

Name of site	Location	Region	Number of points? <sup>1</sup>	Temperature	Salin
Men Er Roue	47°32'5" N / 3°5'37" W	Brittany	503	3.8-22.2 (14.4 +/- 3.7)	20.1-38 (33.
Loscolo	47°27'27" N / 2°32'18" W	Brittany	463	5.7-22.4 (14.9 +/- 4.0)	14.0-36.8 (32.
Croisic	47°18'0" N / 2°30'51" W	Brittany	500	4.8-28.9 (14.7 +/- 3.9)	14.7-37.6 (31.
L'Eperon	46°16'13" N / 1°14'16" W	Oléron	460	3.0-26.0 (15.3 +/- 4.8)	13.0-36.6 (32.
Cornard	46°3'19" N / 1°7'50" W	Oléron	491	3.1-29.2 (15.6 +/- 4.8)	19.0-38.1 (32.
Auger	45°47'59" N / 1°12'19" W	Oléron	524	3.0-24.5 (15.4 +/- 4.4)	23.9-36.0 (32.
Buoy7	44°32'32" N / 1°15'49" W	Arcachon	311	7.2-23.9 (15.2 +/- 3.8)	31.8-36.1 (34.
Teychan	44°40'25" N / 1°9'31" W	Arcachon	494	5.5-25.2 (15.5 +/- 4.6)	20.6-35.8 (32.
Antoine	43°22'41" N / 4°50'45" E	Mediterranean Sea	539	4.6-30.0 (16.8 +/- 5.1)	26.8-38.9 (32.
Lazaret	43°5'14" N / 5°54'23" E	Mediterranean Sea	512	8.7-29.2 (17.4 +/- 4.2)	21.6-39.6 (35.

Table 1: Attempt of summary for our locations ; should we add the species for each region ?

Code on the plot	Ref	Dimension	Type of organisms	System	
1a	[7], conditional least square estimates	9	Zooplankton	Lake	107 points
1b	[7], total least square estimates	9	Zooplankton	Lake	
2a	[9]	2	Phytoplankton	Lake	108
2b	[9]	3	Zooplankton	Lake	
3a	[8]	4	Functional groups of plankton	Lake	18
3b	[8]	5	Taxonomic groups of plankton	Lake	
4a	[6]	4	Plankton	Lake	
4b	[6]	4	Plankton	Lake with high planktivory	
4c	[6]	4	Plankton	Lake with low planktivory	
5a	[4]	14	Plankton	Lake	
5b	[4]	14	Plankton, growing season	Lake	
6a	[3]	13	Plankton	Lake	
6b	[3]	7	Simpler web, plankton	Lake	
7a	[5]	10	Ciliates	Lake	
7b	[5]	10	Phytoplankton	Lake	
8a	[12]	3	Insects	Terrestrial	
9a	[11]	2	Lynx/Hare	Terrestrial	
10a	[10]	3	Fish	Baltic Sea	
11a	[2]	7	Phytoplankton	Coastal site	
11b	[2]	7	Phytoplankton	Offshore site	
12a	[1]	12	Phytoplankton	Outside a bay	
12b	[1]	12	Phytoplankton	Inside a bay	

