

### Marine Statics

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*Statics are in general a problem which is commonly encountered in land seismic because of weathering layers and the elevation of shots and receivers. In marine seismic, similar problems exist, though to a lesser extent, in areas where there are shallow anomalies which could be due to gas, soft weathering layers on the sea bottom, or coral reefs. Such irregular changes in very shallow lithology create seismic ray path problems by either increasing or decreasing the seismic velocity and therefore introducing statics problems.*

*Examples of such problems are seen in several areas offshore Sarawak. The shallow anomalies differ in area size and are rather irregular in shape.*

*To solve marine statics problems in 2D processing, the assumptions usually made are:-*

- (1) Feathering angle is negligible and therefore shot and receiver stations lie nearly in a straight line.*
- (2) The statics to be computed are surface consistent.*

*Our experience while processing data acquired in 1985 and some of the older vintages shows that remarkable improvement can be achieved on the stack sections with statics application. Application of statics gave an overall improvement in continuity of events resulting in better interpretable stacks.*

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