

## Comparison of tidal signals between ocean bottom pressure data and ocean tide models off Lutzow-Holm Bay

# Yuichi Aoyama[1]; Koichiro Doi[1]; Yoshifumi Nogi[1]; Kazuo Shibuya[1]; Naoto Ishikawa[2]

[1] NIPR; [2] Graduate School of Human and Environmental Studies, Kyoto Univ.

Ocean bottom pressure (OBP) measurement has been conducted off Lutzow-Holm Bay, the Southern Indian Ocean since Dec., 2004, to study seasonal mass redistributions in the Antarctic Ocean and validate GRACE data.

The OBP gauge was installed to the north of Syowa Station at 37.8E, 66.9S. We have already obtained about 1.2 years OBP data from Dec., 2004 to Feb., 2006. The observed OBP data at 1 minute sampling intervals are decomposed by tidal analysis software BAYTAP into tidal (M3 to SSA), trend and short-term irregular components. Since the smoothed (low-passed) non-tidal residual has already been compared with an GRACE-derived equivalent water thickness, in this paper, we focus the observed tidal signals. The observed tidal parameters are compared with those from the ocean tidal model such as NAO.99.b, GOT.2b, CSR4.0, FES2004.