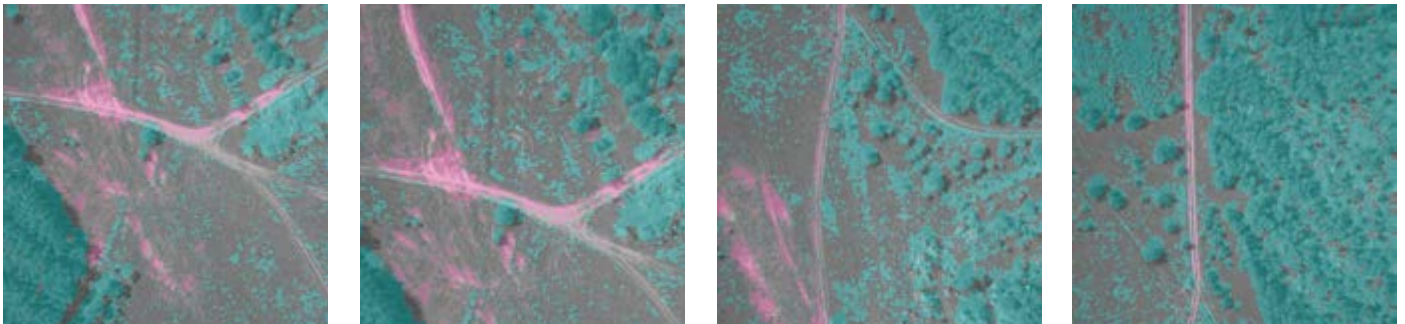




## ADVANCED NAVIGATION



Robust navigation is crucial for operating any unmanned aerial vehicle. Existing systems are based on global navigation satellite systems, whose functionality can be negatively impacted or even disabled by various influences such as atmospheric disturbances or jamming. Experts at the AIT Austrian Institute of technology have developed an optical on-board navigation system as an alternative or complement to satellite-based systems.

It comprises cameras and dedicated algorithms for an accurate position and orientation estimation of the aircraft by using geographic information that is widely available.

This robust estimation was integrated on the CAMCOPTER® S-100.

**AIT AUSTRIAN INSTITUTE  
OF TECHNOLOGY GMBH**

Christoph Sulzbachner  
Tel +43(0) 50550 4177  
Giefinggasse 4, 1210 Wien  
christoph.sulzbachner@ait.ac.at  
[www.ait.ac.at/airborne](http://www.ait.ac.at/airborne)