



[www.TAHMO.org](http://www.TAHMO.org)

Trans-African Hydro-Meteorological Observatory

## SENSOR DESIGN COMPETITION

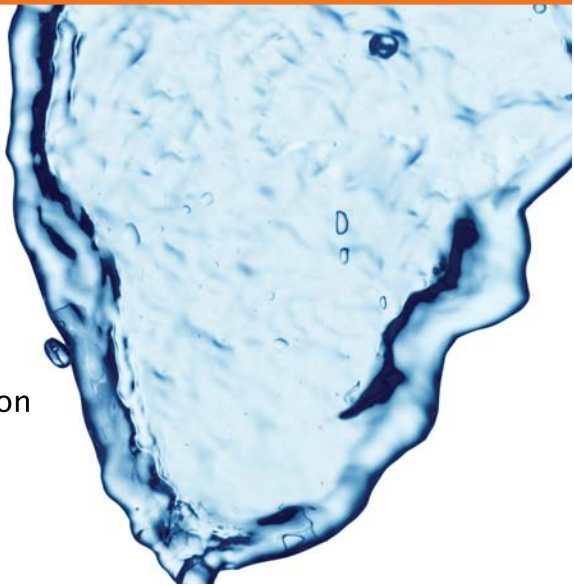
The ambitious TAHMO project aims to design and build a dense network of 20,000 weather stations in Africa; one every 30 km. The data will help to obtain a complete insight into the distribution of water, needed for the sustainable development of natural resources.

DESIGN A WEATHER STATION **SENSOR**,  
RECEIVE ALL NECESSARY HARDWARE & MATERIALS  
AND BUILD YOUR OWN SENSOR!

visit:

[TAHMO.org](http://TAHMO.org)

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## The TAHMO project

Delft University of Technology (the Netherlands) and Oregon State University initiated the TAHMO (Trans-African Hydro-Meteorological Observatory) project. The aim of this ambitious project is to design and build a dense network of 20,000 weather stations in Africa; one every 30 km. The revolutionary low-cost, robust cell-phone based stations would be placed at schools and integrated in the educational program.

Presently, the African observation network is very limited. However, monitoring Africa's environment is an important challenge if the continent's resources are to be used in an optimal and sustainable manner.

## Help us find a suitable sensor

Current available sensors used in weather stations are not suitable for the TAHMO project. Therefore, we ask you to come up with an innovative design for a sensor.

## Design requirements

- the sensor must measure a weather or hydrological variable
- the sensor must be inexpensive (under \$25 when producing 20,000 pieces)
- the sensor must be robust
- avoid any cavities since insects might use them as hide outs
- the sensor requires zero maintenance for two years

For more requirements check: [www.TAHMO.org](http://www.TAHMO.org)

The TAHMO Sensor Design Competition has a two-round entry process.

### ROUND I: design a sensor

From all entries, 20 winners will go through to Round II. They will receive a kit consisting of all hardware and materials needed to fabricate their designs.

### ROUND II: build your sensor

Winners of Round II will be invited to Nairobi for a multiple day workshop to test, tinker, and integrate the ideas.

## Round I DEADLINE: FRIDAY 1 MARCH 2013

We invite African students and scholars to join the TAHMO Sensor Design Competition. We strongly encourage the formation of competition teams. Be creative in your design, both in terms of parameters to observe and in ways of measuring them.



For more info about the TAHMO Sensor Design Competition, entry requirements, registration, regulations and FAQ visit: [TAHMO.org](http://TAHMO.org)

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