

The main objective of this short and well-illustrated paper is to present the open access database SedDARE-IB for sedimentary basins of Iberia and also its offshore basins. This important database appears to include only Mesozoic and Cenozoic sedimentary successions (i.e. no Paleozoic or older sediments). If so, it would be useful to explicitly state this. The paper also presents maps of depth to base Cenozoic and Top Paleozoic stratigraphic markers. These maps are rather small and could be presented to greater advantage by filling the full page. The paper briefly describes the geological characteristics of the major onshore and offshore Iberian basins. Some attention is needed to complete and harmonize the data provided for each basin. An illustrative modelling of depth to the 150°C isotherm is presented with intriguing results, which require a clearer explanation. But I think this has already been addressed.

I recommend publication with minor revisions.

More detailed comments.

Line 42: replace 'rocks sourcing them' with 'rocks in source areas'

Line 45 : replace 'whose detailed knowledge' with ' a detailed understanding of which'

Line 52 replace 'is instrumentale for ' with 'contributes to'

In the introduction it would be very useful to indicate the range of ages of the sedimentary succession in the database.

Line68 : replate 'the applicability of' with 'the potential uses of'

Line 104 : replace 'at c 156 Ma' with 'starting at c 156 Ma'

Line 107: replace 'at about 118 Ma' with 'starting at about 118 Ma'

Line 114 : replace 'salt-related' with 'salt-rich'

Line 130 replace 'occurrence' with 'development'

Section 2.2.1 Ebro Basin : Need to state clearly that this is a foreland basin.

2.2.2 Duero and Basque-Cantabrian basin : give thickness range, age range of sedimentary fill. Is this a foreland basin?

2.2.3 : give clear information on thickness range, age range of sedimentary fill.

2.2.5 : This setion is quite unlike the other basin descriptions. It describes the tectonic features and evolution of the Guadalquivir Basin but there is little information about the basins sedimentary fill. Would be good to give the same information for this basins as for the others.

Line 215: replace 'Similarly to' with 'Like the' or 'With the'

Line 221/ replace 'comprises' with 'involves'

230: suggest completion of sentence 'of the Acoustic Basement marker for most of the Western Mediterranean region, which is equivalent to the Base Cenozoic marker'.

Line 251: Estremadura Spur – needs to be shown on a figure

Line 259: outer shelf should read inner shelf?

259-260: Present day? sediment composition on the shelf varies with water? Depth

Line 275: shallow marine and shelf break limestones ... what is the age of these sediments?

Line 279: Setubal and Asao Vicente – these localities need to be shown on a figure

Line 288: Replace 'Neo-Tethys' by 'Atlantic'??

Line 291 : add: Carboniferous basement rocks of the SP2 zone (Fig. 1b)

Line 292: I would say the Guadelquivir basin lies to the SE of this basin? – Also I'm wondering if it makes sense to make this statement as the Guadelquivir basin did not exist when the rift forming?

Between Lines 300 and 309 – clarify and harmonise the ages given for the development phases of the Algarve basin.

Line 358 : replace 'differing' with 'new'?

Line 385: replace 'limitations in terms of' with 'limited'

Line 397: replace 'was' with 'were'

Figure 5 locate Valentia trough and Alboran Sea on the map.

Figure 5: Figure caption. I find the term 'Paleozoic-cover sequence boundary' unclear compared with 'top of Paleozoic basement'. I'm not sure I understand why you need to make this distinction?

Figure 5 : in caption replace 'discordance' with 'unconformity'

420 : correct positions of brackets

437: replace 'comprise' with 'provide'

479: replace 'it serves' by 'it is identified'

Section 4 – influence of sediment thickness and nature on geothermal potential – Your response to the first reviewer has answered my request here to provide a clearer explanation of the model results.

Figure 7: You plot values for various basins but it is not clear how their data were gathered. A deeper discussion of their significance would be helpful to illustrate the relevance of your models.

Line 503: 'other parameters considered' ... Are these input parameters that are held constant in all the models?

Line 505 replace 'concerning.....' with 'with varying sediment thickness and surface heat flow and for....'

Line 506: four different thermal conductivity values for the sediment'.... It would be very useful for the reader to appreciate the relevance of these values for real sedimentary basins?

Figure 7. Colour scale for depth to 150°C isotherm is I presume in km? add km to the scale or say in figure caption...

Line 541: replace 'a rise' with 'an increase'