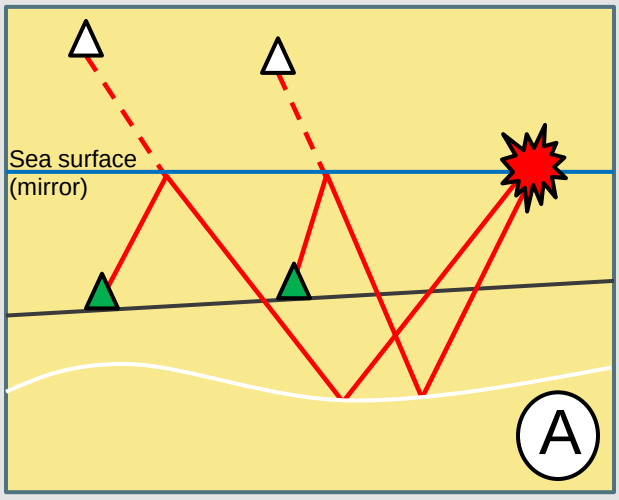
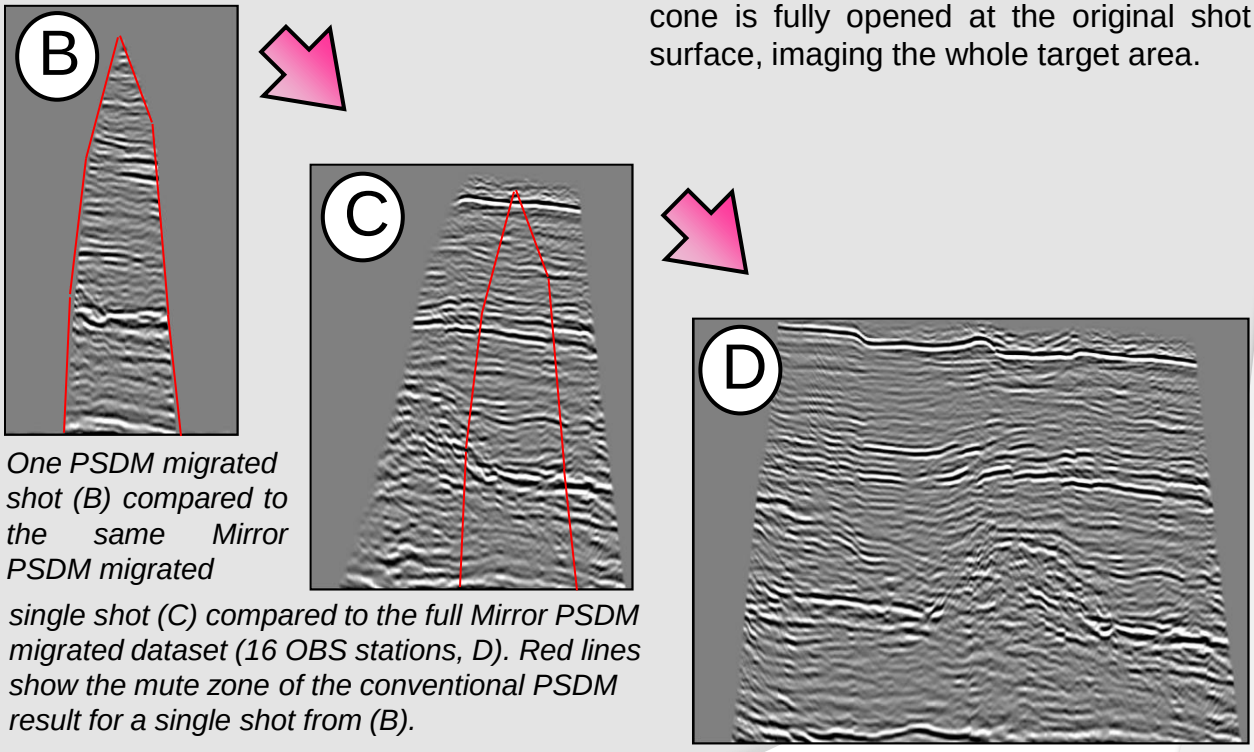
Mirror Kirchhoff Depth Migration

You have densely covered 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 Kirchhoff Depth Migration



Every OBS position is mirrored at the Sea surface to a surface point, which will act as a secondary source during Kirchhofff mirror Migration (A).

Nowadays, OBS surveys are often densely acquired datasets and there are several options how to depth migrate the data. A standard Kirchhoff Depth would be the fastest and most reasonable solution. However the result might not be satisfying due to low coverage in the shallow, caused by the shotcone which opens up with depth starting at the OBS location on the seafloor. The application of mirror Kirchhoff Depth Migration will solve this problem. Due to the reciprocity of the shot-receiver coupling each OBS can be considered as a shotpoint. By applying the Mirror PSDM 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.



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

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