A few weeks ago I found an interesting device in my drawer. I developed it many years ago and used it for the weather prediction out of town for awhile. And the device works perfectly even nowadays. So, let's reveal it.

The device is made as simple as possible and stored in a waterproof case. It has only three buttons: reset the device, display off/on and processing of accumulated data for weather prediction.

Let’s take a look at its scheme:

Here's how it looks in real life :)

Like others my early projects it is based on microcontroller ATMEGA8.

It also uses DS1624 for temperature measuring, MPX4115A for pressure and HIH-4000 as a humidity sensor. The rest part of the device is intended for LCD display (SC1602) and power source.

The usage of the device is clear: you just put or hang the device somewhere outside, turn off the display; the device goes into a saving power state, accumulates the environment data for some time (in EEPROM) and then you may find out a prediction.

The demonstration of how it works may be seen on the video:

Device's circuit board, the source code are available as usual.