Prosig Data Analysis Software

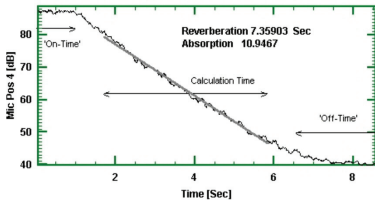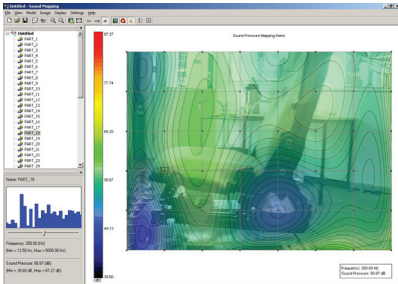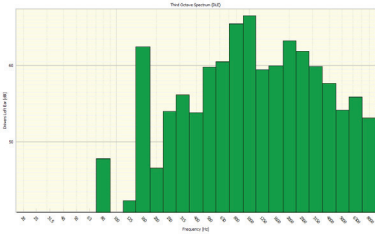# Acoustic Analysis

A complete suite of acoustic tools from sound meter to sound maps
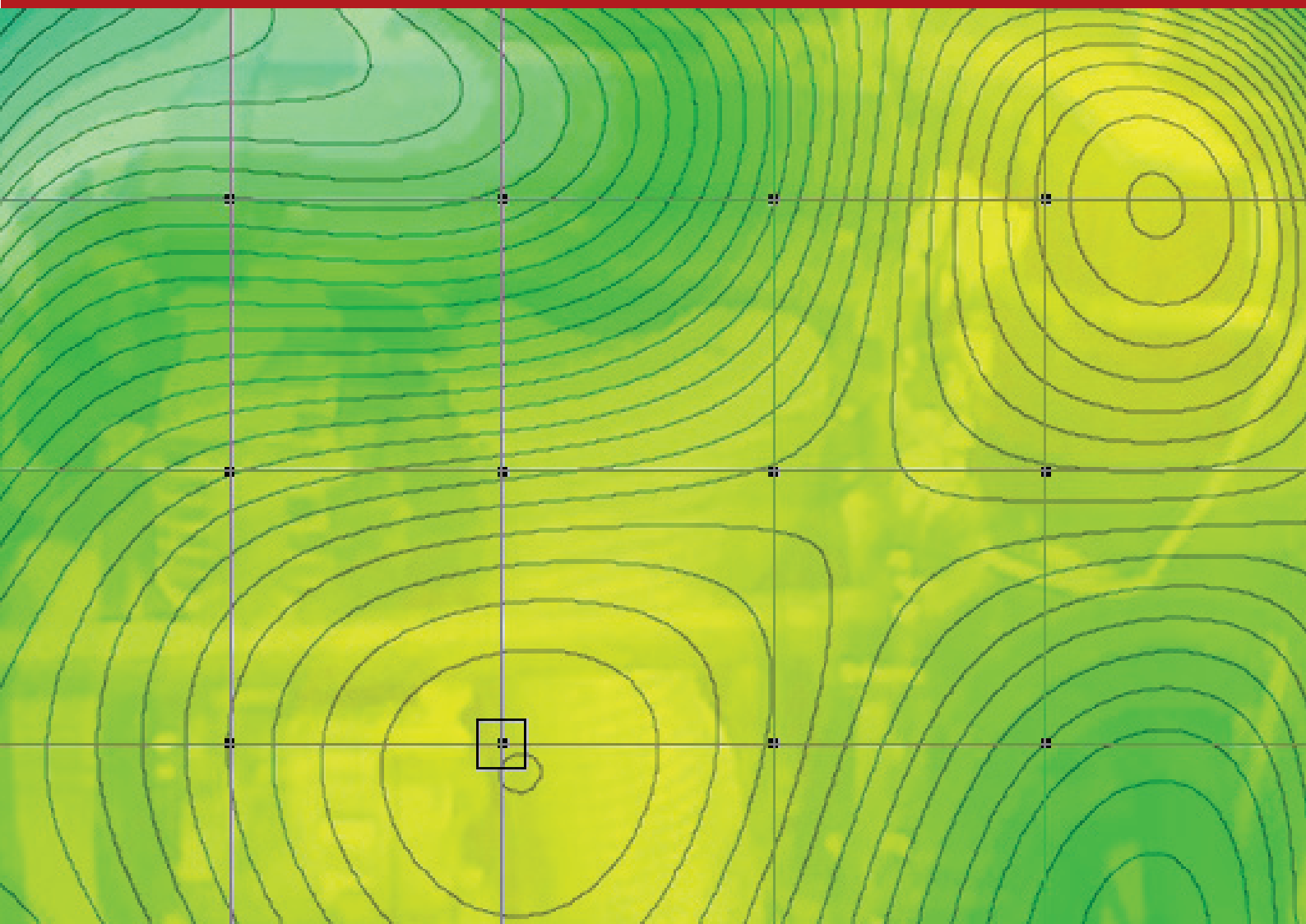
As well as the acoustic analysis and measurement tools in the basic DATS Toolbox package, there are three options in the DATS software that are designed to measure and analyse acoustic data

