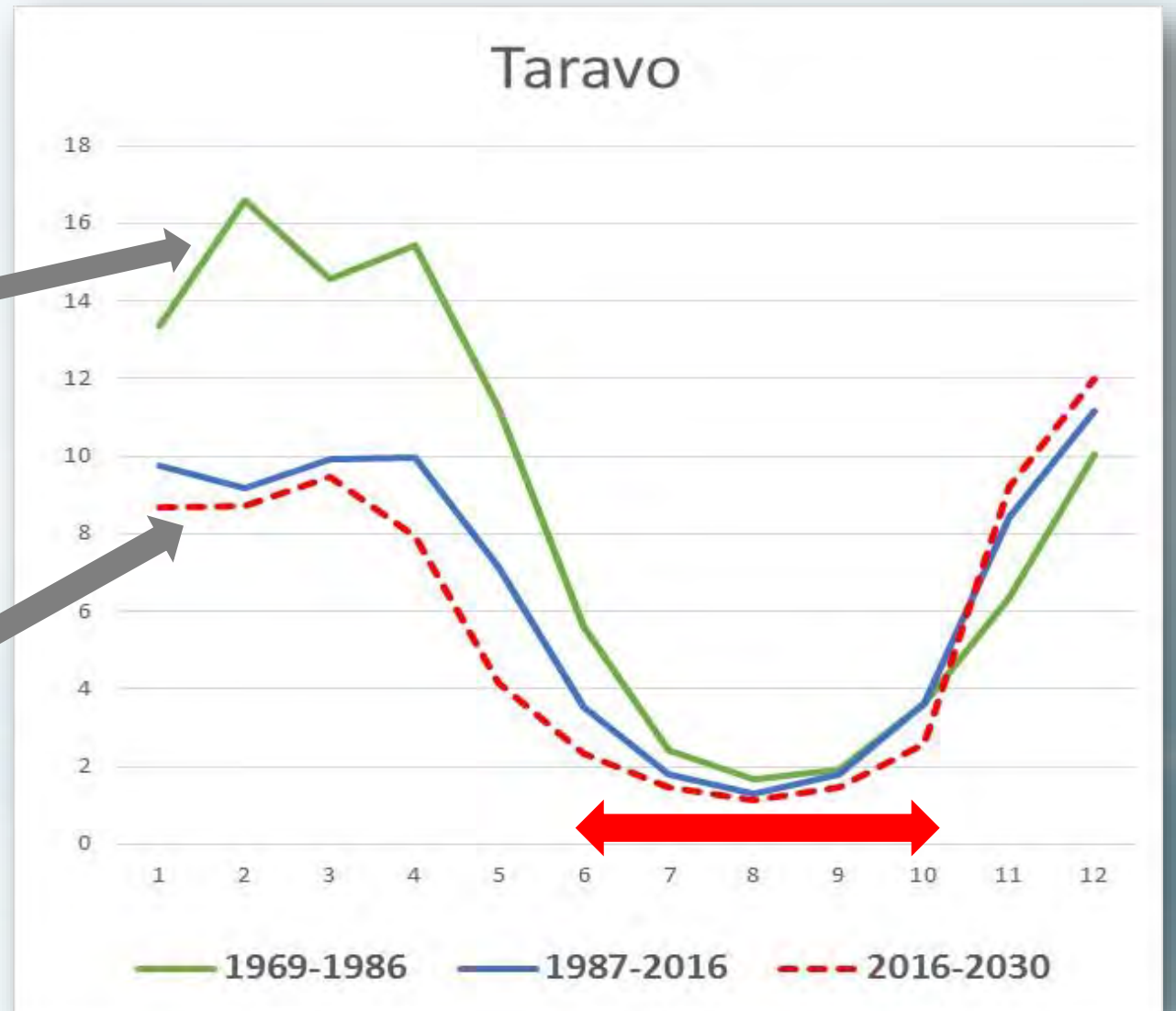
Annual hydrological flow (m<sup>3</sup>) of Rizzanese River and Liamone River

- The Taravo River in 2030
- Change :

