The Scientist–AI Research System

An Integrated Working Standard for War-Related Environmental Contamination

Laboratory of Information Systems

Overview 2 / Artificial Intelligence and Research on the Consequences of War / 15 minutes

Research with limited resources

Small groups need to choose questions with care

AI assists multilingual processing and comparison of evidence

Each task requires an assessment of benefits and checking costs

Equipment, analyses and specialist work require resources and partners

The environmental object

The military ecotone provides an explicit working framework

A bounded question retains its connection to the larger process

A local measurement establishes a result within stated conditions

Unexamined relationships remain visible as research tasks

One integrated research cycle

The problem and evidence guide competing hypotheses

Discriminating observations lead to bounded field results

Interpretation revises the model and identifies the next question

The record preserves the grounds of each consequential transition

Evidence origin and checking

Observed and Documented identify different origins of information

Reconstructed, Inferred and Predicted retain their grounds

Verification describes a procedure for a bounded claim

Confidence has separate, explicit grounds

Hypotheses and uncertainty

Hypothesis histories preserve support and competing explanations

Revision and rejection require recorded reasons

AI suggestions receive no automatic evidential privilege

Uncertainty retains its origin, scope and consequences

Field results and programme revision

Sampling design follows differences between competing explanations

Historical reconstruction helps establish investigation priorities

Each result returns to the shared research record

Previous assessments remain available with the reasons for change

Scientific results and project funding

A grant establishes that a project has attracted resources

Scientific achievement requires evidence of what the work established

Organisational incentives can displace significant research questions

Our standard requires the same scrutiny of our own work

The conference as a revision stage

Preparation has already clarified categories and connections

A programme before the conference provides the initial version

A revised programme records significant changes and their grounds

The outcome includes better justified questions and next actions

Continuity between investigations

Long duration and publication counts alone cannot establish explanation

Later work inherits earlier questions, evidence and limits

New results can revise a shared model of the developing territory

Verdun raises a requirement for continuity between projects

The proposed Vietnam project

Vietnamese archives provide routes to complementary evidence

A bounded question guides historical and spatial reconstruction

Competing hypotheses lead to a justified pilot investigation

New observations revise the same research record

Evaluation of the research system

Did AI-assisted comparison reveal an error?

Did the record improve site selection or avoid unnecessary analysis?

Did an observation distinguish the competing explanations?

Can another researcher continue from the preserved material?

Functions of the two laboratories

Information Systems preserves provenance and evidence assessments

Military Ecotones develops the object description and field priorities

Each project identifies responsible people and qualified partners

Declared functions require operational capacity

AI disclosure and human responsibility

AI participates throughout the research cycle

Significant contributions and checking procedures remain explicit

The logical record connects sources, assumptions and decisions

Humans take responsibility for accepted interpretations and claims

Publication and an open standard

Versioned publications connect the programme with its evidence

Publication identifiers support citation and retrieval

Actual investigations determine which procedures improve the work

Changes and their grounds remain available for examination

Sources 1

[1] Nikolaenko / The Scientist–AI Research System / 2026
DOI 10.66659/1cabcy23

[2] Laboratory of Information Systems / Evidence Status and Pathological Uncertainty / 2026
DOI 10.66659/z0wwf379

[3] Laboratory of Military Ecotones / Field Verification in the Scientist–AI System / 2026
DOI 10.66659/2qwv2037

Full publication details and links are available in the speaker notes

Sources 2

[4] Vu Thi Phung et al. / Archival records at National Archives Center III / 2026
DOI 10.66659/xnkh0w22

[5] Cu Thi Dung and Vu Dinh Phong / Archival sources at National Archives Center II / 2026
DOI 10.66659/zdcj2c76

[6] Laboratory of Information Systems / From Dioxin Source to Long-Term Biological Consequences / 2026
DOI 10.66659/62p3b908

Full publication details and links are available in the speaker notes

The integrated working standard

Limited resources serve clearly formulated research questions

Observations can correct hypotheses and the research programme

New projects inherit a usable and inspectable record

The standard develops through actual investigation