Bornemann, Horst (2016) Dive, time depth profile (DTDP) - Description of parameter, Alfred Wegener Institute Helmholtz-Centre for Polar and Marine Research, Bremerhaven. hdl:10013/epic.26932.d001

Parameter

Dive, time depth profile [m]   *Abbreviation: DTDP*   *Parameter no: 51217*

In accordance with data derived from electronic instruments of several manufacturers we use processed data on the animal's behaviour in different formats and at varying resolutions.

Dive depth *profiles* at <u>varying time resolutions</u> contain ambient water pressure measurements recorded continuously over periods of up to 12 days. This configuration is optional for Pillbox logger and Multi channel tracking recorders manufactured by Driesen & Kern. Some types of instruments combine several behavioural parameters by providing data on diving behaviour in tandem with data on physiological or locomotory variables.

It is imperative to read the "Further details" section of each event label prior to data retrieval and analyses. The section summarizes the hardware configuration and the user-defined settings upon deployment. For technical specifications on hard- or software configurations of the different satellite transmitters you have to consult the respective manufacturers.

Dive depth *profiles* collected using Series 9000 SMRU SRDLs contain a set of five data points reflecting the most characteristic intermediate depth points of every dive. These depth points are denoted as D0 – D5. For most deployments one of these is guaranteed to be the maximum dive depth of the respective dive. The depth points go along with percentage values of dive duration elapsed since the beginning of the dive at each of the intermediate depth points. These values are denoted as T0 – T5. The dive profile data are aggregated with information on dive duration of each dive (parameter DDU). Dive duration signifies the length of time (minutes) between the crossing of the dive-start threshold on the descent and the dive end threshold on the ascent. These data do not have an Argos quality flag, as they have been subjected to a filter algorithm defined by Sea Mammal Research Unit.

D0   Start point of dive; depth = 0 [m]
D1 1st intermediate depth point of dive [m]
D2 2nd intermediate depth point of dive [m]
D3 3rd intermediate depth point of dive [m]
D4 4th intermediate depth point of dive [m]
D5   End point of dive; depth = 0 [m]

T0   Start point of dive = 0 [%]
T1   percentage of dive duration elapsed between D0 and D1 [%]
T2   percentage of dive duration elapsed between D0 and D2 [%]
T3   percentage of dive duration elapsed between D0 and D3 [%]
T4   percentage of dive duration elapsed between D0 and D4 [%]
T5   percentage of dive duration elapsed between D0 and D5 = 100 [%]

DDU   dive duration [min]