

Creaming curves & cumulative discovery at end 2007 for Africa countries

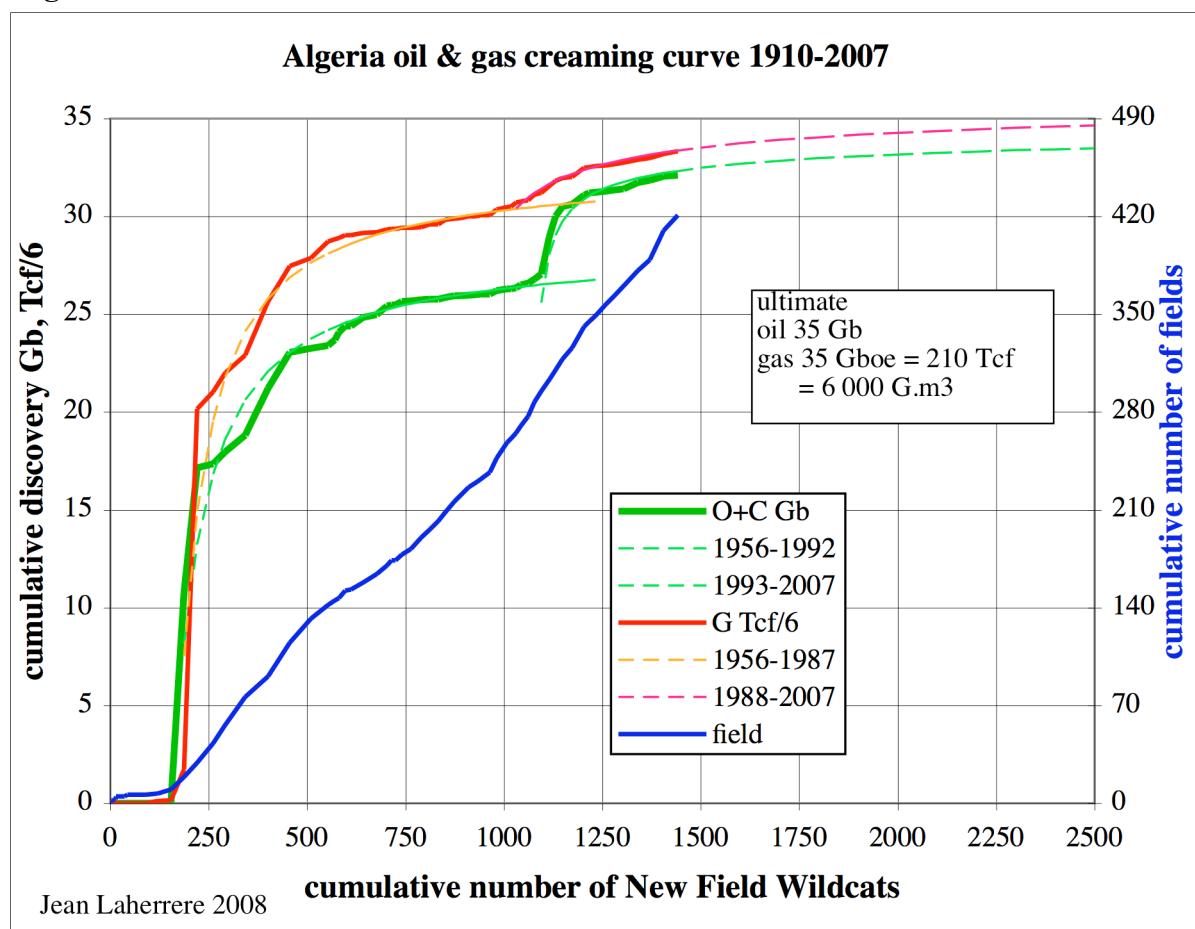
In a previous paper we have studied the creaming curves by continents, in this paper it is done the same way by countries of Africa.

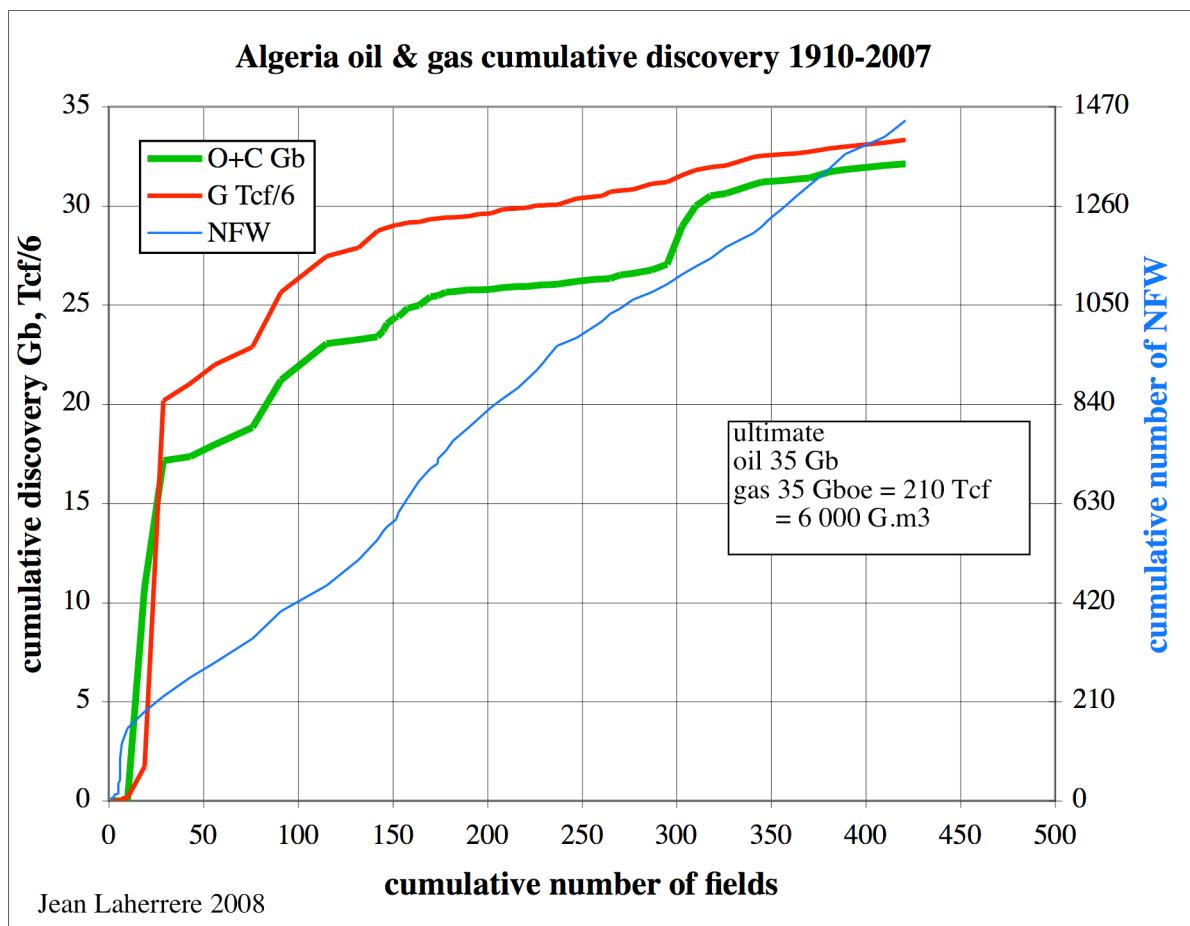
We used all the available data from IHS (2008), Cedigaz, USDOE, DGMN, BP, choosing the most reliable when discrepancies.

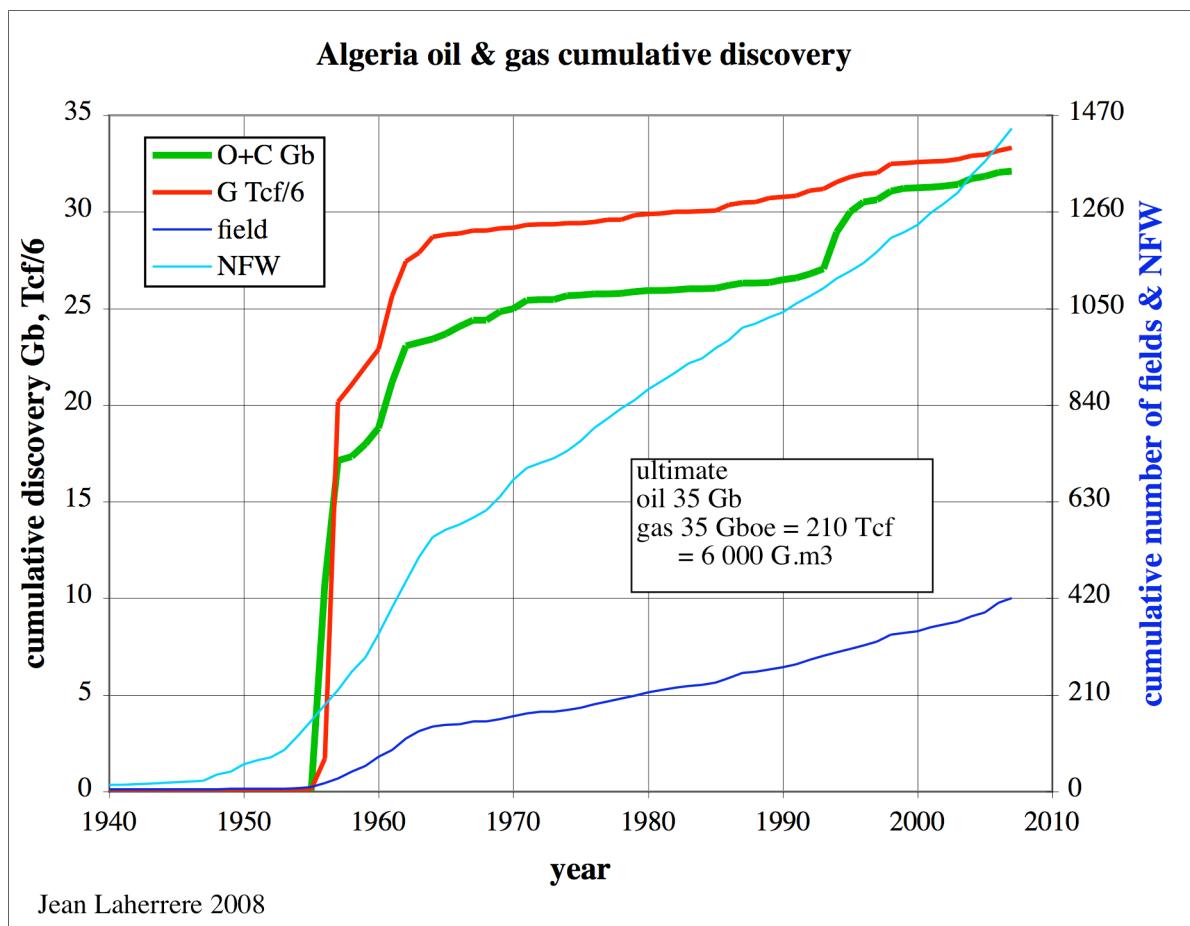
We plot first:

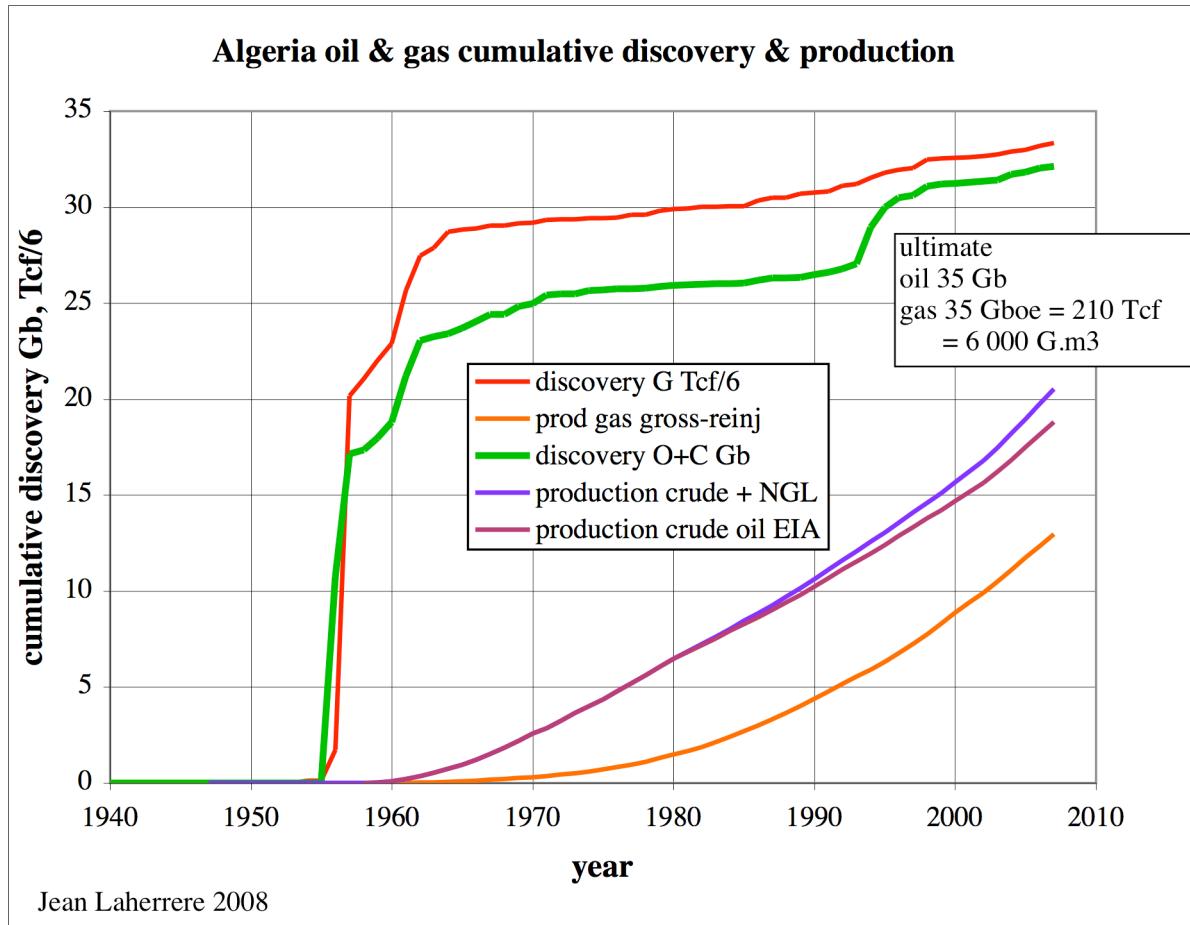
- the creaming curve which is the cumulative discoveries (backdated mean reserves) versus the cumulative number of new field wildcats (NFW); exploratory wells could be drilled in various quantity after discovery depending the complexity of the field and of the tax system.
- the cumulative discovery versus the cumulative number of fields, plot which can be better when NFW data is unreliable, and can give similar extrapolations when the success ratio does not vary much with time
- the cumulative discovery versus time
- the cumulative discovery and production versus time

-Algeria

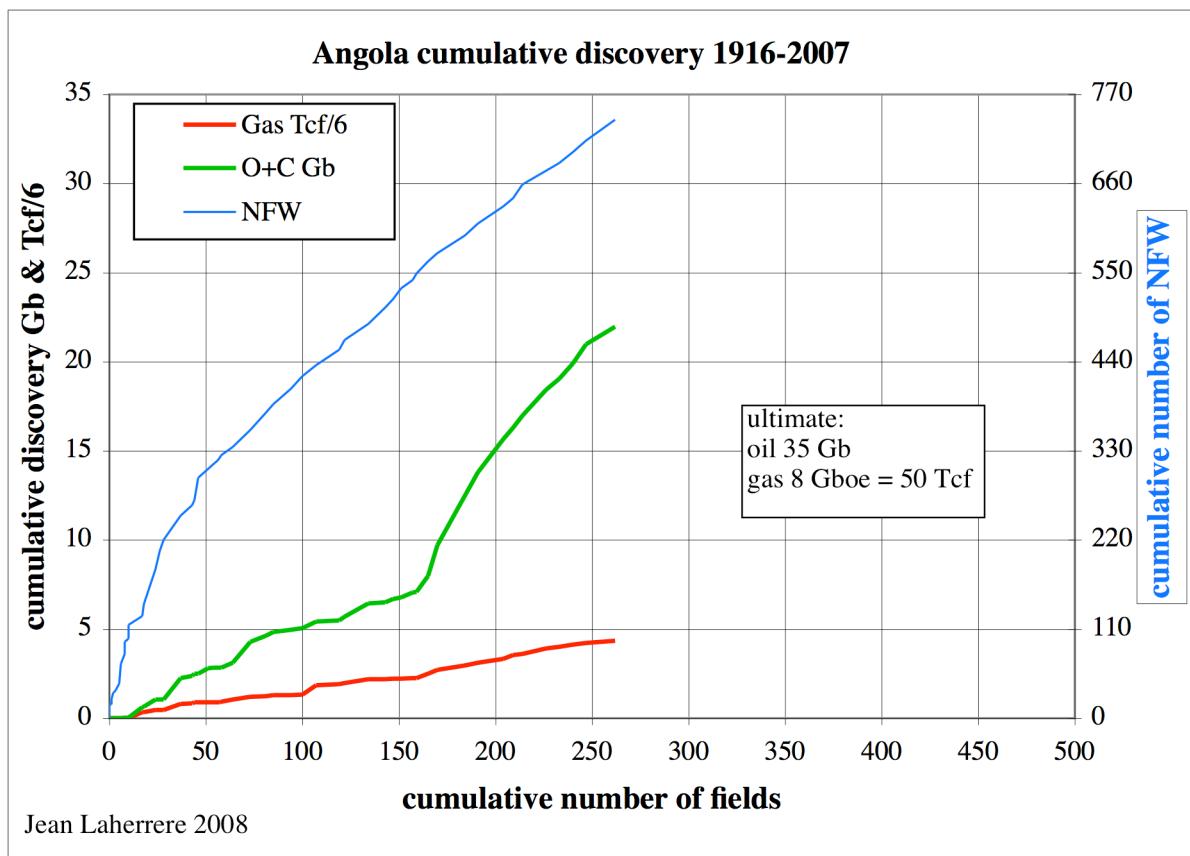
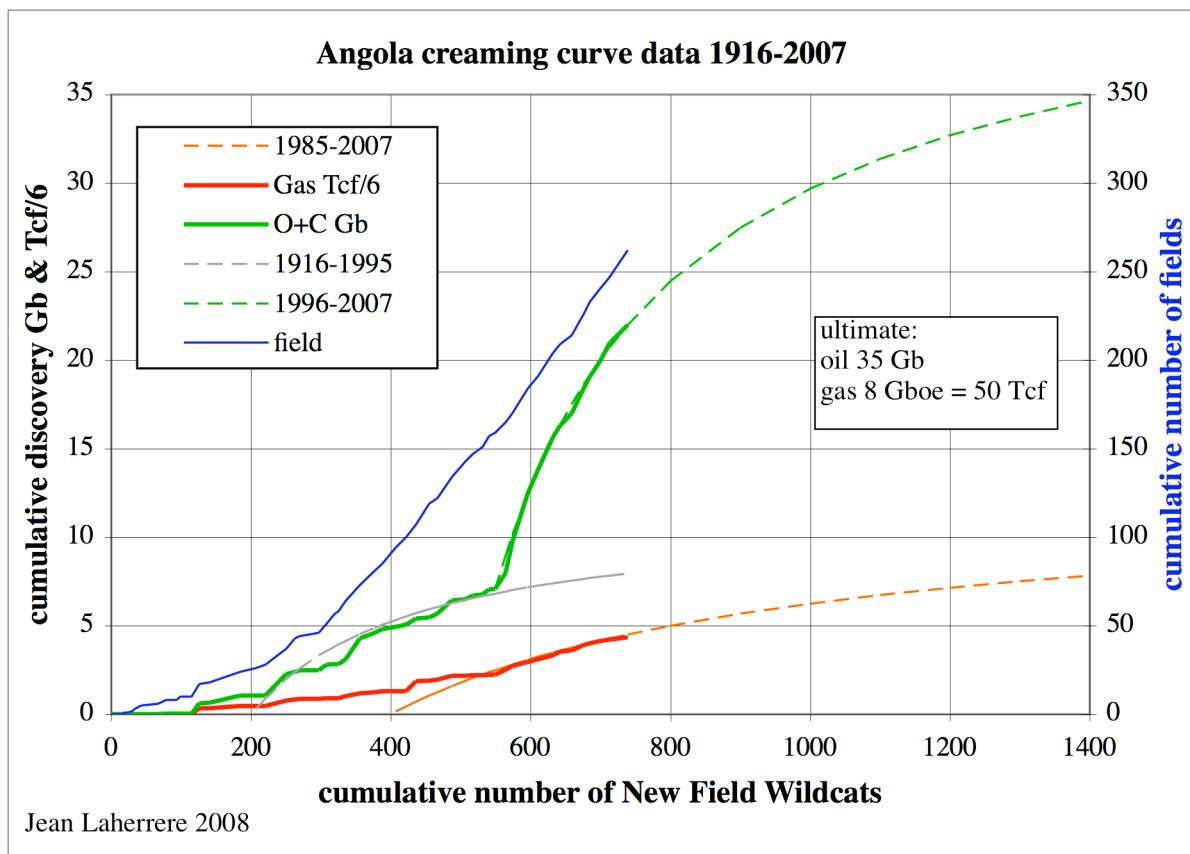


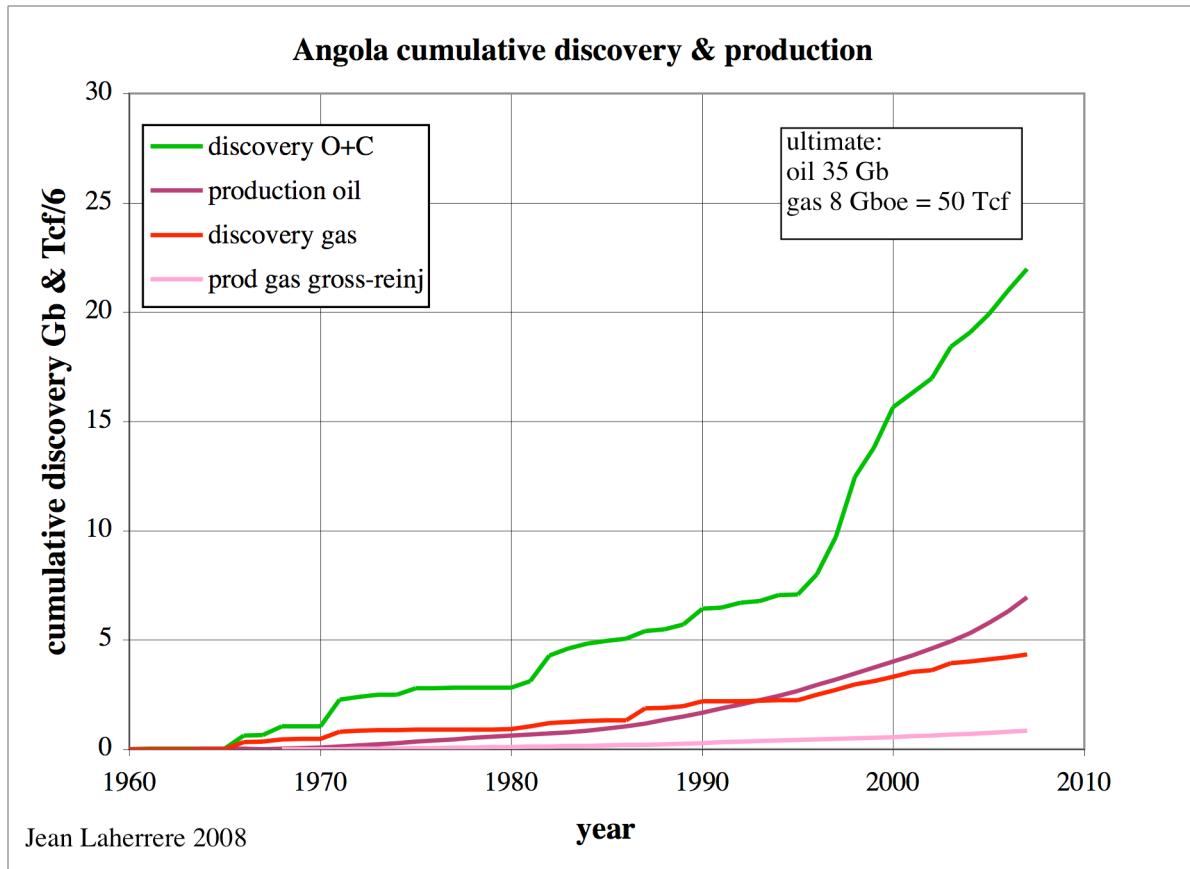
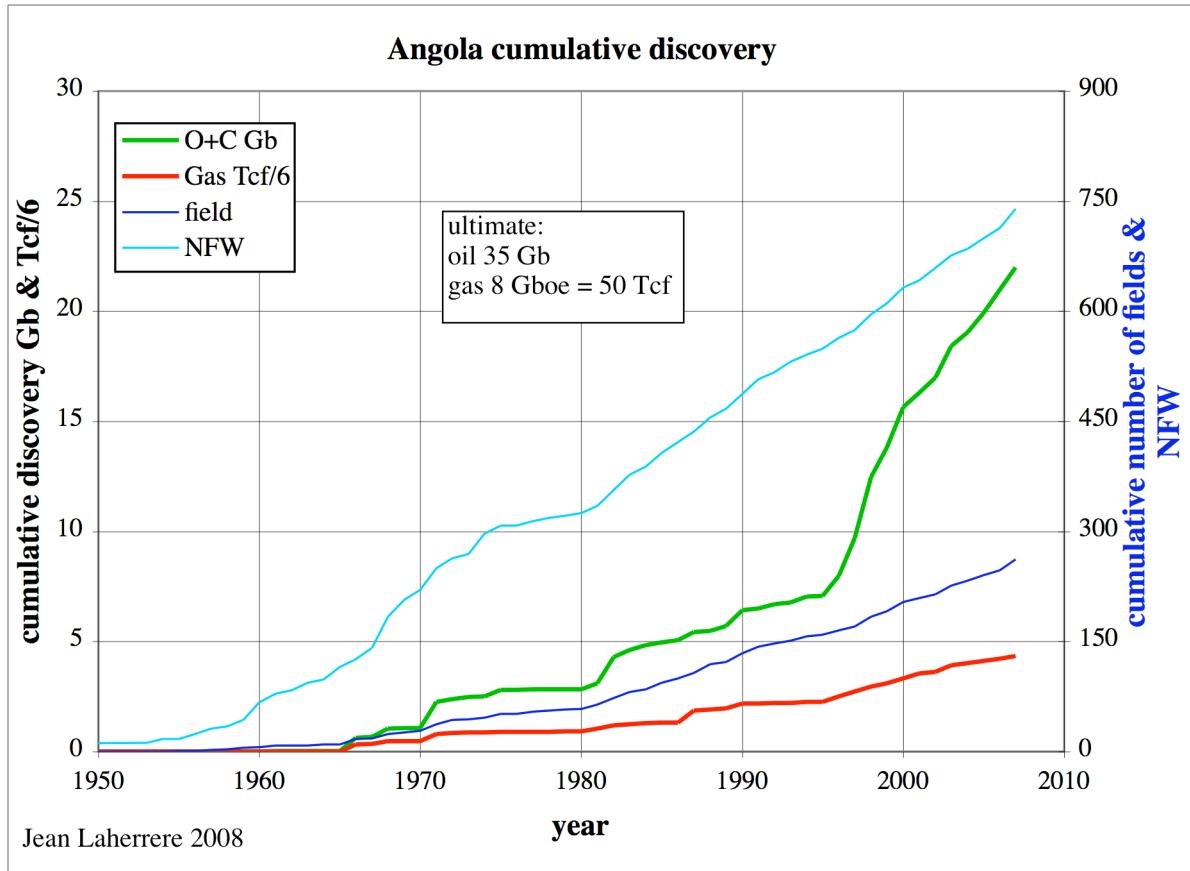




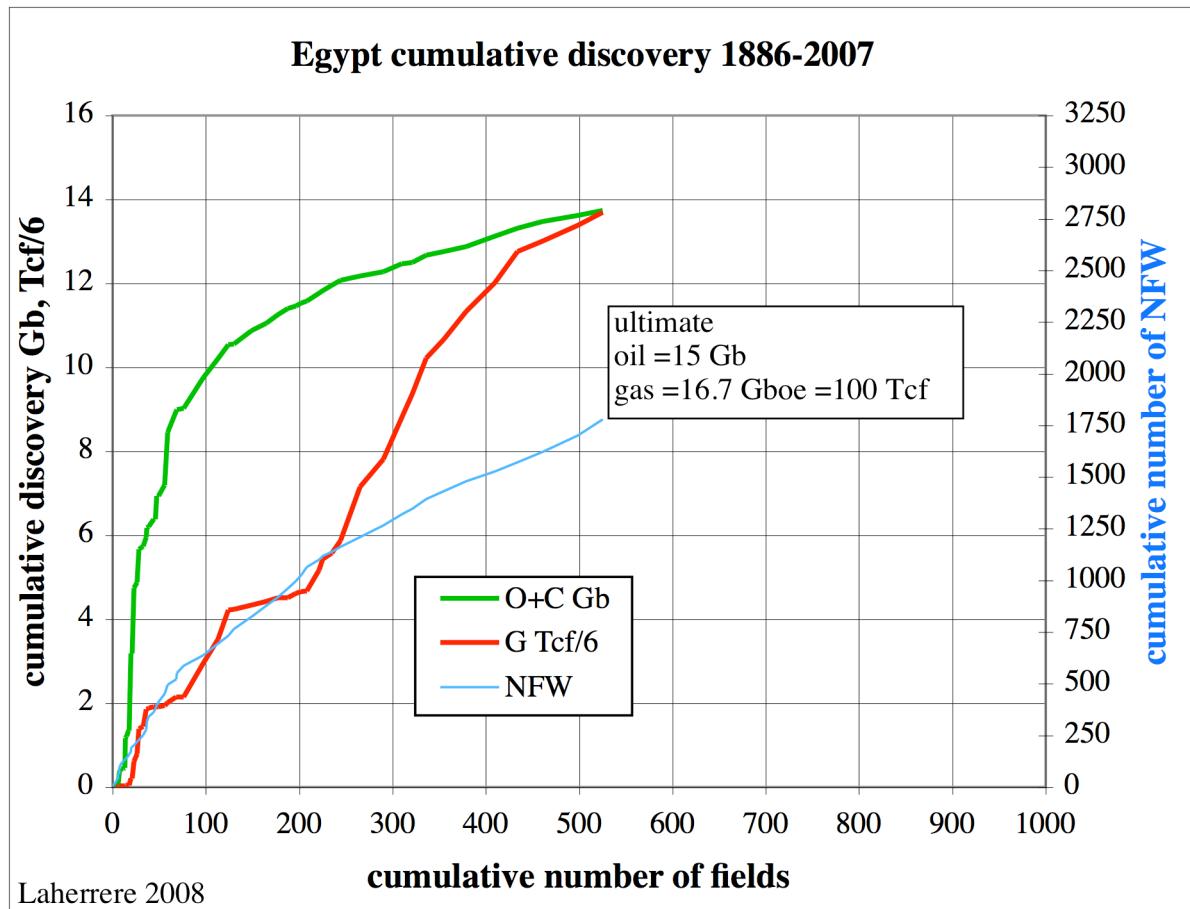
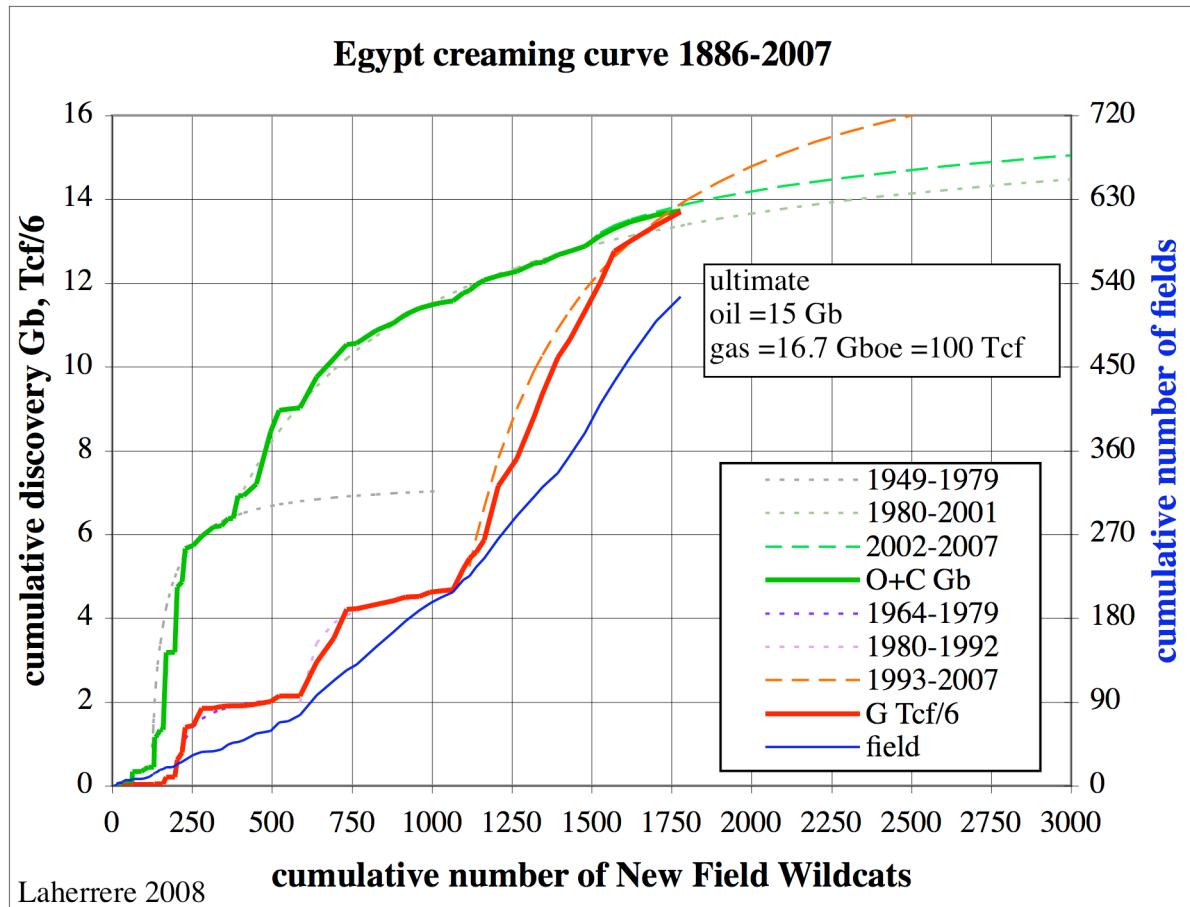


