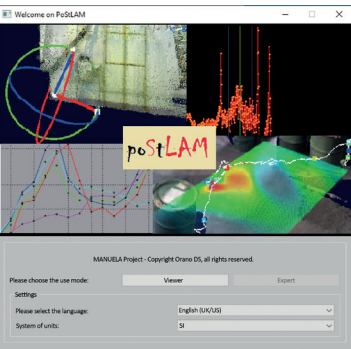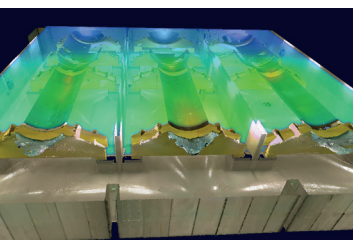# PoStLAM

A software for valuing your topographical and radiological data

PoStLAM home screen

Mapping: Interpolation of radiometric data on a 3D topographic survey

Source location: back-projection of the signal emerging from a source on the 3D topographic survey

Scope

PoStLAM is a post-processing software allowing the visualization of the radiological environment of a room or a building with the aim of preparing interventions.

PoStLAM allows the processing of three types of data:

- Topographical data (i.e. point cloud): acquired by photogrammetry, structured light projection or using 3D scanners (e.g. LEICA, FARO)
- Radiological data: manually positioned in space, using static sensors or robots (e.g. RIANA)
- Radiological and topographic data: acquired using portable devices (e.g. MANUELA™ or EMEFA)

PoStLAM is available in three different modes

- Viewer PoStLAM - Enhanced 3D environment:
  - Visualization of 3D scan and positioned measurements (dose rates, gamma spectra)
  - Visualization of results interpreted with both Standard and Expert PoStLAM

- Standard PoStLAM - ALARA tool:
  - Investigations saved as digital archives
  - Management of single part up to whole building (digital twin)
  - Integration of virtual operators (avatars) into 3D model to assess accumulated dose of personnel as part of ALARA approach
  - Simulation of operating scenarios and optimization of workstations

- Expert PoStLAM - Expert tool:
  - Gamma spectrometry
  - Activity calculations using transfer and solving functions

Advantages

- **PERFORMANCE**
  Digitization of the environment, data archiving and management

- **VERSATILITY**
  Processing of data collected from multiple sensors using a single tool

- **ALARA**
  Visualization of isodoses and dose rate optimization

- **INTUITIVE**
  Simple and visual interface allowing a quick start

- **VIRTUAL / AUGMENTED REALITY**
  Interpreted results can be exported to be visualized on virtual or augmented reality devices

Key data

The minimum system requirements for using PoStLAM are as follows:

- **Operating system:** Windows® 10 (64 bits)
- **CPU processor:** Intel® Core™ i3-8130U (or equivalent)
- **Memory (RAM):** 8 Gb
- **Graphic card:** Intel UHD Graphics 620 (or equivalent)

The software can process up to 12 Gb of data per project.

PoStLAM supports three types of file formats: .man, .obj, .ply (binary or ascii), .e57 (LEICA), .las and .xyz

The processed data can be exported into different standardized file formats (e.g. .obj, .mpt and .csv)

A tool for 3D analysis of both physical and radiological data

Offer

- Viewer PoStLAM is provided to our customers as part of our services for the constitution of input data
- Viewer and Standard PoStLAM are intended for radiation protectionists in order to:
  - optimize intervention scenarios
  - secure nuclear operations
  - share the results and discuss with operators
- Expert PoStLAM is used as part of the expertise service supplied to our clients

Interface with Virtual Reality and Augmented Reality devices
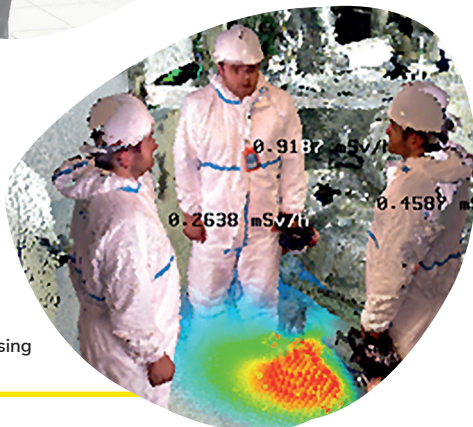
Dosimetric simulations using AVATARS

Our references

Mapping of facilities

- **Chinon and Fessenheim NPPs:** Identifying hotspots, validating the marking out of orange zones and making sure the radiological input data is reliable in anticipation of maintenance projects

Preparation of worksites and ALARA studies

- **Cattenom NPP:** Provision of 3D mapping as part of the ALARA study for the steam generator replacement worksite

- **CEA Marcoule:** Simulation of worksite layout based on 3D mapping

- **Orano la Hague**: Radiological mapping as part of the preparation work for a dismantling project

Design studies

- **Tricastin NPP:** 3D mapping performed as part of the project to modify biological protection

Possible evolutions

- Simulation of biological protections: exclusion of dosing elements
- Integration of CAD models (import and export)

Contact us to discover the range of features PoStLAM can offer.

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