Table 2: References used

<sup>1</sup>From 1996, without linear interpolation

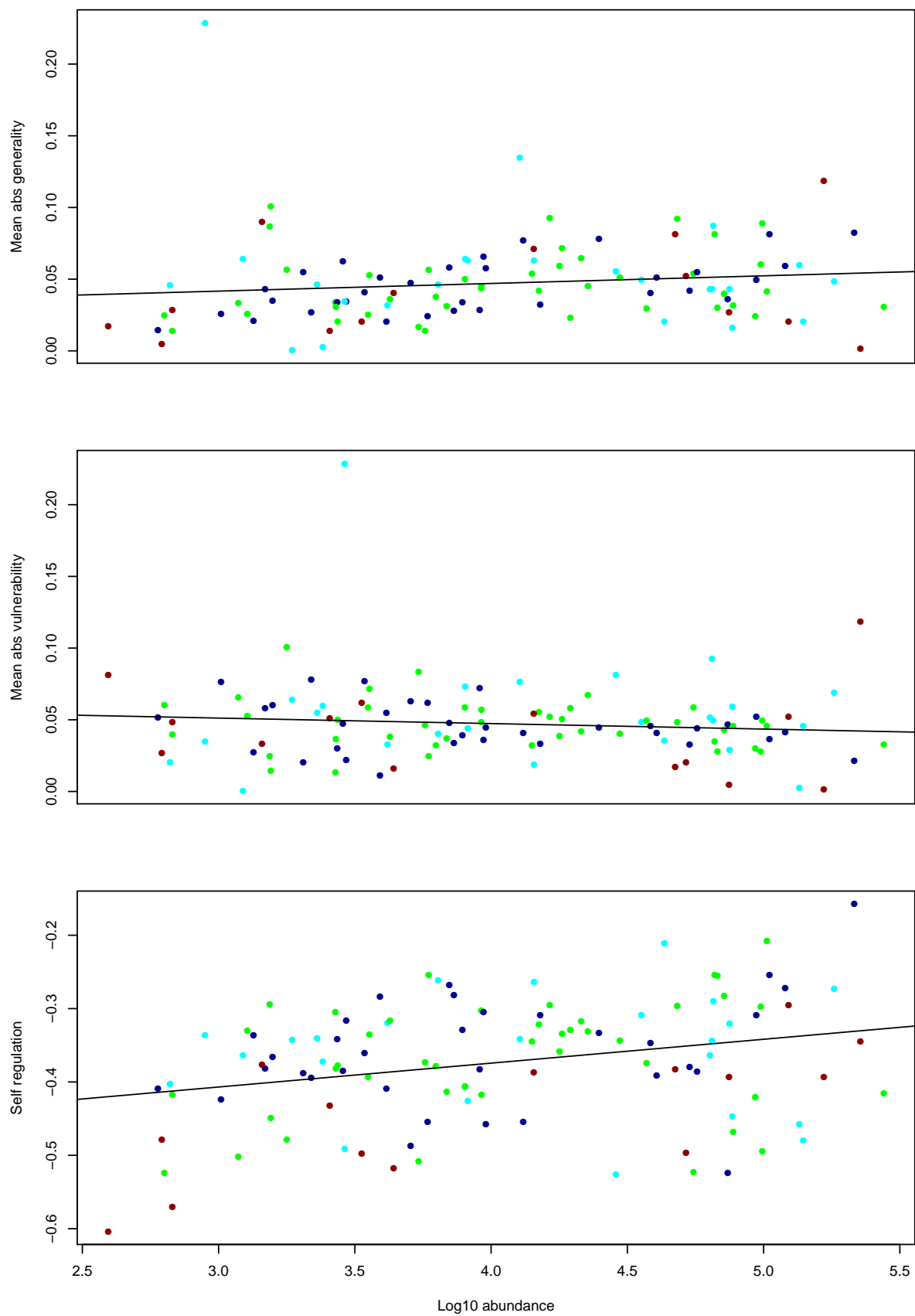


Figure 1: Relation between mean abundance and intra/inter - interactions

## Species identity

We were wondering if species generality was the same in all sites, in all regions. First had a look at plots, looking for patterns (didn't find any).

