The paper of Malcles et al. presents burial ages obtained in karstic networks of southern Massif Central. The authors propose for networks far from the river valley flanks or cliff walls that the well accepted epigenic speleogenesis model (network is formed when water table is stable then abandoned when the river is lower due to incision) cannot be applied and propose a model based on speleogenesis controlled by regressive denudation towards inner part of the plateau.

Despite I am a bit far from this topic but more attracted by the cosmogenic nuclide applications, I think that these data have to be published after rewriting with more explanations and simplification. At this stage, some parts of the paper are a bit fuzzy, and the cosmogenic methodology lacks important information. See pdf

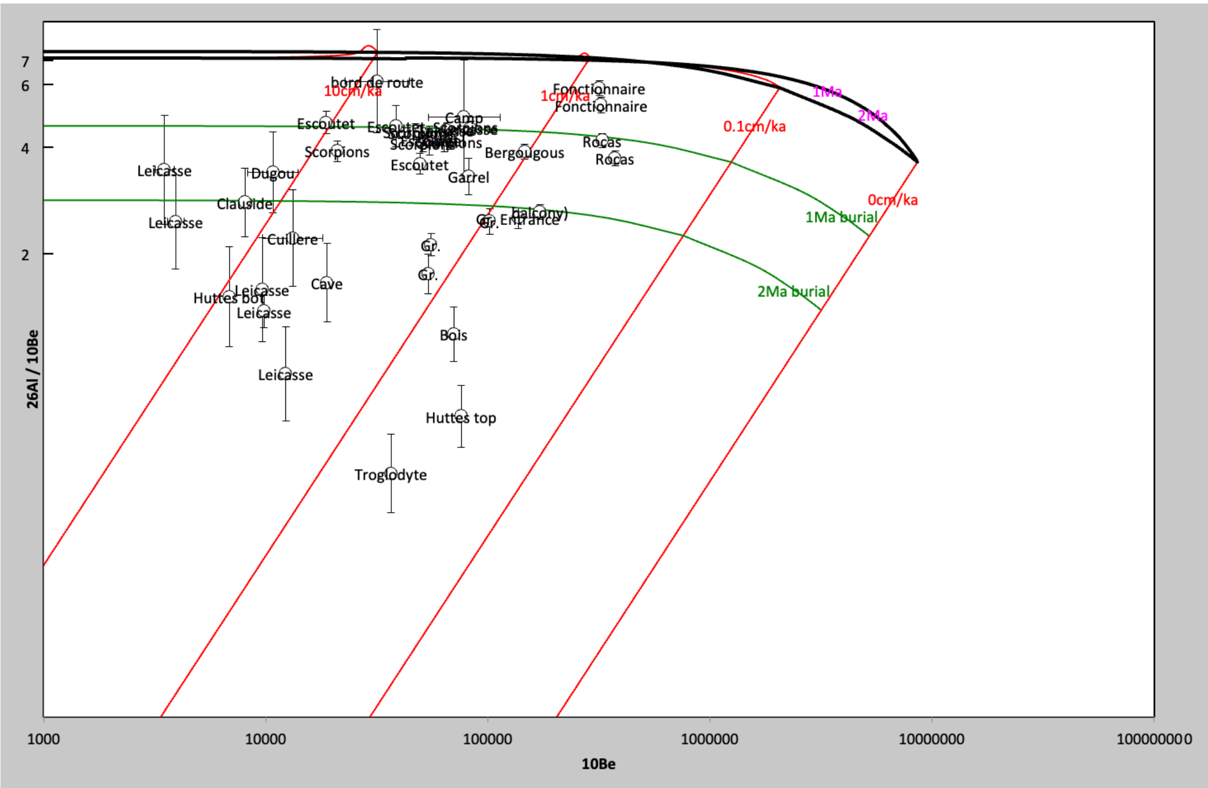
Part 3 :

Please provide the types of spikes used and their concentrations.
Precise the spallation production rate used.
What half-lives have been used for 10Be and ^{26}Al?
What is the spallation production rate ratio used for $^{26}Al/^{10}Be$ (6.75?)

Line 109 – 123: the age calculation explanations are not clear and difficult to understand.

Using the data set provided I have recalculated all ages and paleo denudation rates (see excel table at the end of this review) using a normal approach sample by sample, ignoring postproduction. The clauside amalgam can be modelled (2.04±0.46 Ma and 147.8 ± 33.16 m/Ma).

A banana plot will help to have in one figure the entire dataset.



Regarding the production rate used in the calculation we do not know if it the one of the cave location or the one of the sources of the sediment (mean production rate of the watershed). This will not alter the burial ages but will highly influence the paleo denudation rate determination.

Fig.3. try to use different symbols for a given site. This will help the reader working on black and white paper sheet. In this figure you have plotted two Rocas ages and two Fonctionnaire ages corresponding to two measurements on the same samples. If this is true do not present both data as this will give artificial more weigh to these ages. You can do this when working on different samples.

