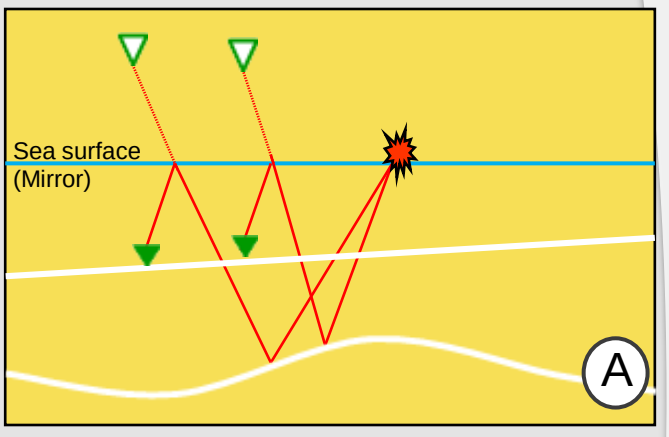
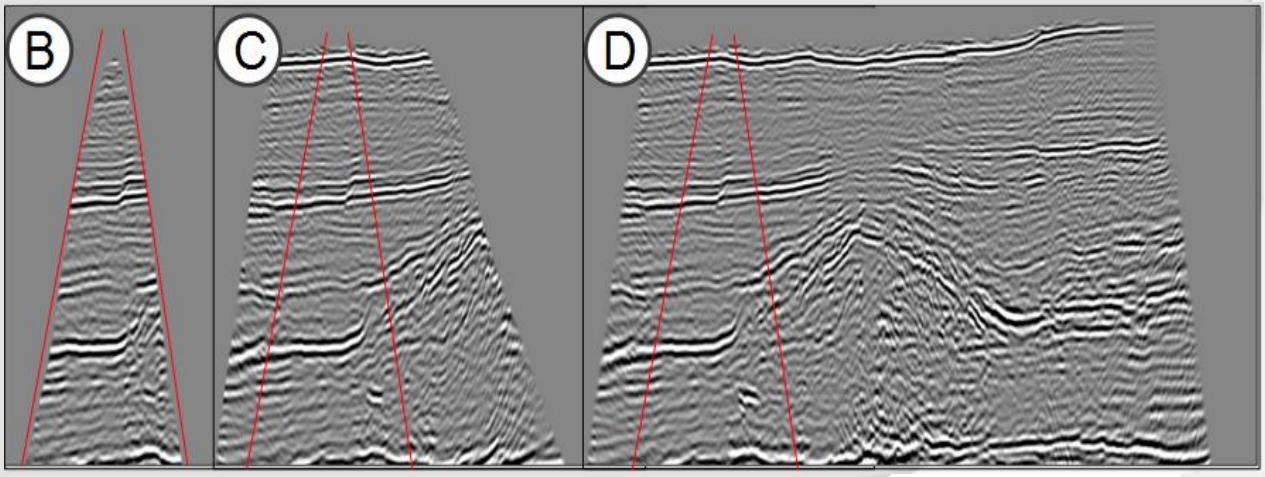
Mirror RTM

You have OBS data and do not know how to get the best image possible out of the data?
There is just one option you have to get a perfect result in depth:
TEECsolutions Mirror Reverse Time Migration

When going into depth with OBS data there are several options you have to image structures best. The easiest way would be a Kirchhoff Depth Migration. However, if the structures are complex or salt is involved you would want to go for a Reverse Time Migration as it is much more sophisticated than the Kirchhoff operator. Problematic for Kirchhoff Depth, as well as RTM are the shallow regions which cannot be imaged well due to the shot cone opening up with depth staring at the seafloor where the OBS is located. Due to the reciprocity of the shot-receiver coupling each OBS can be considered as a shotpoint. By applying the Mirror RTM the original shot location is being mirrored at the water surface to an imaginary shot point. That way the shot cone is fully opened at the original shot surface, imaging the whole target area.



Every OBS position is mirrored to a surface point, which will act as a secondary source during mirror Migration.



One RTM migrated shot (B) compared to the same Mirror RTM migrated single shot (C) compared to the full Mirror RTM migrated dataset (16 OBS stations, D). Red lines show the mute zone of the conventional RTM result for a single shot from (B).

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