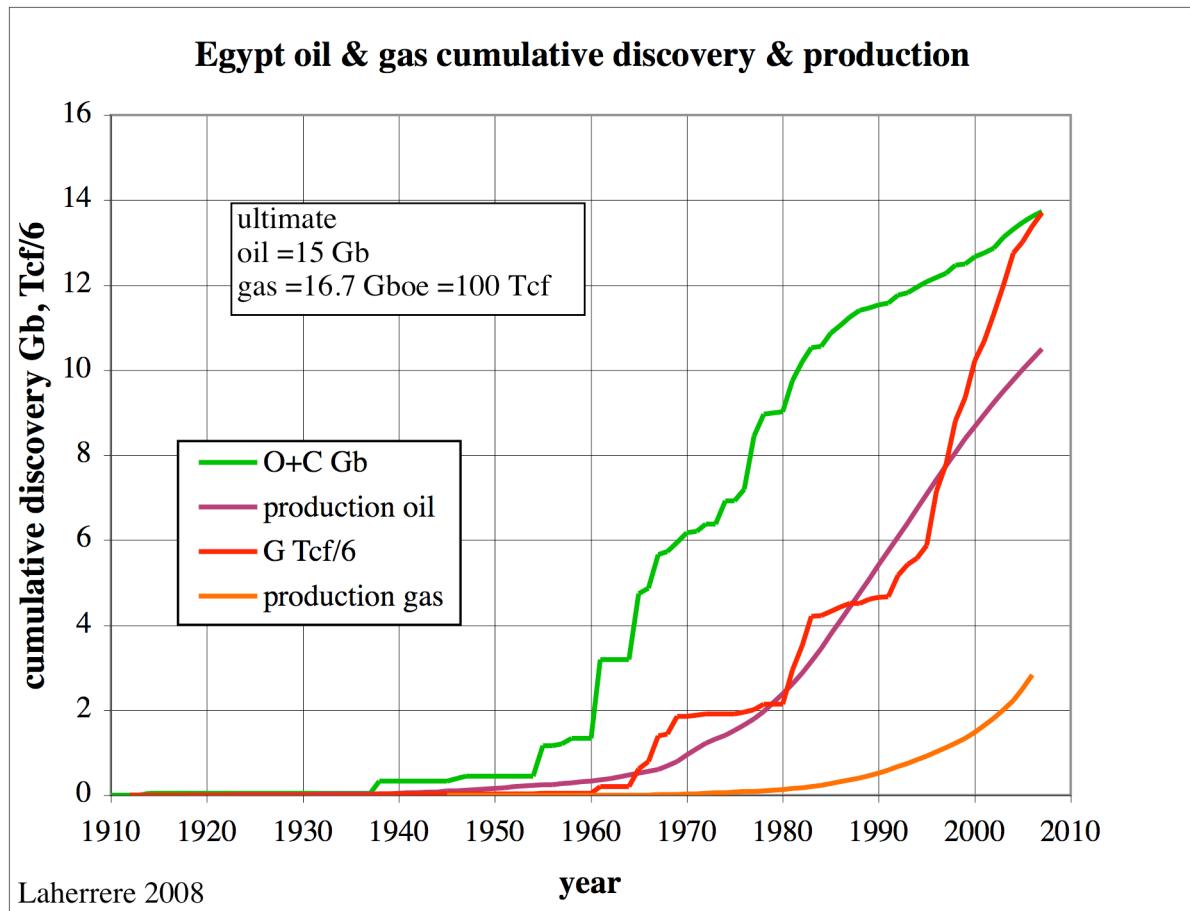
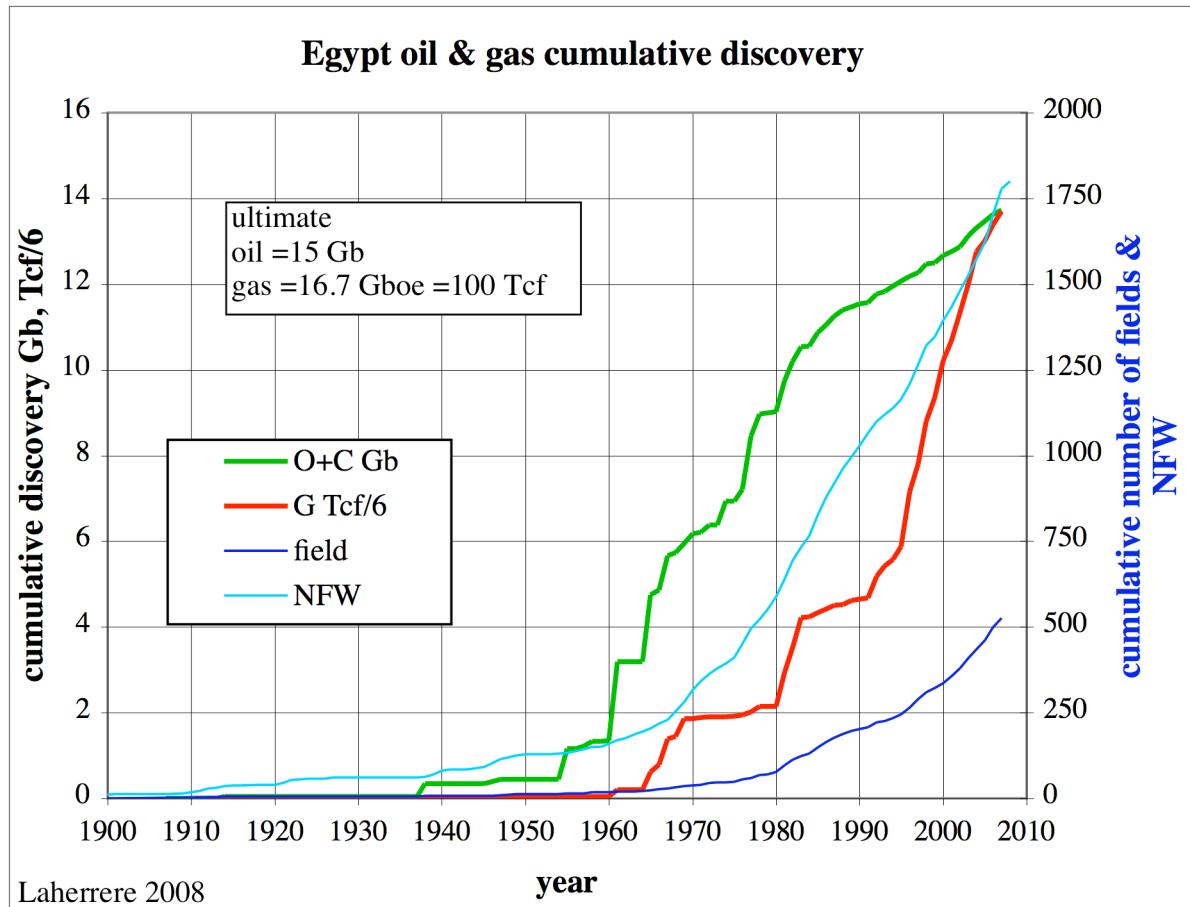
-Angola



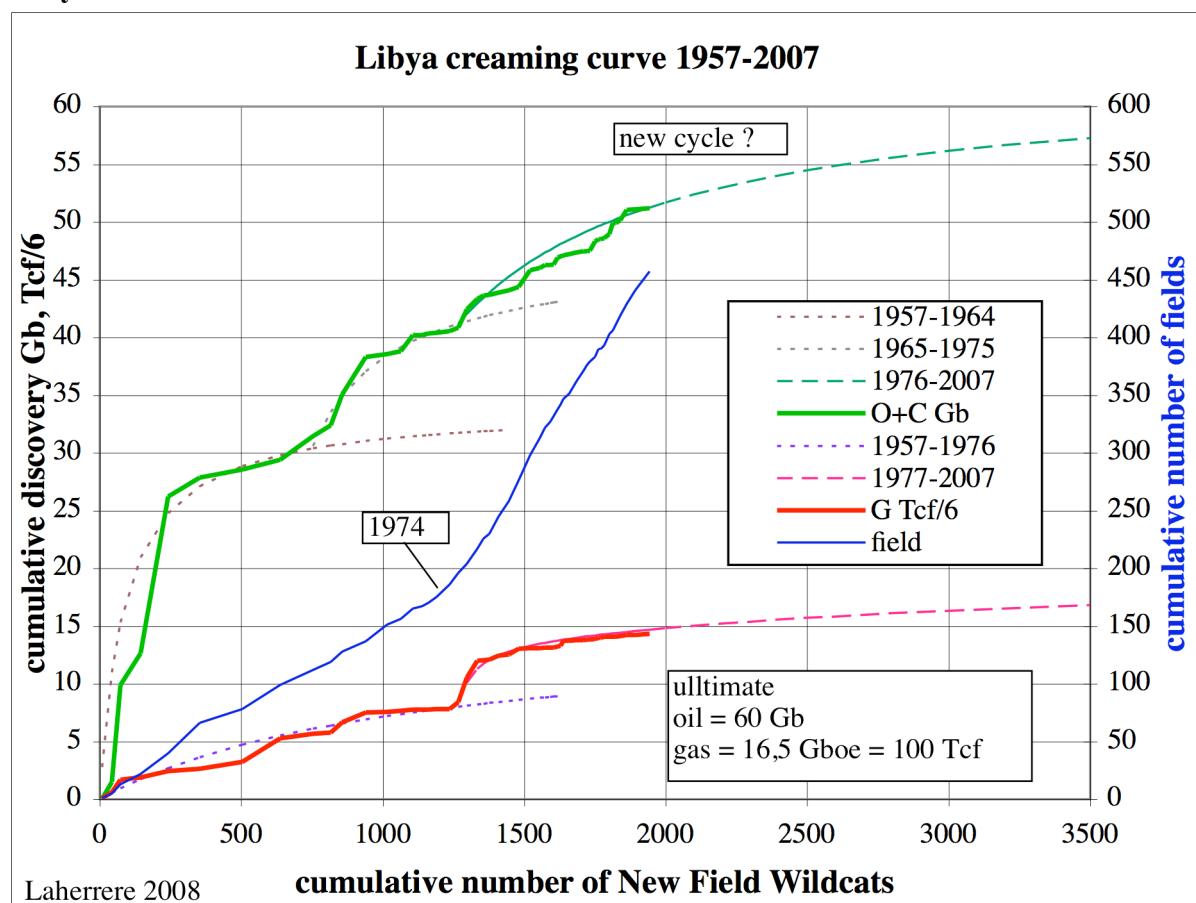


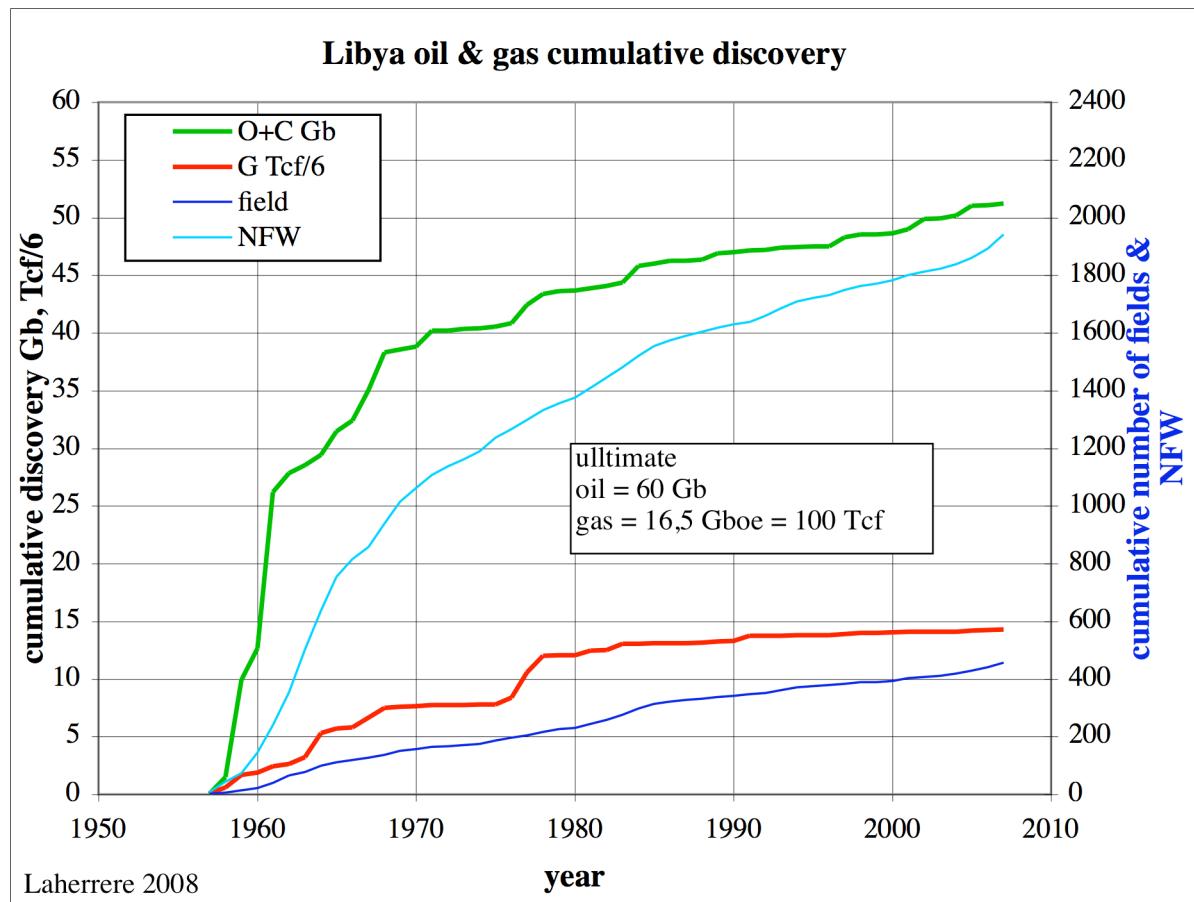
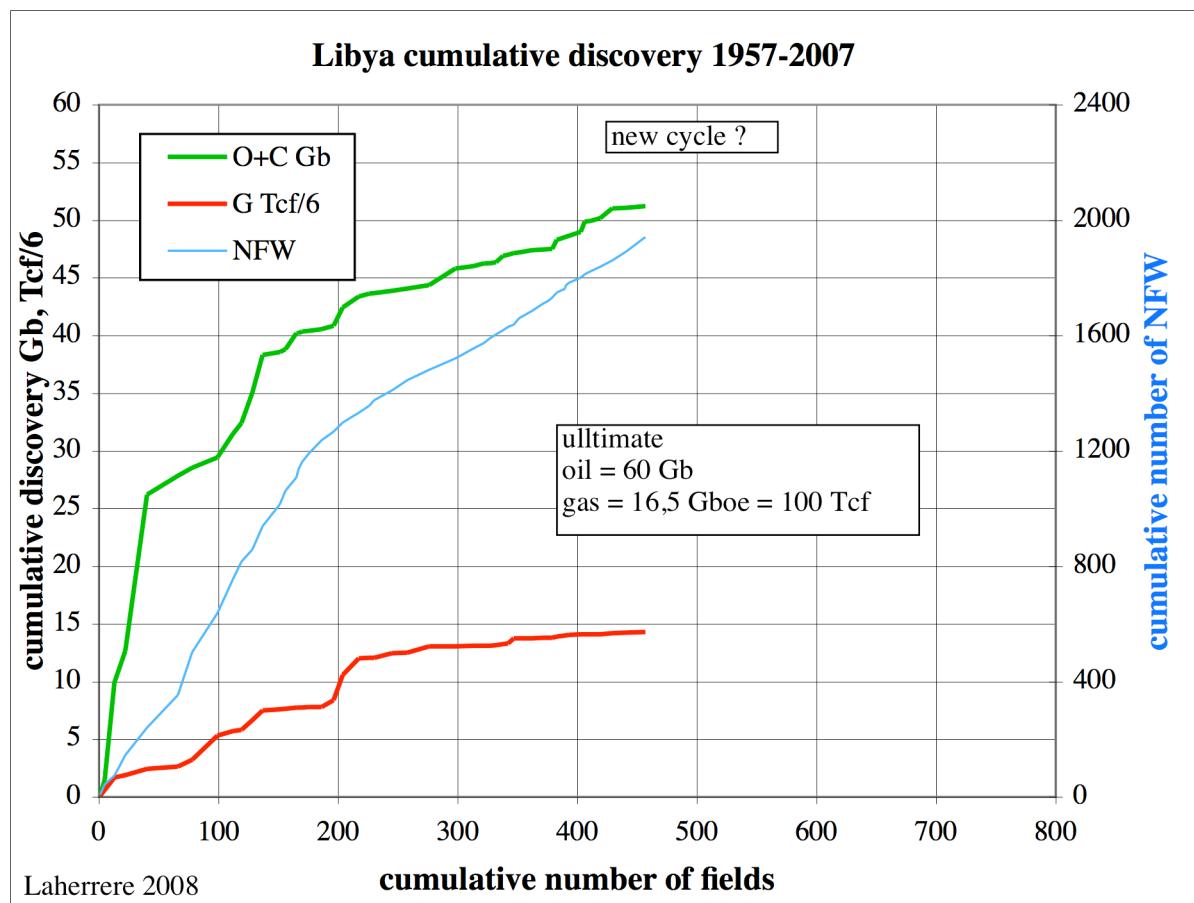
-Egypt

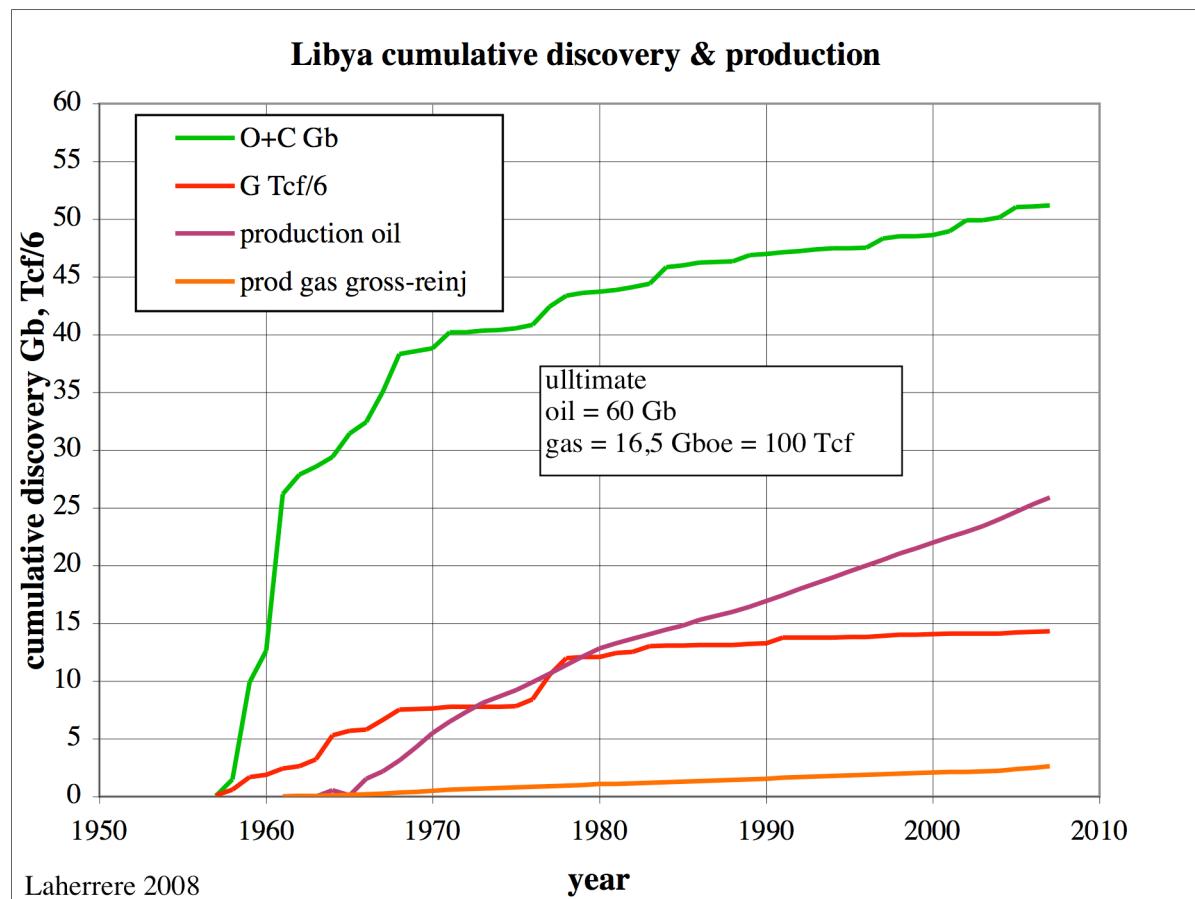




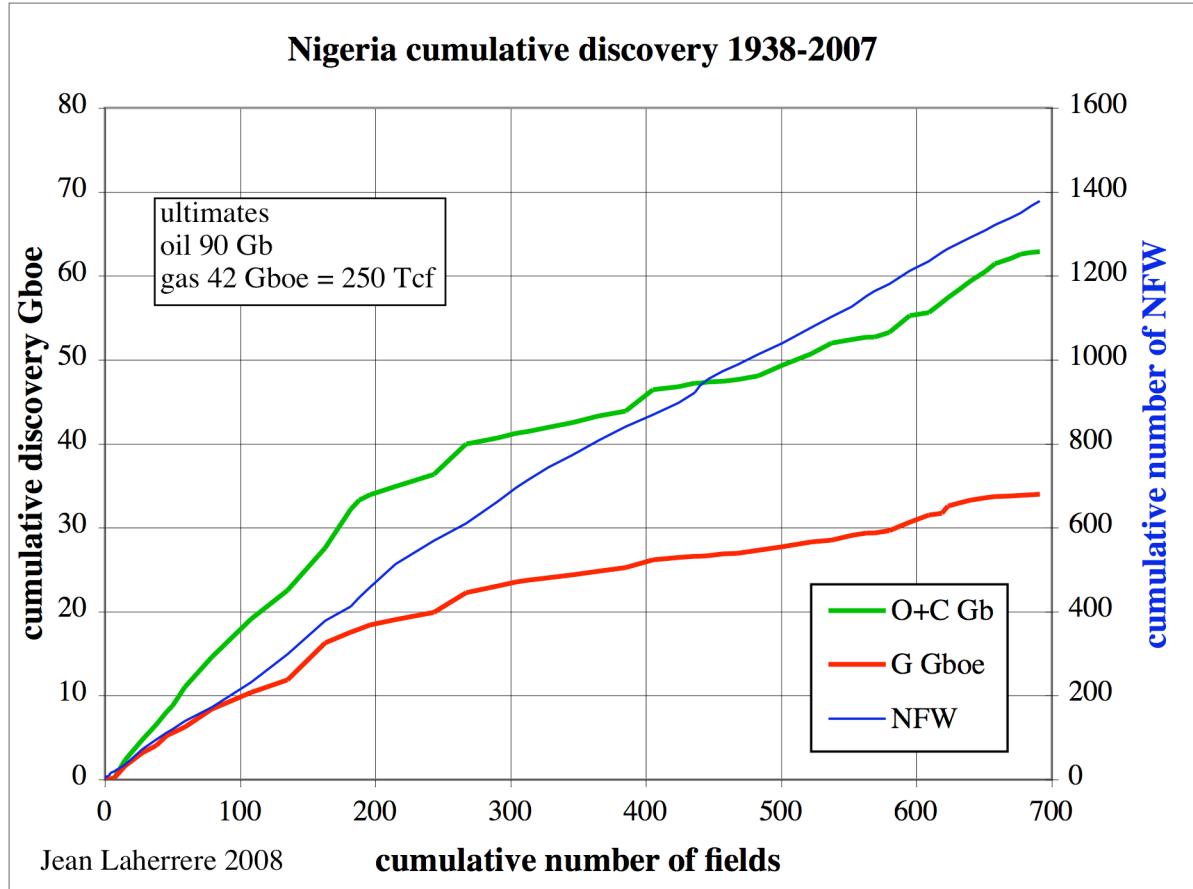
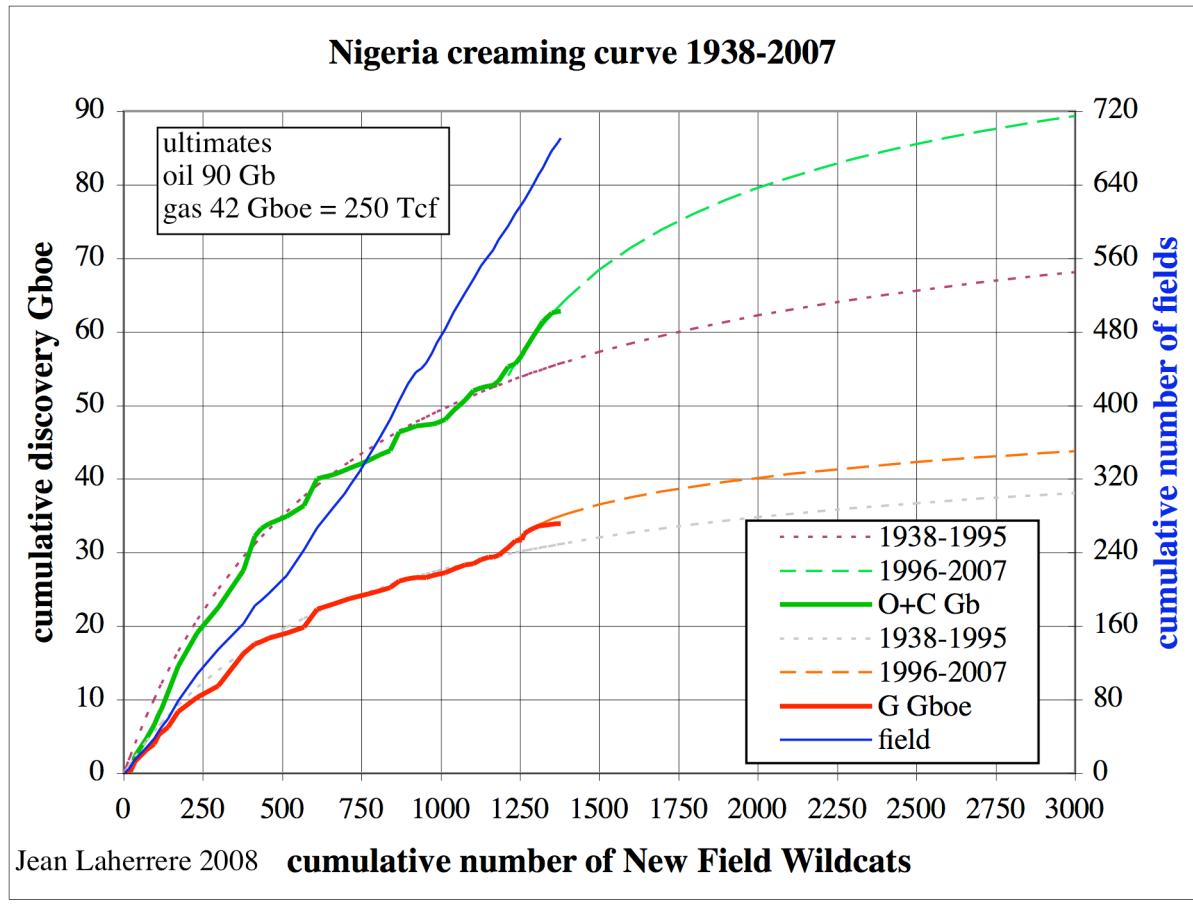
-Libya

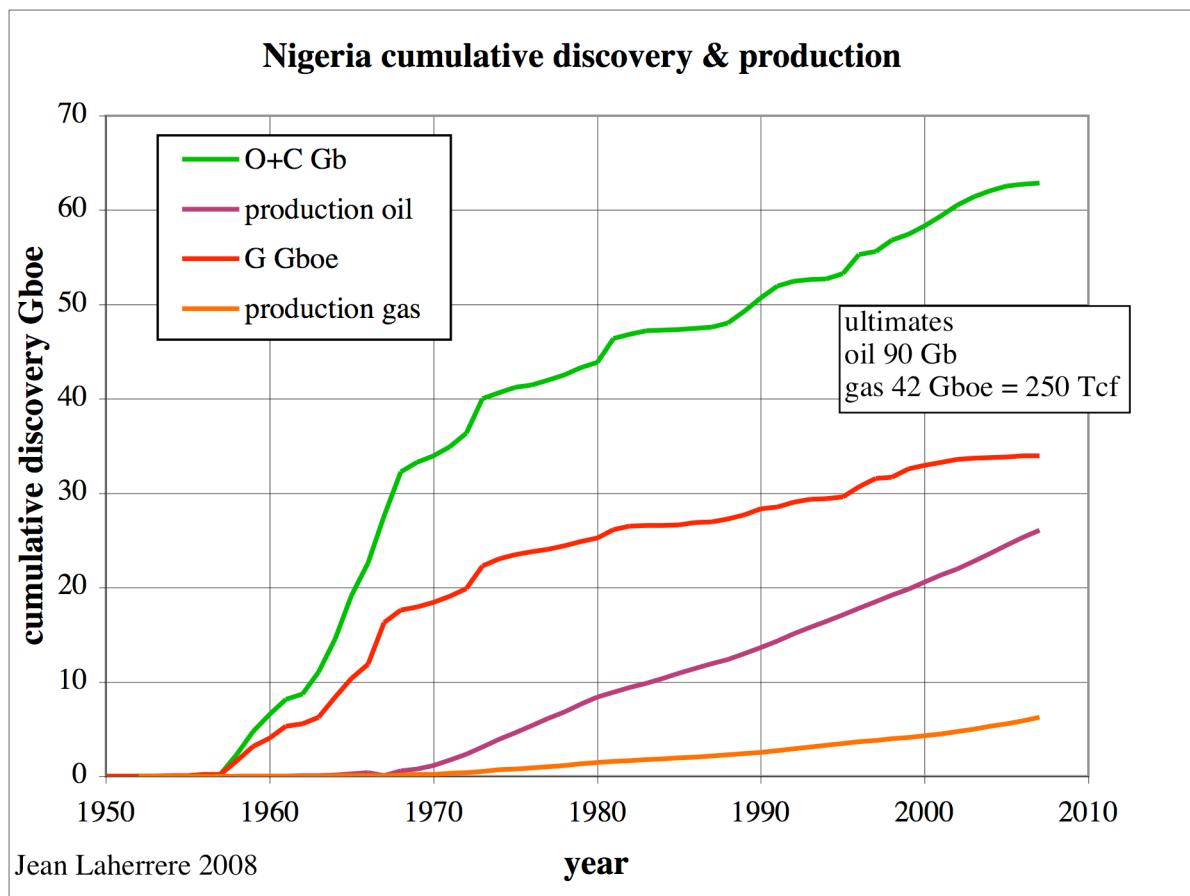
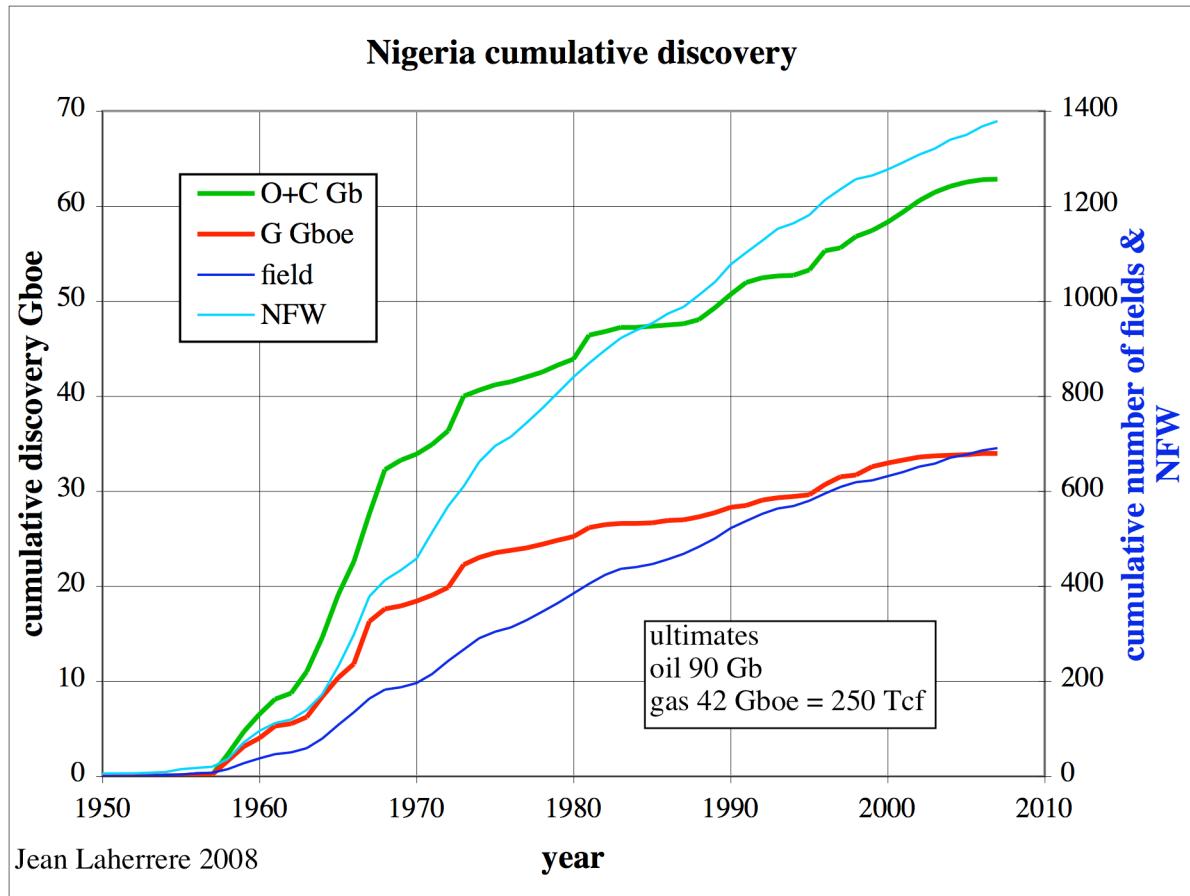