Line 140-144: the use of isochron approach is not helpful here.

Line 145-162: This par is hard to understand!! You are explaining that samples might have been already buried prior to they are deposited in the network; this yields to a scattering in the age distribution. How can you know the sample position in the alluvium cover before its burial in the network? (Line 52-155:" ***This sample with the younger age, was the one located closer to the surface in the surface deposited alluvium layer prior to burial. The older age (~4 Myrs) is a better measure, equal or younger, of the emplacement of the alluvium layer that was subsequently buried into the cave. This sample was the one located deeper in the surface alluvium layer before cave burial***")

Line 179-180: What is the mean displacement rate of the CFZ fault, and the mean offset after earthquakes? In Ritz et al. one can find max offset values of 20 cm and it is also mentioned in the same paper that no surface deformation was observed during historical seism.

Can you thus conclude that this fault can be responsible of the incision of the studied valleys? What about a global uplift due to Massif Central Mountains?

Fig. 4; change symbols and change police type for network far from the river cliffs.

Line 188: What do you mean by "**The unexpected result of diminished burial ages shown in Figure 3…**"?

Line 198. Can you explain you approach here:" ***speleogenesis paradigm (ESP) which would predict ages 2 to 4 ma older - or alternatively, a cave level elevation 150 to 250m lower than recorded compared to the regional base level at the time of the deposit)?***

Line 202: Why the absence of sediment in Rocas implies an age younger than 1Ma?
Line 208: Scorpions and Bergougnous sites seem to be affected by the Vis River. Why do you compare the Rocas sediments (from alluvial deposits on top of the plateau) with these two sites?
Why the same age of 1Ma cannot be related to the activity of the entire network from Sc/Be to Rocas?
As you proposed a new formation model it is worth better explaining this last part synthetized by fig. 6 and show how you construct the chronology from 1Ma to present.

