| Infrastructure (short name) | POSEIDON Observatory (POSEIDON) | |
|--------------------------------|---|----------------|
| Installations (short name) | POSEIDON BUOYS NETWORK & SOUTH AEGEAN BUOYS (POSEIDON BUOYS) | |
| Location | Eastern Mediterranean Sea | |
| Legal name of organization | Hellenic Center for Marine Research HCMR | Met-Ocean-Isun |
| Location of organization | Athens GREECE | hcmr |
| Contact | Leonidas Perivoliotis, Iperiv@hcmr.gr Hellenic Centre for Marine Research 46.7 km Athens-Sounio Ave. PO Box 712 Anavyssos, Attica GR-190 13, Greece Phone: +30-22910 76400 Fax:+30-22910 76323 | |
| Web site address | http://www.poseidon.hcmr.gr | |

Description

POSEIDON is an operational marine monitoring, forecasting and information system for the Greek Seas. It was developed by the Hellenic Centre for Marine Research (HCMR, www.hcmr.gr) and collaborating institutes in four phases over the past 12 years. The basic monitoring infrastructure of POSEIDON comprises of a fleet of 15 oceanographic buoys (SeaWatch and Wavescan types) as well as maintenance and calibration facilities that support the operation of 10 fixed positions in the Aegean and Ionian Seas. The buoys (POSEIDON BUOYS) are permanently moored in the Aegean and Ionian Seas, 3 of which are moored in the south Aegean Sea (POSEIDON SOUTH AEGEAN BUOYS).

POSEIDON BUOYS NETWORK: 7 SeaWatch and Wavescan buoys, permanently deployed in Aegean and Ionian Seas.

POSEIDON SOUTH AEGEAN BUOYS: 3 SeaWatch and Wavescan buoys, deployed in Saronikos, Santorini and Cretan Sea

Both the components of POSEIDON routinely monitor

atmospheric conditions at sea level (wind speed and direction, atmospheric pressure, air temperature at all sites as well as relative humidity, precipitation and radiation components at selected sites)

surface wave conditions (height, period, direction)

surface currents (speed and direction) and hydrological (temperature, salinity) conditions

The exact number and position of moored buoys may alter depending on operational limitations during the access period.

Service offered

The TNA offered by the POSEIDON system to the project includes access to the coastal moored buoys of the network, i.e. to 8 out of the 10 operating sites. Depending on user needs the access can be offered either for one of the existing stations of the network or for several stations for a

smaller time period each.

The buoys are offered as a test bench for existing and new sensors. Spare buoys stored at HCMR premises can also be used as test bench (e.g. for interface with new sensors).

Access to moored buoys will be made during the regular maintenance visits (2-4 per year) onboard the R/V Aegaeo. Access to stored buoys has no time limitations. All operations will be carried out by the scientific and technical personnel of POSEIDON. In case of integration of new sensors, the user will be responsible for the software and hardware adaptations and the relevant costs, but the POSEIDON personnel will assists when necessary and will have the responsibility for on-buoy operations.

Instruments/Sensors

| Instrument | Measured Parameter(s) | Elevation/Depth | Sampling frequency | Frequency of data |
|--|--------------------------|----------------------------|-----------------------|-------------------|
| Young 04106 | Wind speed/dir., | +3 | 3h | recovery 3h |
| | - · · · | | | |
| Vaisala PTB 220A | Air Pressure, | 3 | <u>3h</u> | 3h |
| Omega | Air temperature, | 3 | 3h | 3h |
| Seatex MRU | Wave Height, | 0 | 3h | 3h |
| | direction, period | | | |
| Aanderaa 3919A | SST, SSS surface, | -1 | 3h | 3h |
| Nortek Aquadopp 400 kHz | Currents | -1 | 3h | 3h |
| Seabird 16plus- IMP C-T Seabird 37-IM C-T Aanderaa 3919A (surface) | Temperature | -1, -20, -50, -75, -100 | 3h | 3h |
| Seabird 16plus- IMP C-T Seabird 37-IM C-T Aanderaa 3919A (surface) | Salinity | -1, -20, -50, -75, -100 | 3h | 3h |

Athos Station. 39° 58' 4.8"N. 24° 43' 44.4"E

Lesvos Station, 39° 09' 28.79"N, 25° 48' 46.79"E

| Instrument | Measured Parameter(s) | Elevation/Depth | Sampling frequency | Frequency of data recovery |
|----------------------------|-----------------------------------|-----------------|--------------------|----------------------------------|
| Young 04106 | Wind speed/dir., | +3 | 3h | 3h |
| Vaisala PTB 220A | Air Pressure, | 3 | 3h | 3h |
| Omega | Air temperature, | 3 | 3h | 3h |
| Seatex MRU | Wave Height, direction, period | 0 | 3h | 3h |
| Aanderaa 3919A | Temperature, Salinity | -1 | 3h | 3h |
| Nortek Aquadopp 400 kHz | Currents | -1 | 3h | 3h |

