Geodrones VTOL UAV CW-15 Aeromangetic Compensation System Test Brief Report

Geodrones System Inc. 2019 Oct 10

1.1 Integration Test Information

One system, 2kg payload with 2 hours flight time for both aeromagnetic compensation survey system and RTK/PPK Orthophotography mapping

Address: Cifeng Town, 50km North west of Chengdu,China Date & Time: 2019,Oct 8 - Oct 9 Attending People: Project relative people from JOUAV and Geodrones System Inc. Test product: JOUAV CW-15 VTOL UAV and Geodrones System Inc.'s Aeromagnetic Compensation System Field Pictures:





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1.2 Aeromagnetic Compensation FOM Test



Data output rate: 10Hz Flight Speed: 18-20m/s Flight altitude: 500m ABL(due to that day's air space limitation), higher will be better GPS tracing and GPS altitude:

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Optical pump magnetometer readings:





Compensation improvement ratio:12.5, 4 edge noise standard deviation left:0.05nT



1.3 Use FOM generated coefficient to compensate clover leaf



Finish two clover leaf flight with opposite directions.

Clover leaf test result shows very symmetry and smooth curve, it means good compensated result and no output lag.

1.4 Use FOM generated coefficient to compensate Survey lines

13 survey lines with 2 km length and 100m as distance. 100m altitude to ground and 20m/s air speed.





Grid Map of Optical pump magnetometer raw data vs compensated

