

Olex can be connected to ITI trawl positioning and/or various ROV positioning systems. The trawl is visualized in the Olex screen in 2D and 3D with distance, direction, and door spread. It is also possible to track each trawl door in addition to own vessel.



Trawl positioning using NMEA \$PSIMSSB

The NMEA sentence \$PSIMSSB comes in different varieties, those understood by Olex, contain a bearing from the boat to the trawl. Others will give format errors. ITI must always know the vessel's true heading.

The generated sentence should contain at least 10 fields separated by commas, the first one being a time stamp. The second is the name of the ROV target, and the third should be

"A". The fourth field is empty, and the fifth should be "C". The sixth should be either "N", "E" or "H", and the seventh can be any character. Fields number 8 and 9 is the horizontal distance in meters from boat to ROV, and number 10 is the vertical distance.

Here is an example of a correct \$PSIMSSB, as described above:

```
$PSIMSSB,170800.82,B01,A,,C,E,M,329643.883,6596305.382,-0.977, 0.0,N,*,43
```

Should the sixth field be "H", the sentence \$PSIMSNS must be received on same port as \$PSIMSSB, to convey the heading of the boat.

Below is an example of \$PSIMSSB which would not work, but instead give format error:

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$PSIMSSB,170800.82,B01,A,,U,E,M,329643.883,6596305.382,-0.977, 0.0,N,*,43
```

The error is that field 5 is "U" which means the sentence provides an absolute position in UTM instead of a relative bearing.