

Results of retrospective survey of cultivated land area and abandoned cultivated area on Google Earth Pro using the archive function and the dot sampling method

(Tsukuba City in Ibaraki Prefecture: 2005, 2010, 2015, 2018)

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Fortunately, Google Earth Pro has an archive function. Therefore, we attempted a retrospective survey of cultivated land area and abandoned cultivated area using the fixed points observation method using the dot sampling method in October 2019.

The survey target area is Tsukuba City in Ibaraki Prefecture, and the target year is 2005, 2010, 2015 and 2018 on Google Earth Pro. The sample size was set at 1000 points (999 points in actual results), and the image visual judgment method by us at the same sample points were used for each year.

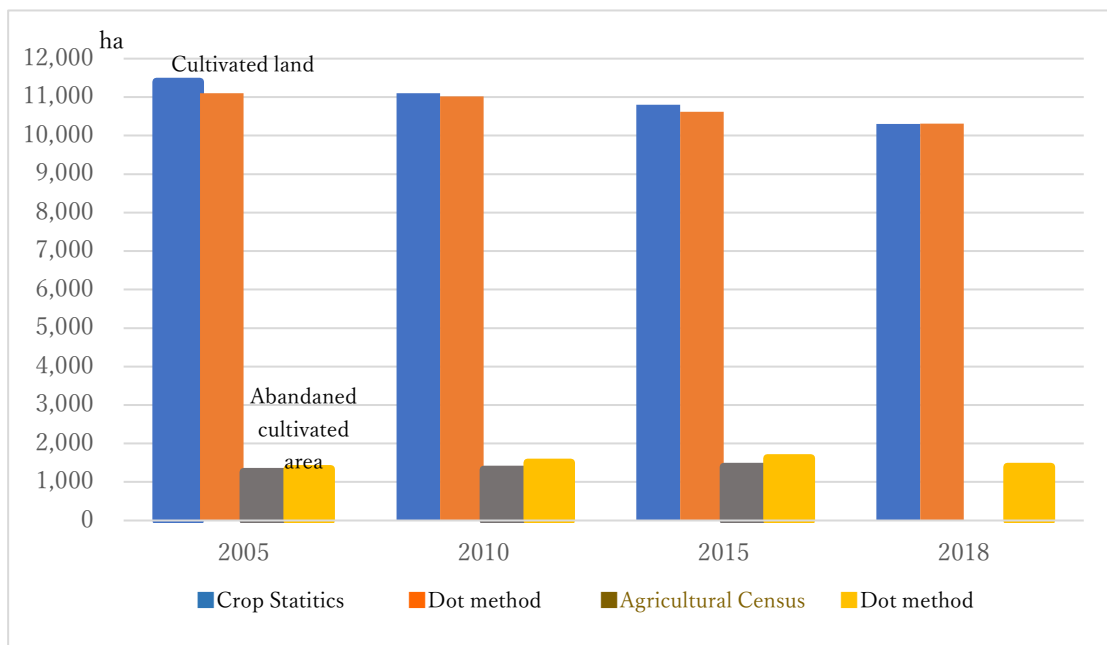


Fig: Changes in cultivated land area and abandoned cultivated land area by official statistics and the dot sampling survey (Tsukuba City in Ibaraki Prefecture)

These estimation results are shown in Fig. 1 and were surprisingly close to the official statistics (Reference: the cultivated land area is the crop statistics survey, and the abandoned farming area is the agricultural census) by MAFF of Japan for each year.

It means you can estimate not only the latest land use but also past year's land use on Google Earth Pro as archive survey in case of target areas are not so large like Tsukuba city. It is very interesting and useful function.

END.