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## Surface nanobubbles: challenging to image, anomalous in nature.

Height image of highly ordered pyrolytic graphite (HOPG) submerged in water taken with tapping mode atomic force microscopy. The size of the image is 2000x2000x40 nm and is drawn on scale. The spherical features in the image can be interpreted as nanoscopic bubbles.

According to classical theory the spherical cap shaped bubbles should disappear (due to surface tension) within milliseconds, but in practice they are stable for hours. Also their anomalously large contact angles (through the water) are still not understood.