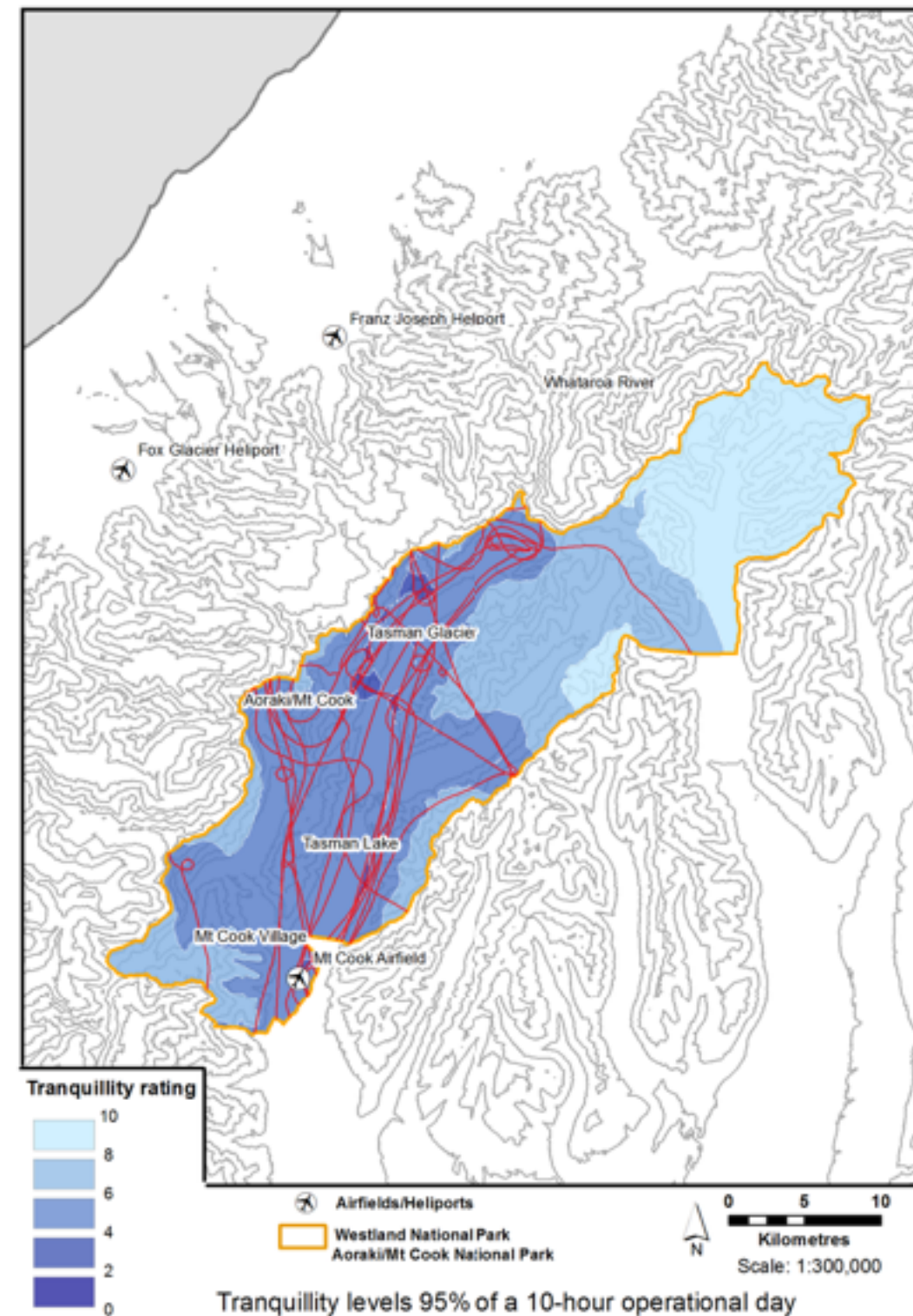
