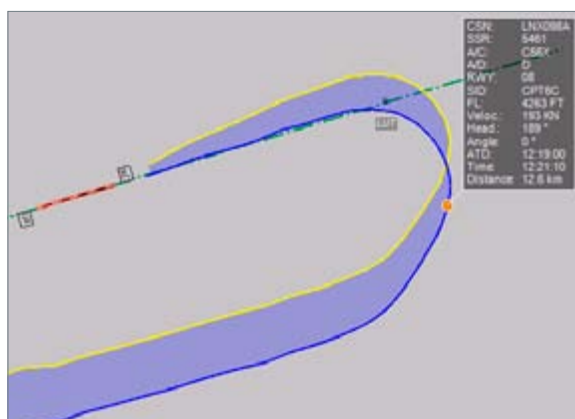# FLIGHT-TRACK MONITORING
AIRCRAFT NOISE & FLIGHT TRACK MONITORING SYSTEM

Flight track monitoring is a module of Topsonic's Noise and Track Monitoring System (NTMS) which is based on radar data.
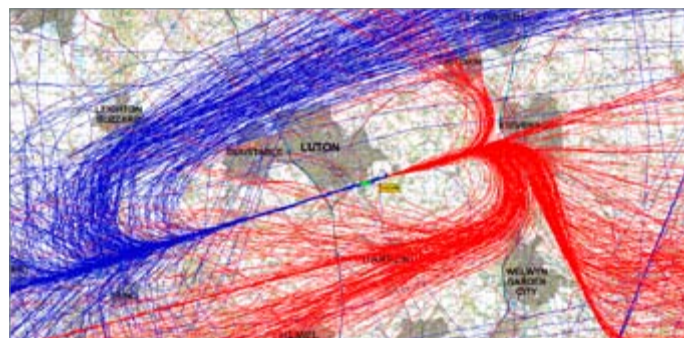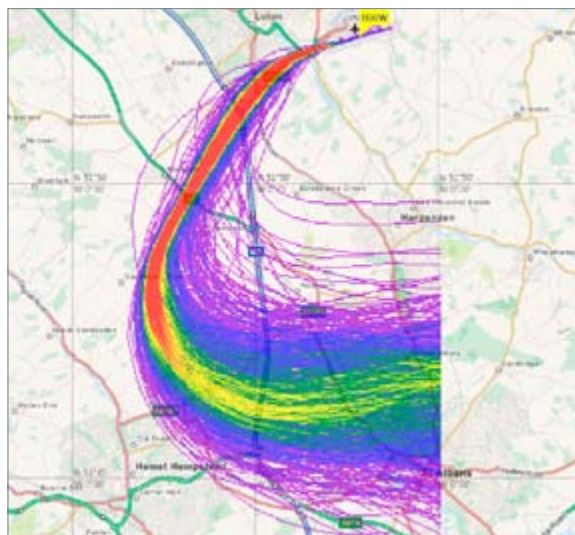
Flight track monitoring provides
- starting and landing tracks in live and replay mode
- correlation of noise events and corresponding aircrafts
- analysis and processing of radar data

Track Plot Tools:

- different background maps, various track colours and line types, altitude display
- smoothing algorithms
- zooming, scrolling and panning of the GIS maps
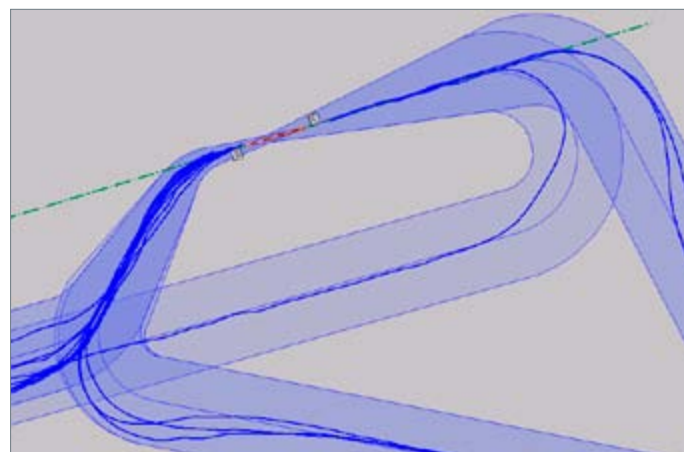- for detailed information click on the track of a selected flight

Track Dump:

Mass plot of selected flights displayed in 2D or 3D with current flight information such as climb rate, speed, and altitude.