Mediterranean  
rain-snow type



Mediterranean  
rain type



Annual hydrological flow (m<sup>3</sup>) of Taravo River

# ALTITUDINAL ZONATIONS

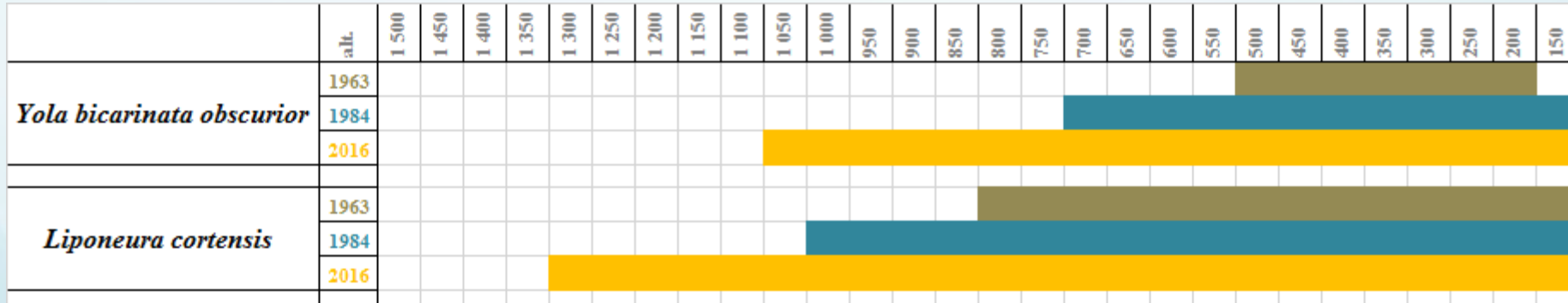
Warm stenothermal organisms / biotopes increases

	alt.	1 500	1 450	1 400	1 350	1 300	1 250	1 200	1 150	1 100	1 050	1 000	950	900	850	800	750	700	650	600	550	500	450	400	350	300	250	200	150			
<i>Yola bicarinata obscurior</i>	1963																															
	1984																															
	2016																															