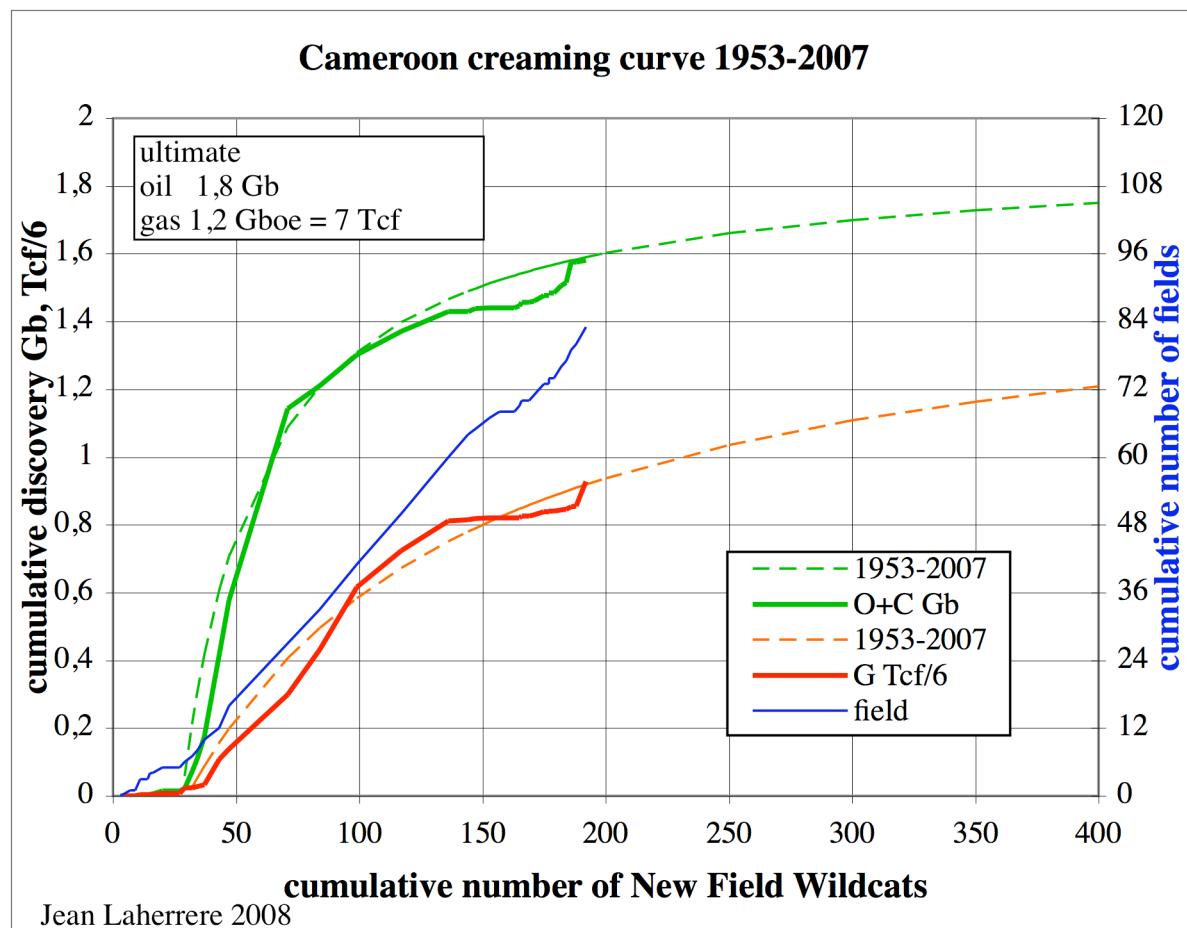


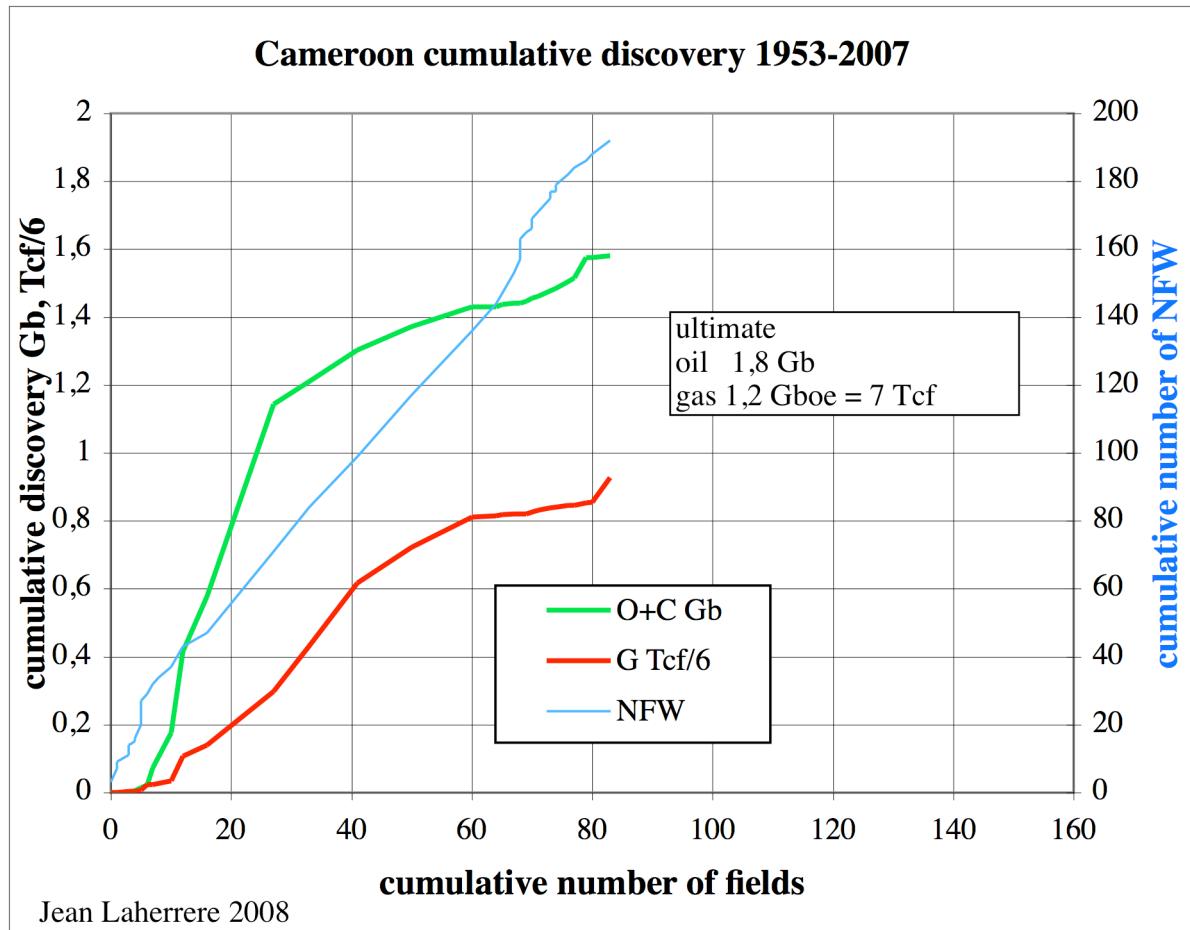
-Nigeria

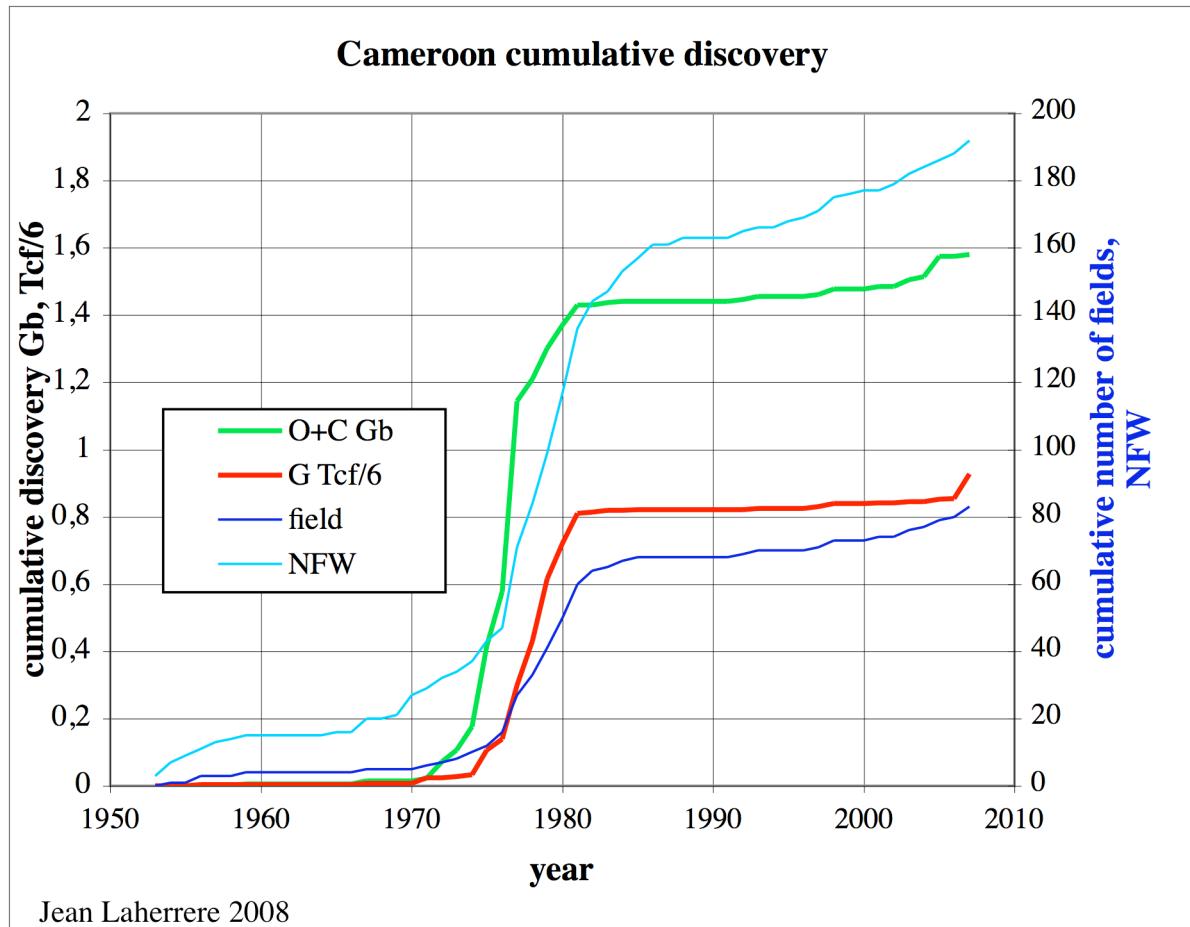


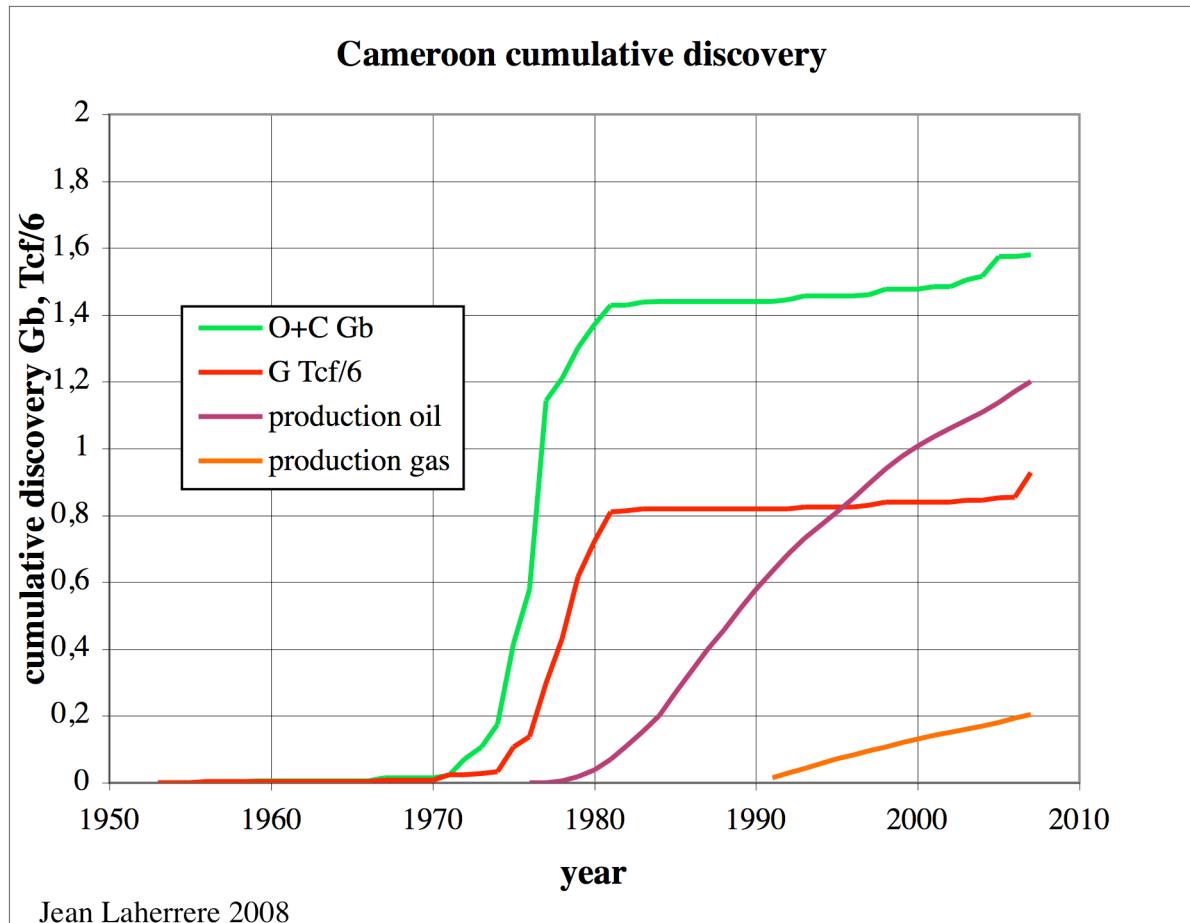


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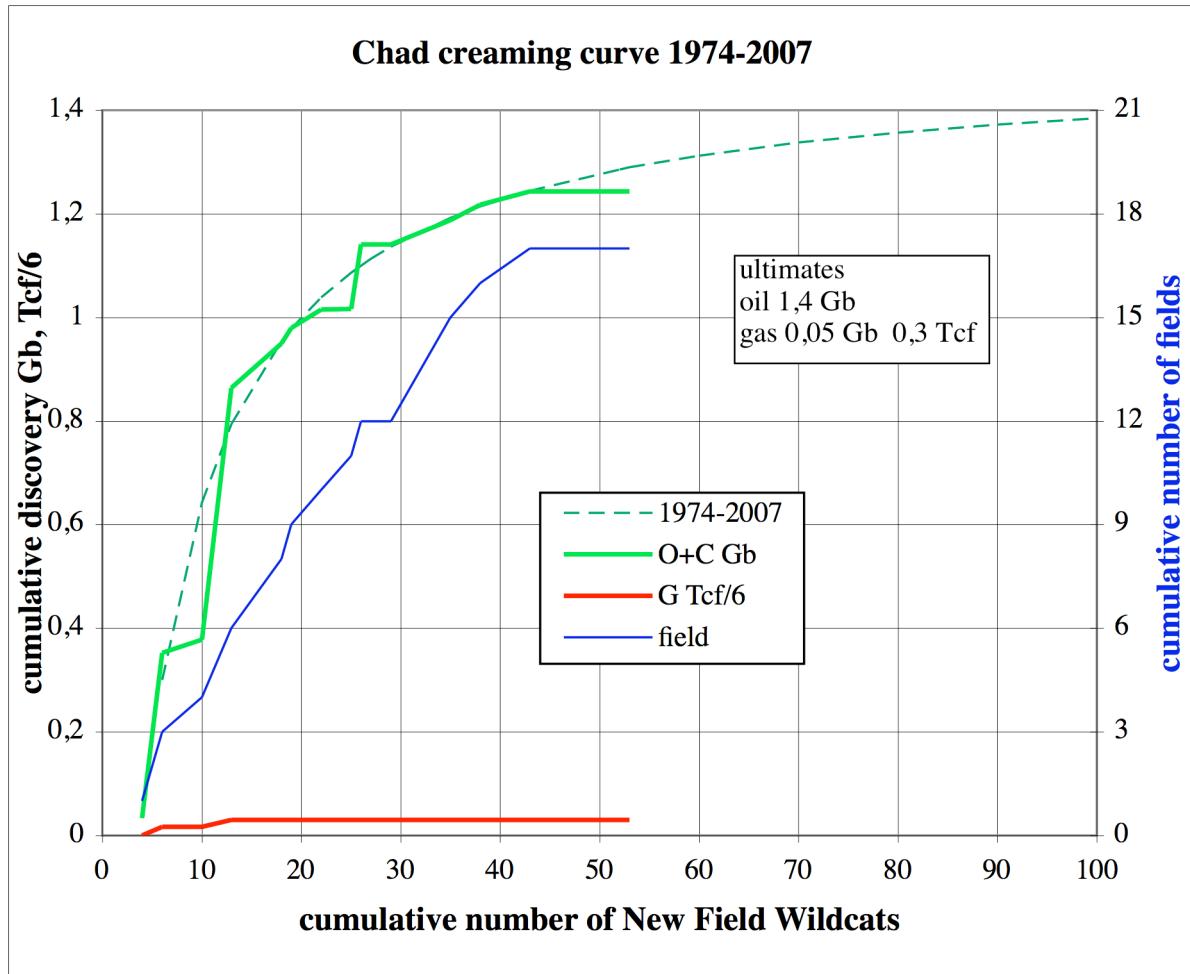


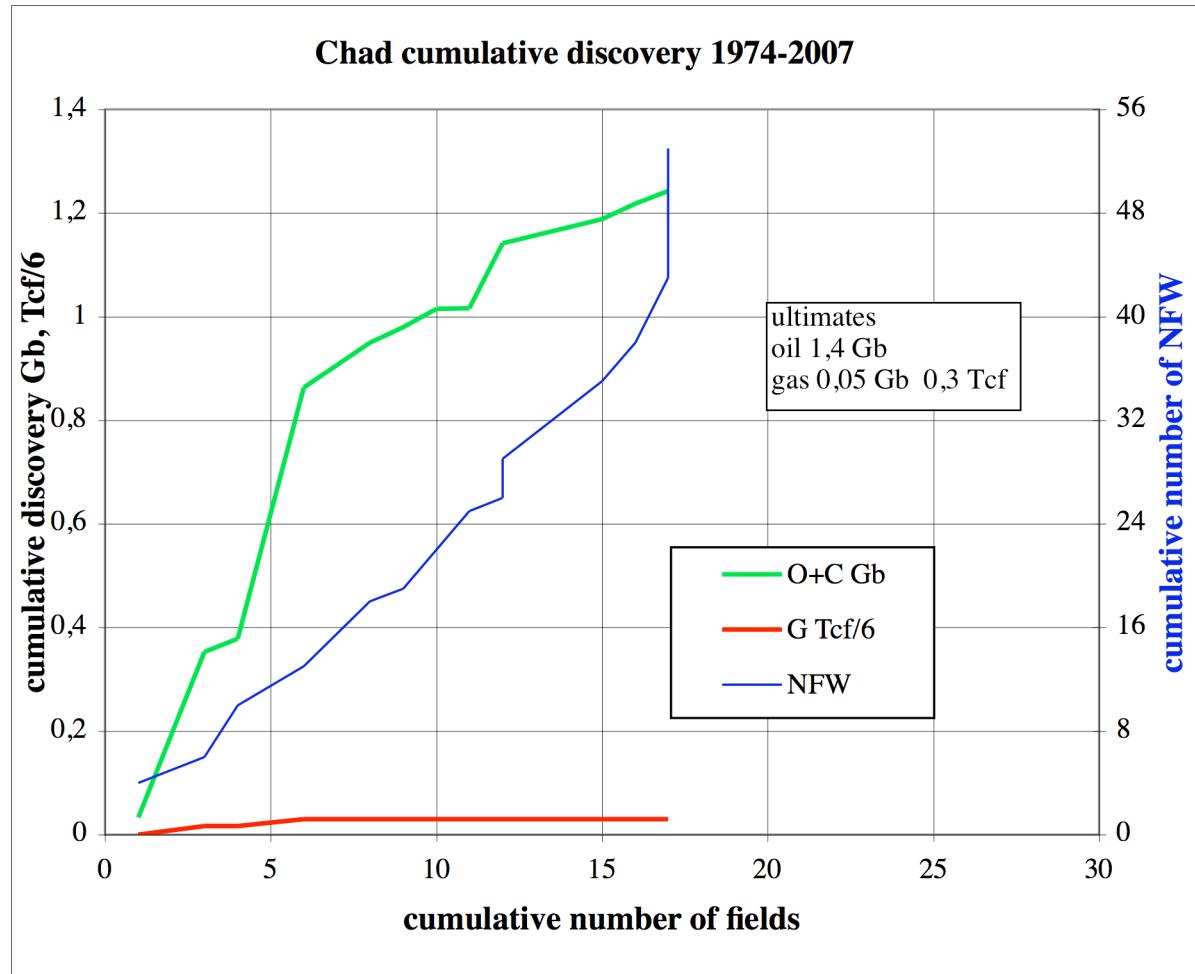


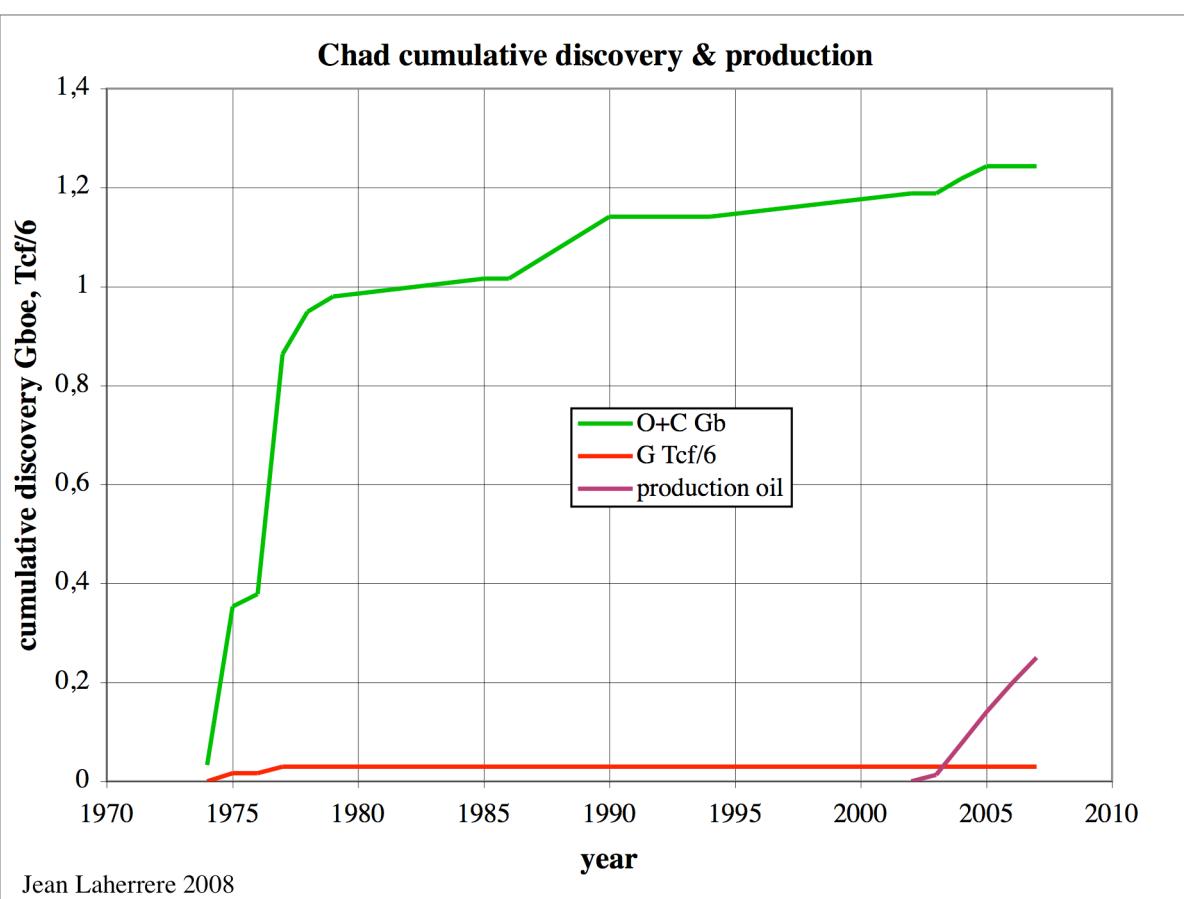
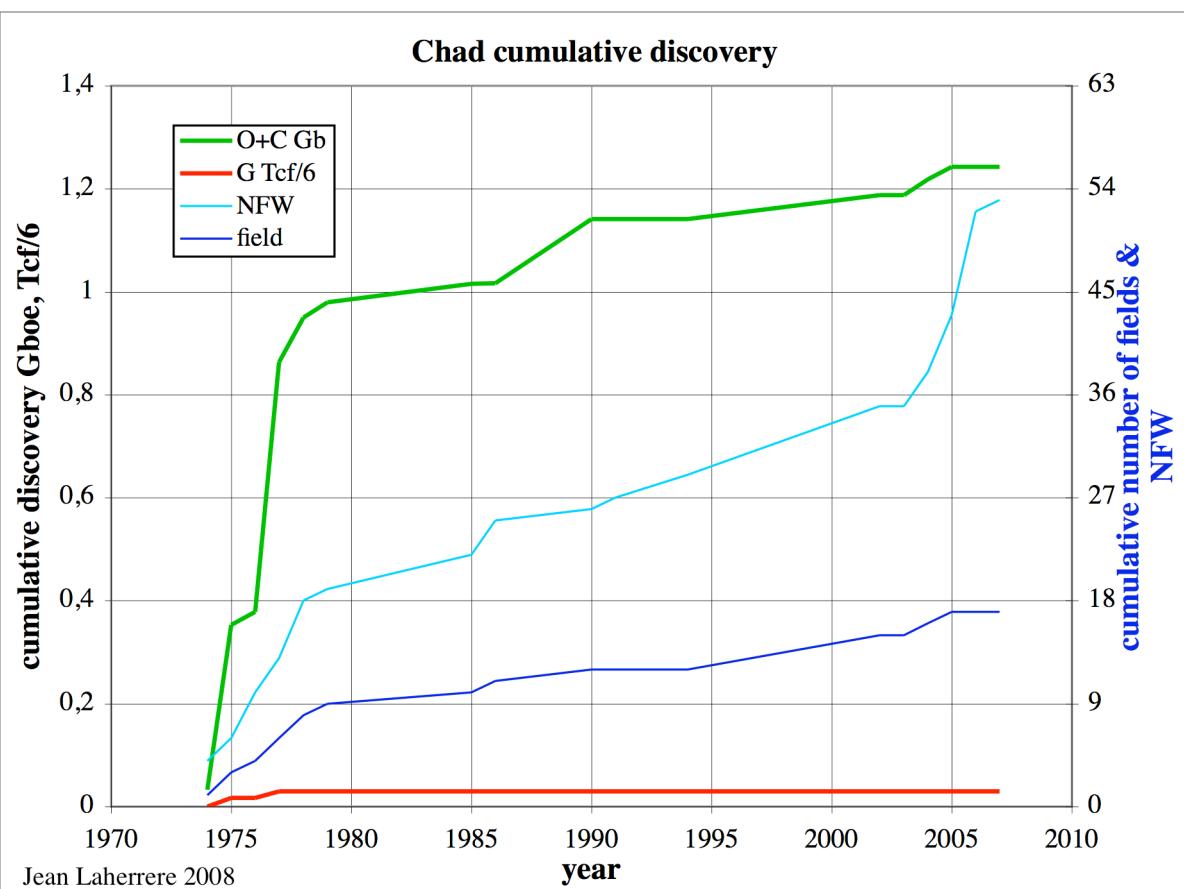




