

A wing-shaped captive balloon using the lift

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http://www.gaia.h.kyoto-u.ac.jp/public_html/

There are few precedent data for a vertical meteorological observation of a city area. So, mechanism of city meteorological phenomena such as heat island aren't clarified absolutely.

In a vertical meteorological observation as high as an altitude of a few hundred meters from the ground, a captive balloon is mainly used. A small airship called kiteon or an advertising balloon, for example. But a captive balloon is effected strongly by wind. So, we developed a new type of a captive balloon. The greatest characteristics of our captive balloon is making a use of wind force for its stability. In fact, our balloon use the lift to fly like a kite does. So, our balloon is wing-shaped.

Then, we aim to clarify mechanism of heat island making a vertical observation with it.