Development of GPS observation system installed by radio-controlled helicopter

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In order to predict volcanic activity, the observations around the crater are very important. However, even if we use a helicopter, it is very dangerous to approach an active volcano. We are developing the GPS observation system which is installed by a radio-controlled helicopter. The radio-controlled helicopter for crop-dusting has not big power. In usual, its load is less than 100kg and its radio-controlled distance is less than 2km. The weight of a new developed system is 15kg, it is carried by a radio-controlled helicopter for crop-dusting. We can make a continuous GPS observation about 2 months by this system and, the data is transmitted to data center—which is at distance less than 2km.