



ARGOS satellite monitoring

Datawell - Oceanographic Instruments

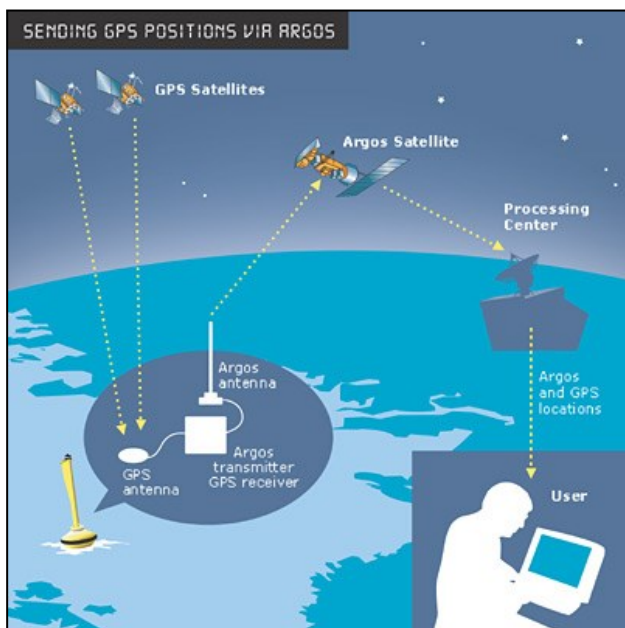
Argos satellite based monitoring, tracking and data collection for Waverider buoys

Argos is a worldwide network of satellites and ground stations maintained by CLS. Argos can monitor the position of a Waverider buoy, track a drifting Waverider buoy and collect basic wave data.

Positions, trajectories and data are made available via a specially designed website, where they are displayed on maps, in tables or charts. They can also be received automatically by email, directly through mapping software, fax or cd-rom.

Monitoring and Tracking

Monitoring and Tracking are the main applications of the Argos system. With Argos, the position of the buoy is monitored with GPS precision. This feature is ideal for monitoring a buoy and for retrieving drifting buoys.



Data Collection

Basic wave data updates are transmitted by the Waverider every ½ hour (DWR-MkIII, DWR-G) or every 3 hours (DWR4 (/ACM)). Although Argos only allows a limited amount of data to be collected, basic wave parameters like Hs and Tz are available. Surface current speed and direction at each hour in the last 3 hours are added on the DWR4(/ACM). On the DWR-MkIII and DWR-G an additional “classic” mode is provided for users using data collection software originally designed for the MKI and MKII Directional Waveriders. Please see the specifications table for a list of the available parameters in the different transmission modes.

Compatible with 28 bit ID

The Datawell Argos implementation is fully compatible with both 20bit and 28bit Argos ID's. As the number of 20bit ID's is limited, compatibility with the newer 28bit ID's is mandatory for continuing availability in the future.

Availability

Argos satellite monitoring is available on the DWR-MkIII, DWR-G (including DWR-G4) and DWR4(/ACM) Waverider buoys.

Links

For more information about Argos please refer to the Argos websites at:

<http://www.cls.fr>

and

<http://www.argos-system.org>

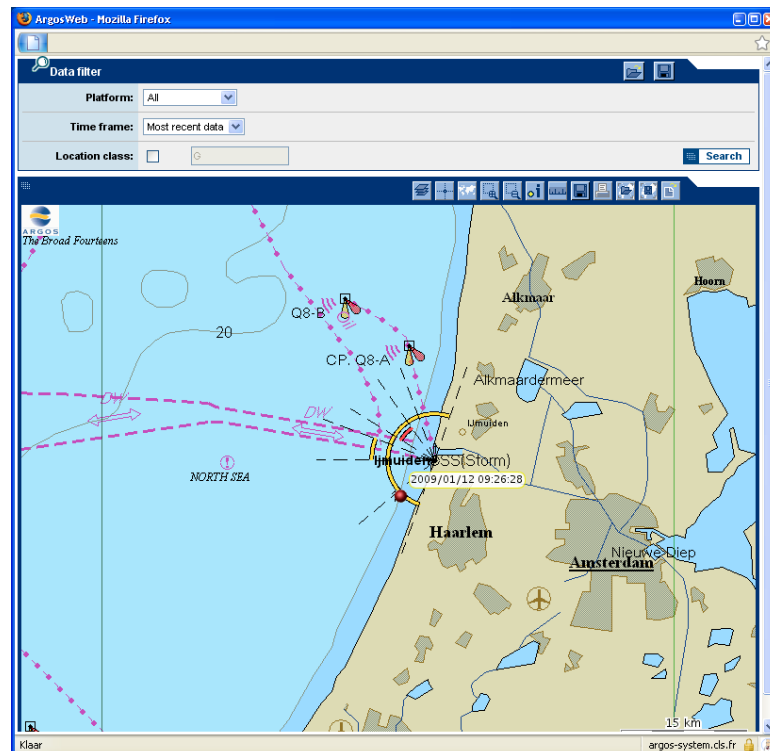


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Specifications

	Transmission Mode	Tracking / Accuracy	Data
DWR-MkIII, DWR-G	mode 3	GPS / average 10m	Hs, Tz, spectral moments (Ti, Te, T1, T3, Tc, Tdw, Tp and 1/Qp), Sea water temperature, battery status
	mode 4	GPS / average 10m	Hs, Tz, spectral moments (Ti, Te, T1, T3, Tc, Tdw, Tp and 1/Qp), Sea water temperature, battery status, spectrum (heave in 27 bands)
	"classic" <i>(not compatible with 28bit ID's)</i>	Doppler / average 350m	Hs, Tz, Peak Direction and spread, Sea water temperature, battery status, spectrum (heave and direction in 15 bands)
DWR4 / ACM	default	GPS / average 10m	Hs, Tz, spectral moments (Ti, Te, T1, T3, Tc, Tdw, Tp and 1/Qp), Sea water temperature, battery time remaining, ACM speed & direction



Monitoring a Waverider with Argos