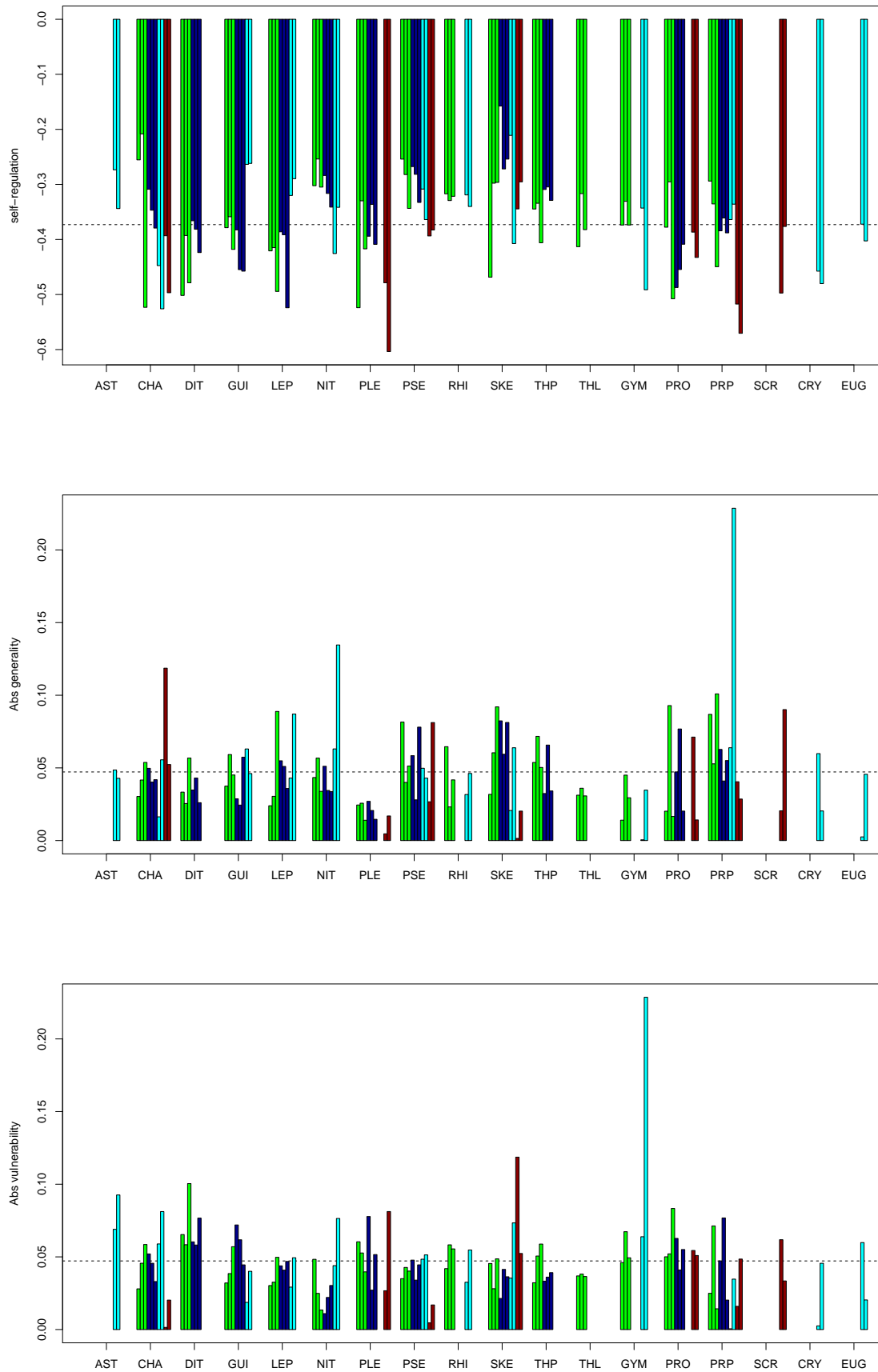


Figure 2: Self regulation, vulnerability and generality of each species in 10 different sites. The dotted line indicates the average parameter value.

I then ranked each species according to its self-regulation, average absolute vulnerability and absolute generality, in each site, and focused on the first and last 3 groups in each least (i.e., the 3 most and least regulated species; the 3 least and most vulnerable/general species) to find patterns within a given region (we only have 4 species in common in the 4 regions : CHA, PSE, and PRP, making it difficult to conclude anything for all regions).

The lists are similar within a region, except for Brittany which shows the most variability in the rank of the species.

SKE almost always belongs to the least regulated groups, in all sites. However, I saw no other pattern in vulnerability nor generality.

[TBC]

## Comparing Barraquand 2018 and this study

	Teychan	B7
Mean Intra	0.352/0.342	0.404/0.382
Sd Intra	0.077/0.076	0.082/0.082
Mean Inter <sup>2</sup>	0.075/0.073	0.126/0.128
Sd Inter	0.015/0.015	0.039/0.052
Sparsity	0.87/0.87	0.86/0.85
%Pos	22/23	23/21

Table 3: Comparison of main metrics on the interaction matrix in Teychan and B7 in Barraquand 2018/this study

## References

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<sup>2</sup>taking all coeff into account, not only significant ones

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