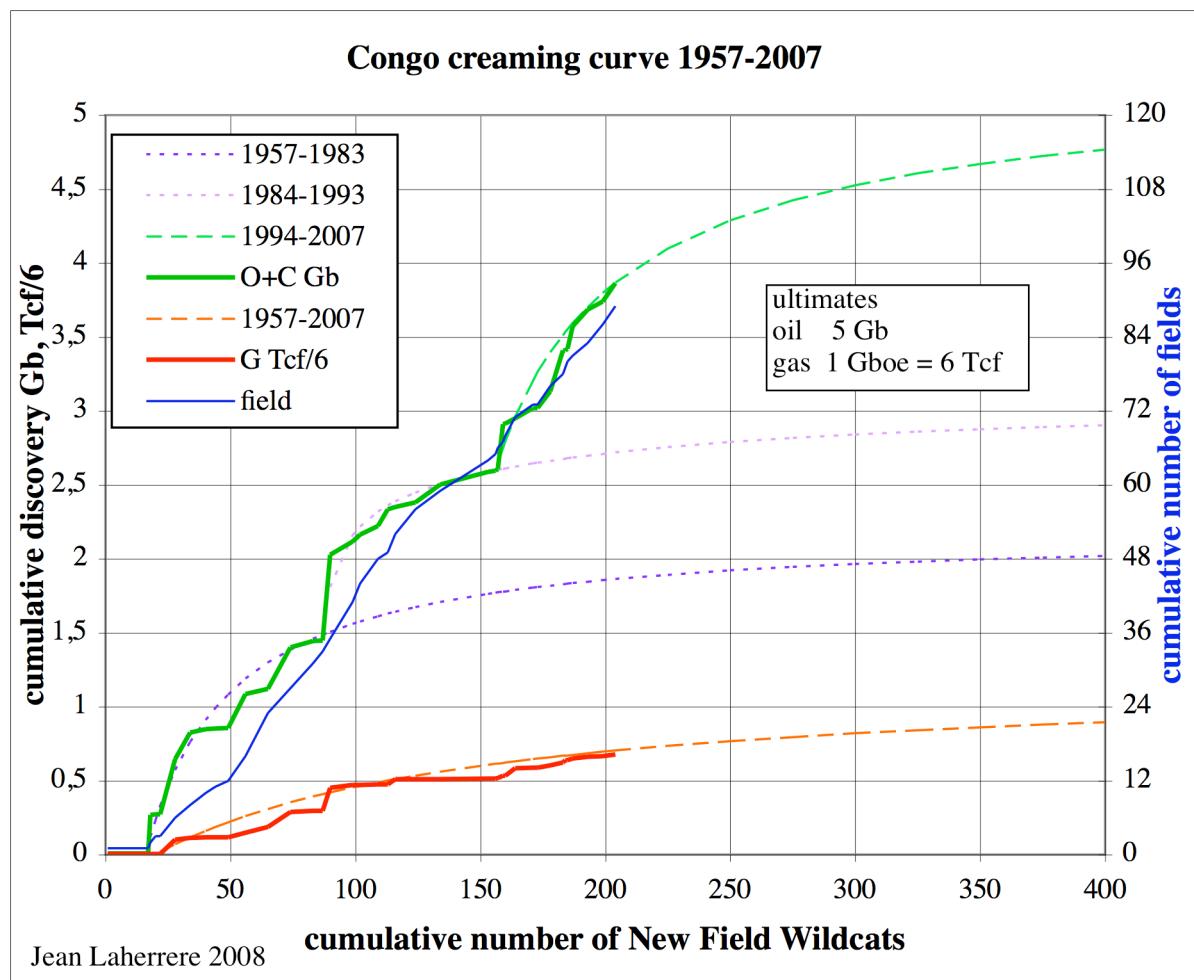
-Chad

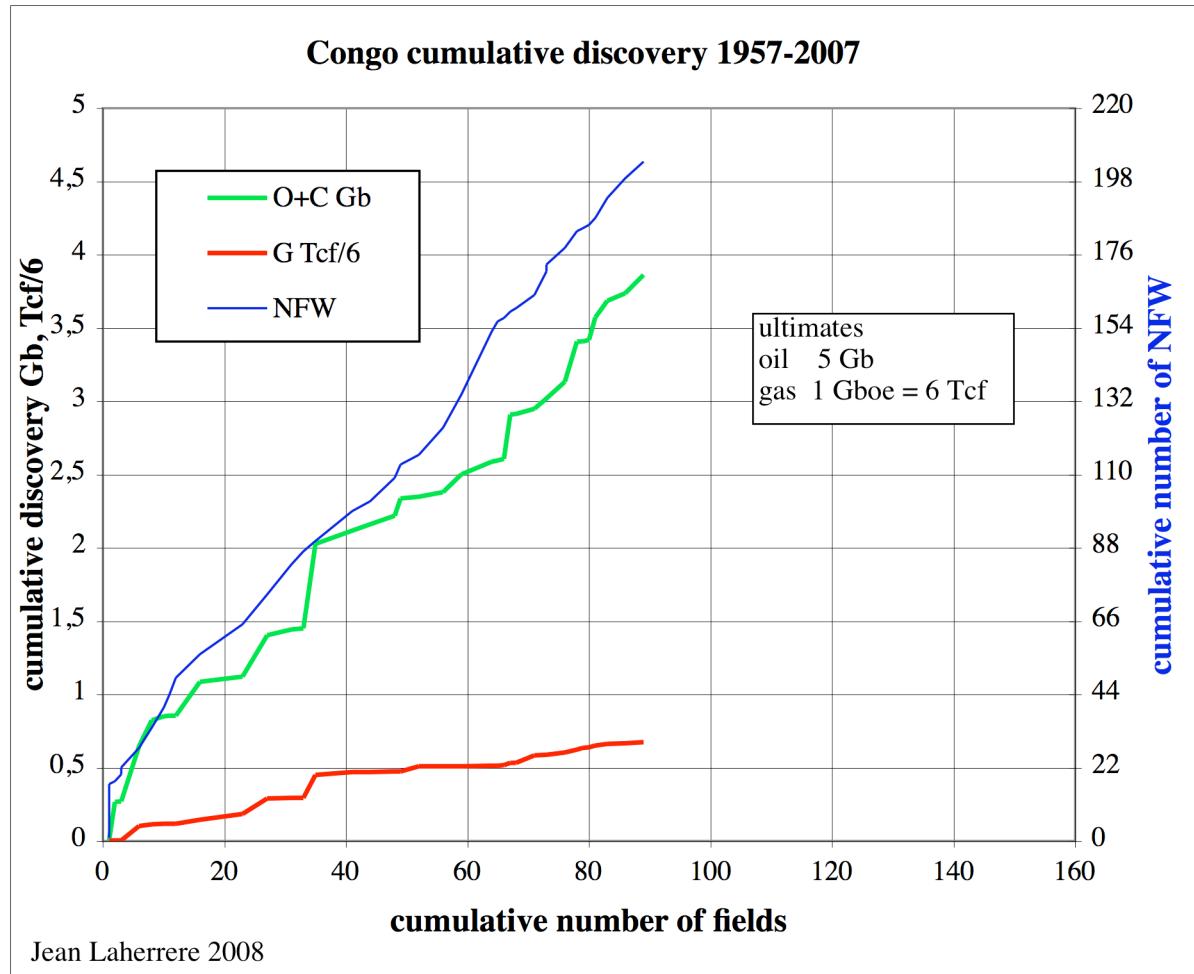


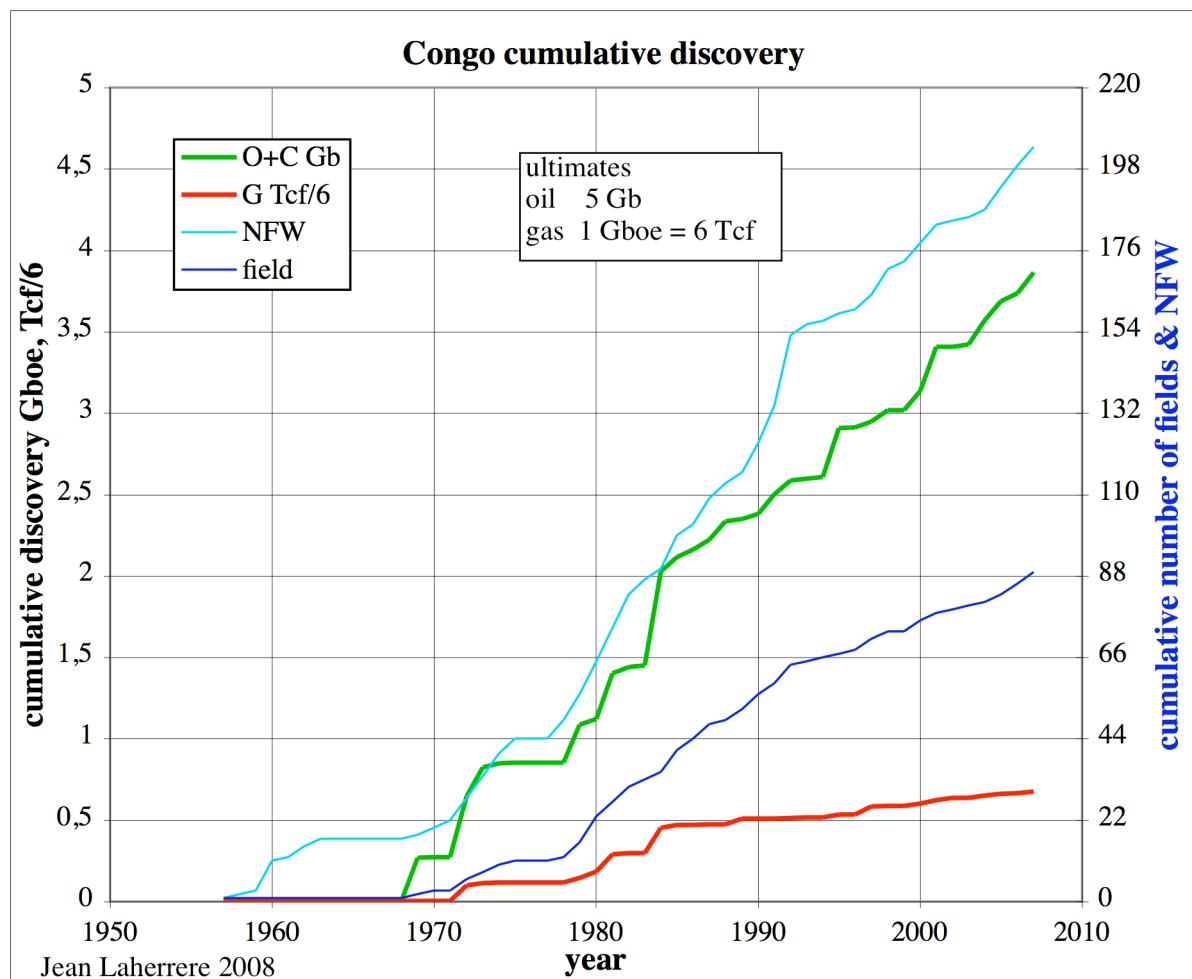


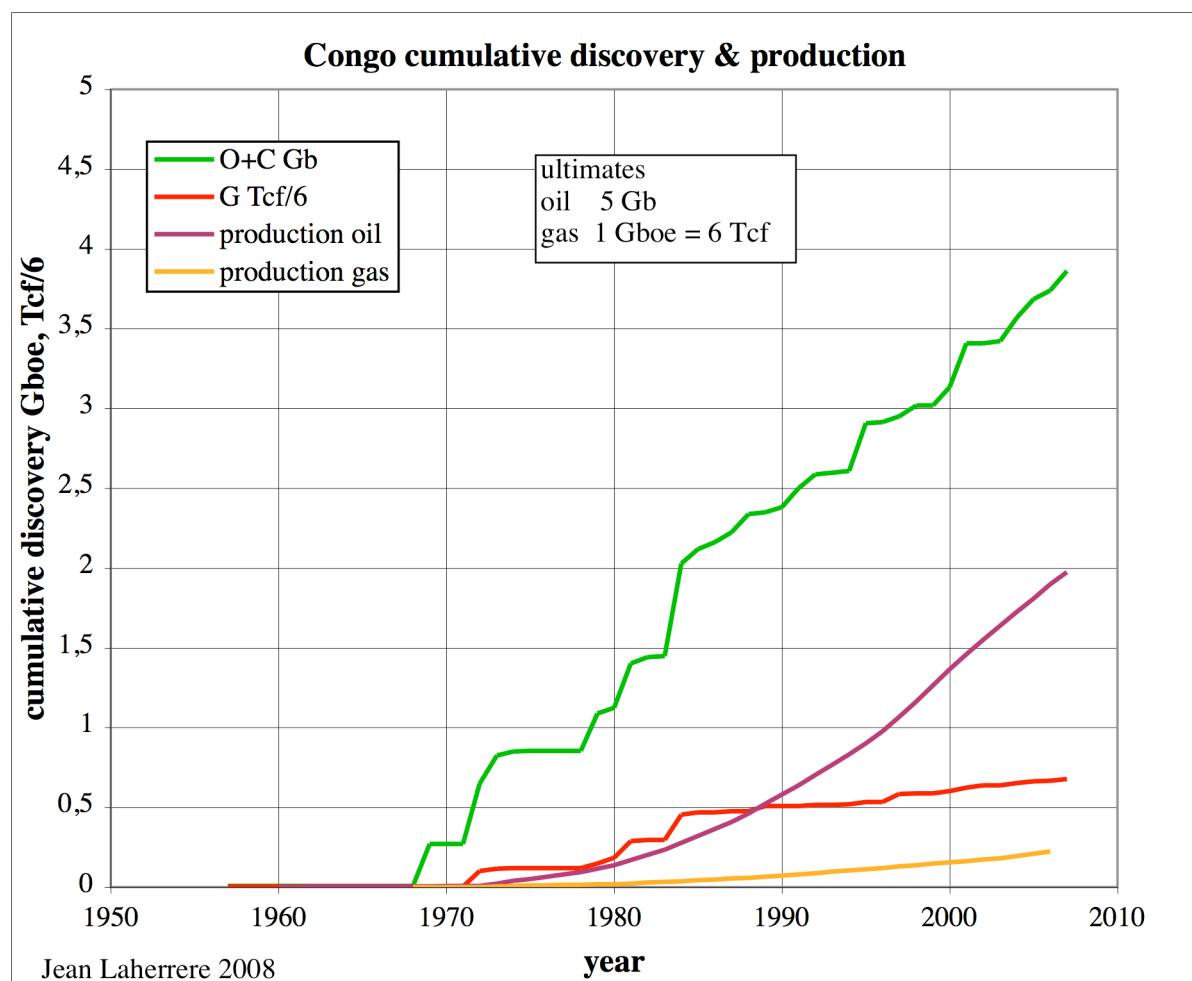


-Congo

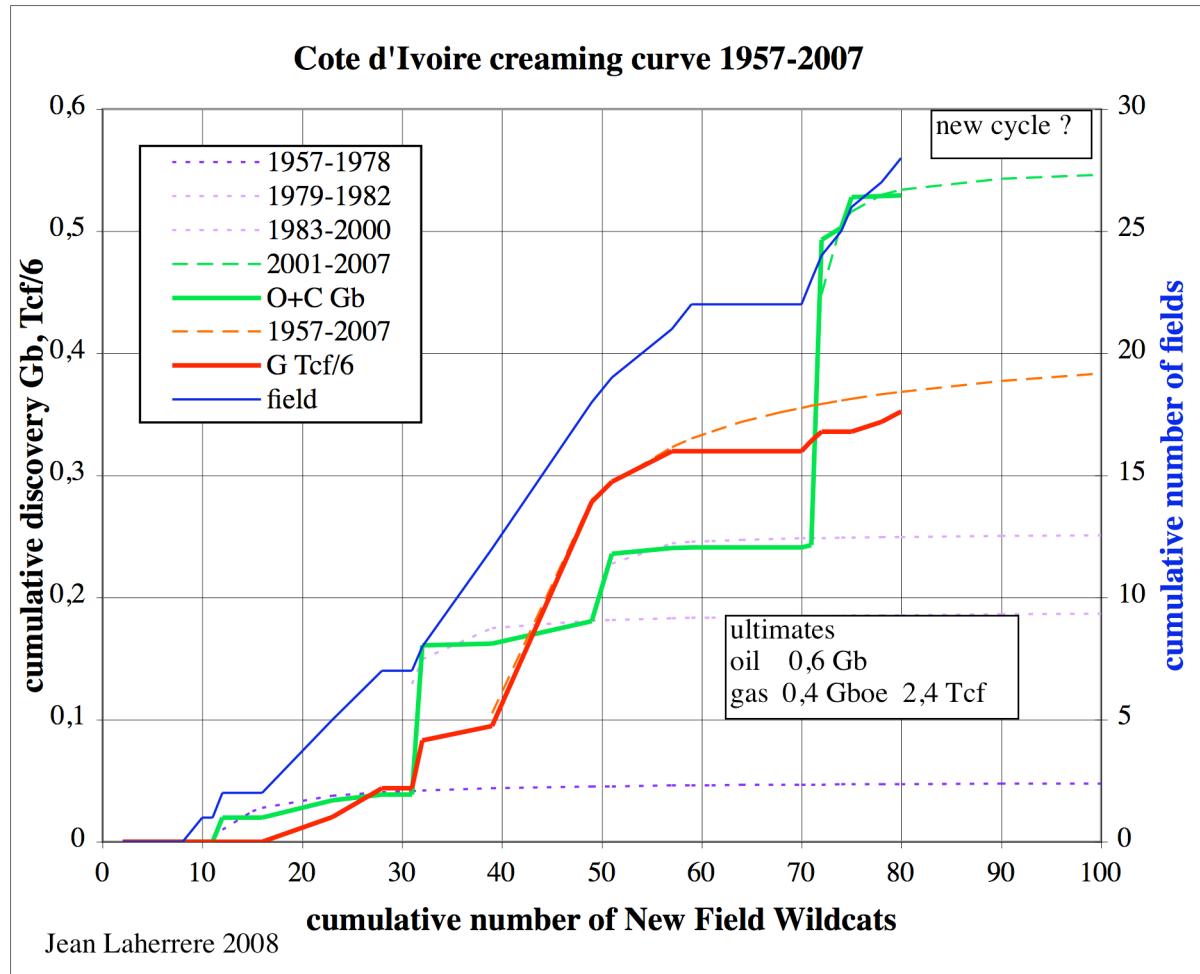


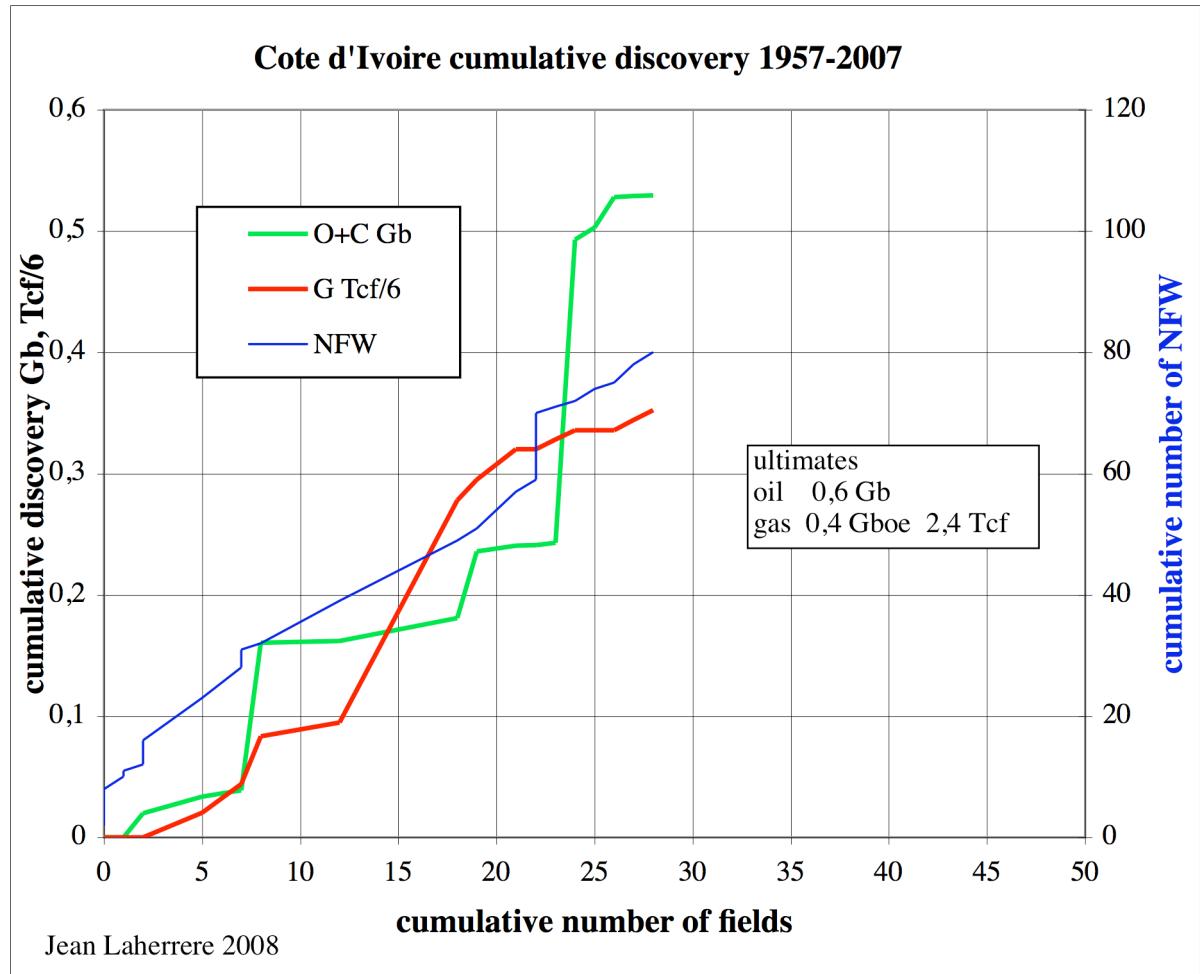


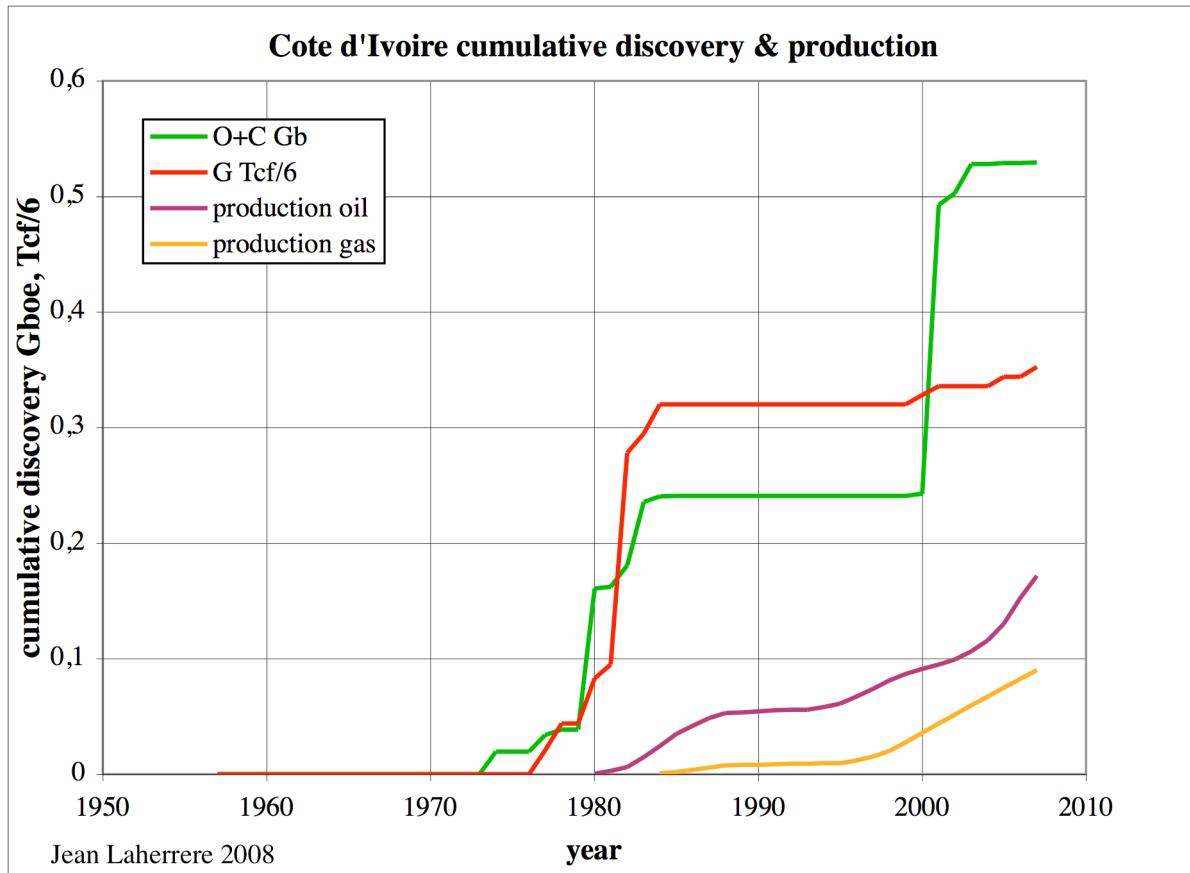
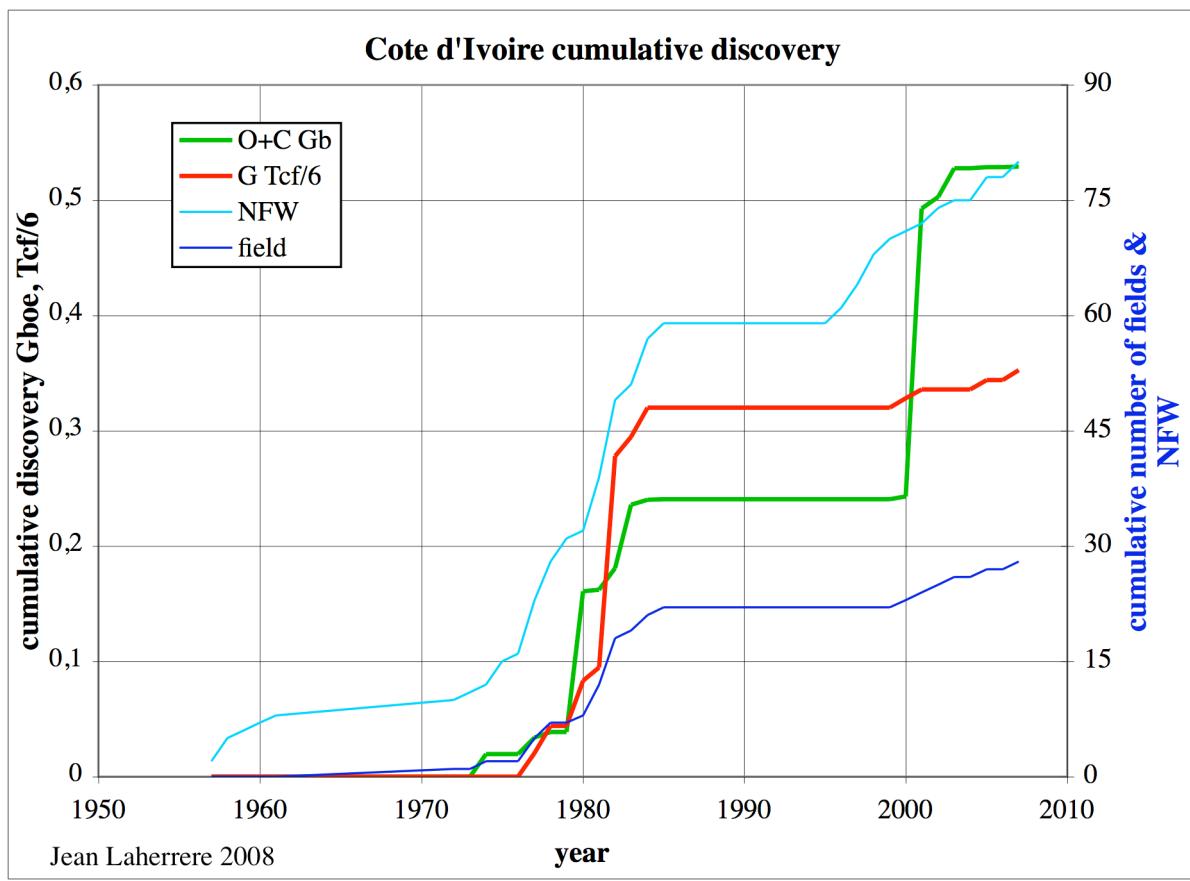




-Cote d'Ivoire

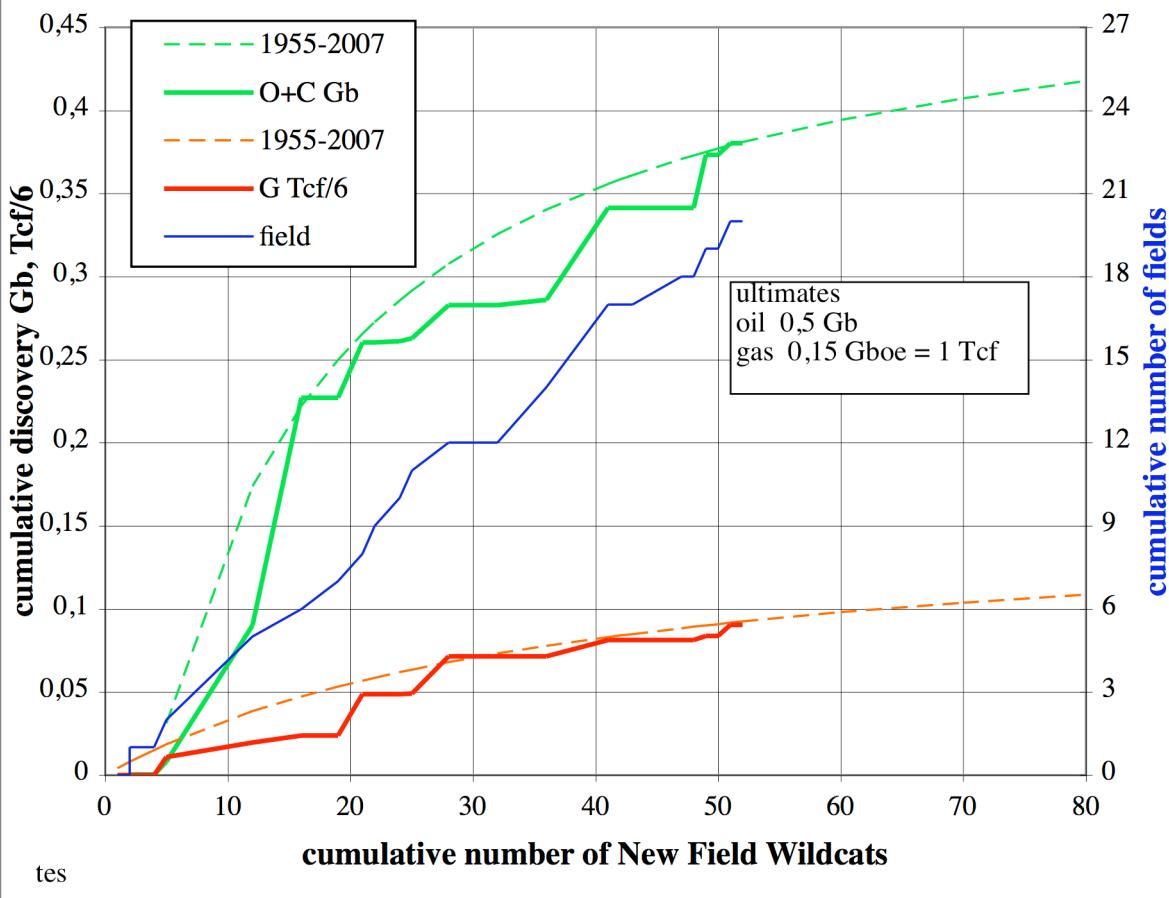




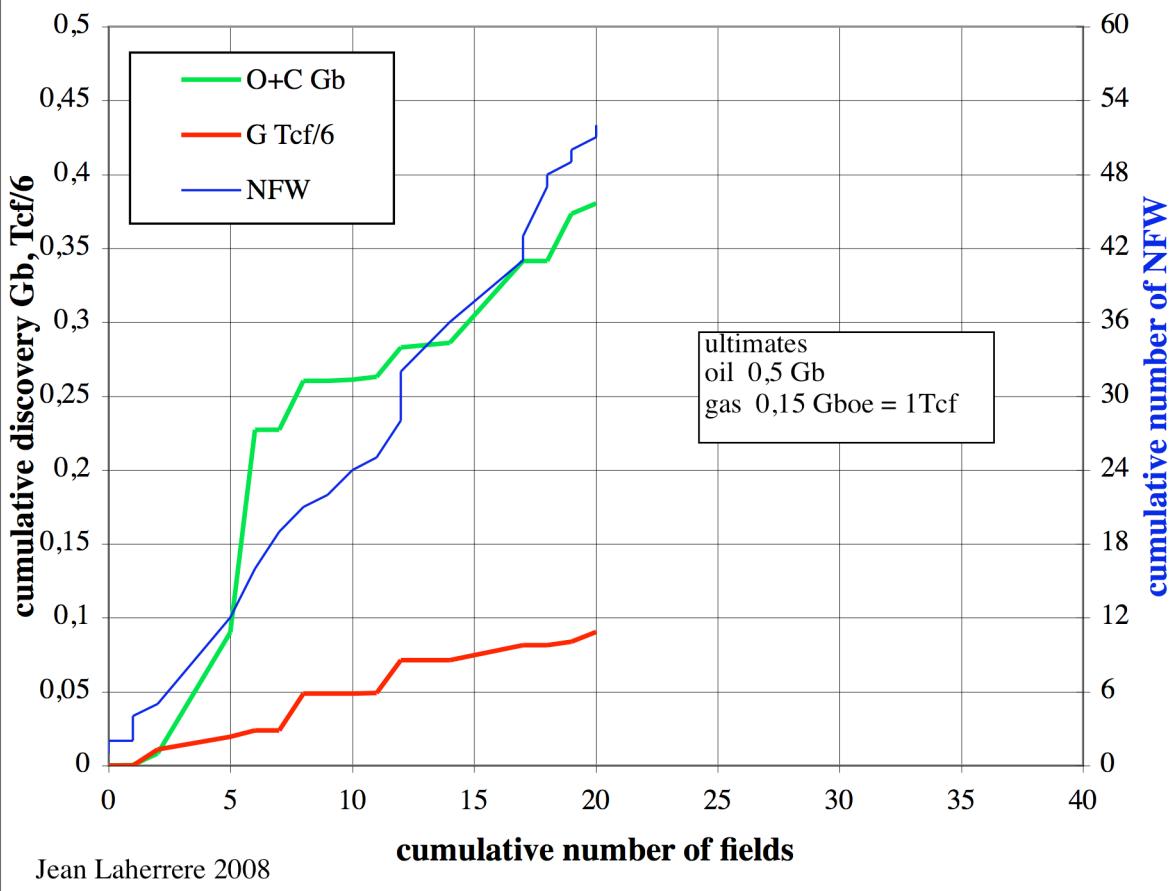


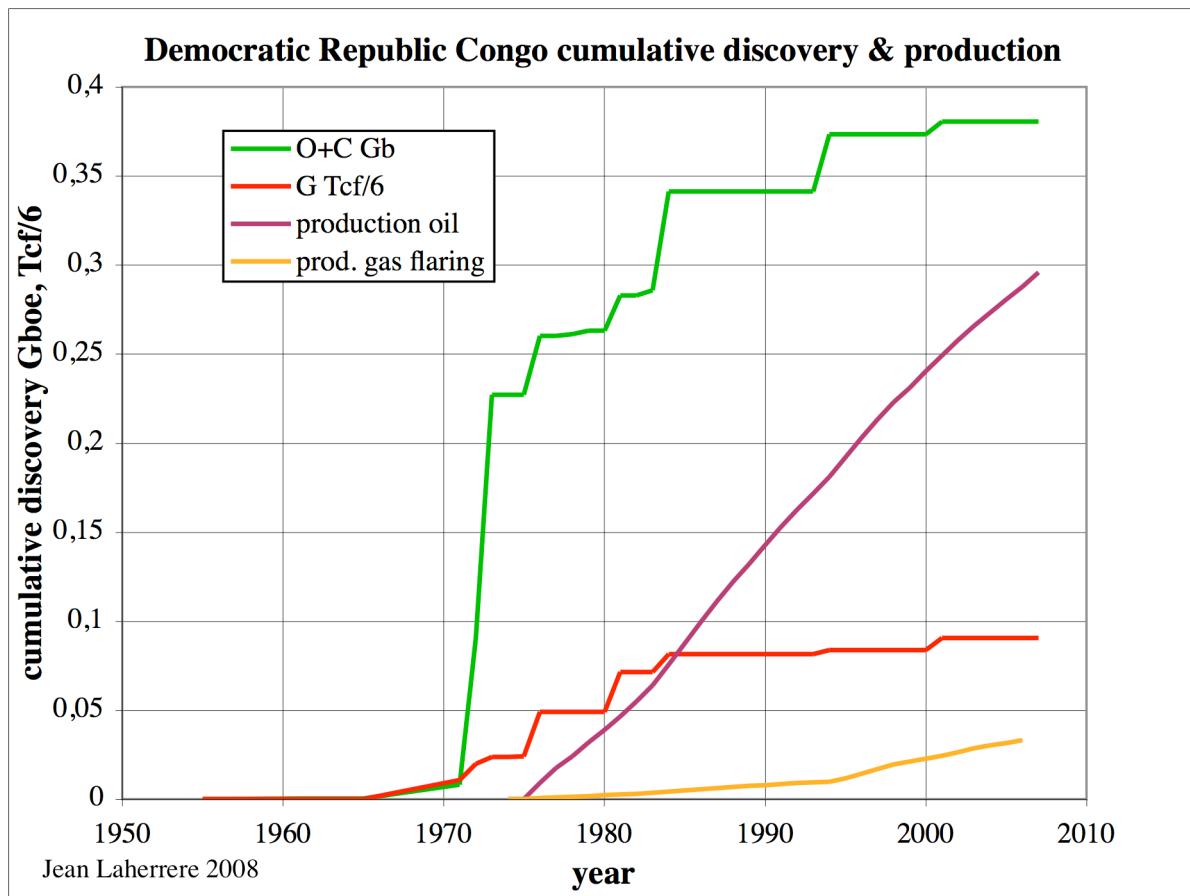
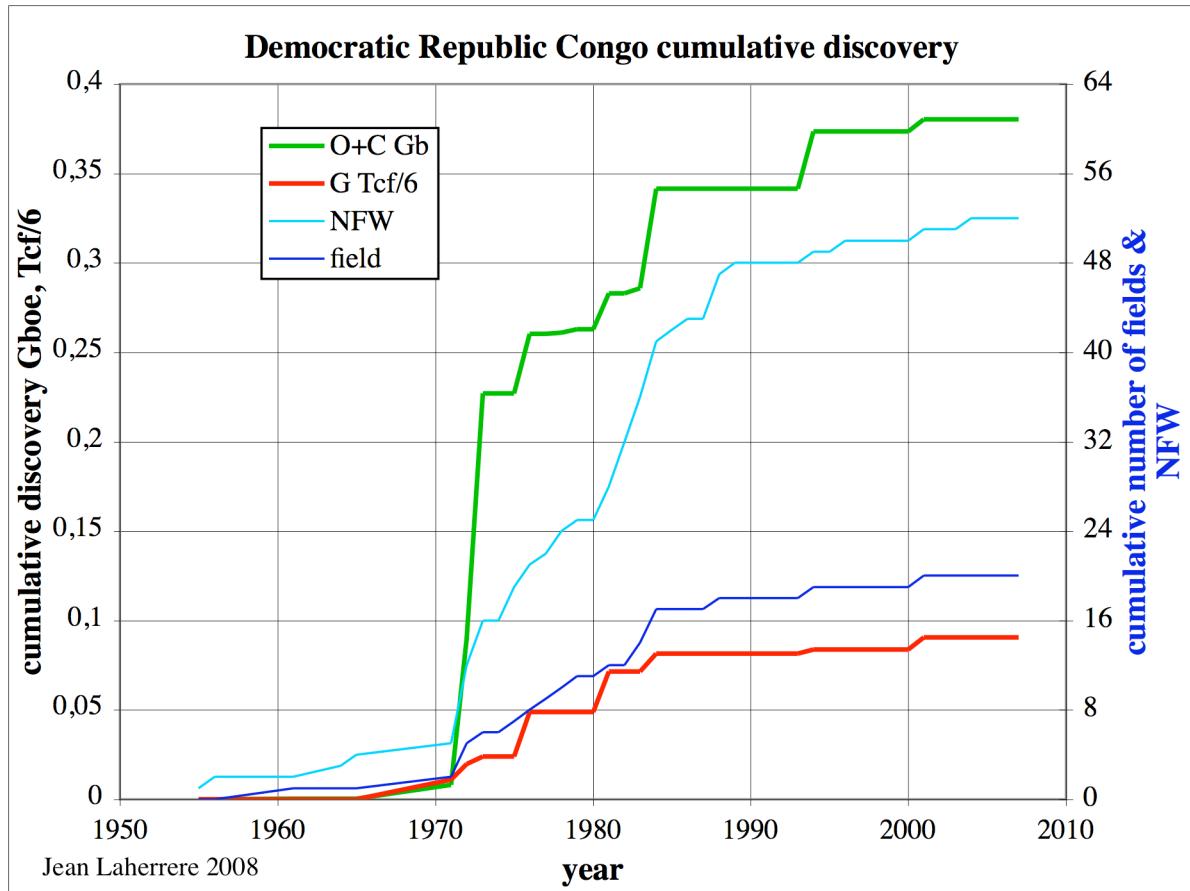
-DR Congo

Democratic Republic Congo creaming curve 1955-2007

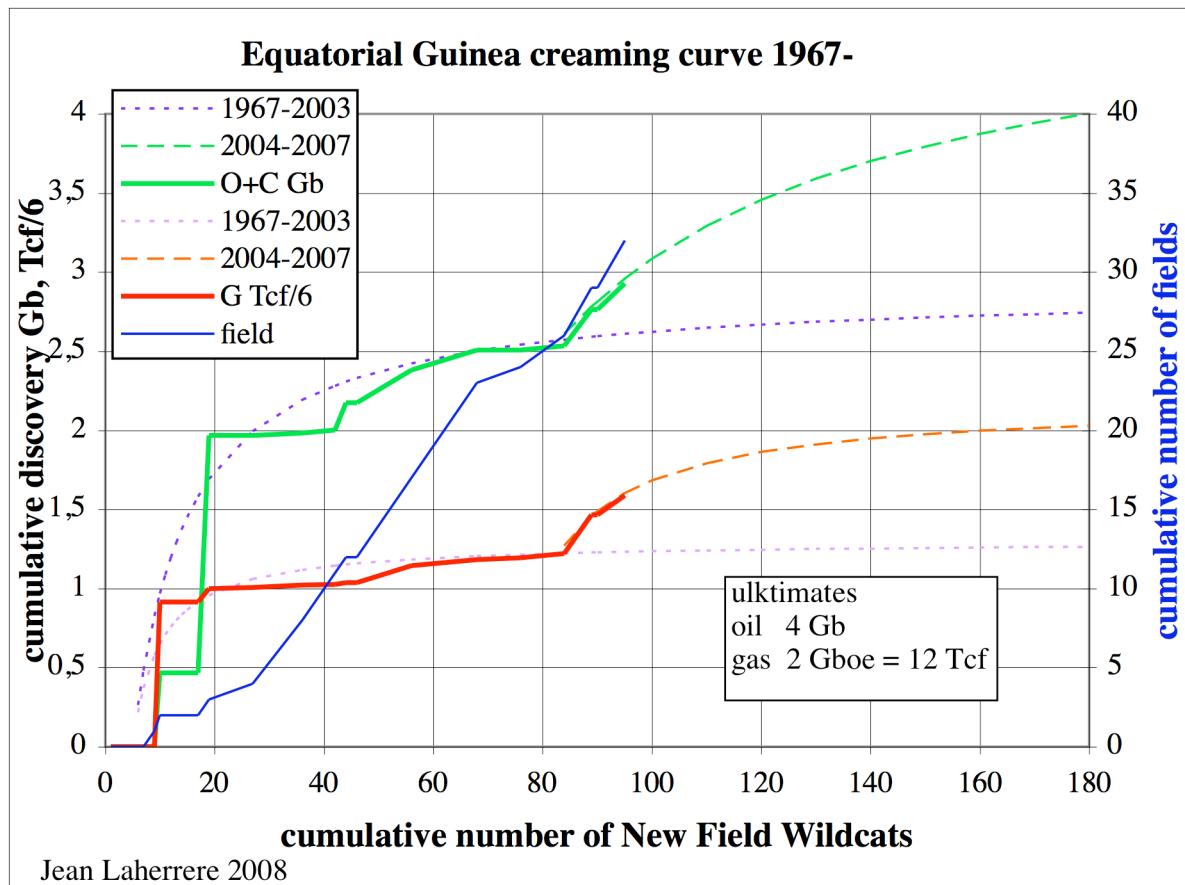


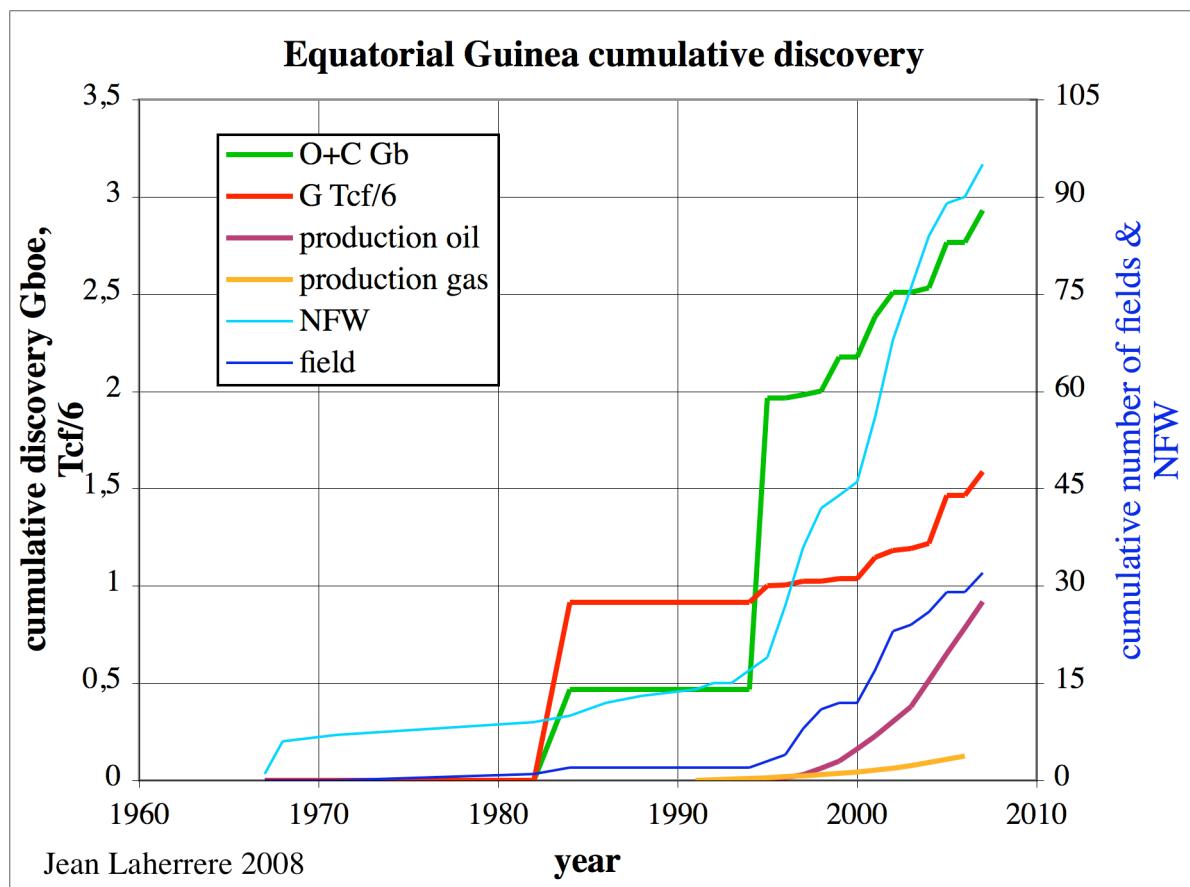
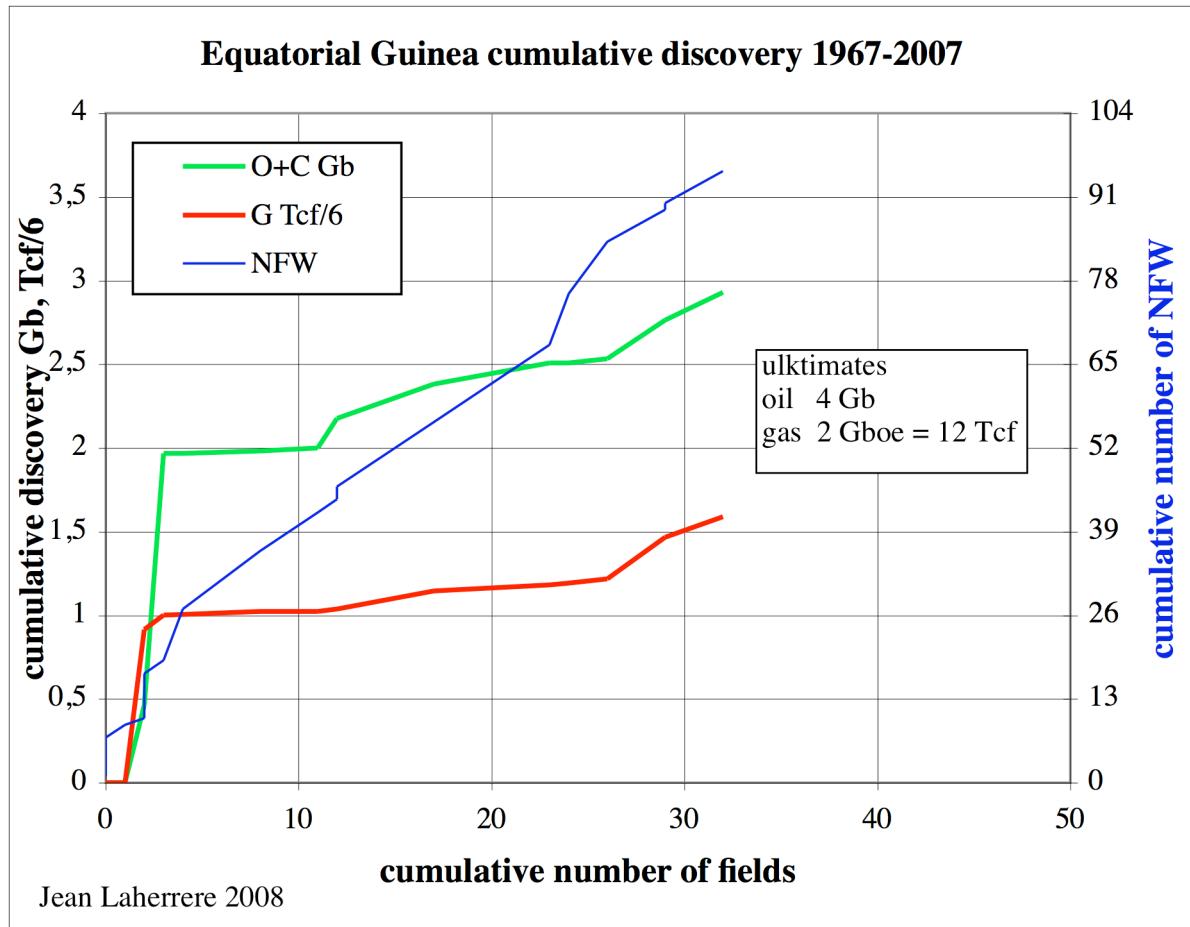
Democratic Republic Congo cumulative discovery 1955-2007