	Long	Lat	Alt				Be	±	Al	±	Paleo denudation	Age	±			10Be model	26Al Model
				Pres. (mbar)	Stone sc	Lal sc	1e4at/g	1e4at/g	1e4at/g	1e4at/g	m/Ma	Ma	Ma	R modeled	R measured	1e4at/g	1e4at/g
Bergougous	3.493	43.889	426	963.11	1.43	1.43	20.15	0.4	77.87	3.46	11.38 ± 0.61	1.16	0.06	4.04	3.86	20.00	80.72
Scorpions	3.625	43.885	275	980.65	1.25	1.25	5.73	0.15	25.25	1.12	42.27 ± 2.36	0.95	0.05	4.56	4.41	5.68	25.90
Scorpions	3.625	43.885	275	980.65	1.25	1.25	6.04	0.13	26.4	1.09	37.85 ± 1.94	1.04	0.05	4.37	4.37	6.04	26.40
Scorpions	3.625	43.885	275	980.65	1.25	1.25	9.63	0.24	43.63	1.83	27.04 ± 1.44	0.80	0.04	4.88	4.53	9.43	46.04
Scorpions	3.625	43.885	275	980.65	1.25	1.25	2.53	0.08	9.82	0.58	81.13 ± 5.71	1.30	0.09	3.90	3.88	2.53	9.85
Scorpions	3.625	43.885	275	980.65	1.25	1.25	8.15	0.2	33.57	1.35	26.06 ± 1.35	1.16	0.06	4.12	4.12	8.15	33.57
Scorpions	3.625	43.885	275	980.65	1.25	1.25	6.17	0.17	25.15	1.22	34.54 ± 2.07	1.18	0.07	4.10	4.08	6.16	25.25
Escoutet	3.626	43.885	220	987.10	1.19	1.19	5.72	0.13	20.44	1.28	30.51 ± 2.14	1.48	0.10	3.56	3.57	5.72	20.36
Escoutet	3.626	43.885	220	987.10	1.19	1.19	6.32	0.15	26.32	2.37	36.49 ± 3.49	0.95	0.09	4.56	4.16	6.28	28.65
Escoutet	3.626	43.885	220	987.10	1.19	1.19	2.16	0.11	10.08	0.51	123.97 ± 9.3	0.77	0.06	5.01	4.67	2.08	10.42
Escoutet	3.626	43.885	220	987.10	1.19	1.19	4.47	0.12	20.4	2.72	66.79 ± 9.2	0.48	0.07	5.71	4.56	4.42	25.23
Troglodyte	3.469	43.744	485	956.33	1.50	1.50	5.17	0.13	2.47	0.63	4.54 ± 1.17	5.64	1.45	0.48	0.48	5.17	2.47
Cave	3.619	43.759	218	987.33	1.19	1.18	2.18	0.06	3.61	0.91	35.39 ± 9.01	3.12	0.79	1.66	1.66	2.18	3.61
Bois	3.614	43.755	273	980.88	1.25	1.25	8.44	0.2	9.96	1.72	6.22 ± 1.09	3.74	0.66	1.18	1.18	8.44	9.96
Garrel	3.615	43.834	184	991.34	1.15	1.15	9.26	0.21	30.51	3.47	20.62 ± 2.43	1.22	0.14	3.99	3.29	9.17	36.59
Garrel	3.615	43.834	200	989.45	1.17	1.17	7.26	0.17	30.32	2.16	28.75 ± 2.24	1.09	0.08	4.27	4.18	7.24	30.91
bord de route	3.709	43.954	175	992.40	1.14	1.14	3.54	1.18	21.6	0.15	119.5 ± 39.93	0.02	0.01	7.11	6.10	3.04	21.60
Camp	3.71	43.955	190	990.63	1.16	1.16	8.87	3.28	42.9	0.31	59.41 ± 22.01	0.02	0.01	7.06	4.84	6.08	42.90
Dugou	3.71	43.957	245	984.16	1.22	1.22	1.27	0.33	4.29	0.06	136.22 ± 35.57	1.61	0.42	3.38	3.38	1.27	4.29
Cuillere	3.71	43.957	354	971.44	1.34	1.34	1.7	0.53	3.75	0.07	794.48 ± 248.73	0.03	0.01	7.11	2.21	0.53	3.75
Clauside	3.71	43.96	487	956.10	1.51	1.51	1.14	0.08	3.16	0.67	147.8 ± 33.16	2.04	0.46	2.77	2.77	1.14	3.16
balcony)	3.537	43.964	470	958.05	1.49	1.49	24.73	0.57	64.52	2.79	5.83 ± 0.31	2.03	0.11	2.61	2.61	24.73	64.52
Gr.	3.537	43.964	470	958.05	1.49	1.49	7.67	0.17	13.41	1.67	16.17 ± 2.07	2.51	0.32	2.17	1.75	7.60	16.49
Gr.	3.537	43.964	470	958.05	1.49	1.49	7.87	0.18	16.6	1.12	15.15 ± 1.13	2.57	0.19	2.11	2.11	7.87	16.63
Gr.	3.537	43.964	480	956.90	1.50	1.50	14.67	0.31	36.02	2.88	9.26 ± 0.79	2.25	0.19	2.41	2.46	14.69	35.40
Gr. Entrance	3.537	43.964	510	953.46	1.54	1.54	20.27	0.5	50.83	3.07	7.1 ± 0.49	2.14	0.15	2.51	2.51	20.27	50.83
Rocas	3.482	43.841	310	976.56	1.29	1.29	41.35	0.87	171.96	7.17	5 ± 0.26	1.02	0.05	4.16	4.16	41.35	171.96
Rocas	3.482	43.841	310	976.56	1.29	1.29	47.34	1.56	175.4	6.7	3.75 ± 0.21	1.24	0.07	3.67	3.71	47.52	174.40
Fonctionnaire	3.467	43.805	278	980.30	1.25	1.25	39.73	0.78	207.82	9.87	7 ± 0.39	0.45	0.03	5.51	5.23	39.42	217.38
Fonctionnaire	3.467	43.805	278	980.30	1.25	1.25	38.89	0.98	226.86	8.79	8.42 ± 0.43	0.19	0.01	6.28	5.83	38.00	238.80
Huttes bot	3.496	43.814	463	958.85	1.48	1.47	0.95	0.04	1.43	0.46	90.11 ± 29.3	3.34	1.09	1.51	1.51	0.95	1.43
Huttes top	3.496	43.814	473	957.70	1.49	1.49	10.67	0.23	7.35	1.46	3.18 ± 0.64	4.80	0.96	0.69	0.69	10.67	7.35
Leicasse	3.558	43.817	245	984.16	1.22	1.22	9.9	0.21	44.55	1.87	22.92 ± 1.19	0.96	0.05	4.50	4.50	9.90	44.55
Leicasse	3.558	43.817	220	987.10	1.19	1.19	7.55	0.16	33.61	1.4	29.35 ± 1.51	1.00	0.05	4.45	4.45	7.55	33.61
Leicasse	3.558	43.817	240	984.75	1.21	1.21	1.44	0.04	1.32	0.4	28.8 ± 8.79	4.38	1.34	0.92	0.92	1.44	1.32
Leicasse	3.558	43.817	240	984.75	1.21	1.21	1.15	0.05	1.58	0.15	56.5 ± 6.03	3.53	0.38	1.37	1.37	1.15	1.58
Leicasse	3.558	43.817	240	984.75	1.21	1.21	0.46	0.04	1.13	0.33	267.19 ± 81.62	2.30	0.70	2.46	2.46	0.46	1.13
Leicasse	3.558	43.817	240	984.75	1.21	1.21	0.41	0.04	1.41	0.48	430.39 ± 152.7	1.58	0.56	3.44	3.44	0.41	1.41
Leicasse	3.558	43.817	240	984.75	1.21	1.21	1.13	0.04	1.79	0.6	67.16 ± 22.68	3.23	1.09	1.58	1.58	1.13	1.79