ADCP OS150 Issue

- **Situation:**
  - Discovery of problems on ADCP OS150 on board Atalante April 2011, confirm in July 2011.
  - New installation of ADCP on board Thalassa in July 2011. ADCP OS150 doesn’t follow furnisher specifications at sea trials on august 2011.
Detail of issue

After sea trials on board Atalante in July 2011 and Thalassa in August 2011 (after installation of new ADCPs), we noted that:

⇒ difference between speed GPS and bottom track

⇒ sound range too short

⇒ first speed current layers proportional to vessel speed

Idea : issue of ADCP OS150 acoustic windows

Is it only an acoustic windows issue or is it more complex?

OFEG-TECH, 22nd-23rd nov 2011, Southampton
➢ **Investigation – sept/oct 2011**

Tests in acoustic tank of several acoustic windows.

We tested different materials and several thickness.

⇒ choose material to test at sea

➢ **Sea trials – oct 2011**

First trials of ADCP OS150 with 2 new acoustic windows on TVO, on board Thalassa.

⇒ results are better than in August. Need to continue in this way.
Sea trials – fev 2012

We plan to do more trials next February on TVO, on board Pourquoi pas?.

Objective of these new sea trials:

⇒ Find the right couple material/thickness for our acoustic windows

⇒ Be sure that it’s only a problem of acoustic windows and nothing else

OFEG-TECH, 22\textsuperscript{nd}-23\textsuperscript{rd} nov 2011, Southampton