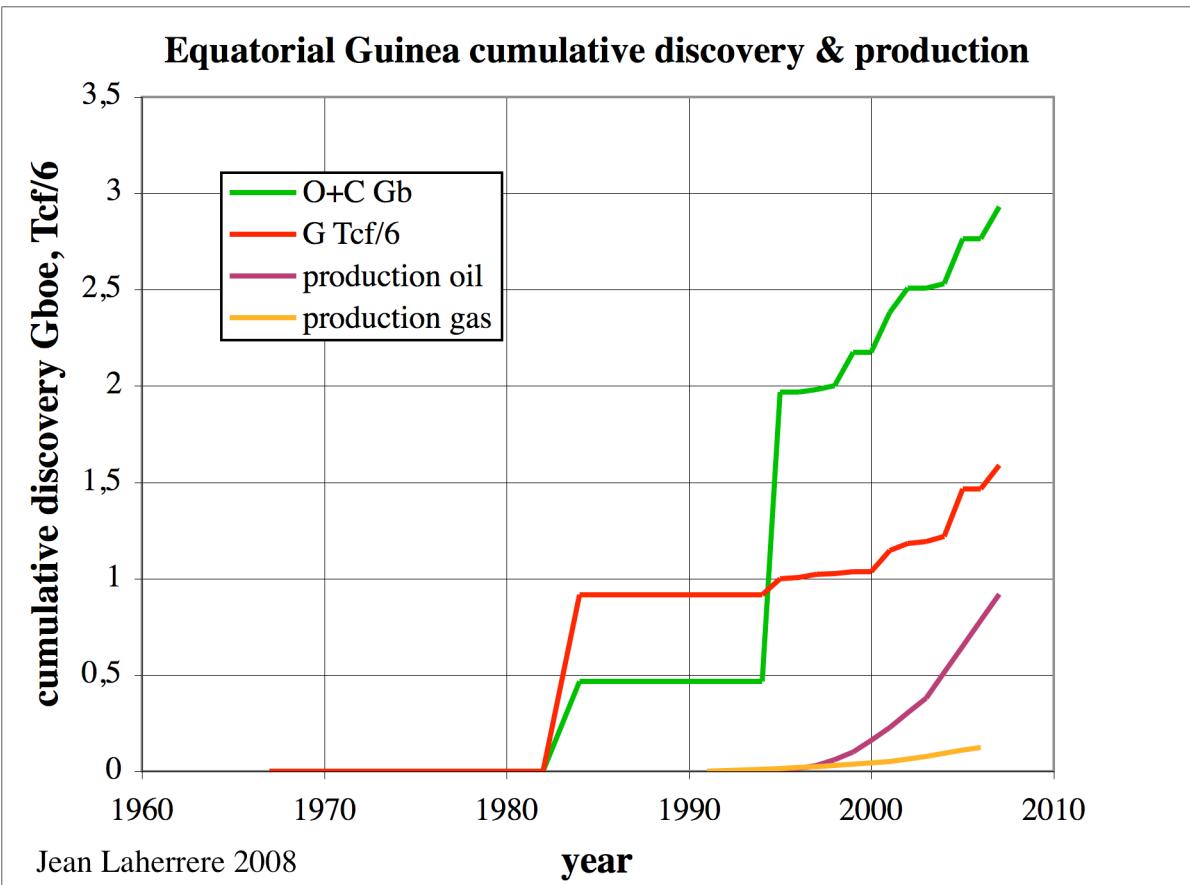




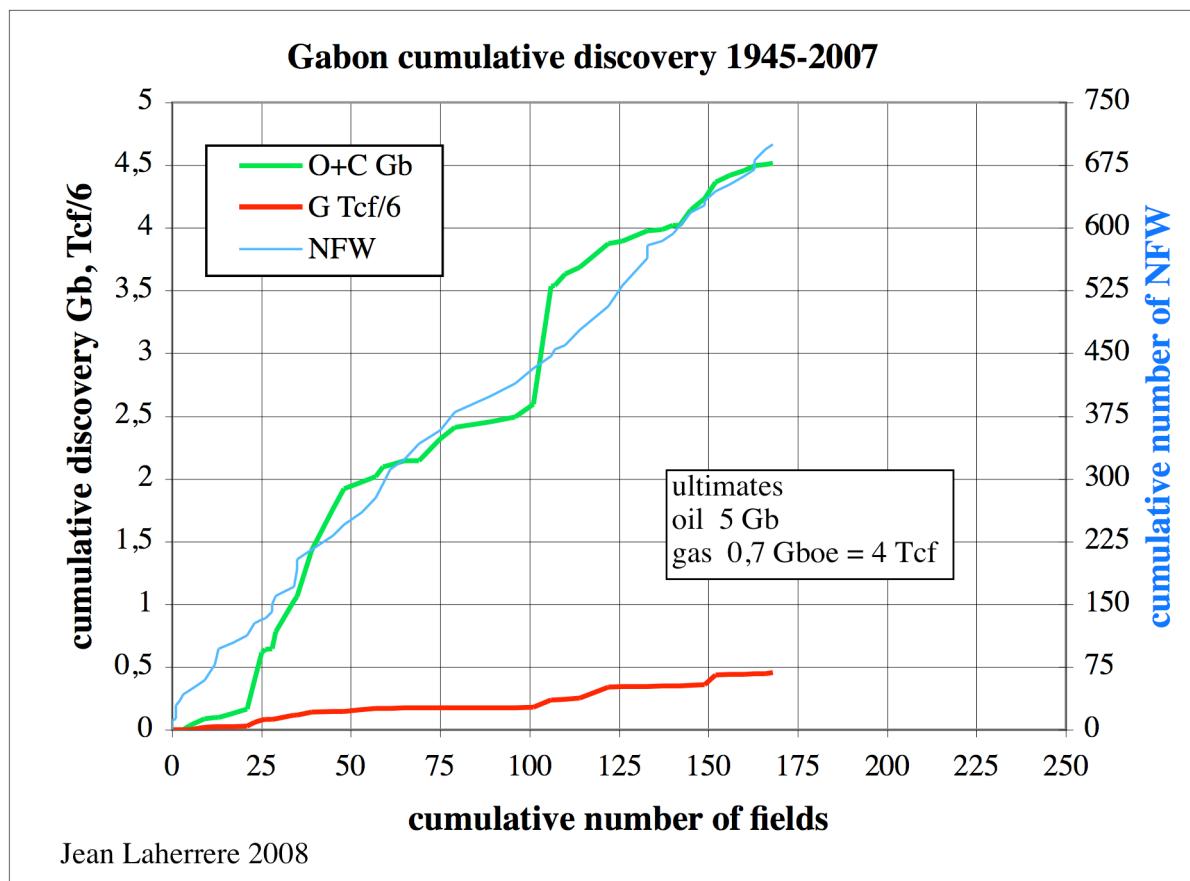
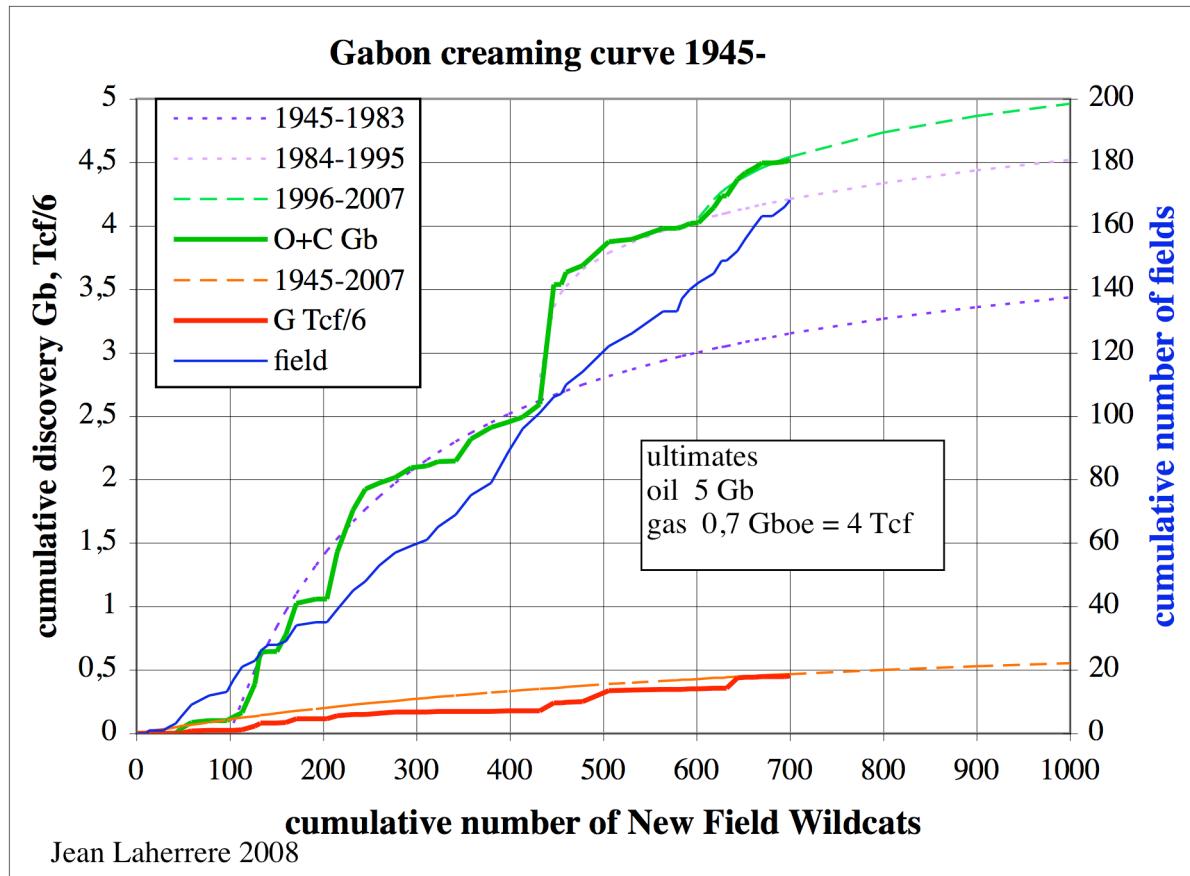
-Equatorial Guinea

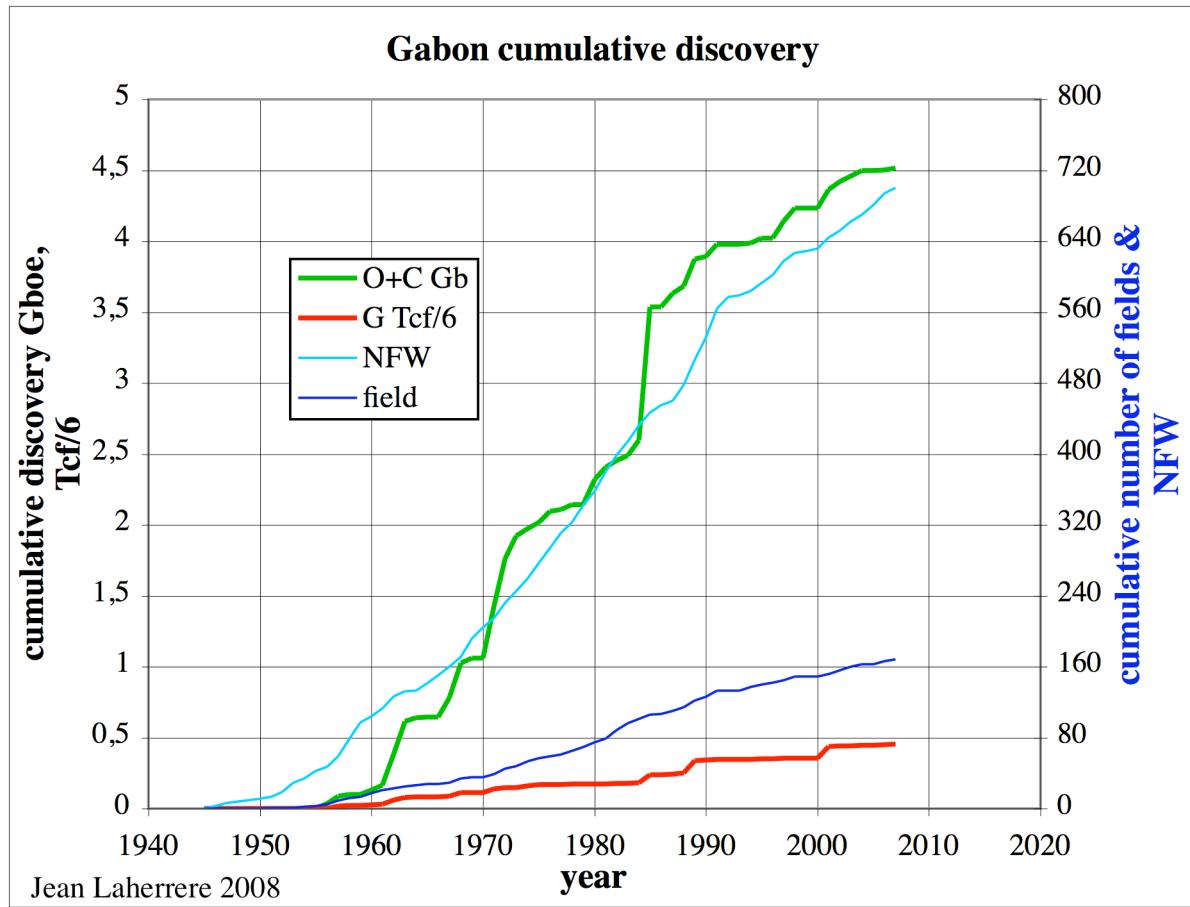


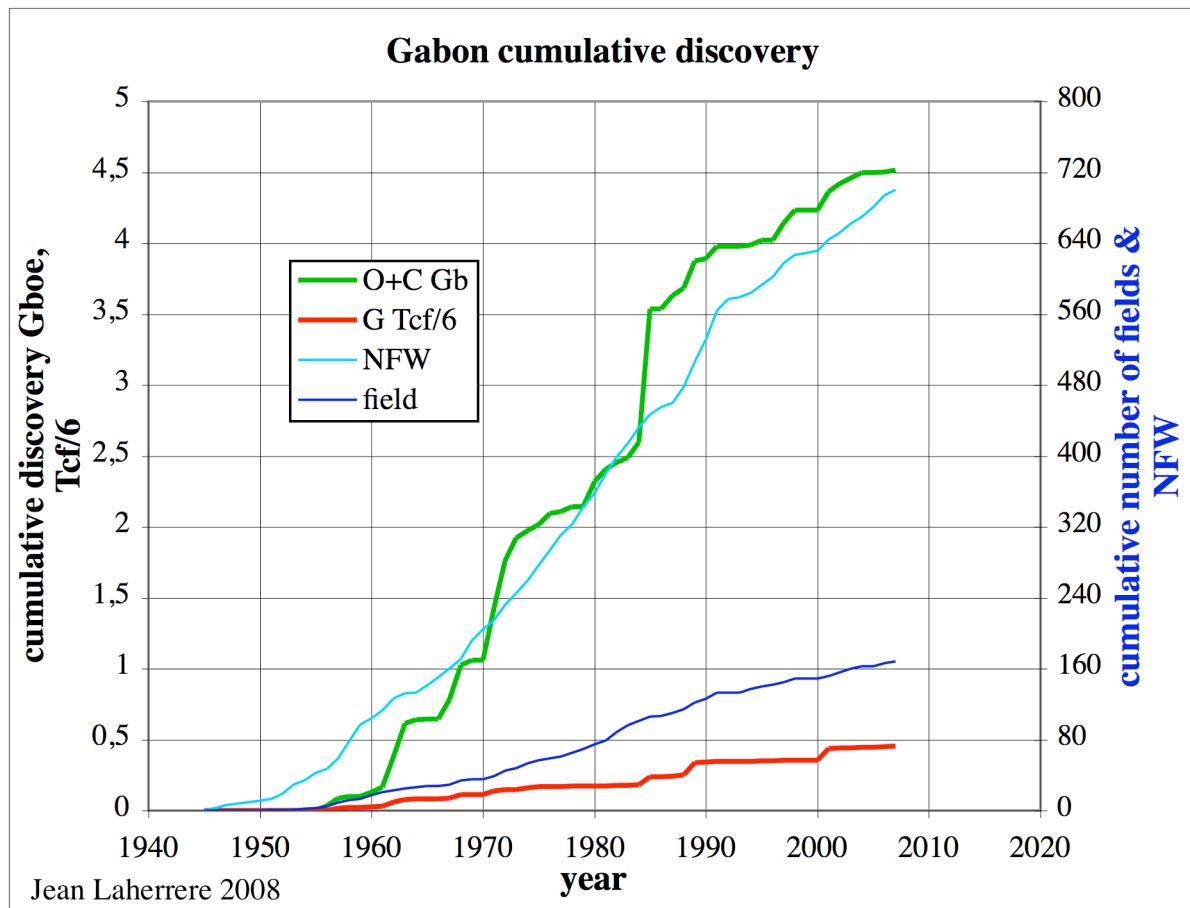
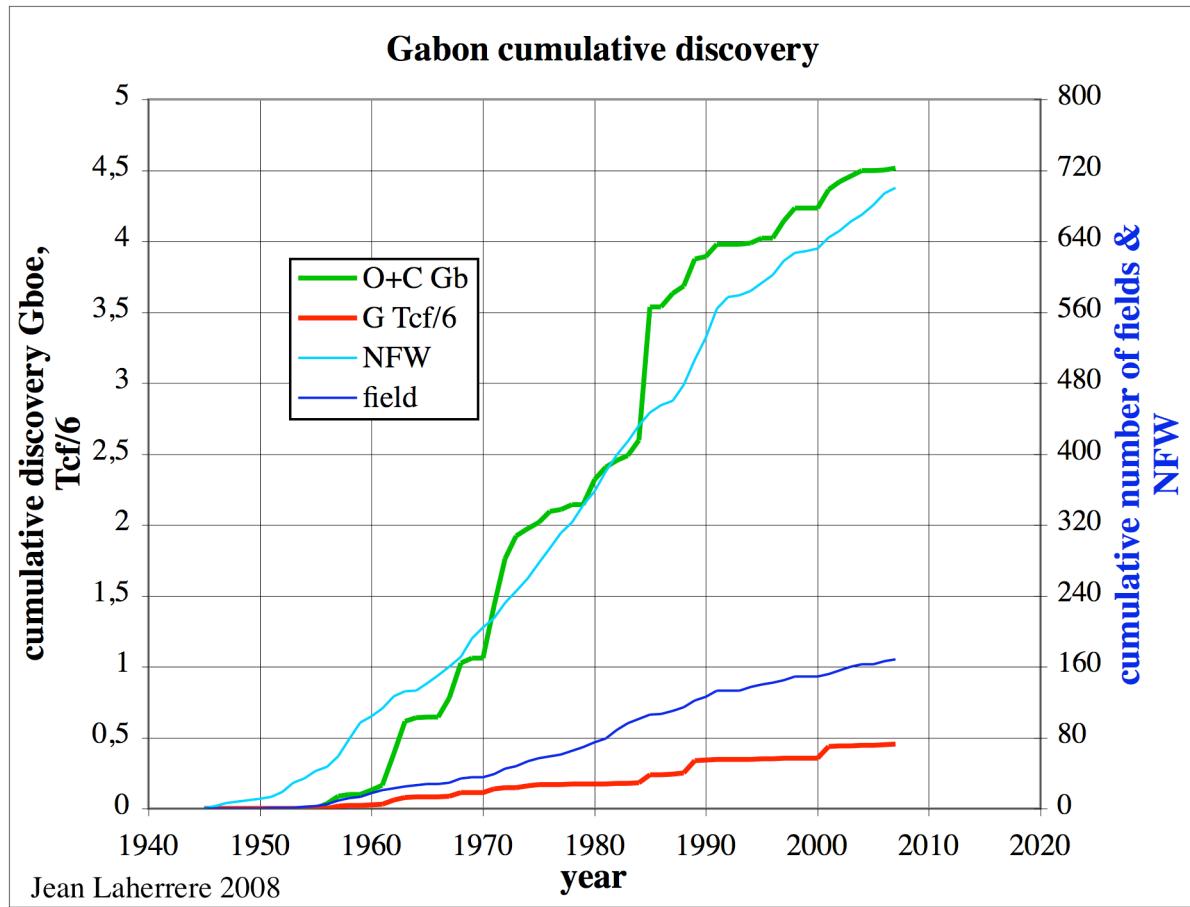


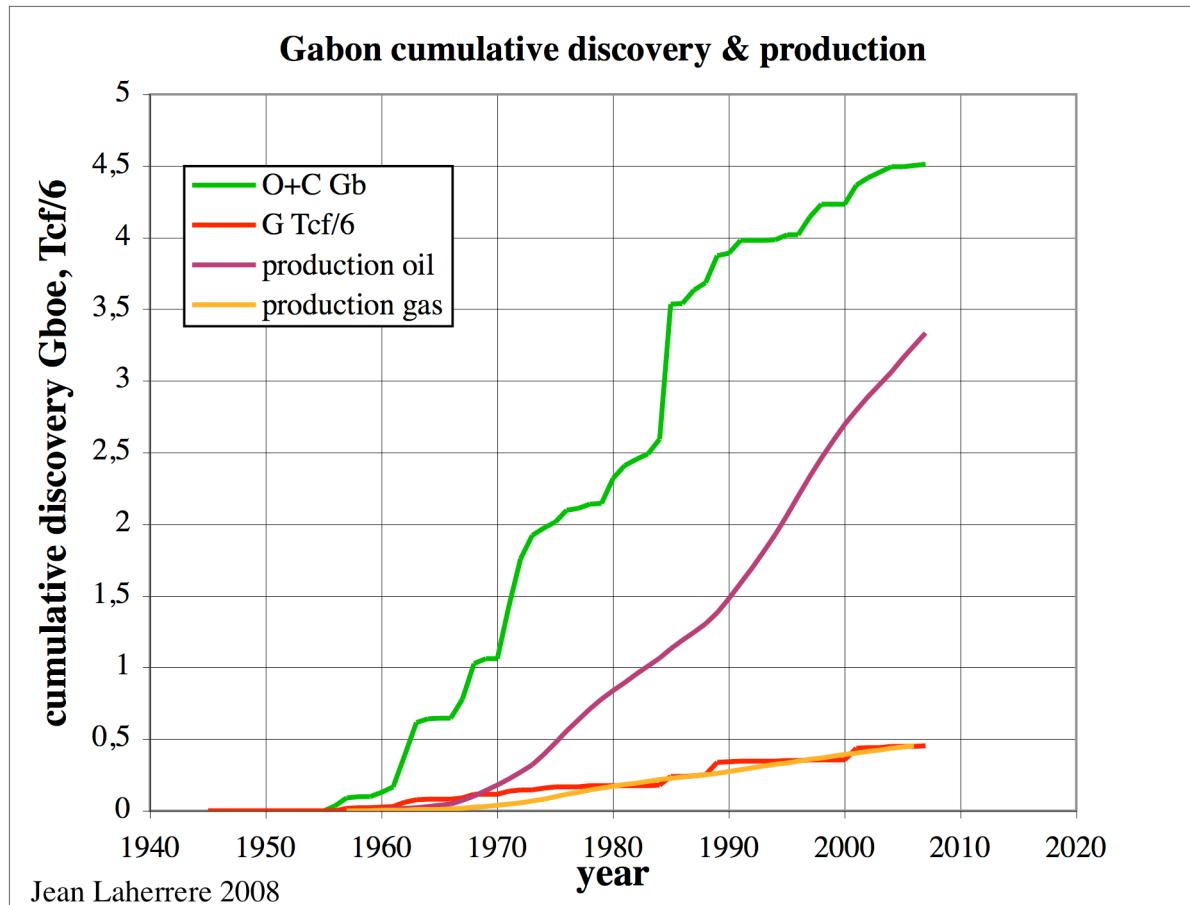


-Gabon

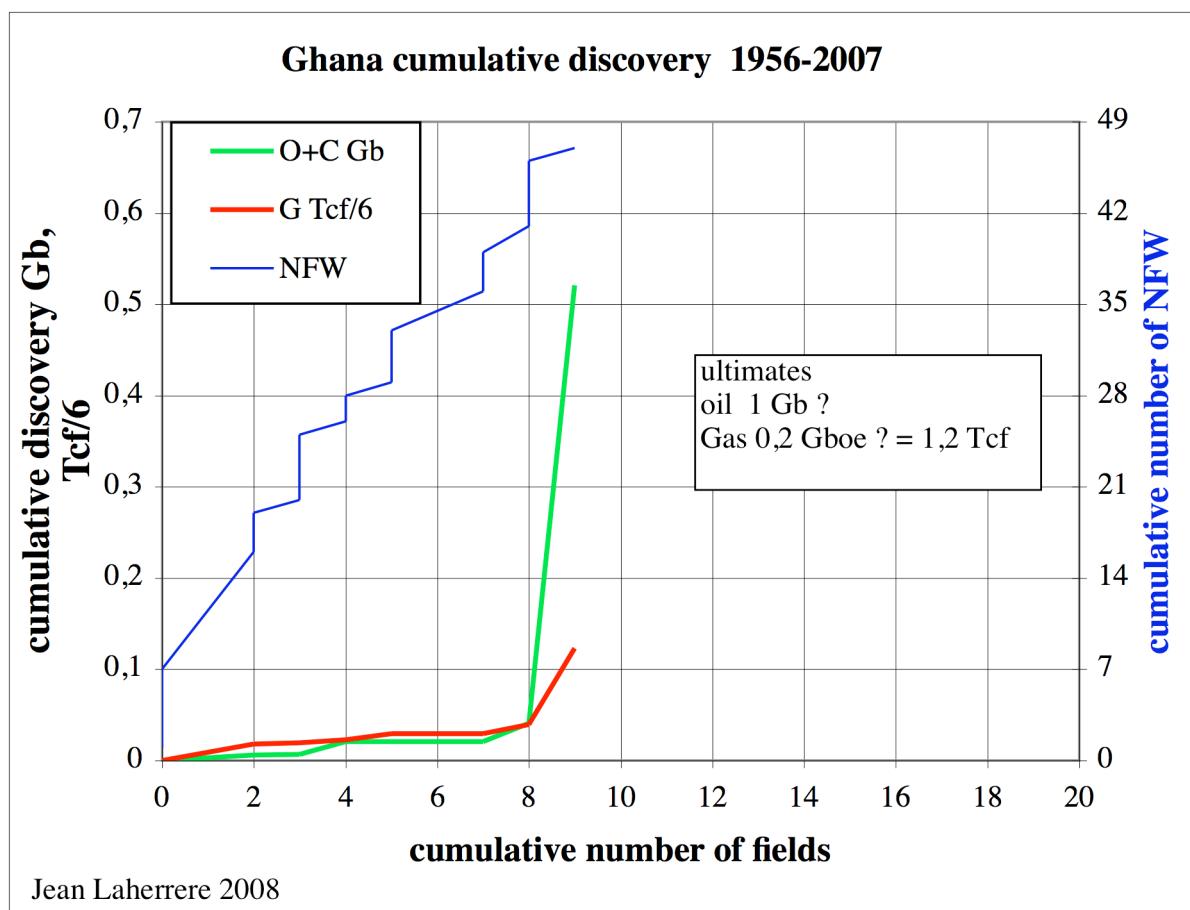
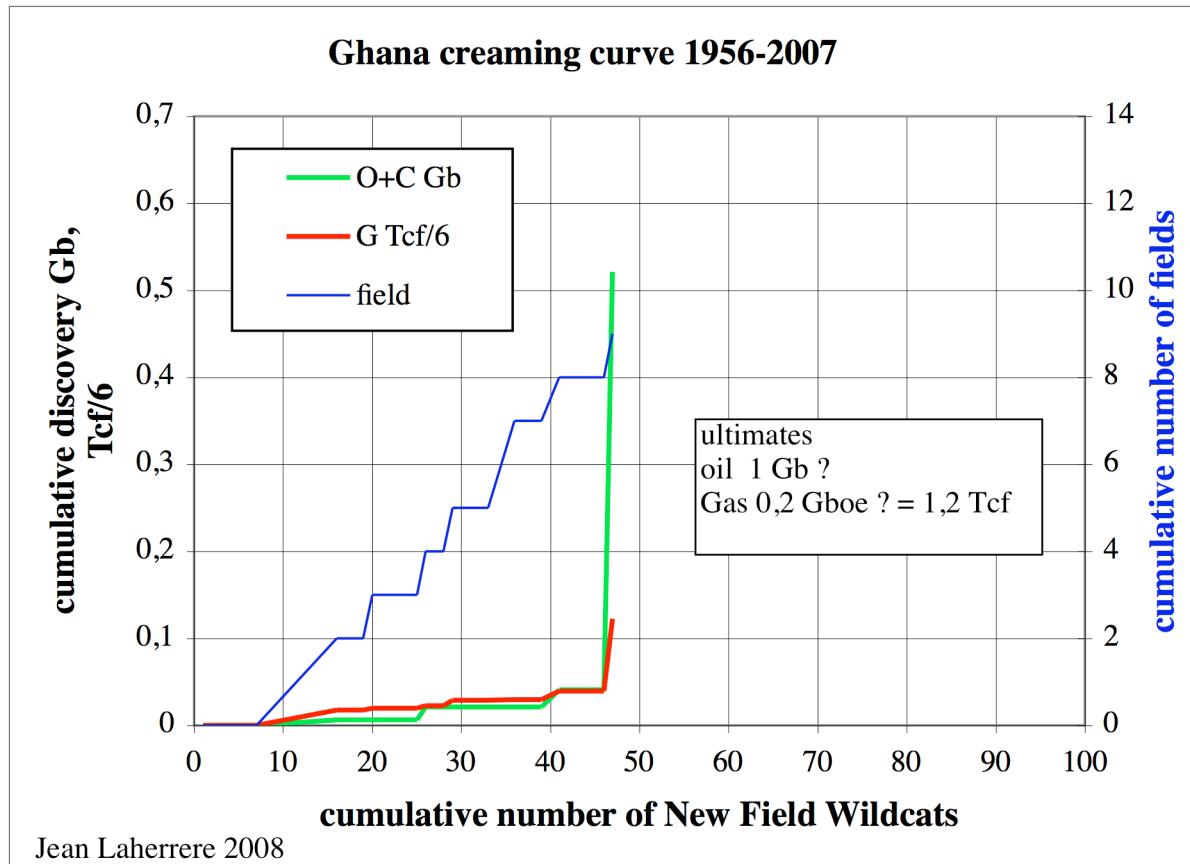


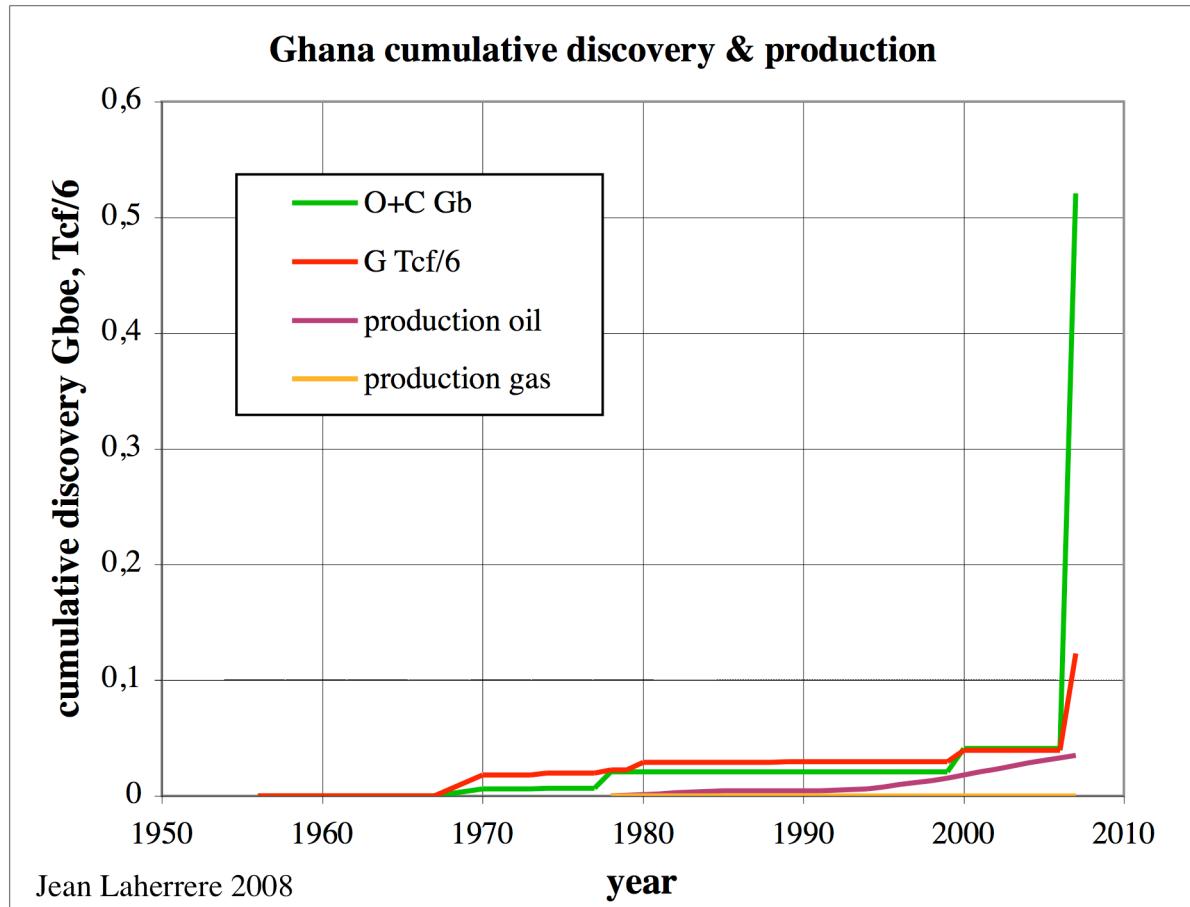
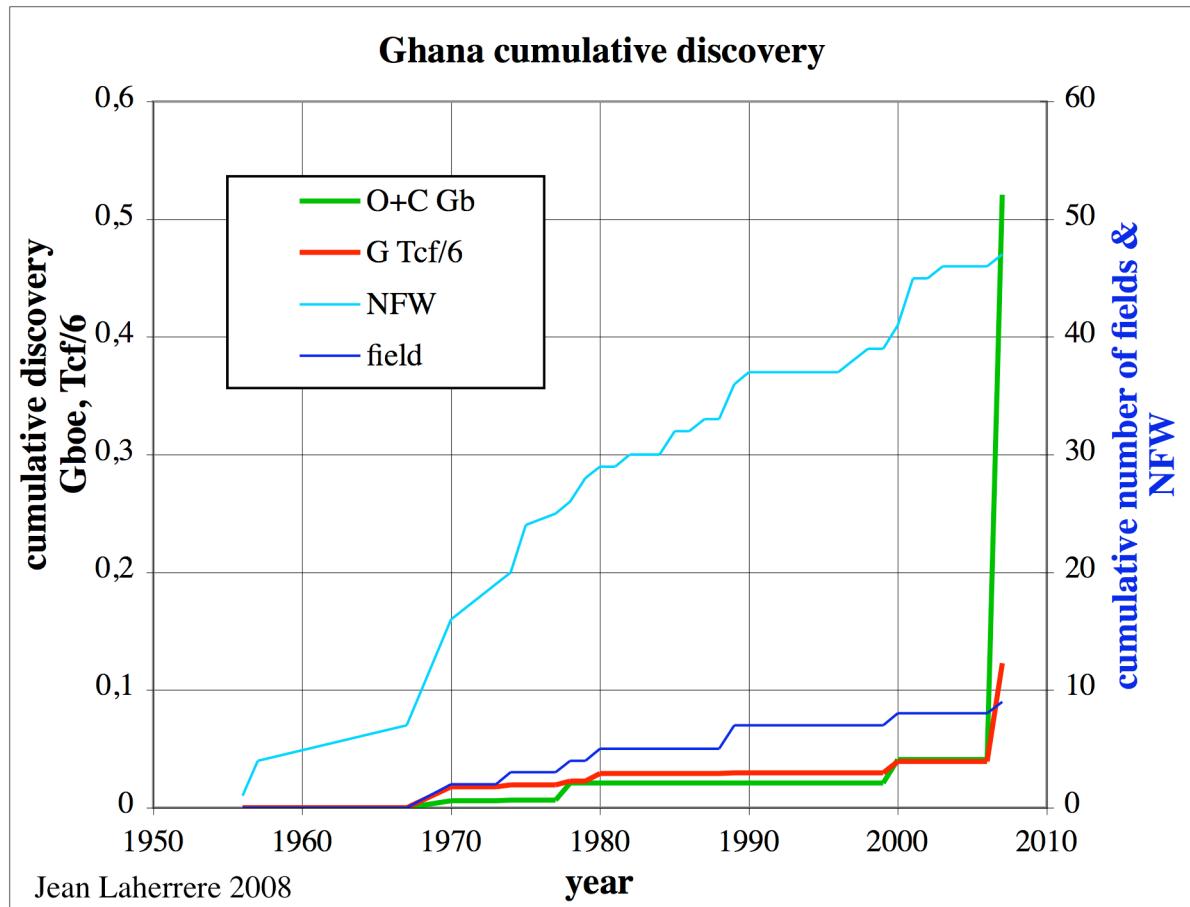