- Selection of tracks according to any flight information such as carrier, aircraft type, runway, SID/STARs

Track Density Plot:

Illustration of the realised flight paths around the airport for an individually selected period.

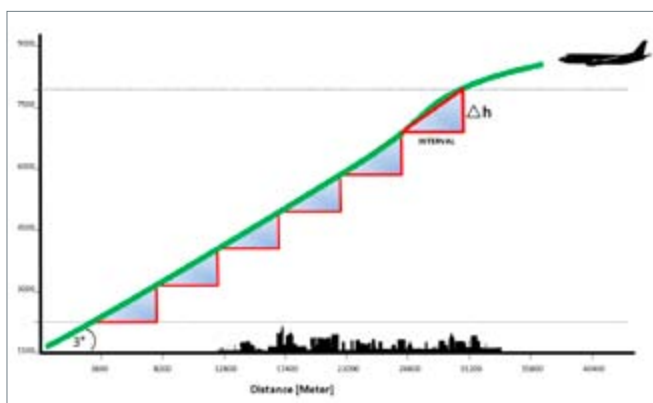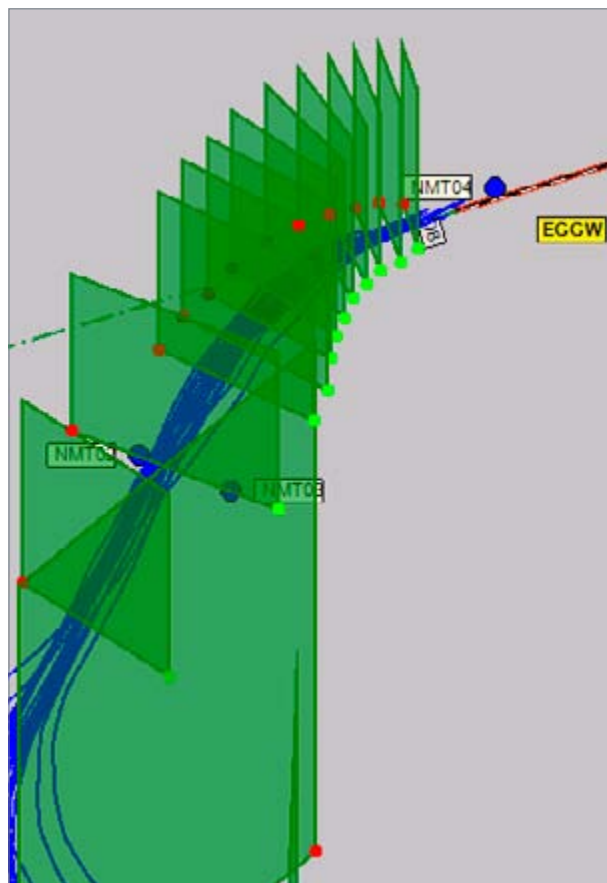- Accumulation of flight paths indicated by colour graduation

FLIGHT-TRACK MONITORING
AIRCRAFT NOISE & FLIGHT TRACK MONITORING SYSTEM

The radar module automatically calculates the runway to be used and the arrival/departure route for every flight. This data is compared with the entries in the official flight schedule. Differences are marked and missing data is filled in automatically. This information can be re-transferred to a FIS or FIDS system.

- Calculation of mean tracks for every arrival and departure route. These mean tracks can be used for improving the noise model.
- Detection of all flight movements with deviations from pre-defined routes and corridors.
- Easy-to-use editor for definition of SID/STARs.
- Repair of interrupted radar tracks by automatic filling of missing track segments down to the runway for better correlation of monitoring stations near the airport.
- Calculation of the flight altitude by means of a barometric height correction.
- Smoothing algorithms eliminate reflections.
- Comprehensive gate penetration module with 2D-gates.
- 3D-visualisation of selected tracks.
- Track analysis of aircrafts flying over exclusion zones or city regions.

Climb Profile:

- Display of altitude in relation to flown distance

CDA detection:

- Analyses all arrival profiles