

Gravimeters prospecting for aerial surveys using Drones

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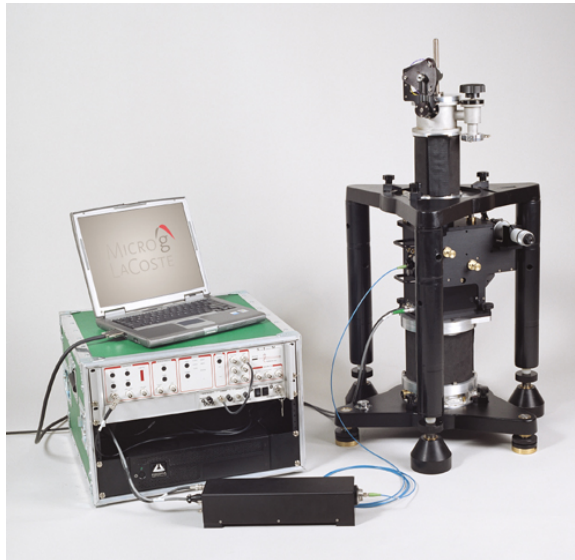


Figure 1: FG5-L Small Absolute Gravimeter [1]

Abstract

We will review gravimeters and try to attend into their near future with emphasis to aerial surveys.

1 Gravimeters

Gravimeters measure the gravitational field of the Earth and the commercial availability of the devices has seen them employed in the oil and gas industry to discover fossil fuel deposits. However, the widespread uptake of gravimeters has been limited due to cost and size.

2 Gravimeters using MEMS

Researchers from Glasgow University have adapted technology found in smartphones to make a small but powerful gravimeter.

According to the University, affordable, portable gravimeters could have a wide range of applications, including volcano monitoring, environmental surveying, and oil exploration. The research is detailed in a paper titled Measurement of the Earth tides with a MEMS gravimeter and published in Nature.

3 Stamp-Size Gravity Meter

It is a gadget.

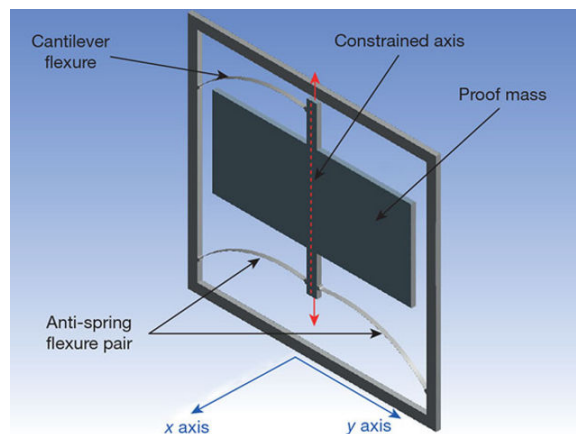


Figure 2: Micro Mem Gravimeter [2]

4 Conclusion

References

- [1] Micro G Lacoste <http://www.microglacoste.com/fg5l.php>
Gravimeter
- [2] IEEE <http://spectrum.ieee.org/energywise/energy/fossil-fuels/stampsized-gravity-meter-could-have-big-impact-on-oil-exploration> Mem gravimeter
- [3] Wikipedia <https://www.grc.nasa.gov/www/k-12/airplane/glidang.html> Glide Angle
- [4] Wikipedia <https://en.wikipedia.org/wiki/Wingspan> Wing span