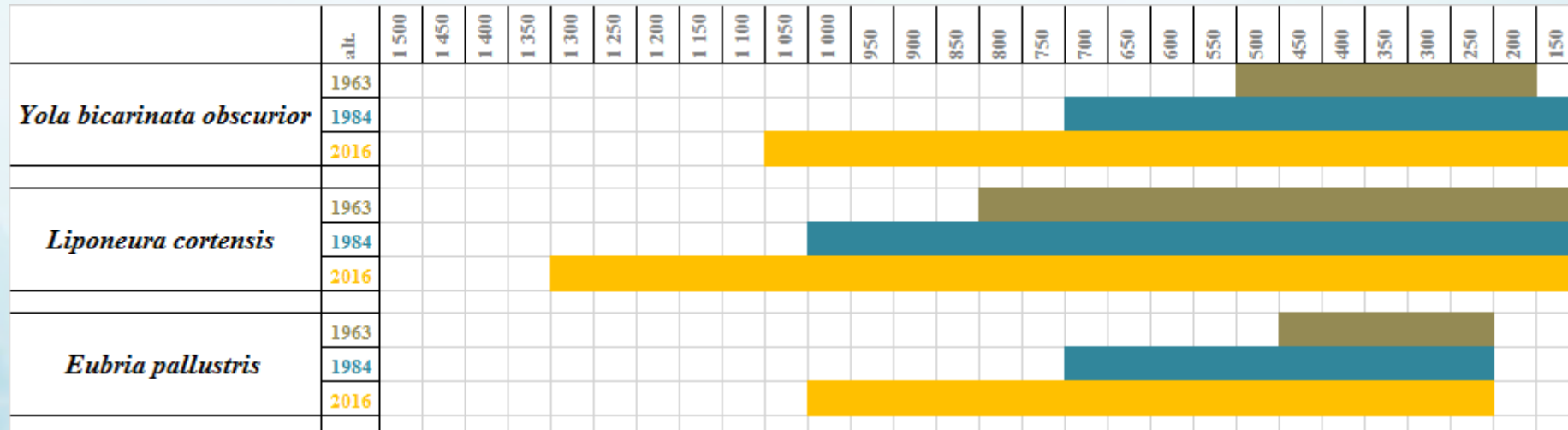




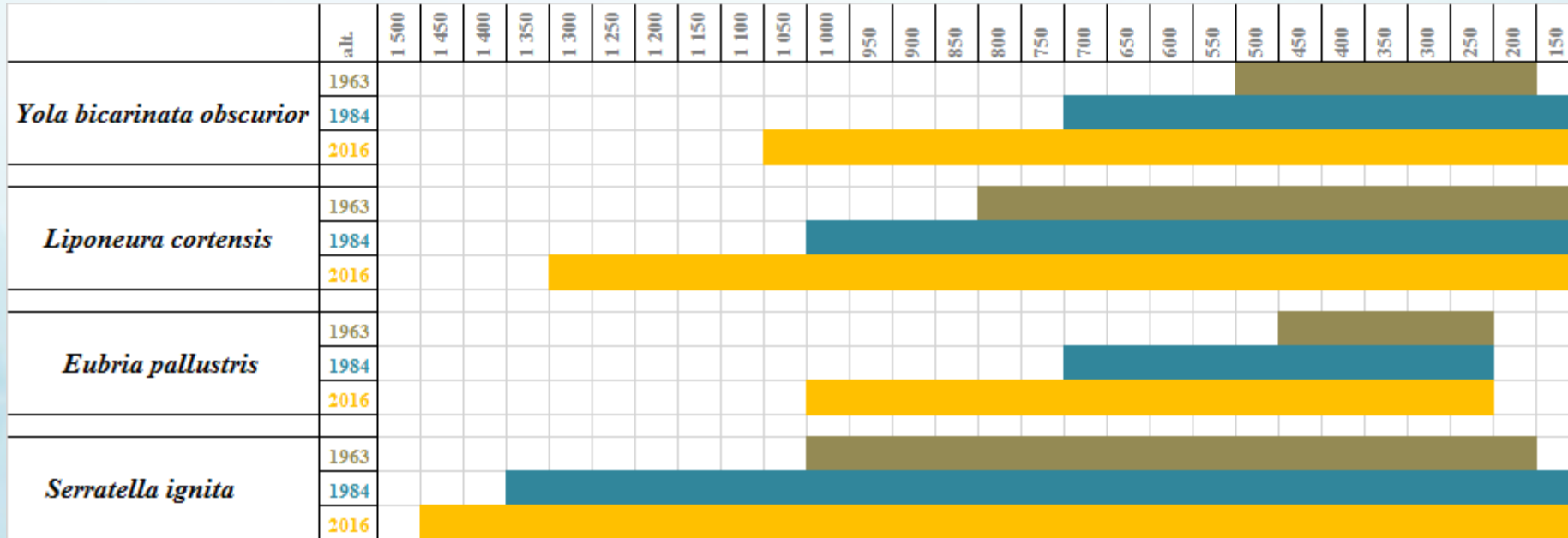
# Warm stenothermal organisms / biotopes increases