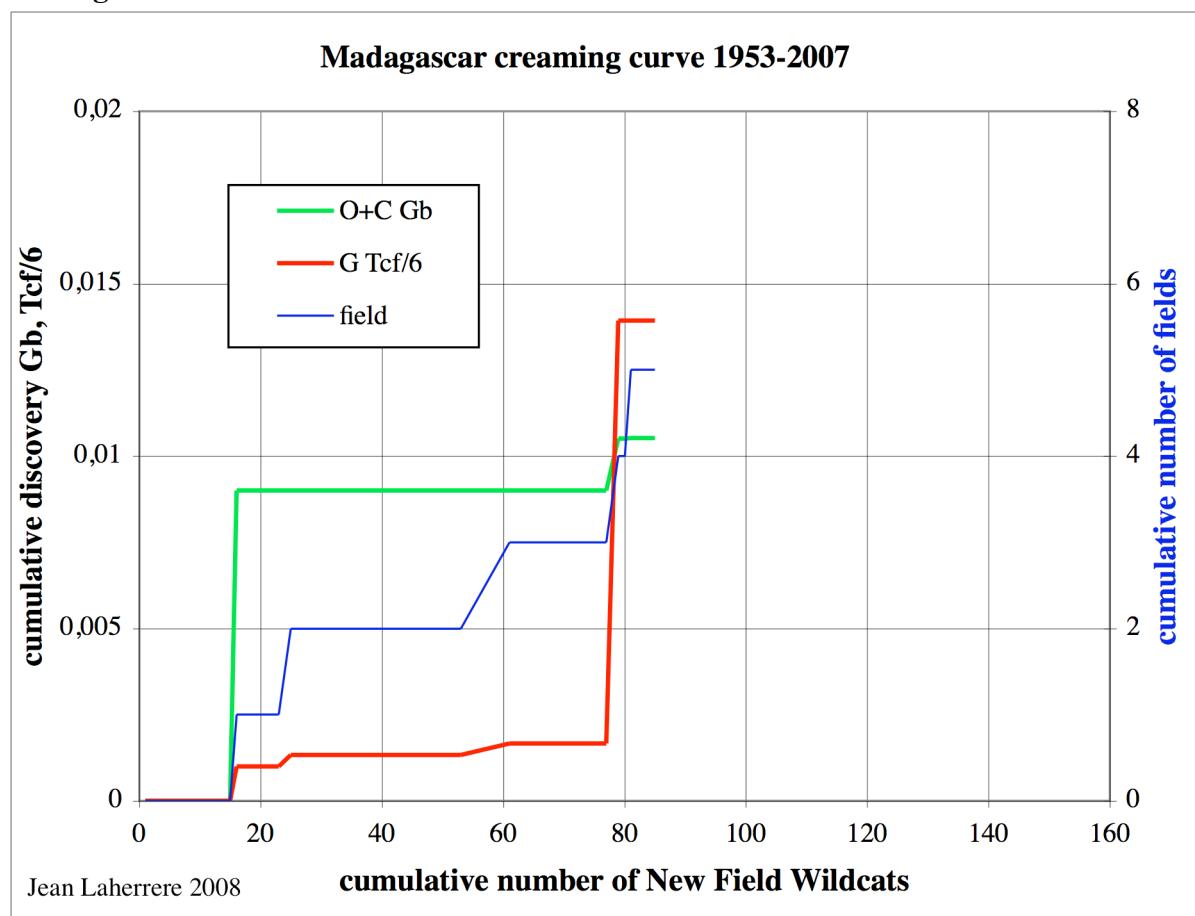


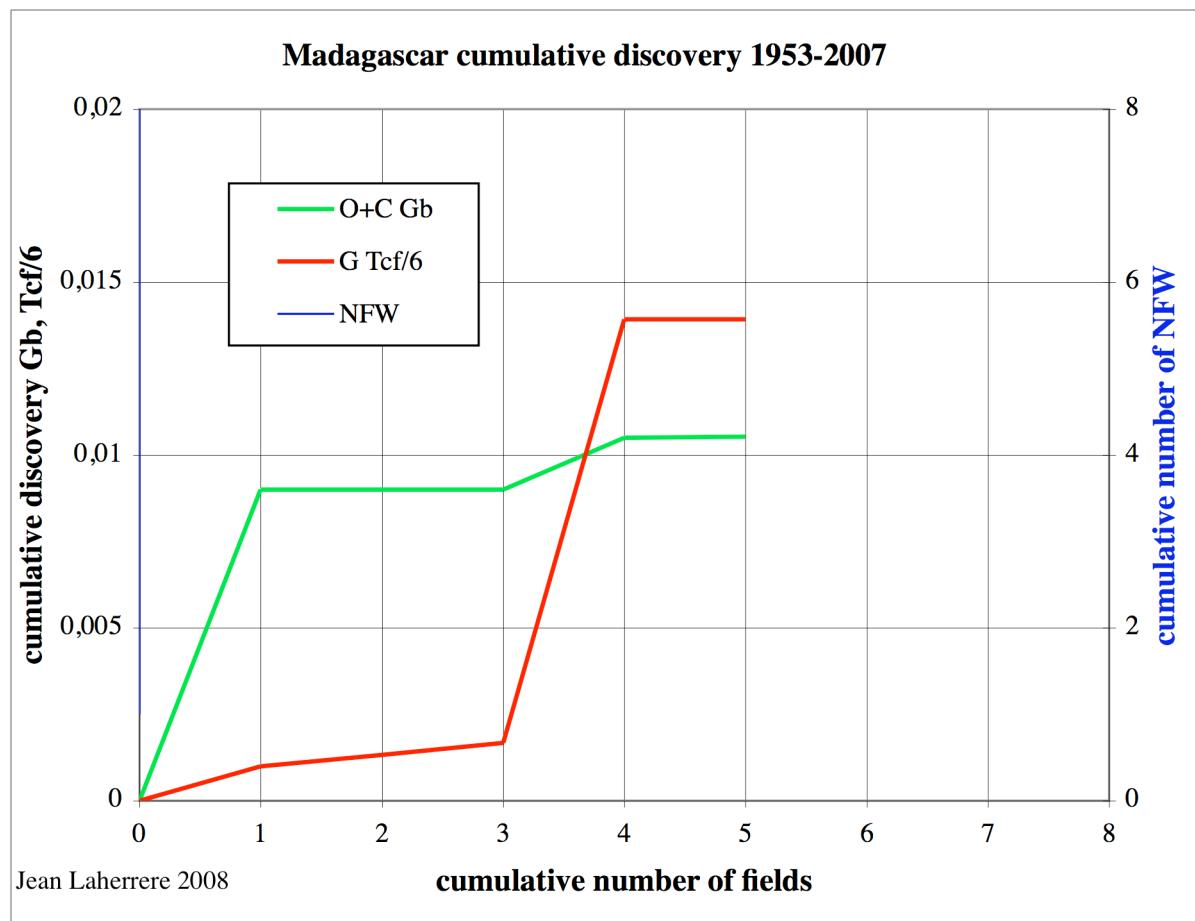
-Ghana

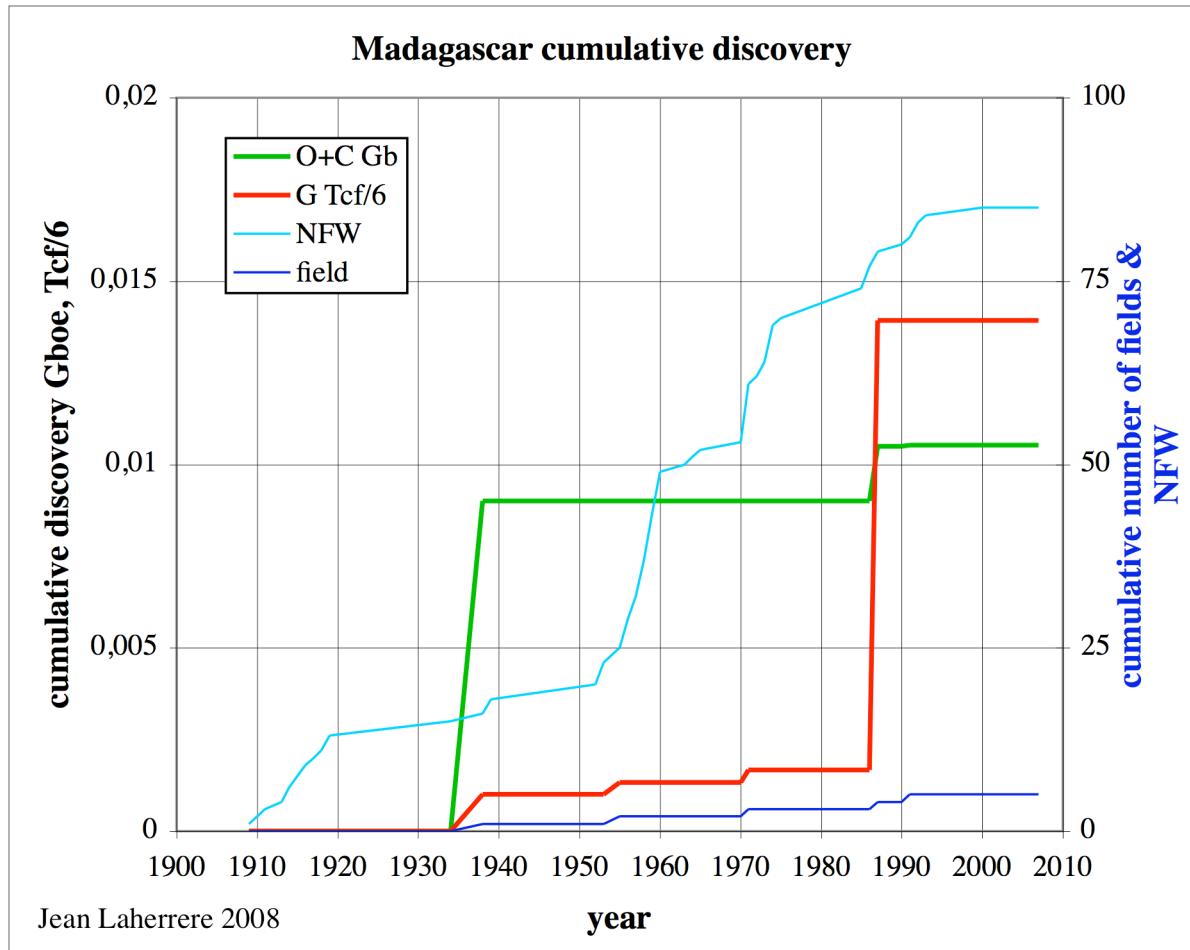


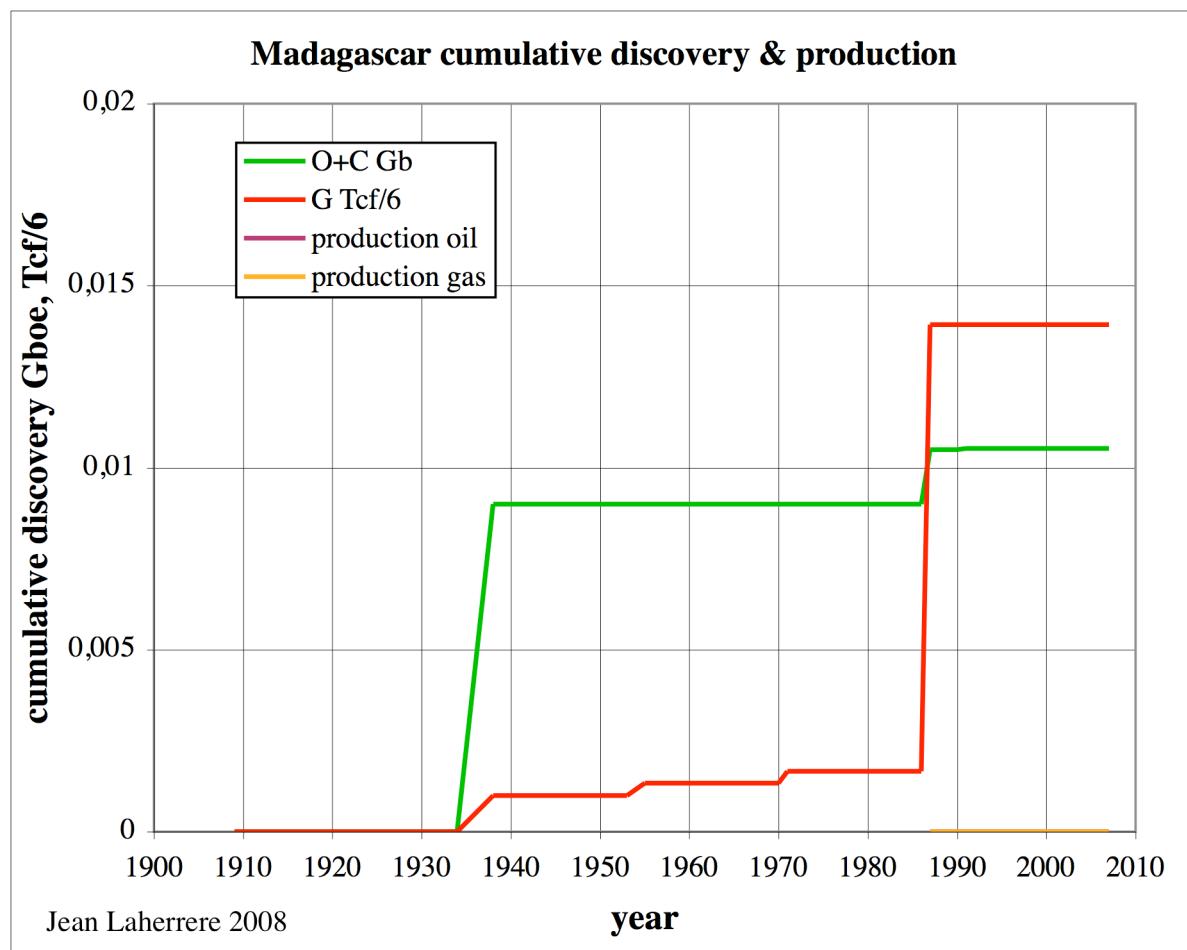


-Madagascar

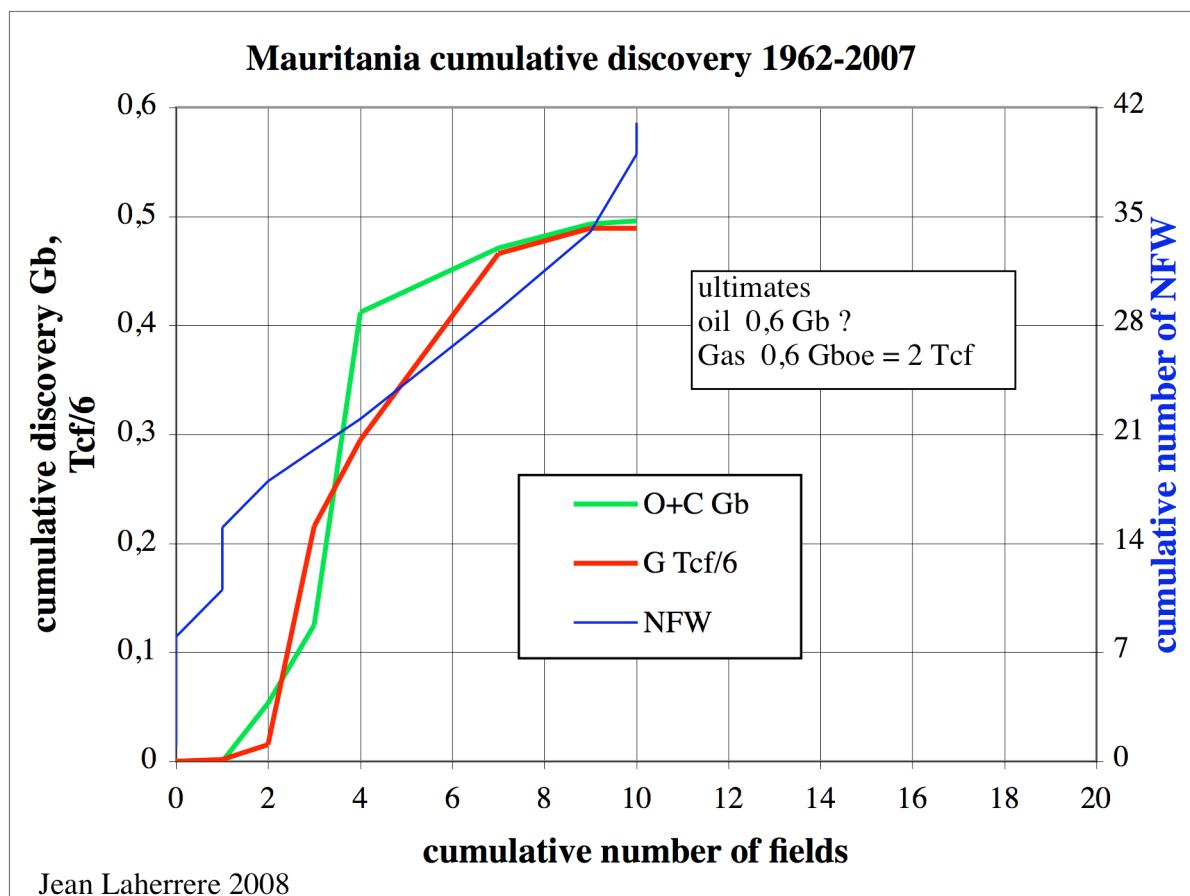
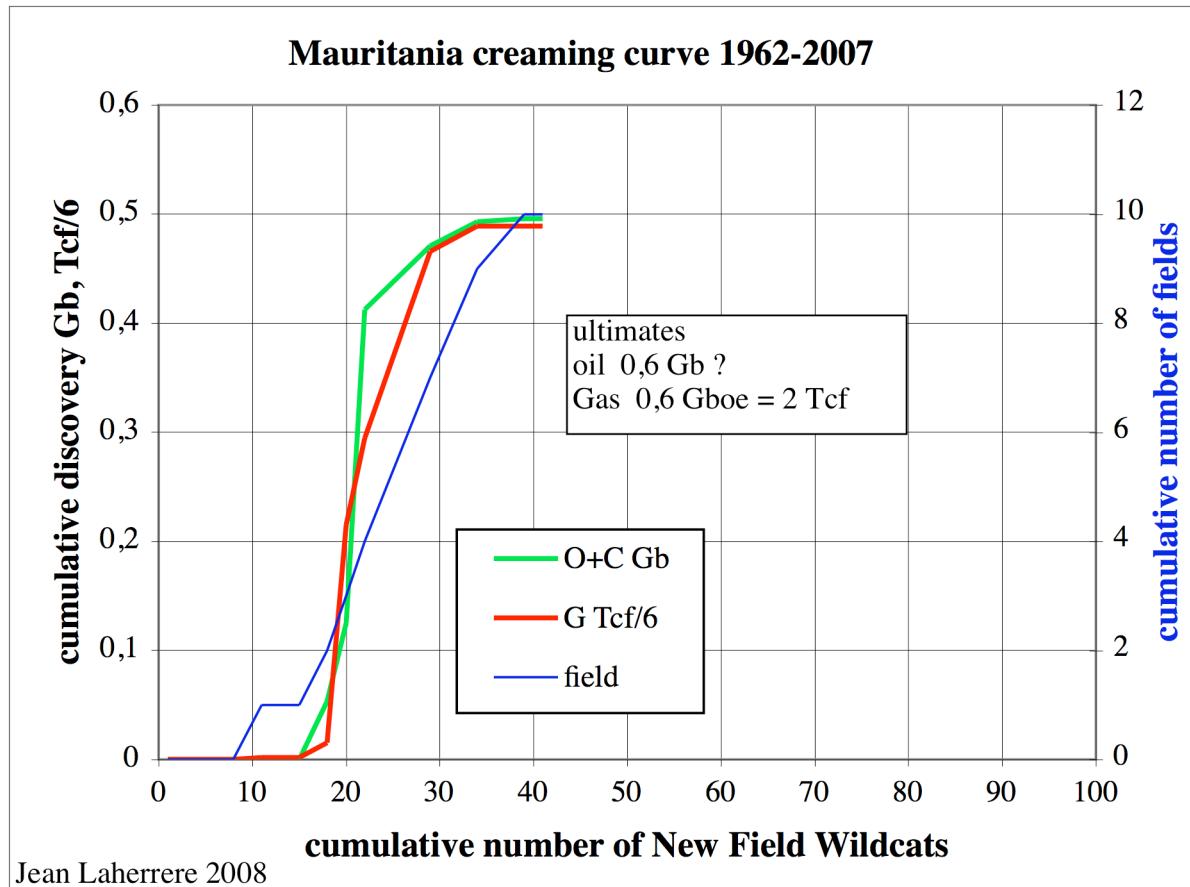


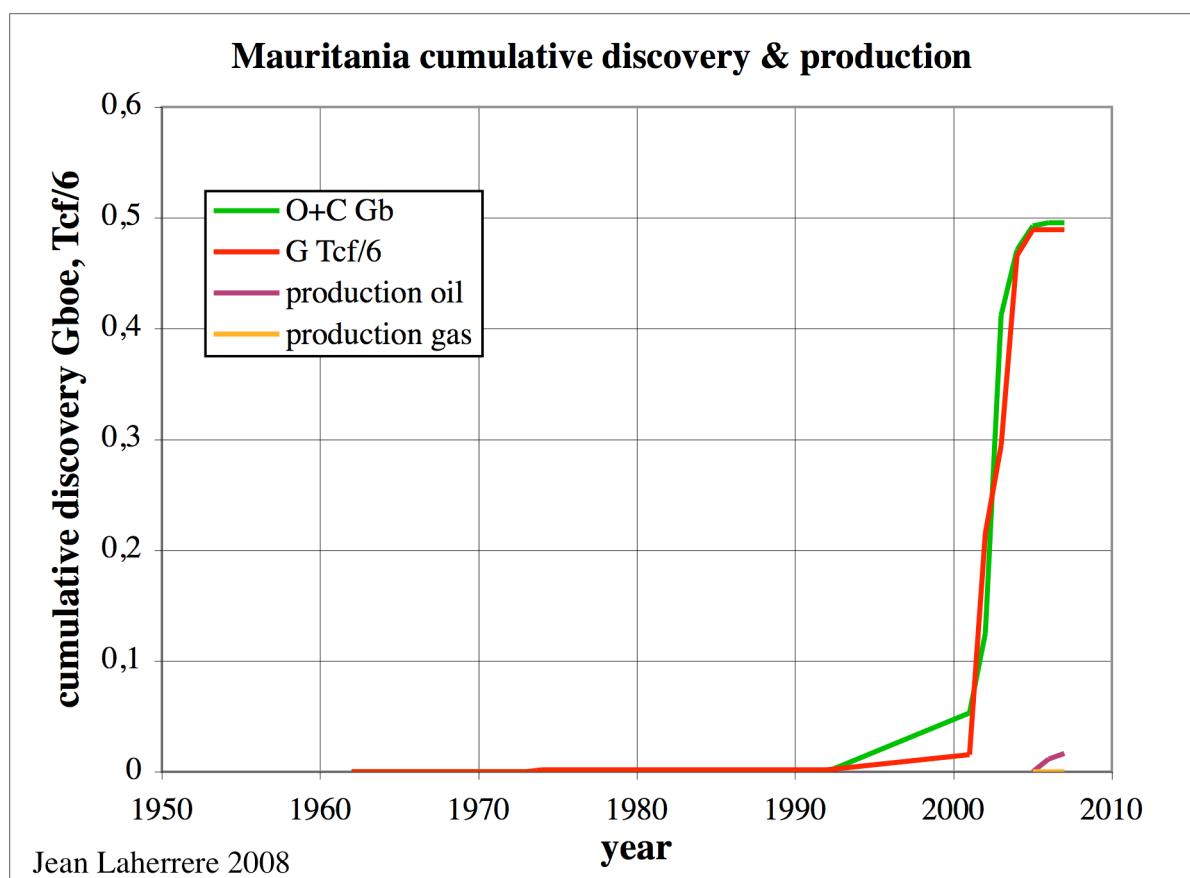
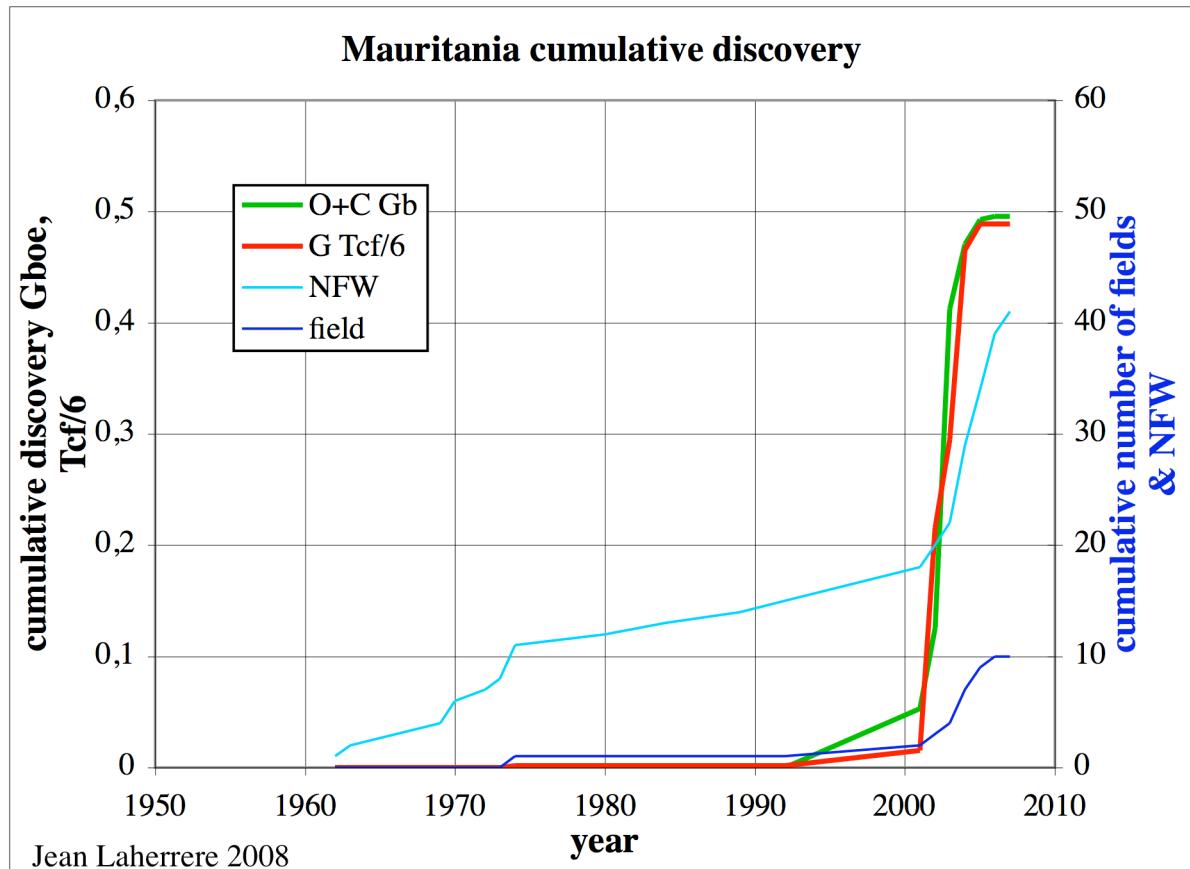




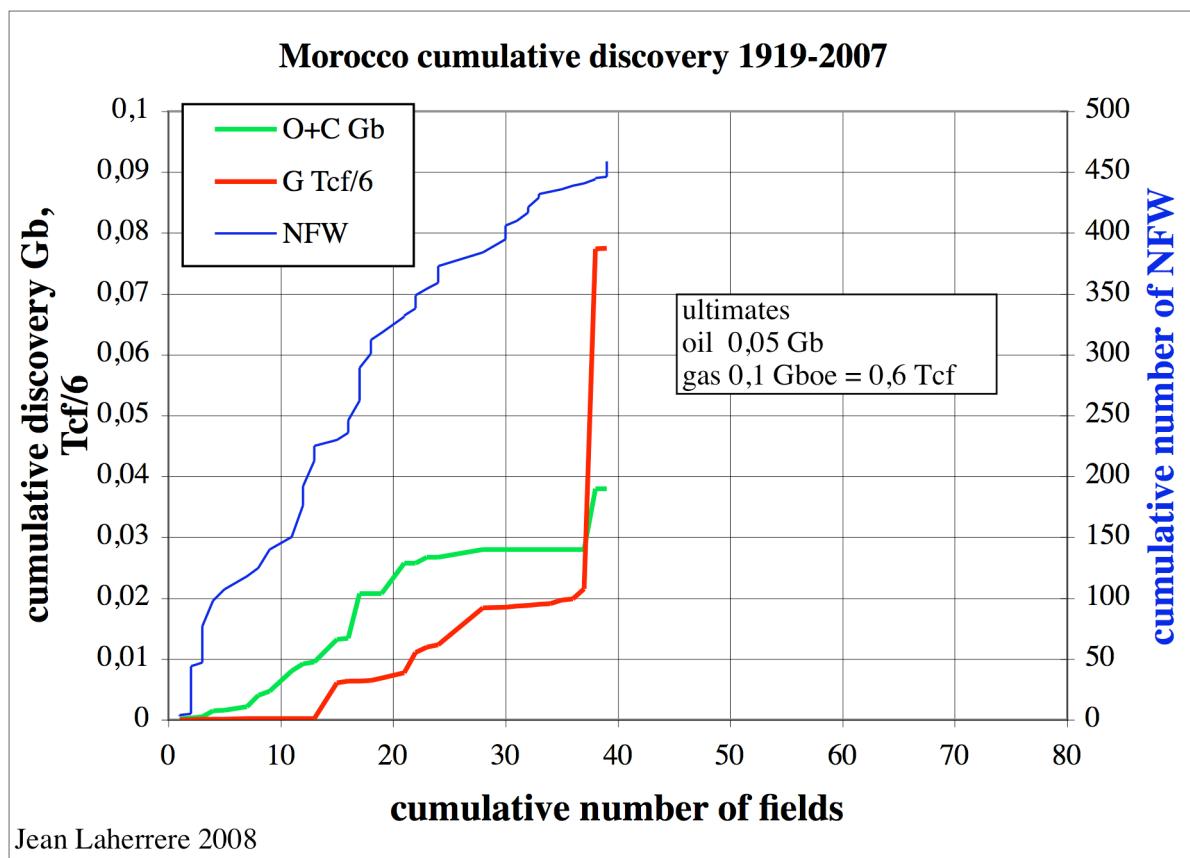
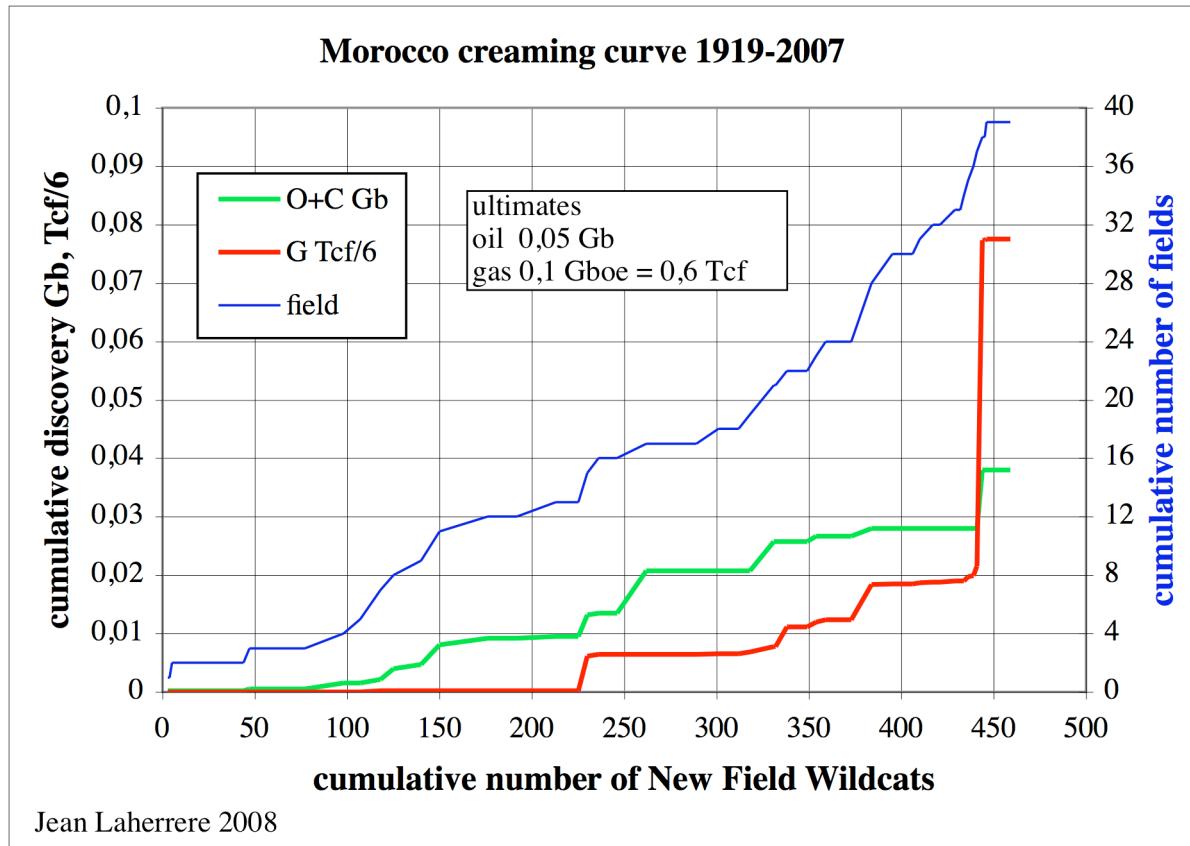


