

Bornemann, Horst (2003) Dive, time at surface, relative (DTASR) - Description of parameter, Alfred Wegener Institute for Polar and Marine Research, Bremerhaven, hdl:[10013/epic.26928.d001](https://hdl.handle.net/10013/epic.26928.d001)

Parameter

Dive, time at surface, relative [%] *Abbreviation: DTASR* *Parameter no: 31472*

Satellite transmitters usually have a seawater conductivity sensor (SCS). The sensor monitors whether the unit is submerged or above the sea surface. Conductivity readings at the SCS terminals can be used to switch the transmitter into certain modes, e.g. "transmission" or "sleep". It can also be used to monitor at-surface intervals or haul-out periods on land or ice. Depending on the manufacturer of the transmitter, the conductivity sensor can be matched with user-defined threshold-depths for transmitting to the polar-orbiting satellites at different repetition rates. The repetition rate may be set to shift from, e. g. approximately 90 s intervals (on-land interval denoted as "dry" or "0") when the sensor is disconnected for a user-defined number of consecutive transmission intervals to approximately 50 s (at-sea interval denoted as "wet" or "1") or vice versa.

In accordance with data derived from satellite transmitters of several manufacturers we use processed data on the animal's at-surface time or haul-out on land or ice in different formats and at varying resolutions.

At-surface *condition* at intermediate resolution shows the percentage amount of each hour the tag's SCS indicated "dry". Hence 100% corresponds to 60 min or 1h. The hourly percentages do not need to be consecutive. This configuration is optional for SPOT5 and SPLASH tags manufactured by Wildlife Computers. Satellite transmitters prior to SPOT5 and SPLASH denote the percentage amount relative to a 6 hour interval, and are therefore denoted as at-surface *condition* at low resolution. The data are associated with parameter 2162 *Dive, depth frequency* (DDF).

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.