

Diving Bubble Model Data Correlations

KJYb_Y'6F^{1*}UbX'C@YUfm'HF²

¹Computational Physics C and C Dive Team, Los Alamos National Laboratory, Ldr Los Alamos, USA

²Technical Diving Operations, American Diving and Marine Salvage, Tampa, FL 33578, USA

*7cffYgdc**X**Jb['Uih\cf. Wienke BR, Program Manager, Computational Physics C and C Dive Team, Los Alamos National Laboratory, Ldr Los Alamos, USA, Tel: +15056671358; Fax: +15056657725; E-mail: vkhw4yfn'jb_'bYh

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This short article deals with useful and modern bubble models used to stage divers to the surface and correlations, if and when they exist, with actual data, usually decompression sickness (DCS) outcomes across a limited spectrum of exposures. Many of the early (wet) tests were carried out by world Navies, later by hyperbaric chamber testing and today also by statistical inference from downloaded computer profiles. All have contributed to correlation of models and data but in varying degrees as the scope of mixed gas, open circuit (OC) and rebreather (RB), nonstop to saturation and sea level to altitude diving is immense. No amount of wet or chamber testing will ever cover the ground here, but there is considerable hope and potential for downloaded computer profile data coupled to DCS outcomes to provide necessary correlations across the varied activities of modern diving.

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