Interactive comment on “Some improvements in subbasalt imaging using pre-stack depth migration” by I. Flecha et al.

Anonymous Referee #2

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This paper is working on a study of improvement of the imaging with pre-stack depth migration. This paper is worth for publishing. But it is required to be polished up. I think moderate revision is required before publishing. Following problems have to be considered.

1. As the authors wrote “The presence of a high-velocity and highly heterogeneous layer (basalt) embedded in low-velocity sediments, has a detrimental effect on imaging beneath this structure”. Then authors improved the method of imaging with pre-stack depth migration. The results which are shown in figure 3 show clear images. But, it is not clear how is the images improved. The comparison between the images with ordinary method and with this method will be required. 2. This paper wrote two topics: one is the improvement of migration method, the other is the application of the method to the seismic data. We suppose that the improvement of migration method part is very important in this paper. However, the description of the method is not so much. It was very difficult to understand of the whole image of the improvement. I suppose more detail explanation of the improvement of the method has to be written.

Careful modification will be required before publishing.

Interactive comment on Solid Earth Discuss., 2, 1, 2010.