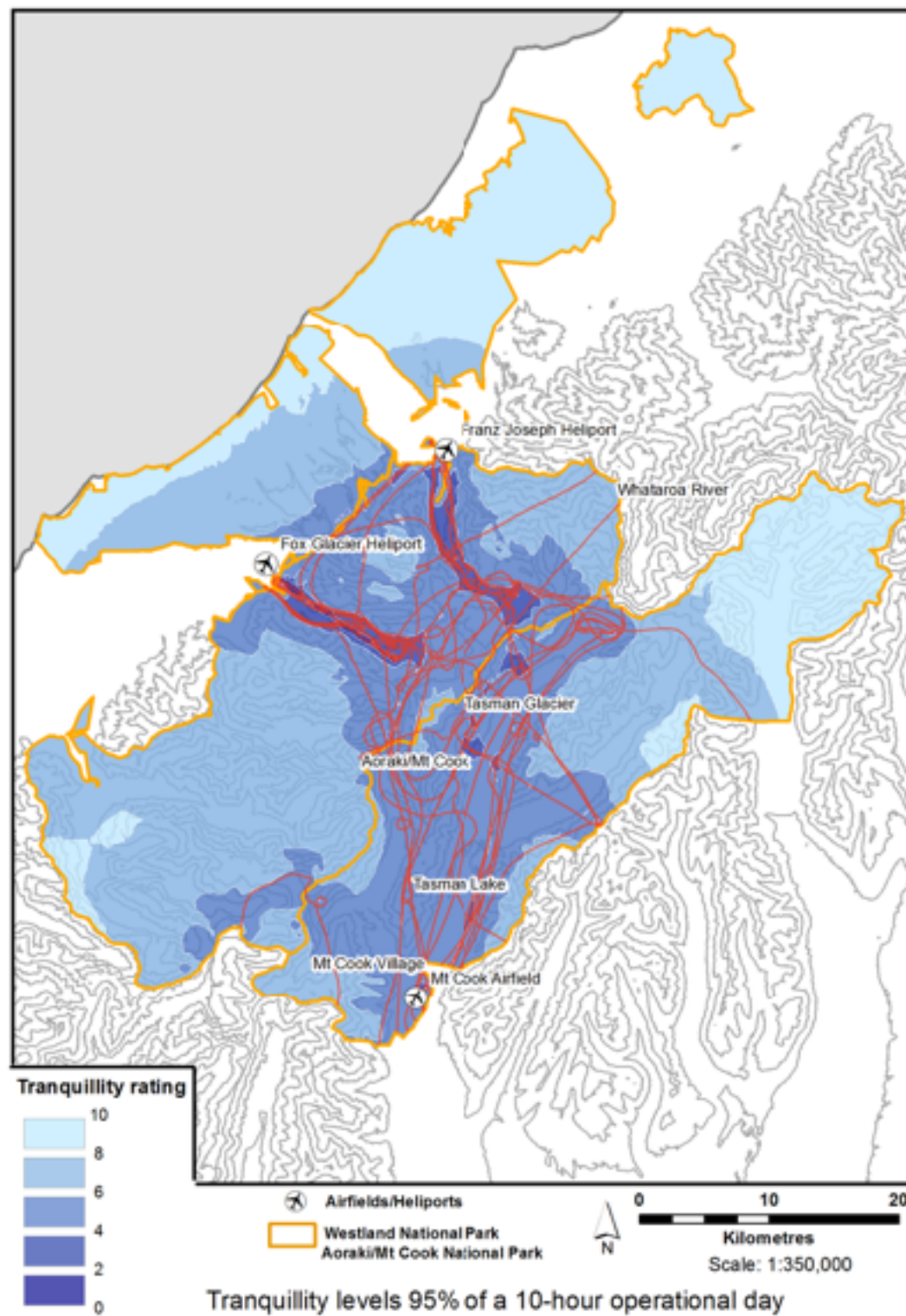


