Petit déjeuner du RTRA

Oceanographic in situ sensors: Challenges and opportunities:

le 11 juin 2010, de 8 h 30 à 10 h 00 A l'Observatoire Midi-Pyrénées (salle Pyrénées)

Animé par Ralph Prien, du Département de Chimie Marine, Liebniz Institute für Baltic Sea Research Warnemünde, invité du projet MAISOE,

The talk will set out the challenges engineers are facing when developing in situ sensors for the harsh environment that is the ocean. These challenges are exacerbated by the accuracy and precision required by oceanographers to answer their scientific questions. They reach from processes on the sub-centimetre and sub-second scale to basin-wide decadal changes.

Large observation systems like the Argo float programme and arrays of moorings have been among the success stories of the past decade in oceanography in spite of carrying mostly sensors for physical parameters only. Being able to equip these platforms with sensors for additional chemical and biological parameters would multiply the scientific output of these observing systems.

Some of the developments of in situ sensors in recent years will be presented as well as the potential of promising technologies for further developments.