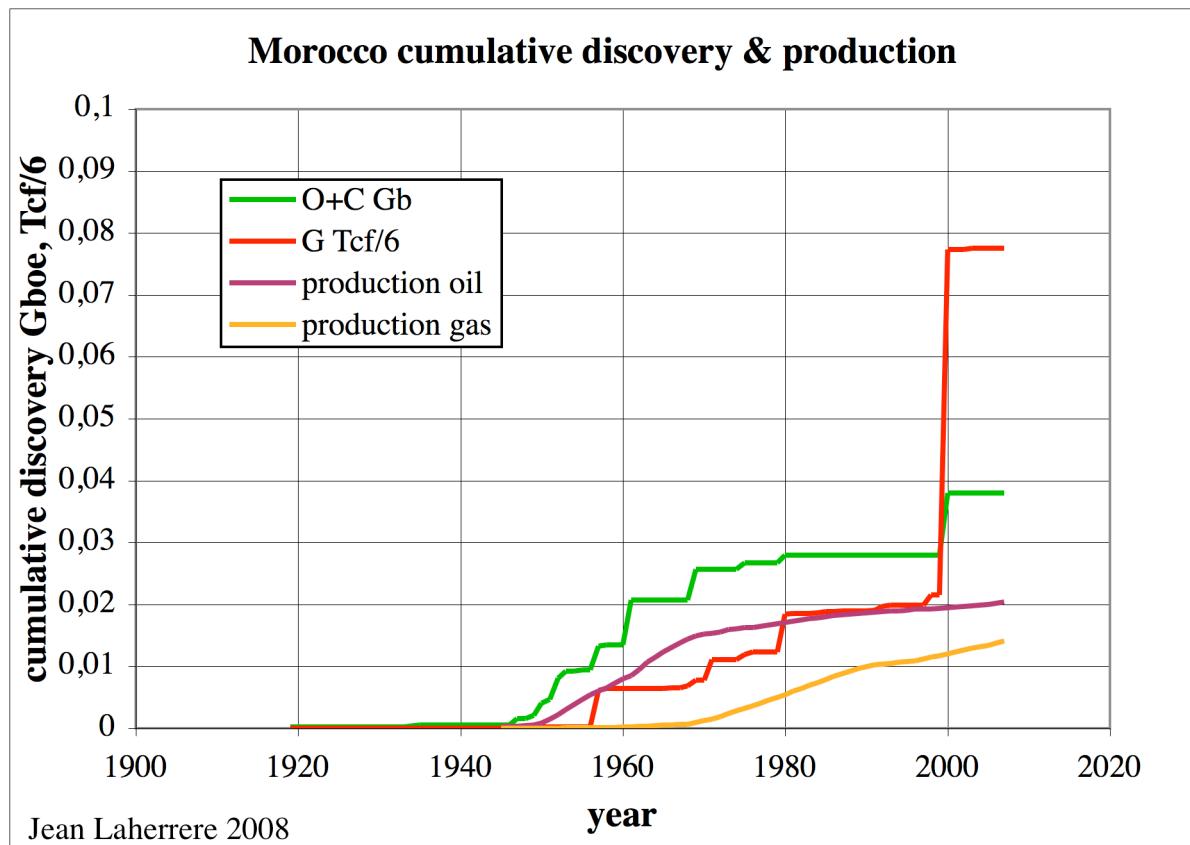
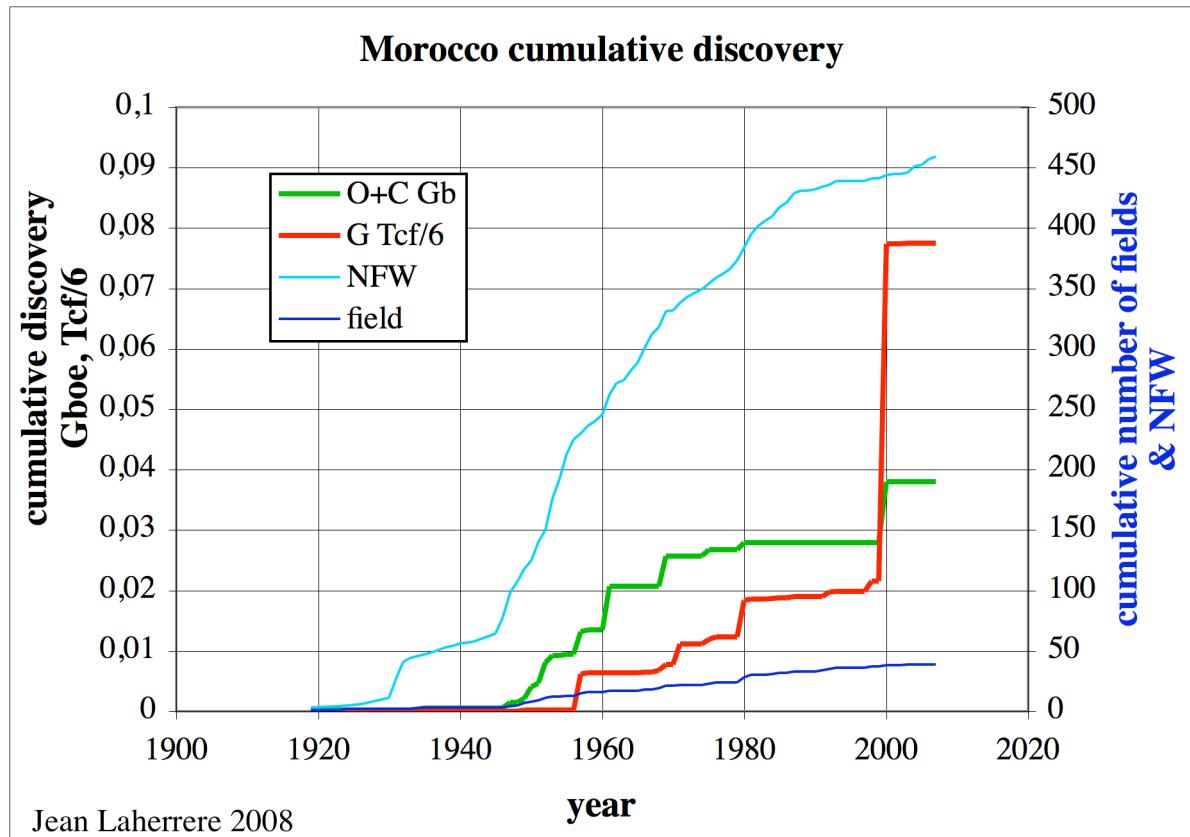
-Mauritania



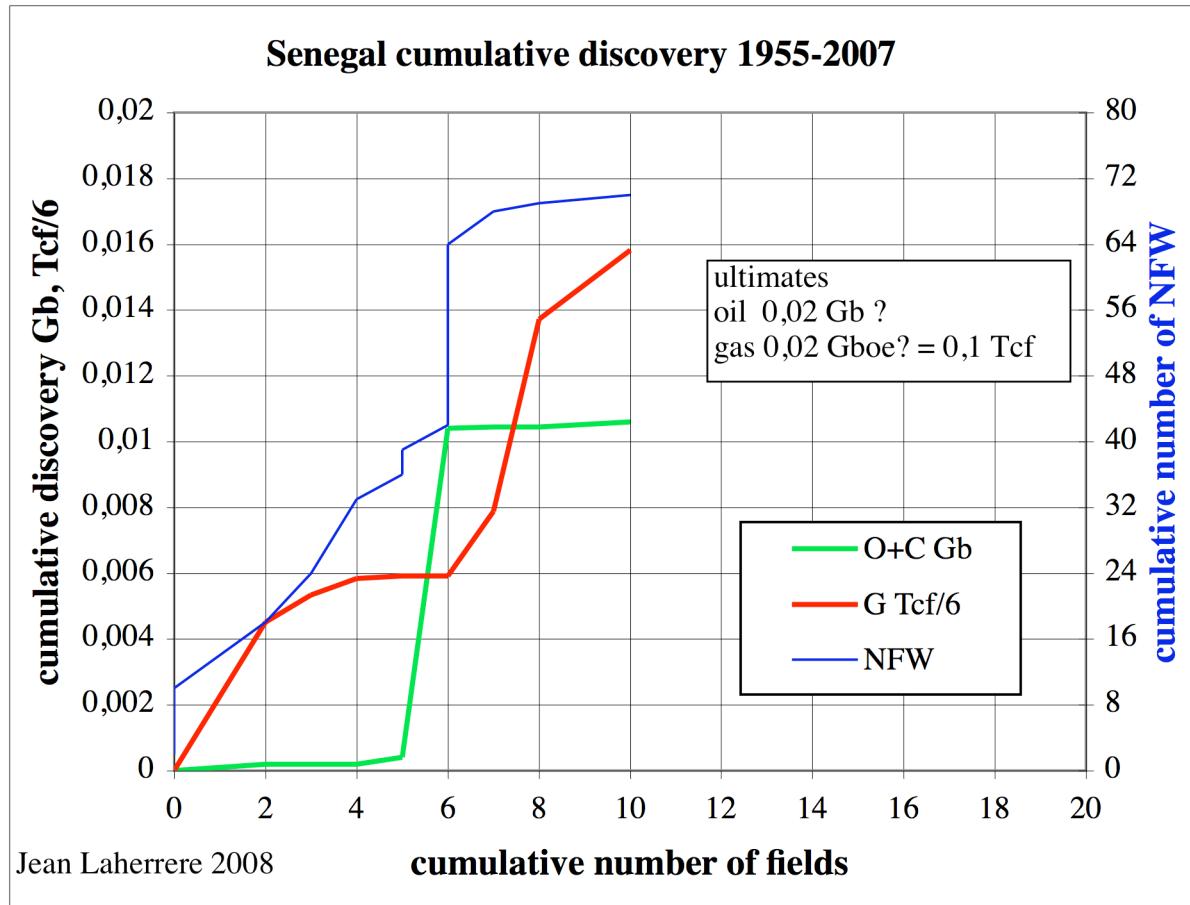
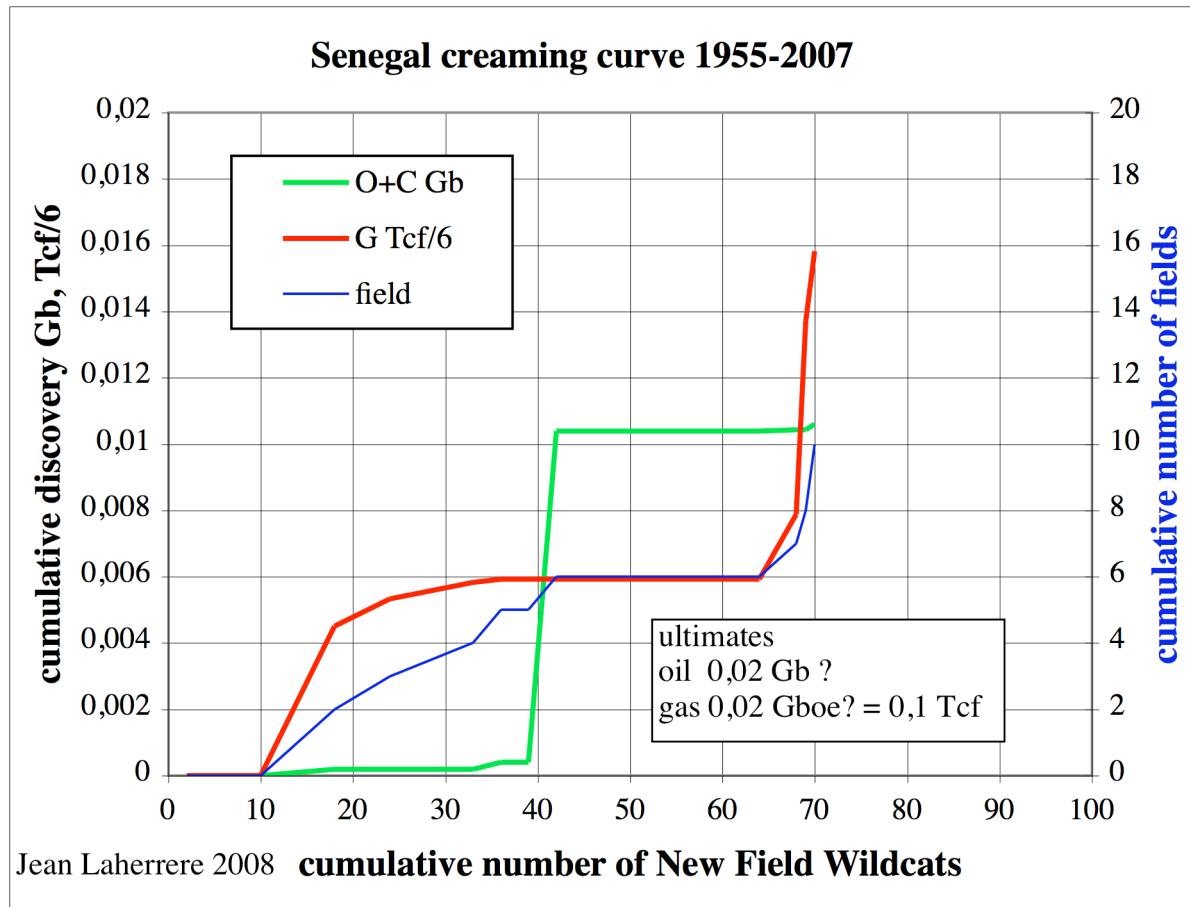


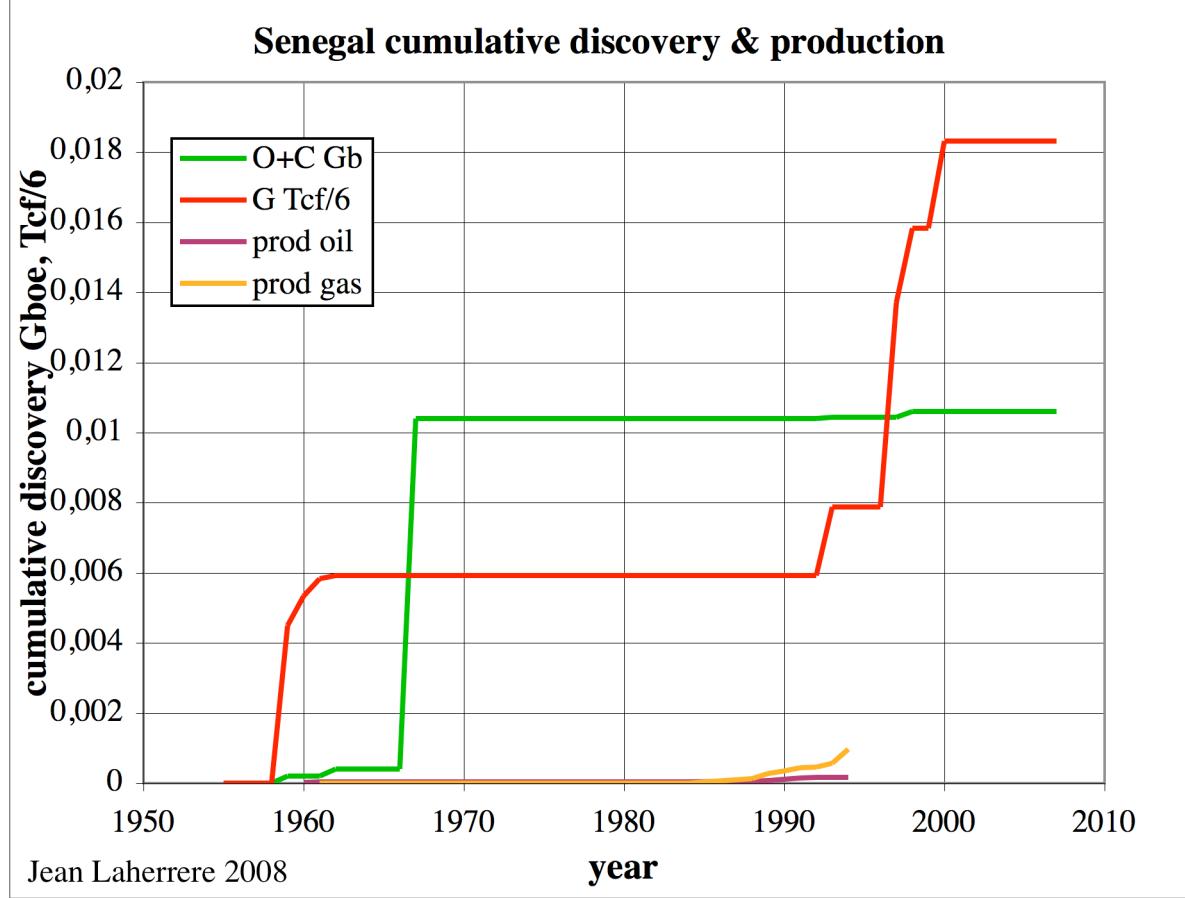
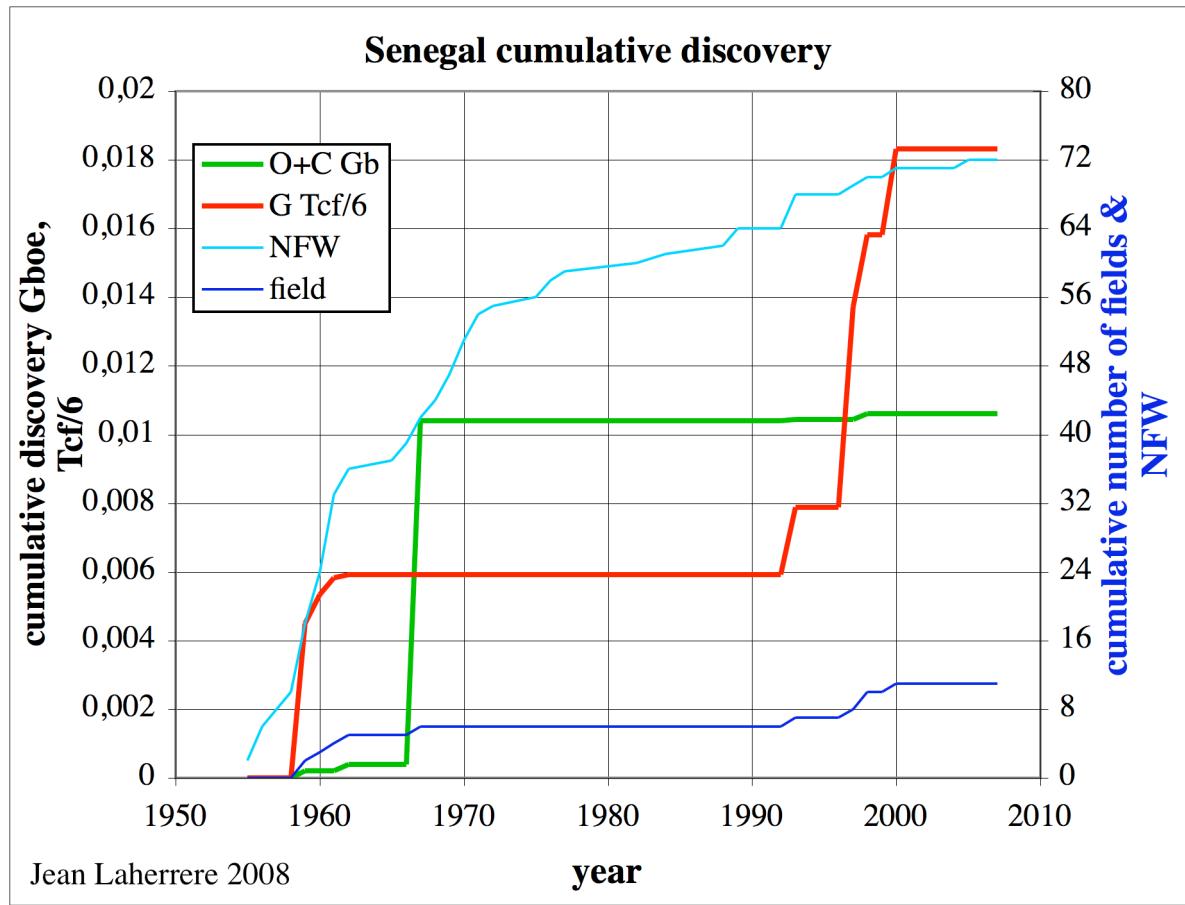
-Morocco



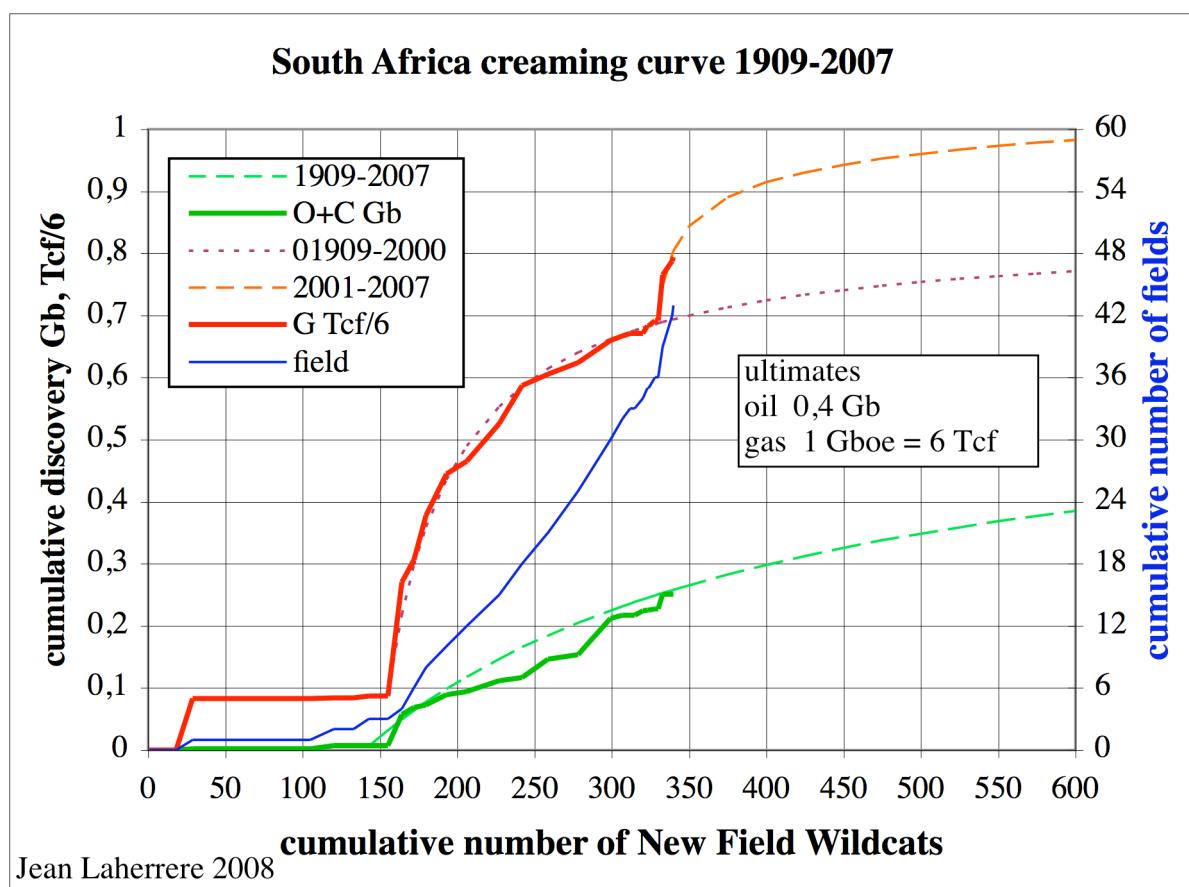


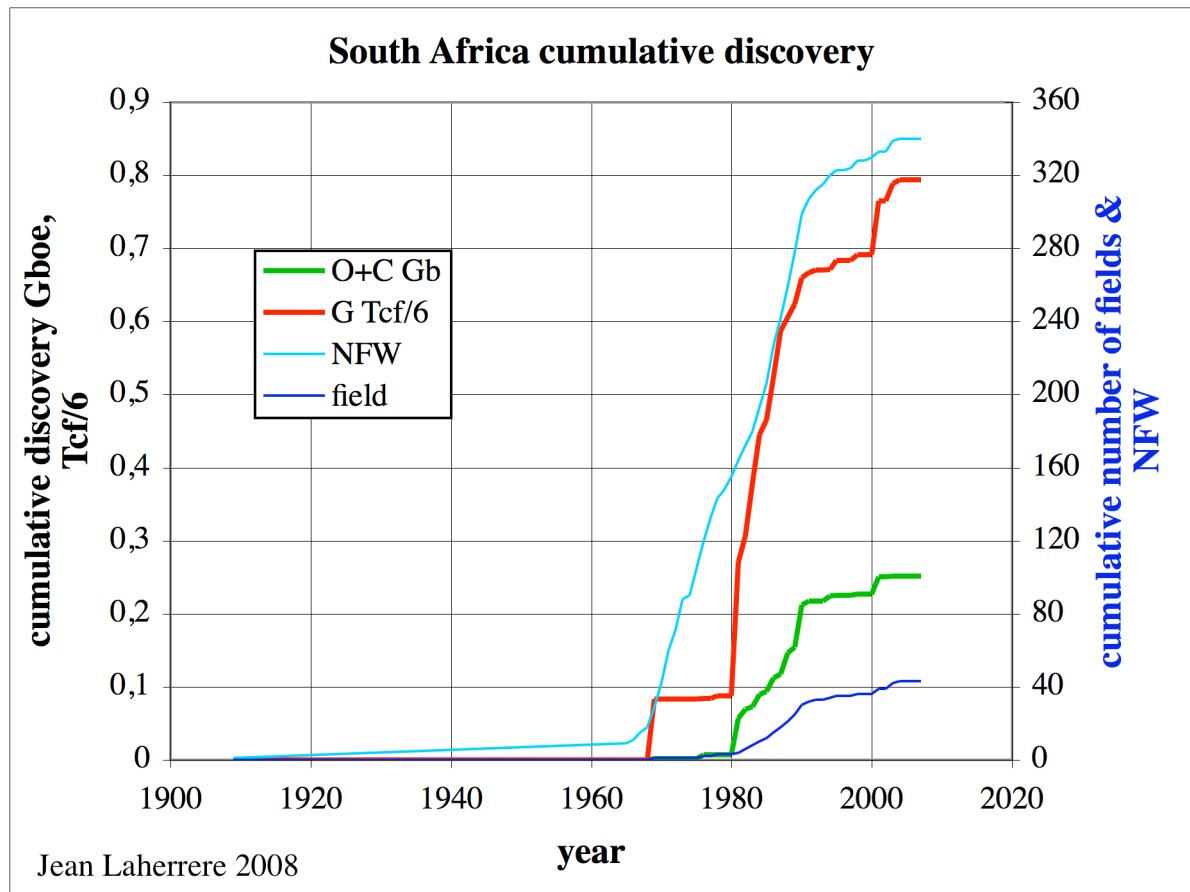
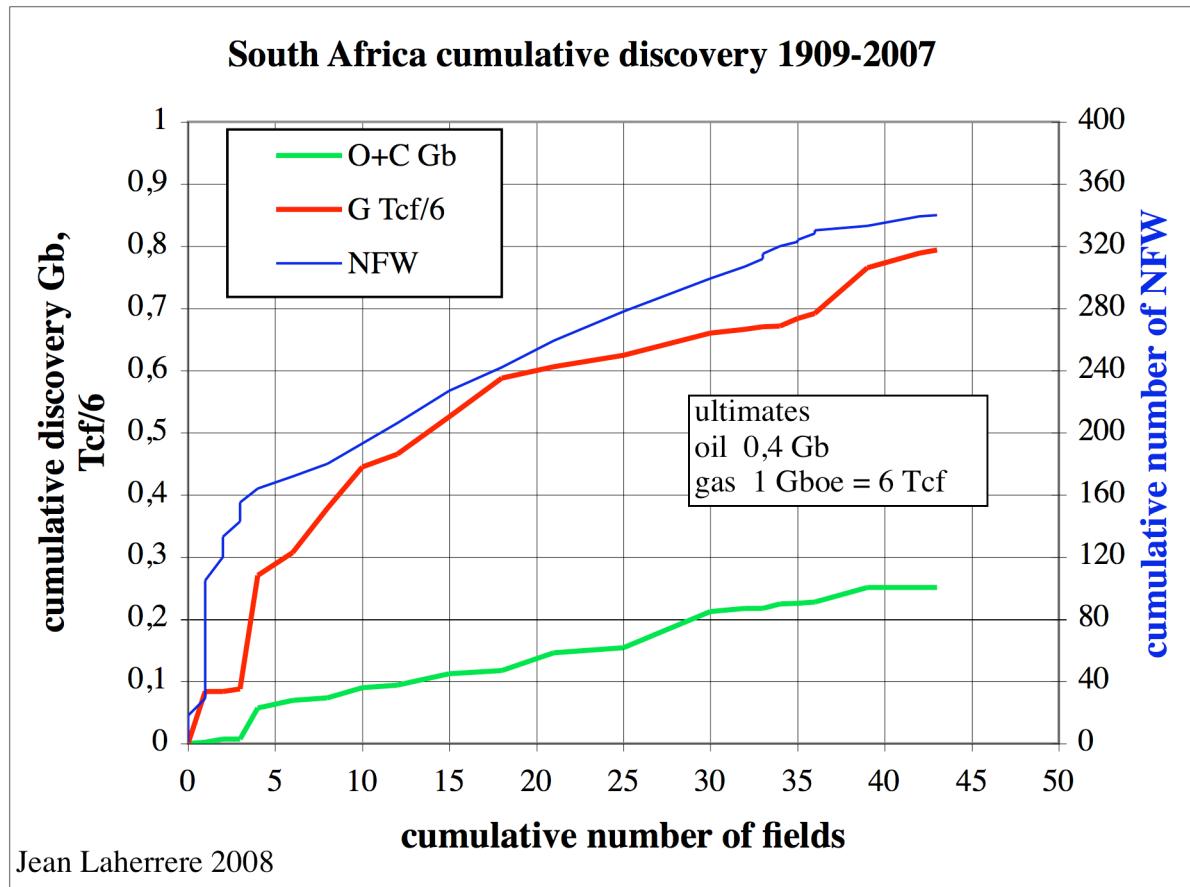
-Senegal

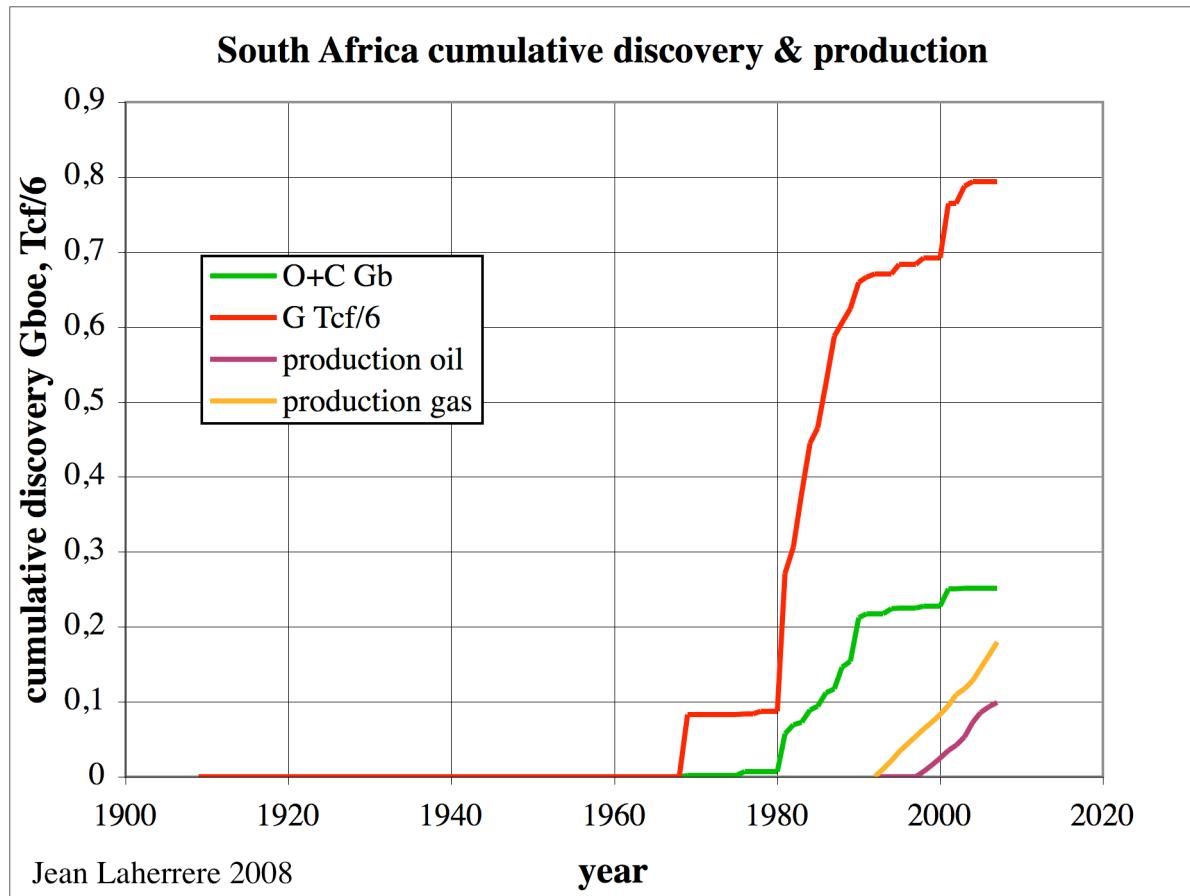




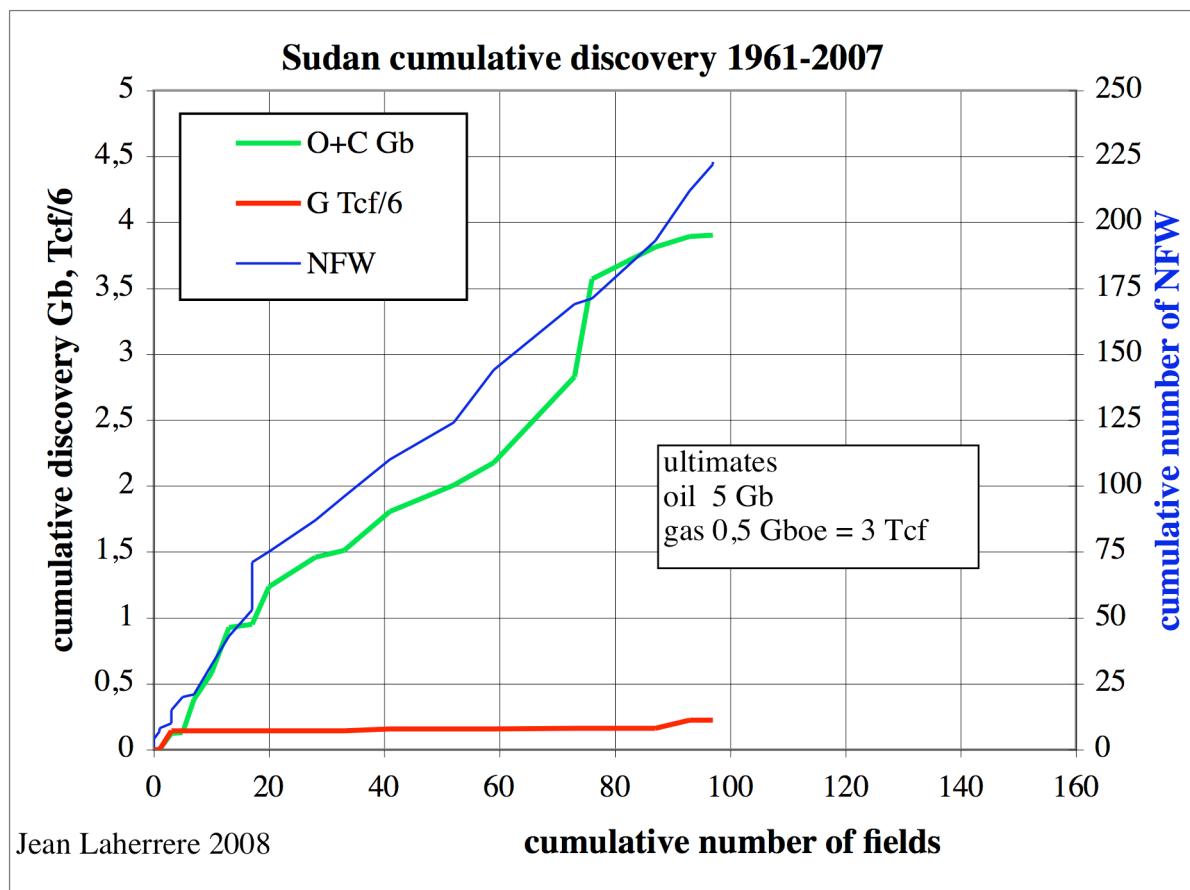
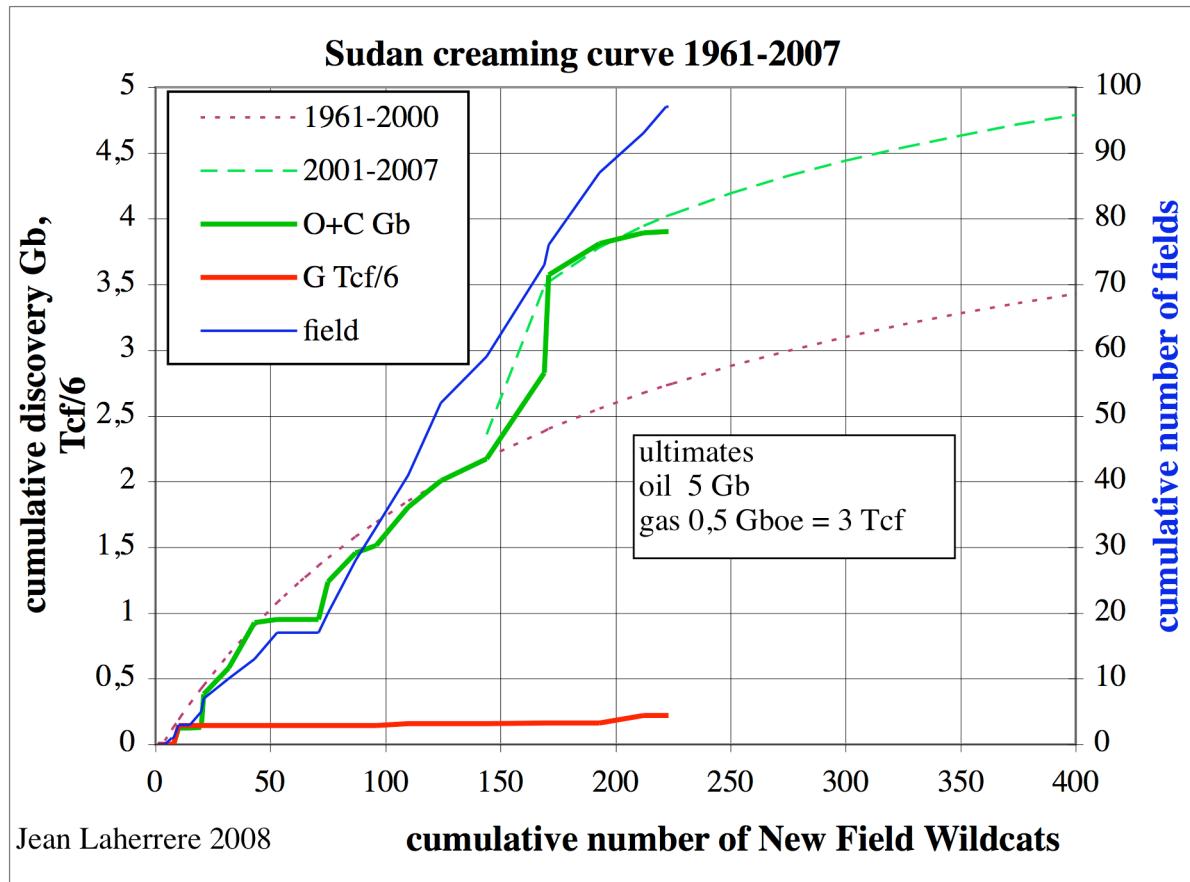
-South Africa