GNSS Real time Spatial relationship recordings for statistical analysis and resource database creation/maintenance

‘DocSat Flightpath’

Designed to ease the collection, retrieval and storage of statistical data collected in the field during routine tourist operations.

Mode 1. ‘Flightpath Optimisation’ (Airborne). mitigation of noise pollution/maintenance of tranquility in iconic environments



‘DocSat Flightpath’

Operation

Designed to ease the collection, retrieval and storage of statistical data collected in the field during routine operations of tourist aircraft operating within concessions in the Southern Alps National Park confines.

Mode 1. ‘**Flightpath optimisation**’ (Airborne). mitigation of noise pollution/ maintenance of tranquility in iconic environments

Each ‘DocSat’ GNSS equipped unit was powered from the USB port on a cockpit device containing a battery.

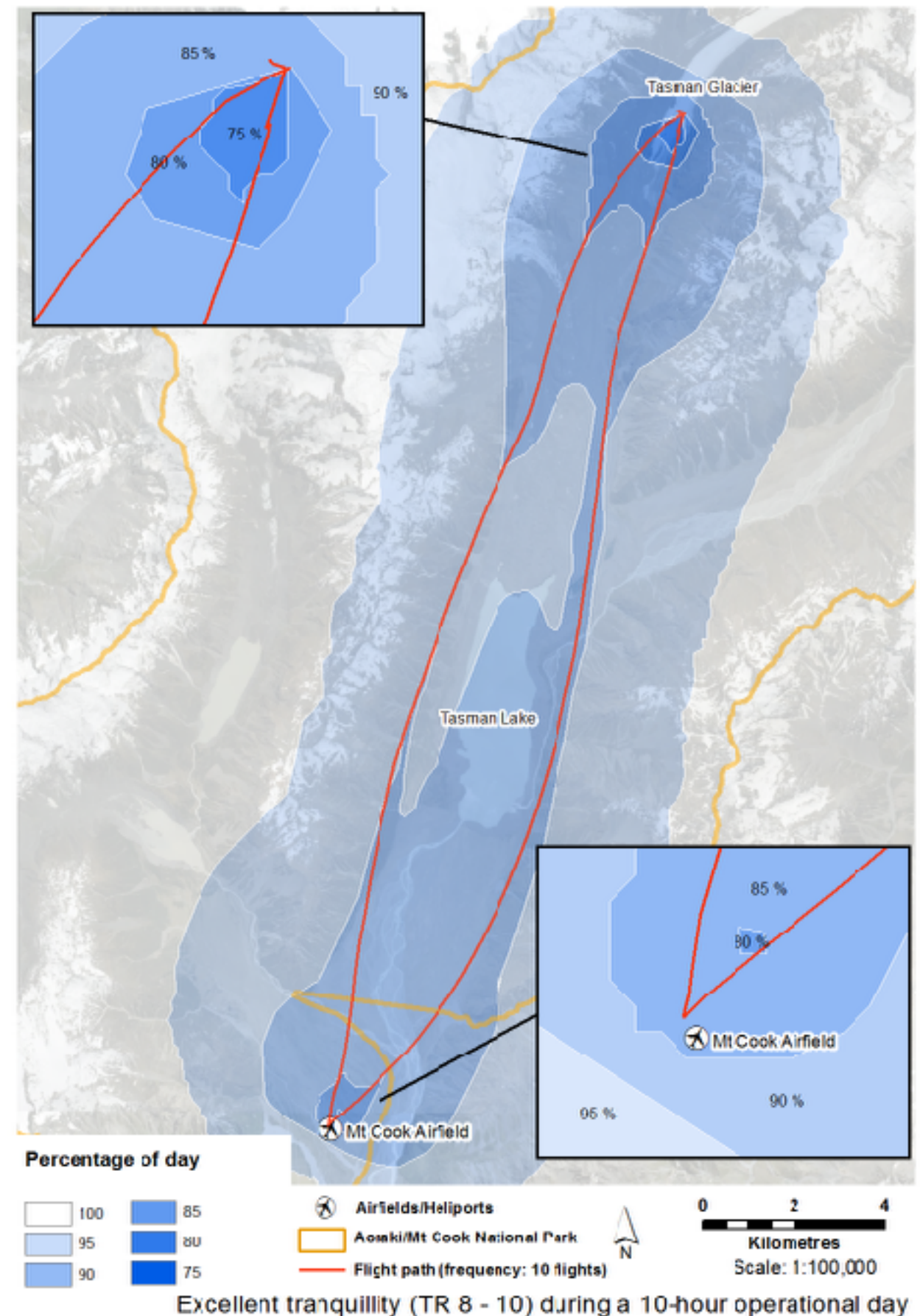
The motion detector sensed when the aircraft was in motion and turned the DocSat device on.

Likewise when the aircraft ceased movement the unit switched off automatically.

Within a polycarbonate case each unit contains a Ublox GNSS receiver providing precise points for the collection of geospatial data Lat, Long, Height, Speed, Sats in view, Quality etc. The internal onboard GNSS antenna provided by Ublox was found quite adequate for the purpose. Thus no external antenna installation was required on the various aircraft deployed.

The locations were processed by a micro controller and stored on SD card . At appropriate times the data was collected each day for transmission to the database.

No external control or activity was required of the operator. For the purpose of security the process was automatic and stand alone until it was downloaded manually at the end of the day.



‘DocSat Flightpath’



‘DocSat Flightpath’ with USB cable attached.

‘DocSat Flightpath’



Water resistant cover for use by personnel in forest environs

'DocSat Flightpath'

DocSat Derivatives

No operator control or adjustment is required in the stand alone function as DocSat is initiated (enabled) by its internal motion sensor. At the end of the session the operator may download manually through the USB interface to a computer or remotely using a Bluetooth link to a Smartphone app, and on to a remote (on line) server interface.

Input power is regulated by dual regulators and may be sourced from up to 24Vdc or from a rechargeable Li-ion battery pack.

The behaviour is programmable in flash memory. A geofence capability may also allow data collection to be limited to a predefined area.

A number of programmable operational scenarios may be selected by internal switches including real time programs.

Optionally a data radio is accommodated which allows real time transfers of data to a remote network or base radio and server.

A number of units may operate autonomously in a stand alone network gathering geo-spatially defined data and communicating that data to a central or distributed location.

