

# Non-Destructive Evaluation (NDE)

## by Infrared Thermography

An innovative default detection technology

### Principle of an IR Thermography measurement

- ✓ Thermal disturbance of an object by application of a brief and intense energy pulse,
- ✓ Observation of the resulting decreasing disturbance with an IR camera,
- ✓ Processing of obtained images by exclusive algorithms,
- ✓ Default visualization within the observed object.

EPSILON Software platform SAFIR<sup>®</sup>,  
unique in infrared thermography

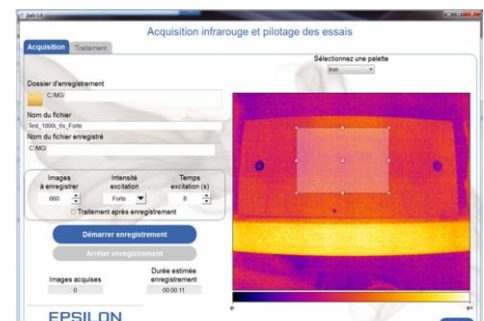
Test bench driving  
Data acquisition and processing

#### SAFIR<sup>®</sup> Inputs

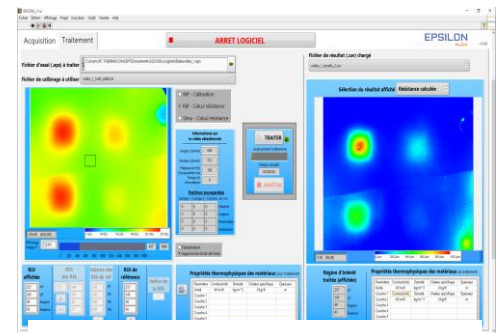
- ✓ Compatible with all cameras, all sources, all suppliers
- ✓ Use in automated production, laboratory and service applications
- ✓ Exclusive processing algorithms, oriented towards low cost cameras use for improved detection and characterization quality
- ✓ Quantification of key parameters
- ✓ Intuitive, simple and customizable user interface
- ✓ CNRS partnership for specific optimization
- ✓ Non-destructive and contactless testing oriented

#### Gathered in specific libraries:

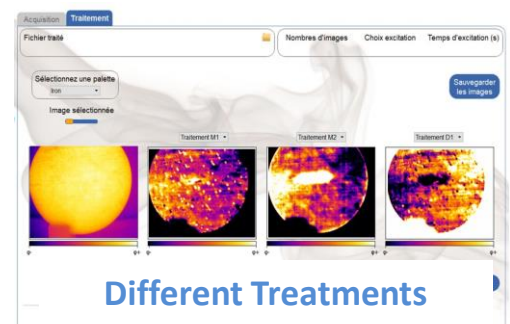
- ✓ Thermal treatments functions
- ✓ Test benches driving functions
- ✓ Acquisition functions



Acquisition Tab

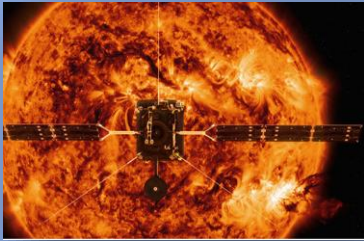


Treatment Tab



Different Treatments

Founded in 1992 to conduct studies in the space domain, EPSILON is distributed in Europe and Morocco at the convergence of physical, software and systems engineering.



EPSILON FIELDS OF EXPERTISE    **AERONAUTICS . SPACE . ENERGY**

EPSILON MAIN ISSUE                **SIMULATION FOR CONCEPTION / TESTS / EXPLOITATION**

EPSILON POSITIONING                **SERVICES & PROPRIETARY PRODUITS**

## OUR EXPERTISE

**Physics**                **Modeling, simulation, analysis, optimization, from component to complex systems, throughout the product life cycle**

**IT**                        **Software development for test benches driving, analysis, data exploitation and production monitoring**

**Systems**                **Design and manufacturing of scientific set-ups, test benches and Non-Destructive Testing set-ups**



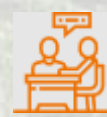
**Physics**



**Digital**



**Systems**



**Consulting**