



Australian Government

Geoscience Australia

Geodetic Connections to Tide Gauge at Rosslyn Bay

RESULTS OF OPTICAL LEVELLING

| Bench Mark Name | PSM 45274 | PSM 82477 | PSM 63878 | SSBM | PSM 47784 |
|---------------------|-----------------------|--------------------------|-----------------------------|--------------------|-------------------|
| Mark description | Deep Driven Mark | Deep Driven Mark | Stainless steel pin in rock | Seaframe sensor BM | Mark in conc kerb |
| AHD Ht (m) May 1994 | 11.268 | 8.14 | 5.937 | 5.807 | 4.253 |
| AHD Ht (m) Nov 1995 | - | 8.14 | 5.937 | 5.808 | 4.252 |
| AHD Ht (m) Aug 1998 | - | 8.14 | 5.938 | 5.804 | 4.253 |
| AHD Ht (m) Dec 2001 | - | 8.14 | 5.9374 | 5.8079 | 4.2516 |
| AHD Ht (m) Jul 2011 | - | 8.14 | 5.9337 | 5.7912 | 4.2482 |
| Comments | Datum for AHD heights | Coastal array Primary BM | Coastal array BM | Tide Gauge Mark | Coastal array BM |

Notes:

1. The vertical offset from the Seaframe Sensor Bench Mark up to the Seaframe Sensor Reference Point is approximately 2cm.
2. The following information is recorded annually by NTF:
 - Aquatrak head number
 - Calibration tube number
 - Sensor offset
 - Seaframe Sensor Reference Point vertical offset from Seaframe Sensor Bench Mark
 - Dates of Service
3. On 26 August 2009 the SEAFRAME sensor was rotated 90 degrees to the right hand side of its supporting pile (i.e. repositioned) to allow for the installation of a safe work platform. A large contribution of the 16.7 mm height change of the SSBM between the December 2001 and July 2011 surveys is likely a result of this repositioning.