# Warm stenothermal organisms / biotopes increases

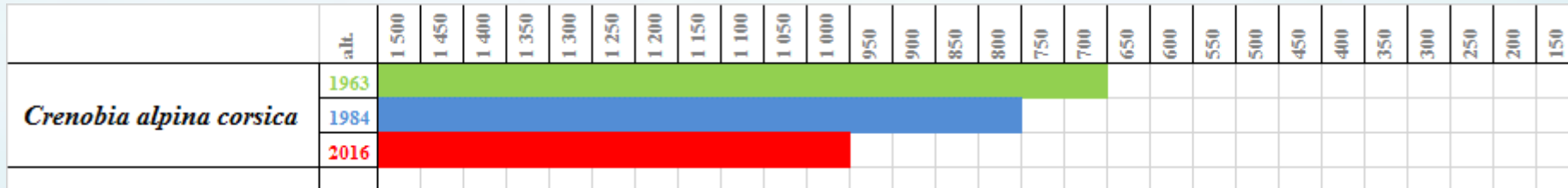


# Warm stenothermal organisms / biotopes increases

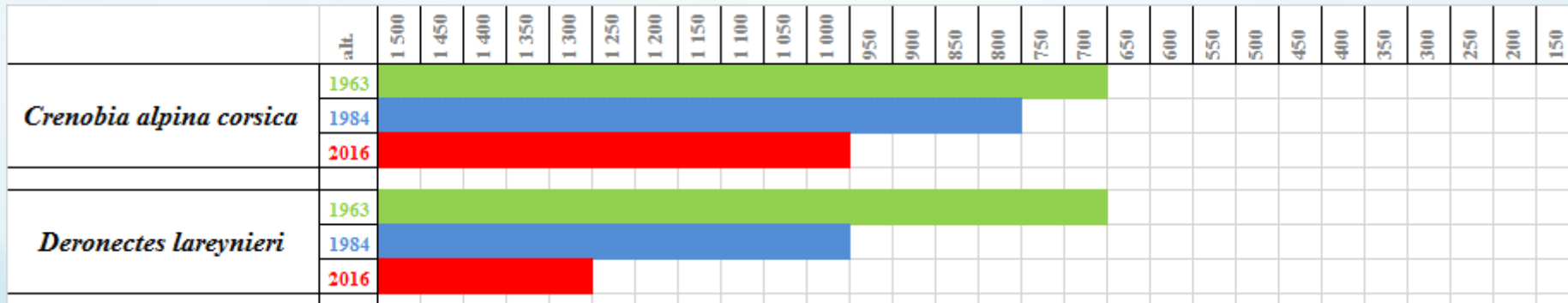




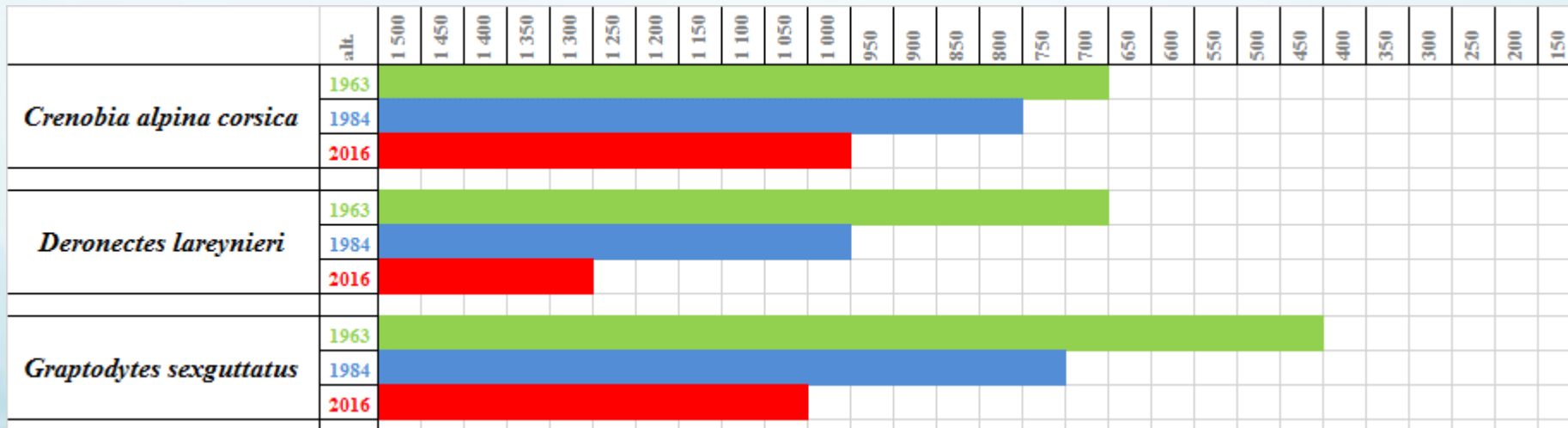
# Cold stenothermal organisms / biotopes reduced



# Cold stenothermal organisms / biotopes reduced



# Cold stenothermal organisms / biotopes reduced





# Cold stenothermal organisms / biotopes reduced





A scenic view of a river flowing through a lush forest. The river is clear and shallow, with large, smooth rocks scattered throughout. The water is a mix of green and blue, reflecting the surrounding foliage. In the background, a steep cliff rises, topped with a large, rectangular structure that appears to be a dam or a bridge. The sky is clear and blue. The overall atmosphere is peaceful and natural.

**Thank you for your attention**