- **Acoustic Analysis Suite**
- **Psychoacoustics Analysis Suite**
- **Sound Mapping Software.**
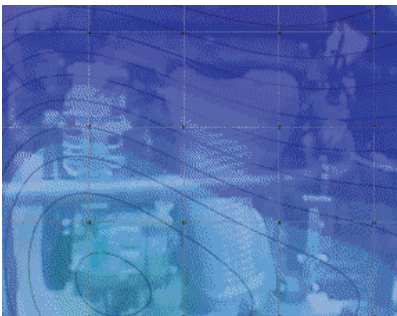
Acoustic Analysis Suite

The suite covers a wide range of acoustic analyses including...

- 1/N Octave filters
- Sound Power Analysis for the measurement of sound power according to ISO3744, ISO3745 and ISO9614-1.
- Sound Level Meter analyses that mimic simple sound level meters
- Transmission Loss functions for determining the effectiveness of panels or pipes
- Room Acoustics Reverberation Time T60 and Total Absorption functions
- Two-Microphone Impedance Measurement Tube, (B&K Type 4206)that complies with ISO10534 and ANSI E1050

Psychoacoustics Analysis Suite

In simple terms, psychoacoustics is the study of the relationship between the physical measures of sound, amplitude and frequency and the human perception of them. The DATS Psychoacoustics Analysis Suite provides a host of functions for the objective description of subjective sounds.

Human hearing can be compared to a spectrum analyzer – the ear resolves the spectral content of the pressure wave. This even includes phase information, which provides a significant part of the directional sensation of sound.

Sound Mapping Software

The DATS Sound Mapping software package consists of two main parts:

- Sound pressure mapping to measure sound pressure from a grid of microphones or from several measurements using a single microphone.
- Sound power mapping, which uses a sound intensity probe to measure sound intensity at a series of grid points across a test piece.

Find out more about Acoustic Analysis at
prosig.com/solution/acoustic.html

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Acoustic Analysis
Features

- **1/N Octave Filters**
- **Sound Power**
- **Sound Intensity**
- **Sound Level Meter**
- **Transmission Loss**
- **Room Acoustics**
- **Two Microphone Impedance Tubes**
- **Loudness**
- **Sharpness**

- **Roughness**
- **Fluctuation Strength**
- **Prominence Ratio**
- **Sound Power Mapping (Intensity)**
- **Sound Mapping (Sound Pressure)**
- **Graphical Mapping Overlays**
- **Color & Contour Mapping**
- **Full Grid / Model Editor**

Contact Prosig

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