**Observations：**

The regular ice observation was carried out during March to December 2012 every 2~7 days near Chinese Zhongshan Station in Prydz Bay. Snow and ice thickness, freeboard, ice type and characters were recorded at two sea ice observation positions (SIP), with one was first-year ice (SIP-FYI) and another was multi-year ice (SIP-MYI). The summary of gap layer records observed at two sea ice observation position SIP-MYI and SIP-FYI near Zhongshan Station in 2012 was presented here. NA means no available data. MYI and FYI represents multi-year ice and first-year ice, respectively.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Site | Date | Snow thickness (cm) | Ice thickness (cm) | Freeboard (cm) | Surface layer thickness (cm) | Gap layer thickness (cm) | Ice type |
| SIP-MYI | 2012/3/12 | 0 | 118.0 | 12.0 | ~80.0 | NA | MYI |
| 0 | 110.0 | 11.5 | ~80.0 | NA | MYI |
| 2012/3/14 | 0 | 104.8 | 9.8 | ~60.0 | NA | MYI |
| 0 | 113.0 | 10.0 | ~60.0 | NA | MYI |
| 0 | 106.2 | 10.8 | ~60.0 | NA | MYI |
| 0 | 104.3 | 11.0 | ~60.0 | NA | MYI |
| 2012/11/30 | 0 | 147.0 | 11.0 | 15.0 | NA | MYI |
| 2012/12/2 | 0 | 140.0 | 6.0 | 13.0 | NA | MYI |
| 2012/12/5 | 0 | 138.0 | 8.0 | 14.0 | NA | MYI |
| SIP-FYI | 2012/12/11 | 0 | 140.0 | 20.0 | 10.0 | 10.0 | FYI |