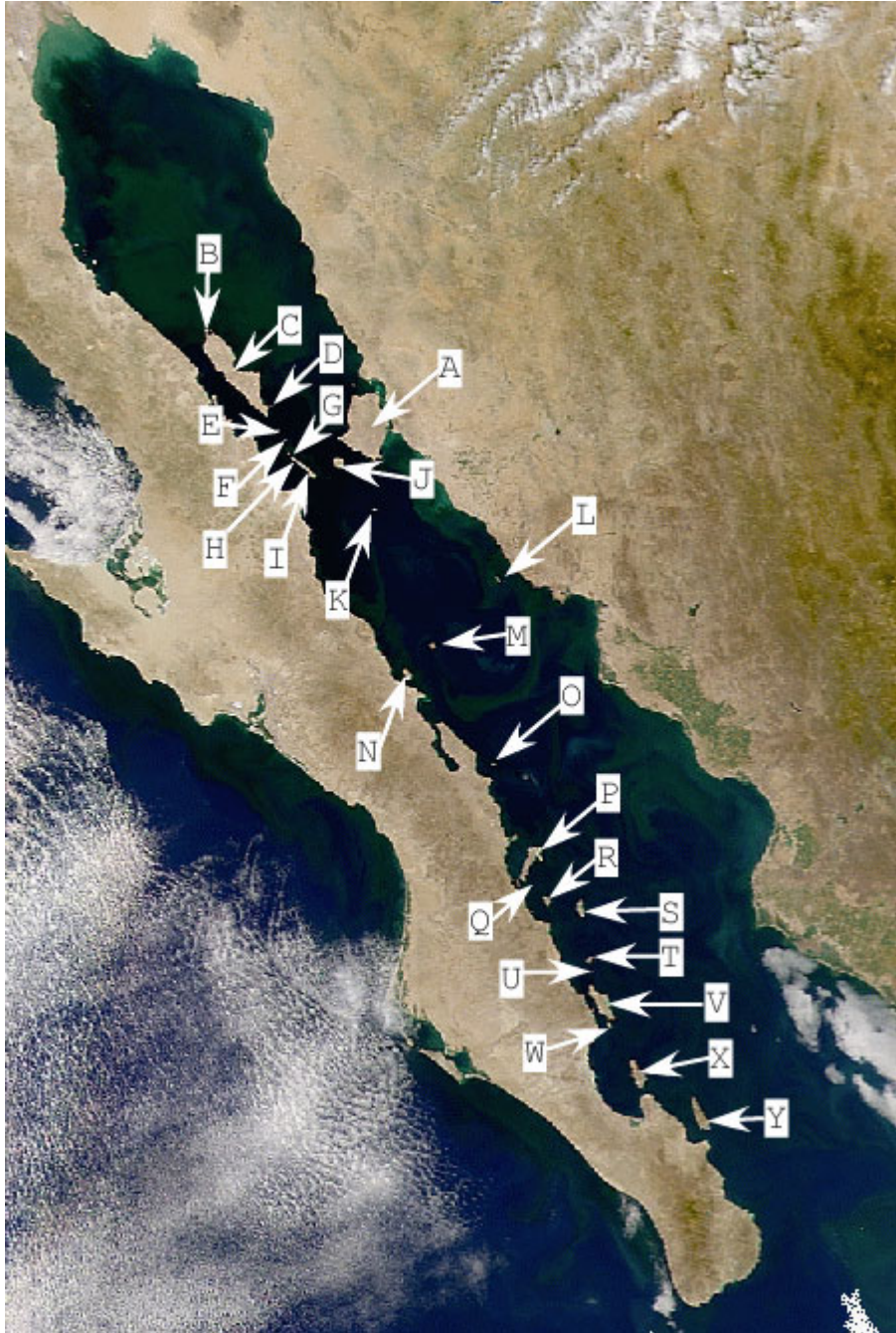


Problème Pratique de Statistique - 12

# Lézards des îles de la mer de Cortés



Fond :

[http://earthobservatory.nasa.gov/Newsroom/NewImages/Images/S2001081194622.L1A\\_HMBR\\_lrg.jpg](http://earthobservatory.nasa.gov/Newsroom/NewImages/Images/S2001081194622.L1A_HMBR_lrg.jpg)

La mer de Cortés, ou golfe de Californie, contient plus de 900 îles de toutes tailles. 25 d'entre elles ont été étudiées par Case (1983). Le tableau qui donne la présence ou l'absence de 20 taxa de lézards dans ces 25 îles est reproduit dans Manly (1995). Les îles sont codées de A à Y avec la code :

A = Tiburton	B = Mejia	C = Angel de la Guarda	D = Pond
E = Partida Norte	F = Razza	G = SalsiPuedes	H = San Lorenzo Norte
I = San Lorenzo Sur	J = San Estaban	K = San pedro Martir	L = San Pedro Nolasco
M = Tortuga	N = San Marcos	O = Coronados	P = Carmen
Q = Danzante	R = Monserrate	S = Santa Catalina	T = Santa Cruz
U = San Diego	V = San José	W = San Francisco	X = Espiriti Santo
Y = Cerralvo			

Le code des espèces est :

1 = Coleonyx	2 = Phyllodactylus	3 = Sceloporus orcutti
4 = Sceloporus magister	5 = Sceloporus clarki	6 = Cnemidophorus tigris
7 = Cnemidophorus hyperythrus	8 = Urosaurus	9 = Urosaurus ornatus
10 = Uta	11 = Petrosaurus mearnsi	12 = Petrosaurus thalassinus
13 = Callisaurus draconoides	14 = Crotyphytus	15 = Gambelia wislizenii
16 = Sauromalus	17 = Dipsosaurus dorsalis	18 = Ctenosaurus hemilopha
19 = Sator	20 = Phrynosoma solare	



3 (<http://www.werc.usgs.gov/fieldguide/scor.htm>)



6 (<http://www.werc.usgs.gov/fieldguide/cnti.htm>)



13 (<http://www.werc.usgs.gov/fieldguide/cadr.htm>)



15 (<http://www.werc.usgs.gov/fieldguide/gawi.htm>)



17 ([http://www.reptilien-center.de/dipsosaurus\\_dorsalis.htm](http://www.reptilien-center.de/dipsosaurus_dorsalis.htm))



20 (<http://educ.csmv.qc.ca/mgrparent/vieanimale/rep/Phryno/Lezard.htm>)

Toute l'information est ici :

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	1	0
2	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1
3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	1	1	0	0
4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	0	1
5	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	0	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	0	1	0	0	1	1	1	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	1	1	1	1
8	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	0
9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1
11	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
13	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	1	1	1
14	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	1	1	1	1	0	0	0	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
17	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	0	0	1	0	1	1
18	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1
20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Il y a 151 présences. La richesse varie d'une île à l'autre, la fréquence varie d'une espèce à l'autre. La question centrale est : y a-t-il une structure dans l'assemblage des espèces ? Qu'est-ce que l'hypothèse nulle d'absence de structure ? Comment peut-on tester cette hypothèse ? Voilà une question qui a fait des remous. Ceux que le problème pourrait passionner trouveront ci-dessous quelques références de base (Diamond and Marshall 1976, 1977, Connor and Simberloff 1979, Brualdi 1980, Pridmore 1985, Stark 1985, Manly 1995, Sanderson et al. 1998, Gotelli 2000, Gotelli and Entsminger 2001, Zaman and Simberloff 2002)

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