| Skyros Station, 39° 06' 58.3194''N, 24° 27' 46.44''E | | | | |
|--|-----------------------------------|-----------------|--------------------|----------------------------------|
| Instrument | Measured Parameter(s) | Elevation/Depth | Sampling frequency | Frequency of data recovery |
| Young 04106 | Wind speed/dir., | +3 | 3h | 3h |
| Vaisala PTB 220A | Air Pressure, | 3 | 3h | 3h |
| Omega | Air temperature, | 3 | 3h | 3h |
| Seatex MRU | Wave Height, direction, period | 0 | 3h | 3h |
| Aanderaa 3919A | Temperature, Salinity | -1 | 3h | 3h |
| Nortek Aquadopp 400 kHz | Currents | -1 | 3h | 3h |

Mykonos Station, 37° 31' 1.2"N, 25° 27' 50.4"E

| Instrument | Measured Parameter(s) | Elevation/Depth | Sampling frequency | Frequency of data recovery |
|----------------------------|-----------------------------------|-----------------|--------------------|----------------------------------|
| Young 04106 | Wind speed/dir., | +3 | 3h | 3h |
| Vaisala PTB 220A | Air Pressure, | 3 | 3h | 3h |
| Omega | Air temperature, | 3 | 3h | 3h |
| Seatex MRU | Wave Height, direction, period | 0 | 3h | 3h |
| Aanderaa 3919A | Temperature, Salinity | -1 | 3h | 3h |
| Nortek Aquadopp 400 kHz | Currents | -1 | 3h | 3h |

Saronikos Station, 37° 36' 29.16"N, 23° 33' 52.56"E

| Instrument | Measured Parameter(s) | Elevation/Depth | Sampling frequency | Frequency of data recovery |
|----------------------------|-----------------------------------|-----------------|--------------------|----------------------------------|
| Young 04106 | Wind speed/dir., | +3 | 3h | 3h |
| Vaisala PTB 220A | Air Pressure, | 3 | 3h | 3h |
| Omega | Air temperature, | 3 | 3h | 3h |
| Seatex MRU | Wave Height, direction, period | 0 | 3h | 3h |
| Aanderaa 3919A | Temperature, Salinity | -1 | 3h | 3h |
| Nortek Aquadopp 400 kHz | Currents | -1 | 3h | 3h |

Santorini Station, 36° 15' 25.2"N, 25° 30' 10.79"E

| Instrument | Measured Parameter(s) | Elevation/Depth | Sampling frequency | Frequency of data recovery |
|----------------------------|-----------------------------------|-----------------|--------------------|----------------------------------|
| Young 04106 | Wind speed/dir., | +3 | 3h | 3h |
| Vaisala PTB 220A | Air Pressure, | 3 | 3h | 3h |
| Omega | Air temperature, | 3 | 3h | 3h |
| Seatex MRU | Wave Height, direction, period | 0 | 3h | 3h |
| Aanderaa 3919A | Temperature, Salinity | -1 | 3h | 3h |
| Nortek Aquadopp 400 kHz | Currents | -1 | 3h | 3h |

| Zakunthos Station | 37° 57' 32.4"N, 25 20° 36' 10.8"E |
|-------------------|-----------------------------------|
| | 37 37 32.4 N, 23 20 30 10.0 L |

| Instrument | Measured Parameter(s) | Elevation/Depth | Sampling frequency | Frequency of data recovery |
|----------------------------|-----------------------------------|-----------------|--------------------|----------------------------------|
| Young 04106 | Wind speed/dir., | +3 | 3h | 3h |
| Vaisala PTB 220A | Air Pressure, | 3 | 3h | 3h |
| Omega | Air temperature, | 3 | 3h | 3h |
| Seatex MRU | Wave Height, direction, period | 0 | 3h | 3h |
| Aanderaa 3919A | Temperature, Salinity | -1 | 3h | 3h |
| Nortek Aquadopp 400 kHz | Currents | -1 | 3h | 3h |

Kalamata Station, 36° 58' 21.72" N, 22° 6' 24.8394"E

| Instrument | Measured Parameter(s) | Elevation/Depth | Sampling frequency | Frequency of data recovery |
|----------------------------|-----------------------------------|-----------------|--------------------|----------------------------------|
| Young 04106 | Wind speed/dir., | +3 | 3h | 3h |
| Vaisala PTB 220A | Air Pressure, | 3 | 3h | 3h |
| Omega | Air temperature, | 3 | 3h | 3h |
| Seatex MRU | Wave Height, direction, period | 0 | 3h | 3h |
| Aanderaa 3919A | Temperature, Salinity | -1 | 3h | 3h |
| Nortek Aquadopp 400 kHz | Currents | -1 | 3h | 3h |

The adobe described configuration of buoys is subject to modifications due to operational constrains.

Additional services/data

In situ measurements such as CTD casts as well as lab analysis can be arranged.

Special owner rules

The time schedule for the access will be defined by the owner based on the R/V availability.