Interactive comment on “Upper Jurassic carbonate buildups in the Miechów Trough, Southern Poland – insights from seismic data interpretation” by Łukasz Słonka and Piotr Krzywiec

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This is an intriguing and thought-provoking paper in the sense that it deals with an “evergreen” subject for those of us who work in the petroleum industry, i.e. the seismic identification of reservoir-grade carbonate build-ups. The comments below should help to produce a final version:

1) On figure 2, the analogue areas mentioned should be annotated and a few more relevant examples should be added, “closer to home”, i.e. in Austria, Czech Republic and Poland. Adámek, J., 2005. The Jurassic floor of the Bohemian Massif in Moravia–geology and paleogeography. Bulletin of Geosciences, 80(4), pp. 291-305.

2) I would certainly include the reference to this paper and also paint the position of the Polish Upper Jurassic reefs in a global context, such as reef types and reef builders: Wolfgang Kiessling, Erik Flügel and Jan Golonka (1999) Paleoreef Maps: Evaluation of a Comprehensive Database on Phanerozoic Reefs. AAPG Bulletin, 83, 1552–1587.

3) Frankly, on some of thee seismic sections, the detection limit for the interpretation is a challenge. It would mbe good to provide some close-ups on some of the features, e.g. on Figure 9, the singular carbonate build-up... I wonder whether some other seismic displays, such as inst. frequency or interval velocity, may be more helpful to show the presence and outline of these build-ups in a more convincing manner? Any sensitivity work on the potential use of velocity pull-up, i.e. could one expect to see one at all, or all these carbonates have pretty much the same velocity, i.e. variations less than, say, 5-10%?

4) Figure 16 is an interesting attempt to compare “apples and oranges”, but I would not
do it. Regardless of the order of magnitude difference in scales, the outcrop photos are just not that convincing to see the difference between the massive and bedded facies. I suggest to drop this figure.