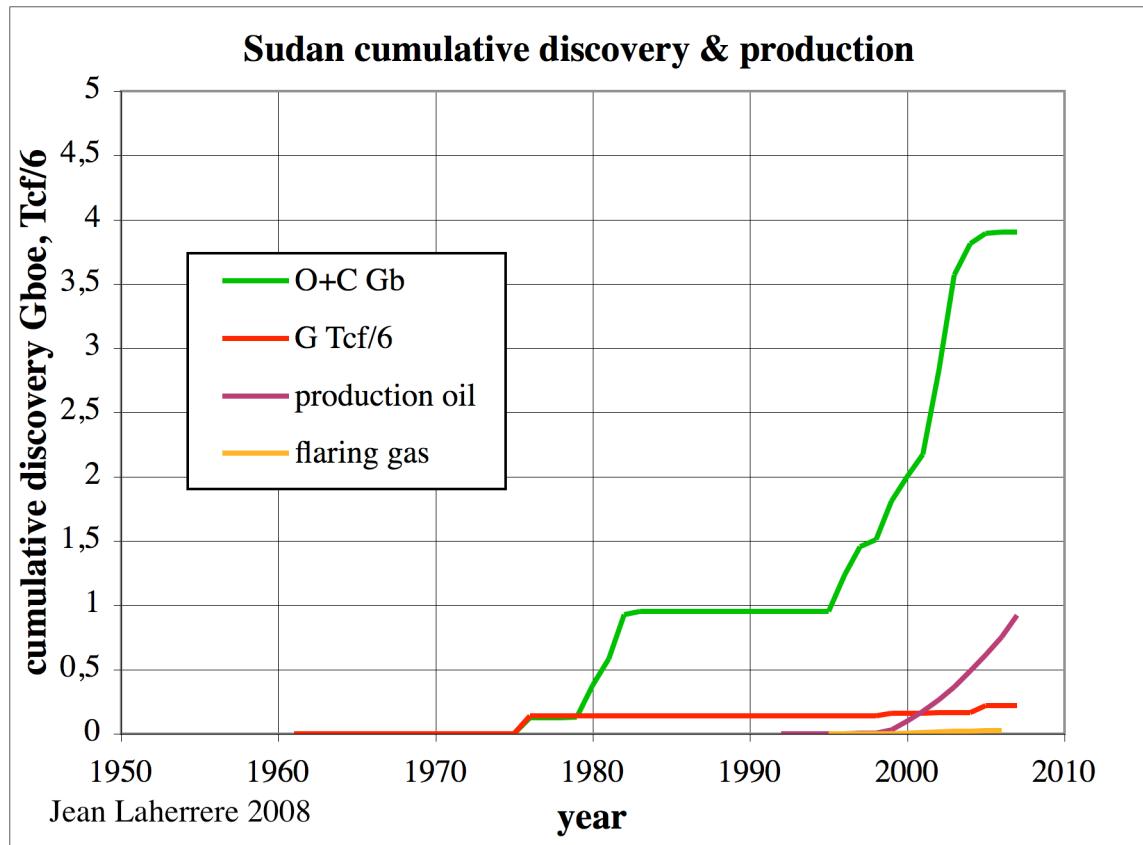
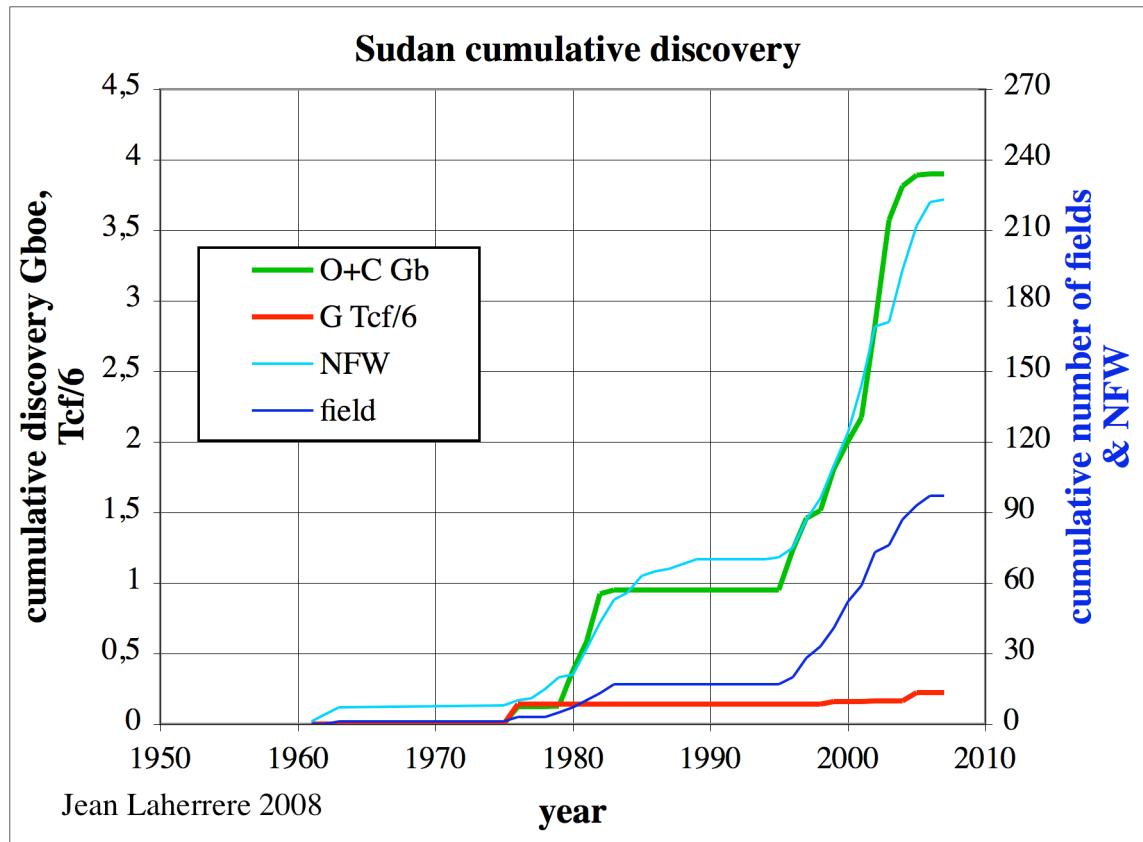




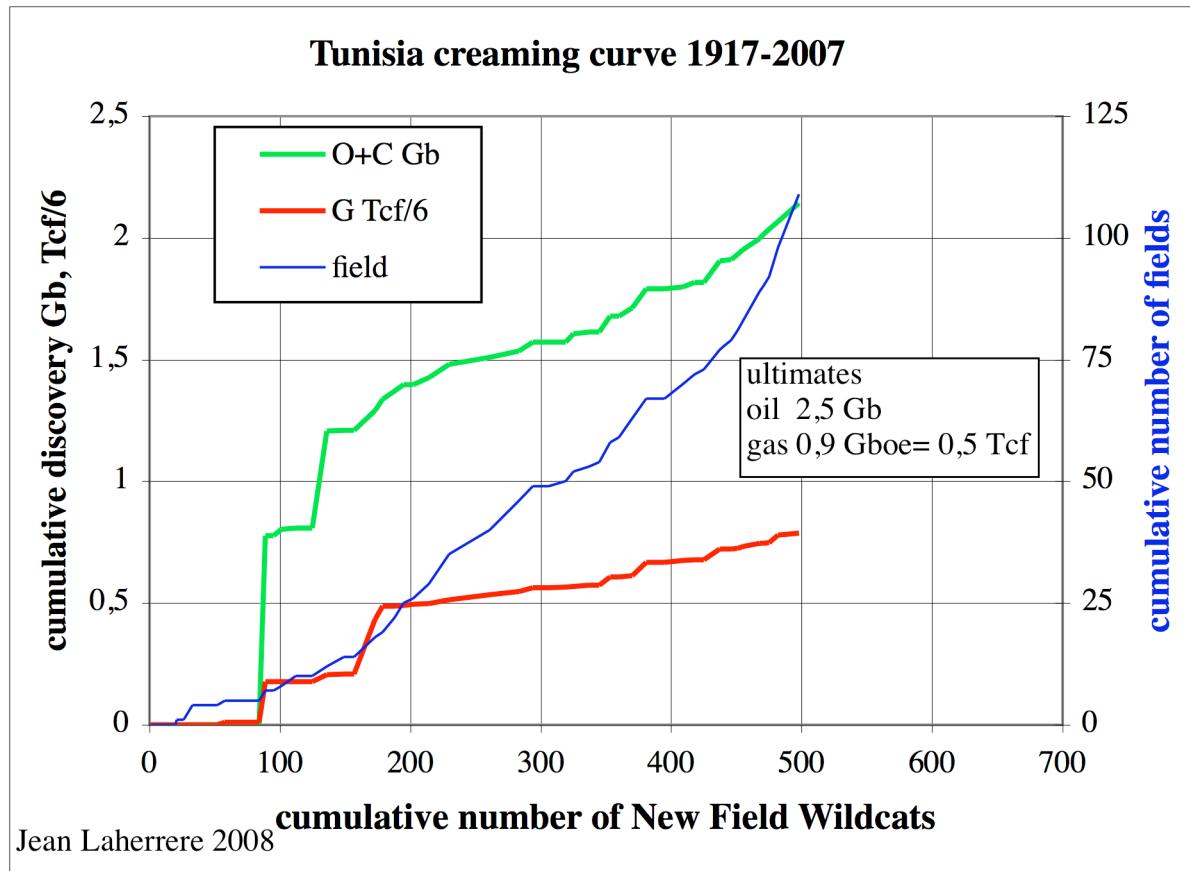


-Sudan

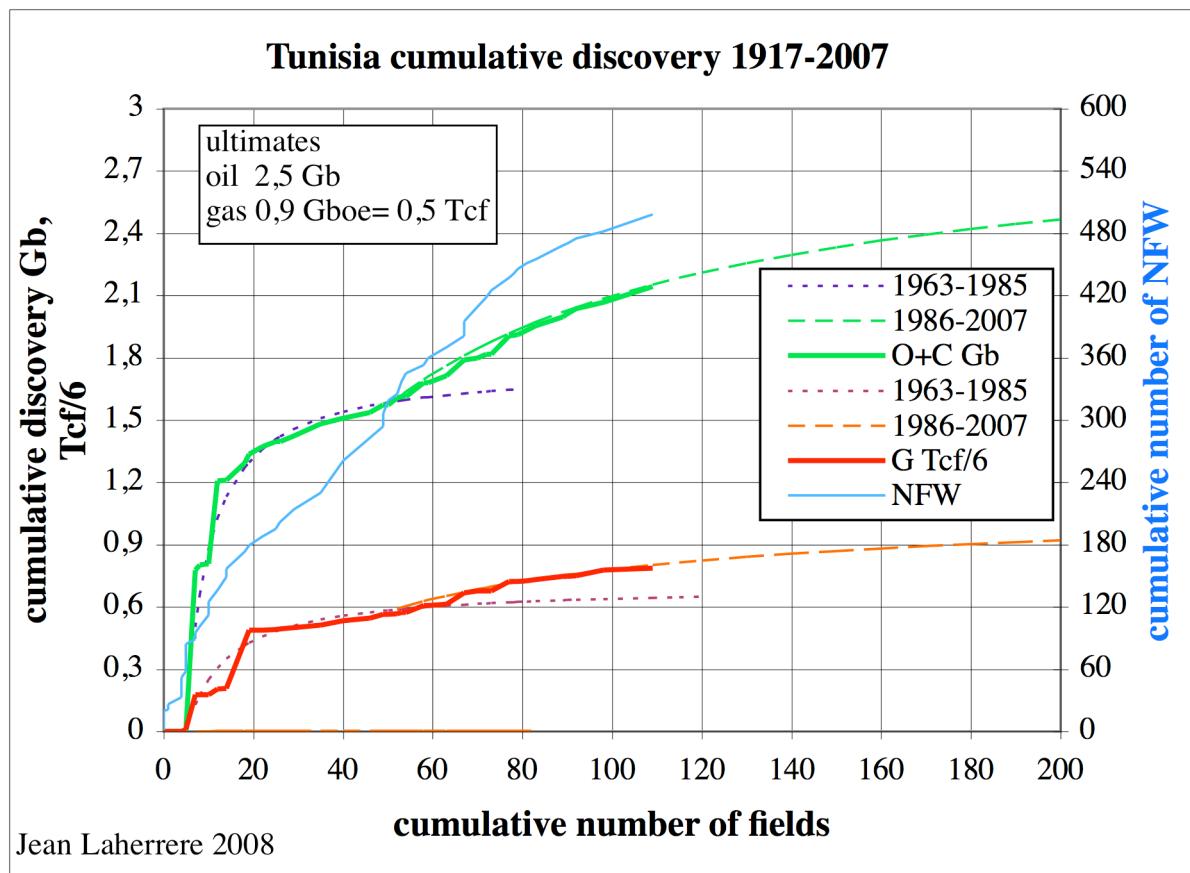


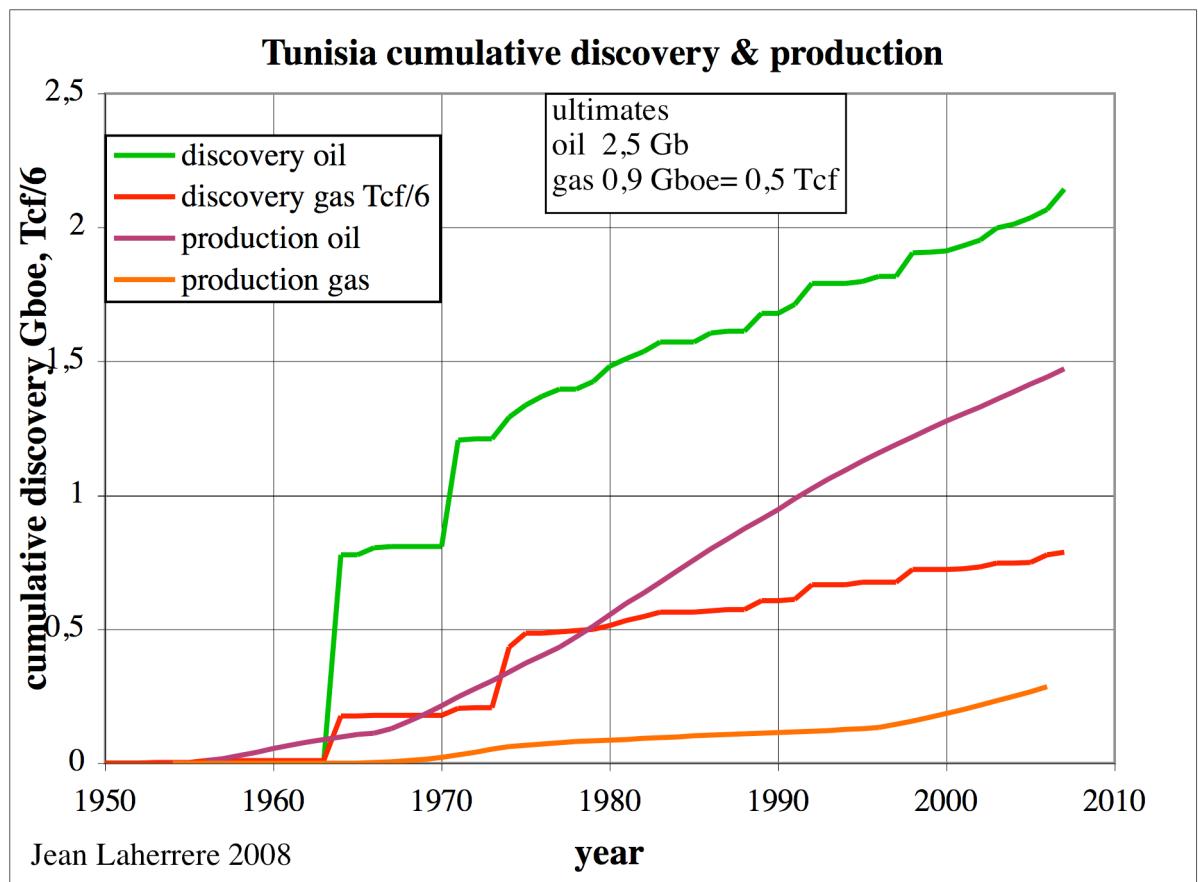
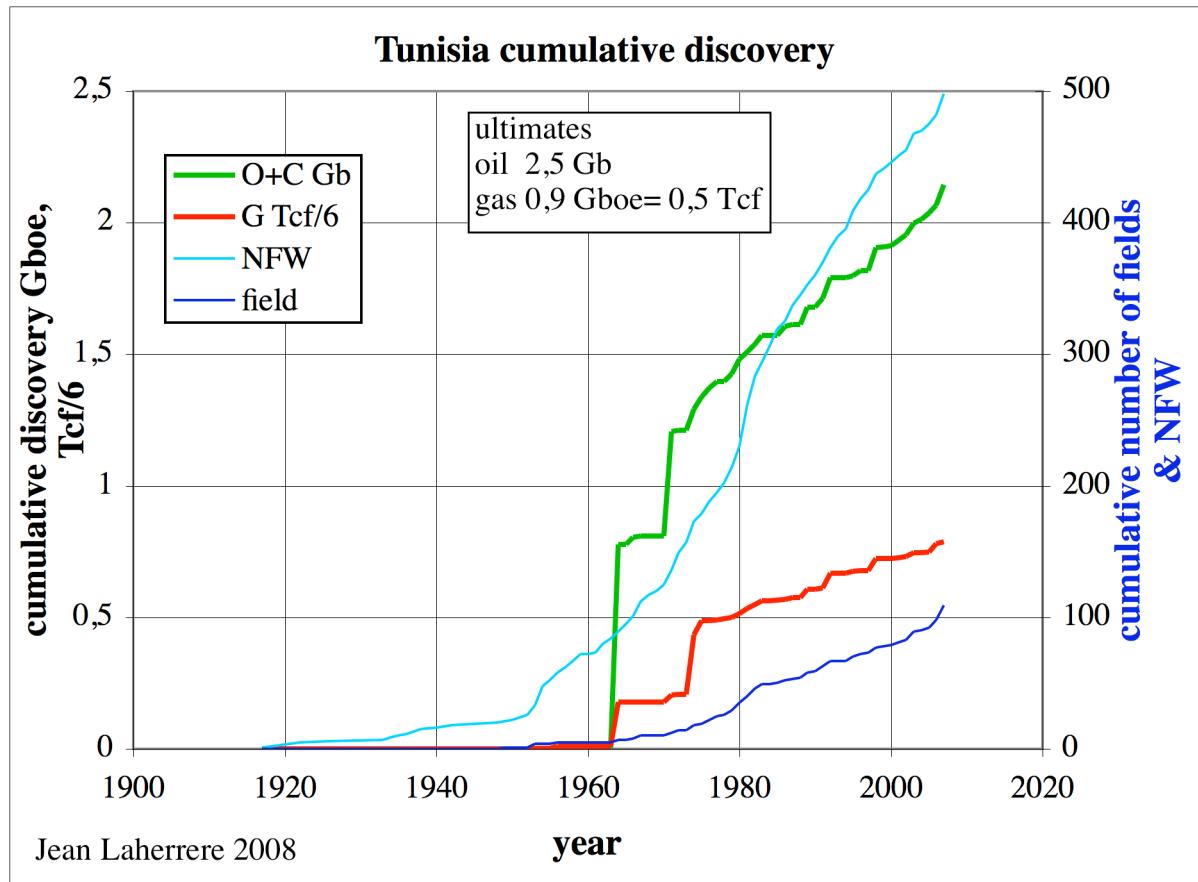


-Tunisia

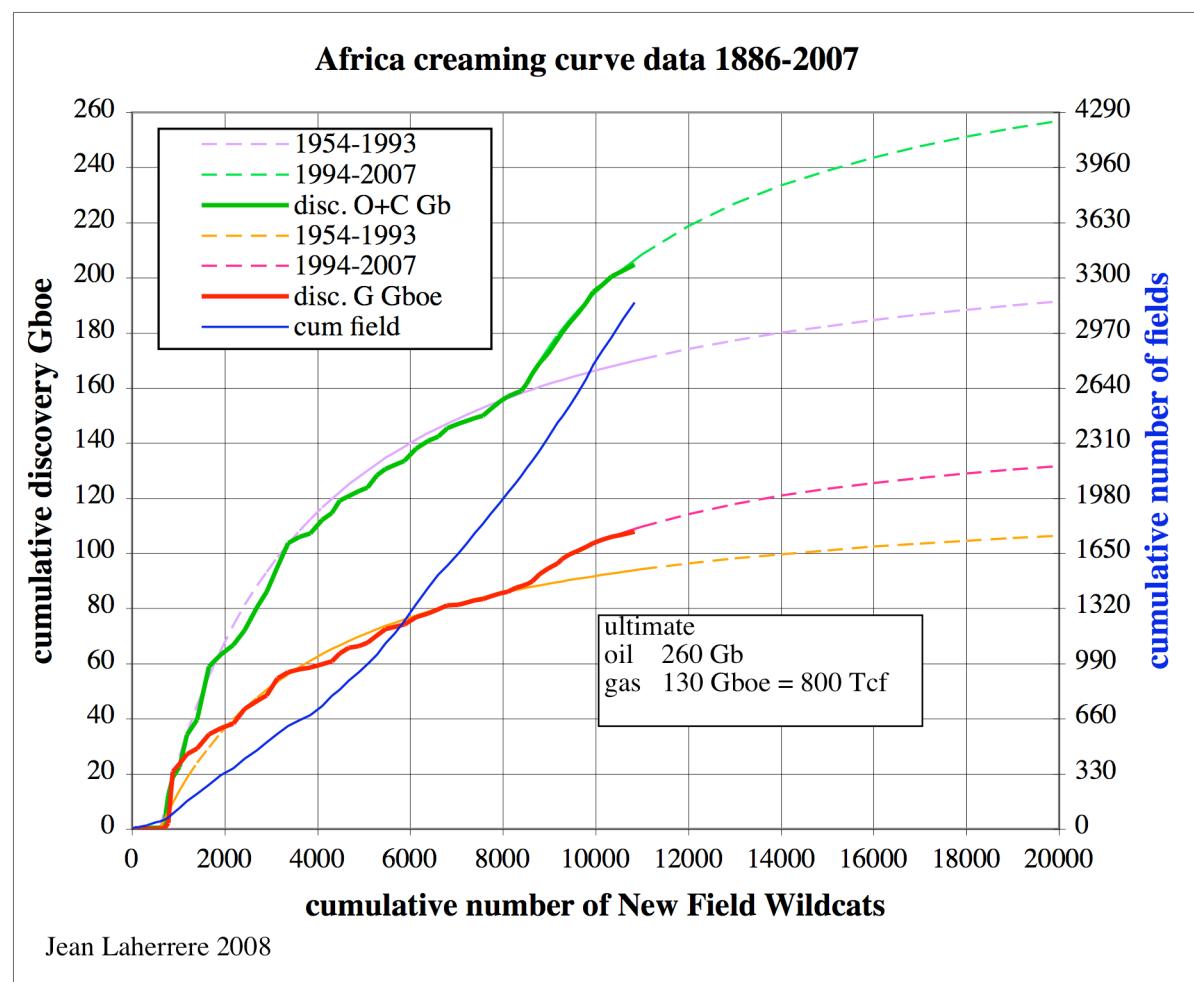


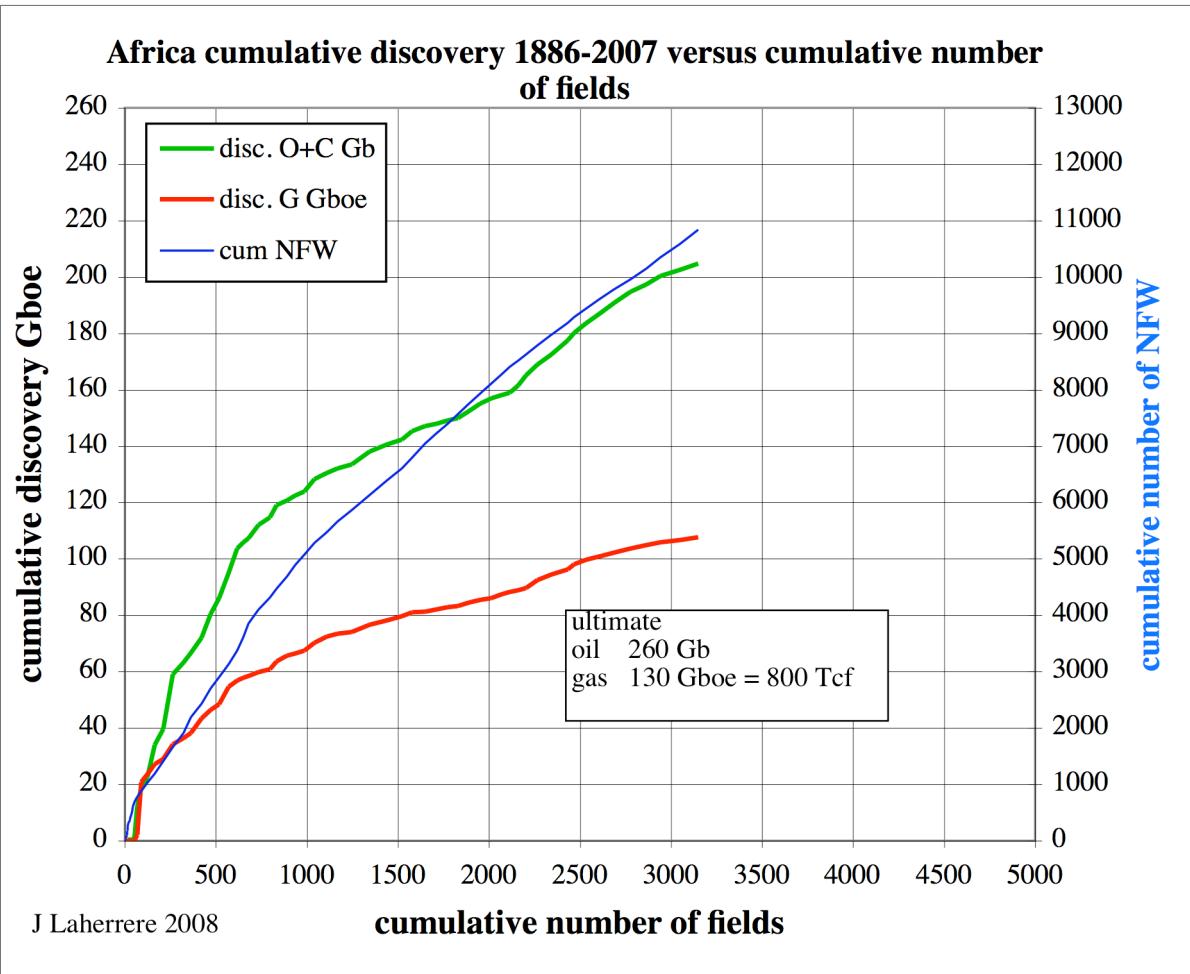
Cumulative number of fields looks more reliable than NFW to estimate ultimates

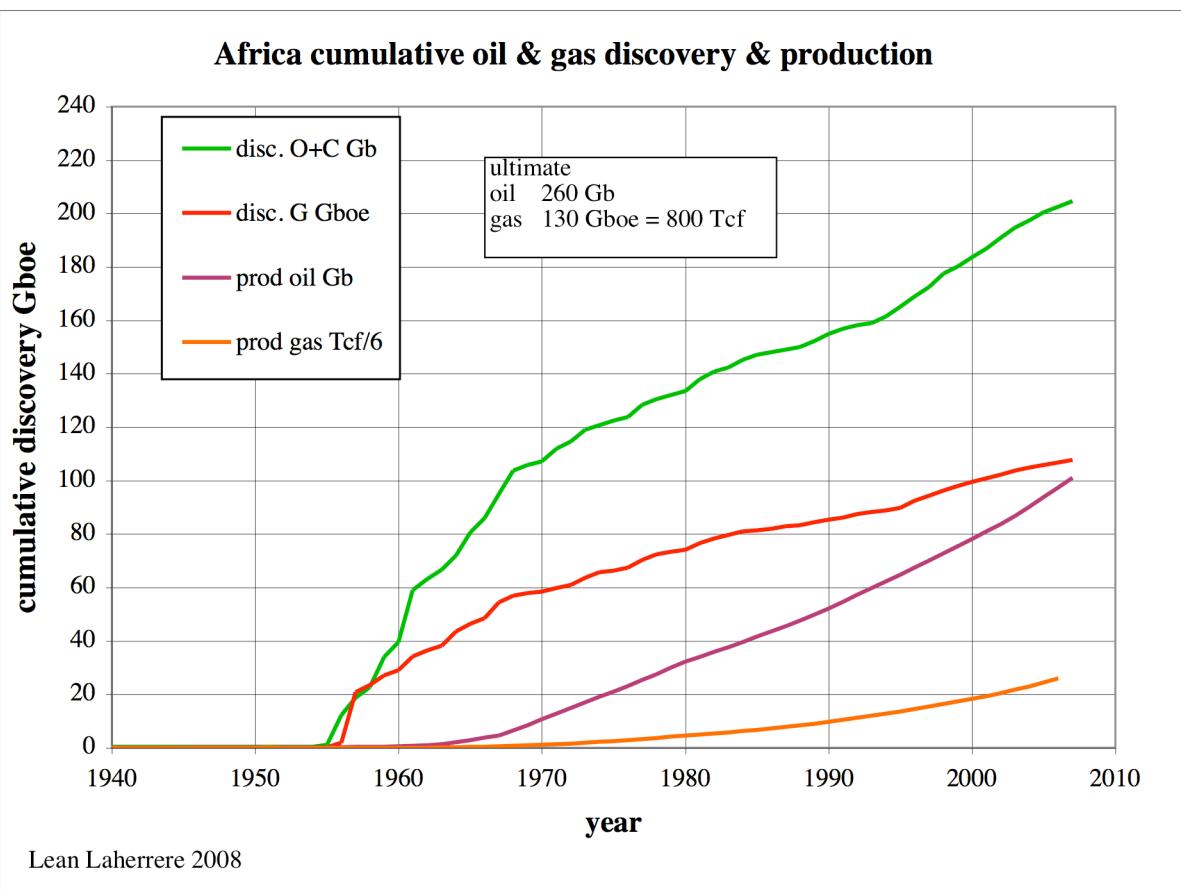
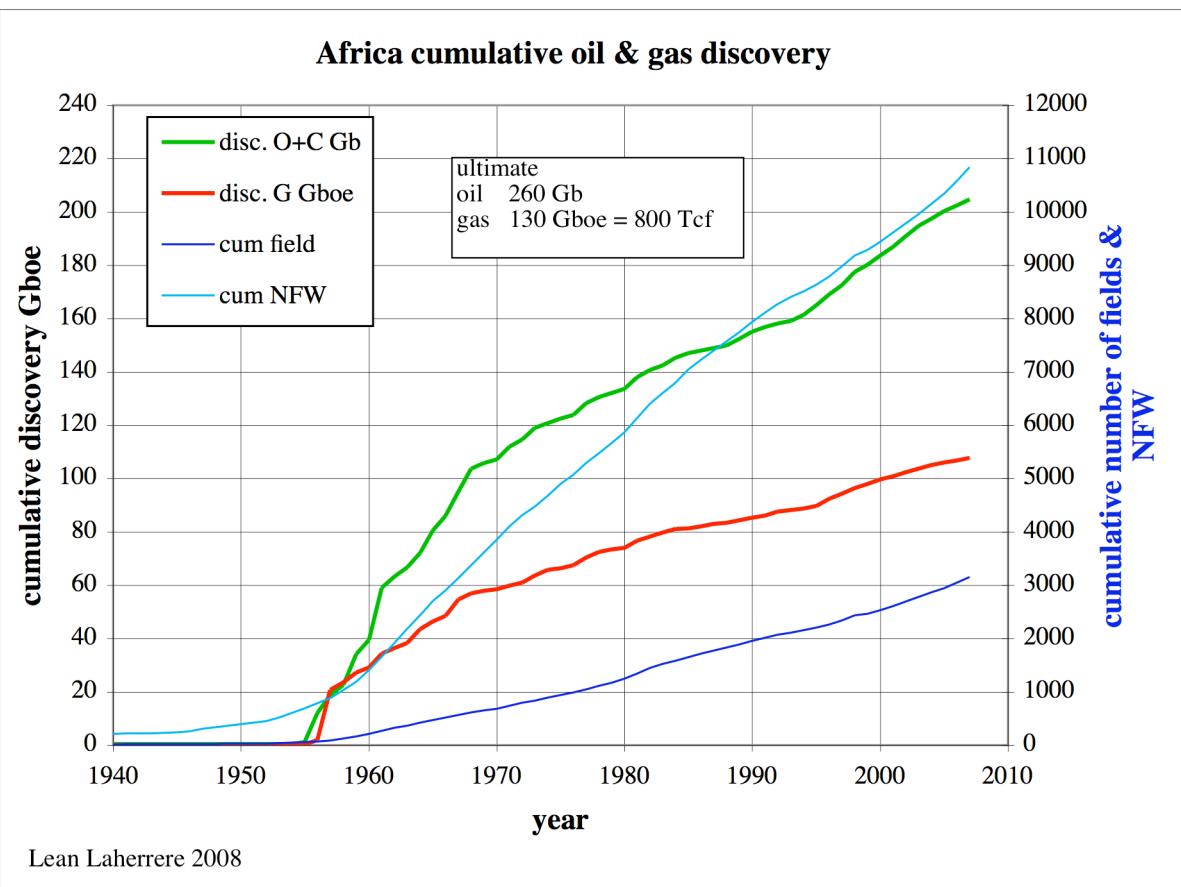




-Africa







-Aggregation by country

country	cum.	disc.	end 2007	ultimates	
Gb, Tcf/6	oil	gas		oil	gas
Algeria	32,1	33,3		35	35
Angola	22	4,3		35	8
Egypt	13,7	13,7		15	16,5
Libya	51,2	14,3		60	16,5
Nigeria	63,8	34		90	42
Cameroon	1,6	0,9		1,8	1,2
Chad	1,2	0,03		1,4	0,05
Congo	3,9	0,7		5	1
Cote d'ivoire	0,5	0,3		0,6	0,4
DR Congo	0,4	0,1		0,5	0,2
Eq Guinea	2,9	1,6		4	2
Gabon	4,5	0,5		5	0,7
Ghana	0,5	0,1		1	0,2
Madagascar	0,01	0,01		0	0
Mauritania	0,5	0,5		0,6	0,6
Morocco	0,04	0,08		0,05	0,1
Senegal	0,01	0,02		0,02	0,02
S.Africa	0,3	0,8		0,4	1
Sudan	3,9	0,2		5	0,5
Tunisia	2,2	0,8		2,5	0,9
Africa	205	106		263	127