

Compatibility:

AT6101DR, DR/1	AT1321
AT6102, A, B	AT6101C, CM
AT6104DM, DM1	AT6103
AT1117M (with PU4)	AT1120M, MA
Smart Detection Units	

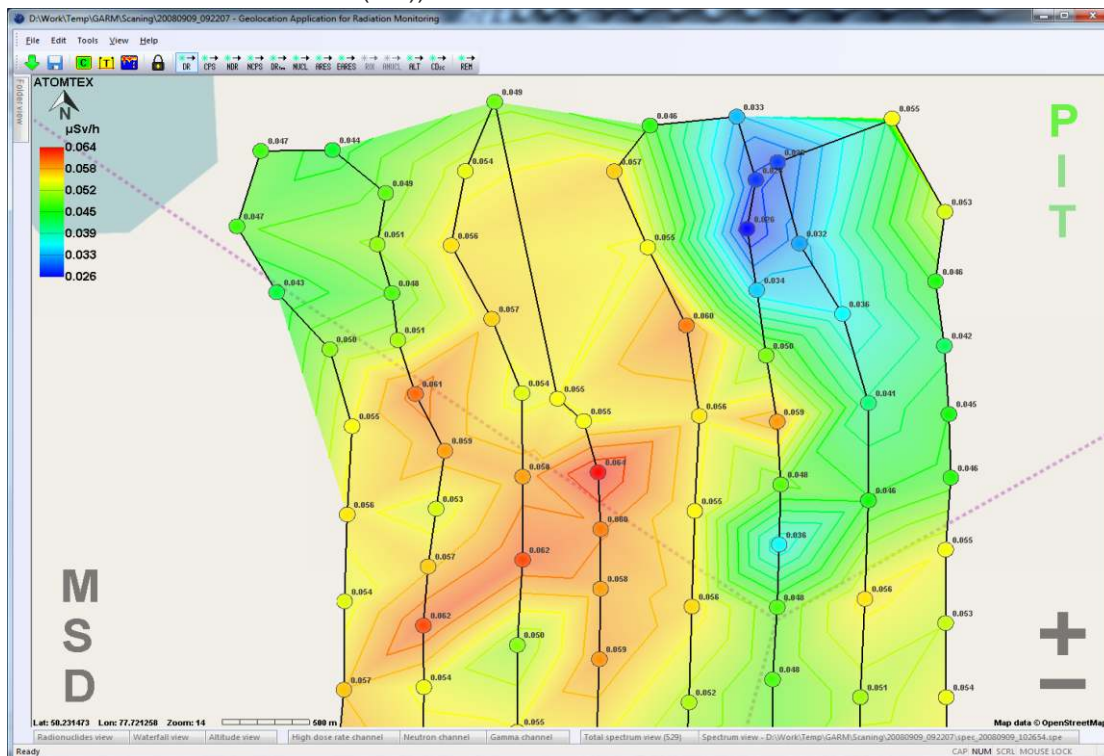
Set of software functions depends on the type of instrument

Purpose:

Process results of instrument radiation survey, e.g. gamma radiation spectra, dose rate values, neutron radiation count rates (if the instrument has internal neutron channel), specific activity, results of radioisotope composition identification and geographical coordinates of radiation survey maps.

Mapping of radiation survey track with indication of measured value

Colour of each marker and displayed overhead value matches the selected parameter data and corresponds to the scale shown in the upper right hand corner (Scale is selected automatically according to the range from minimum calculated values (blue) to maximum calculated values (red)).

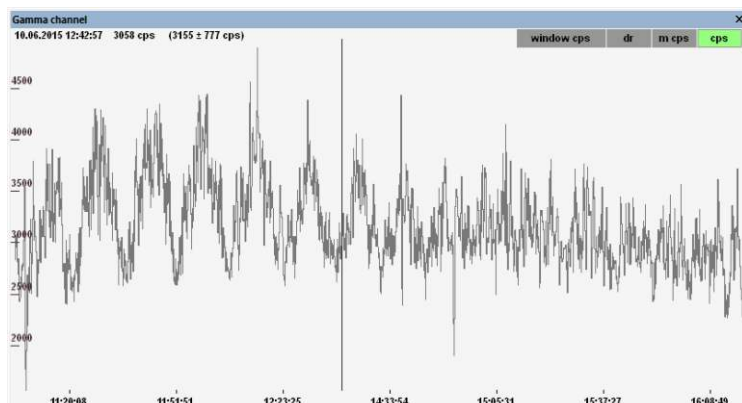
**Functions:**

- Zoom
- Select area of interest
- Measure distance between points
- Show/hide points, text and track
- Isoline contouring and gradient fill of scan area
- Simulate movement along the survey track
- Add GPS markers
- Use offline map

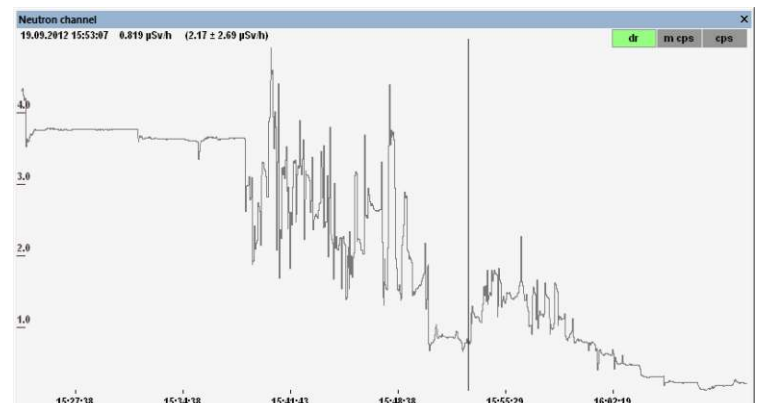
Measurement channel data

Gamma channel:

Dose rate – "dr",
Average impulse count rate – "cps",
Instantaneous impulse count rate – "m cps",
Average count rate of impulses in windows – "window cps"

**Neutron channel:**

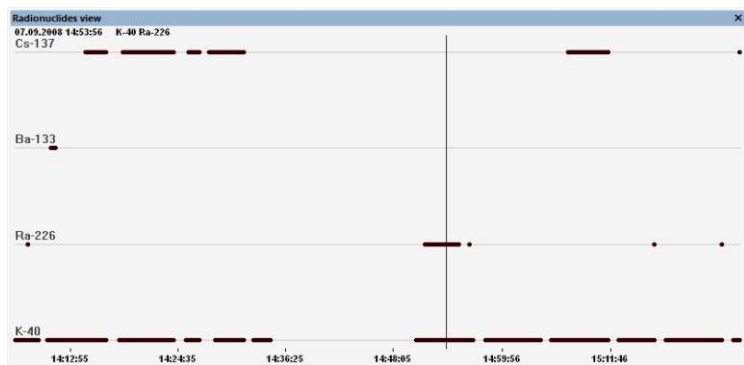
Dose rate – "dr",
Average impulse count rate – "cps",
Instantaneous impulse count rate – "m cps"



Measurement channel data

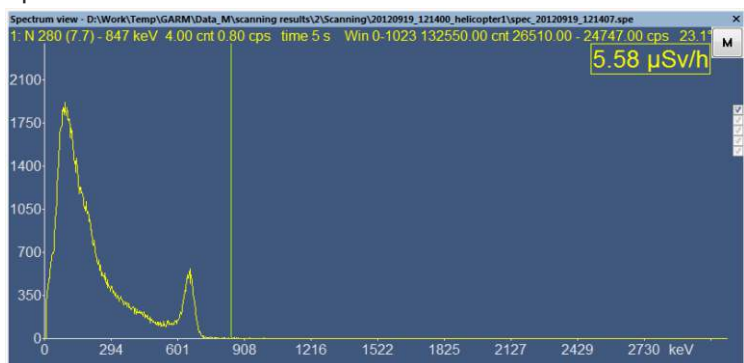
Results of radionuclide identification

Unique chart, displaying identification results in time. Found radionuclide is displayed as a black dot. Information line shows the following data: date and time, and identified radionuclides names at the marker position.



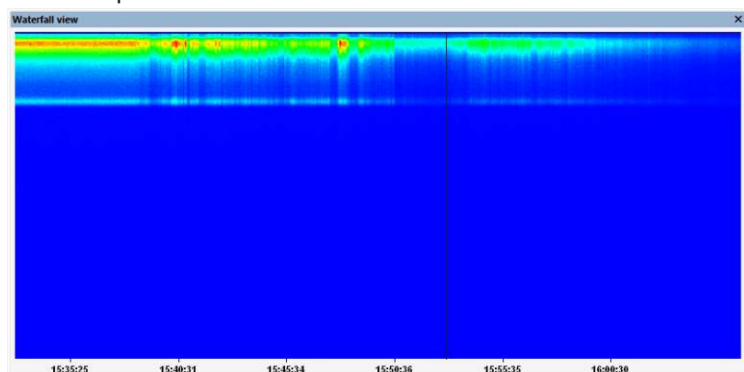
Gamma radiation spectra

Horizontal scale shows energy values (display of values according to channel number), vertical scale shows the number of registered pulses (display of values in logarithmic scale). Zoom and select area of interest, show total gamma spectrum in selected time interval.



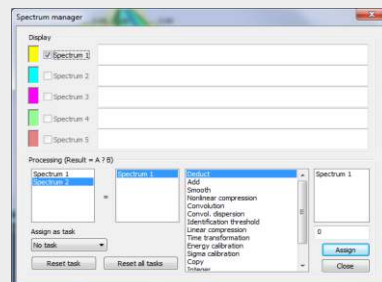
"Waterfall" diagram for all loaded gamma radiation spectra sets

Gamma spectra energy scale is read vertically from top to bottom, gamma spectra from measurement start till its end are read horizontally from left to right. Point colour indicates pulse count in spectrum channel.



Functionality

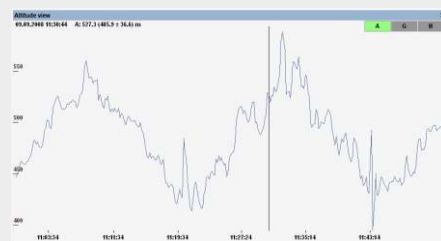
- Edit survey results
- Process spectra



- View spectra details



- Display sea level elevation



- Apply filters to select certain areas in data windows
- Option of data splitting into several sets
- Set time intervals to facilitate quick navigation in big data volumes
- Evaluate of radiological situation:
 - Convert dose rate measured at 50-300 m height above ground to dose rate value at 1 m height. Internet connection is required for calculation (level above ground).
 - Calculate contamination for Cs-137 on the basis of dose rate value at 1 meter height above ground.

Save data

- Save spectrum as text file (SPE, *.spe) or as picture (Image, *.png);
- Save total spectrum as text file (SPE, *.spe) or as picture (Image, *.png);
- Save map as image (*.bmp);
- Convert and save scan results into ".kml" files for their further display in Google Earth application;
- Save data into text file. The resulting file can be opened in Microsoft Excel or text editor.

