

*Scope and potentiality of free and open source
Geospatial tools
in biodiversity conservation*

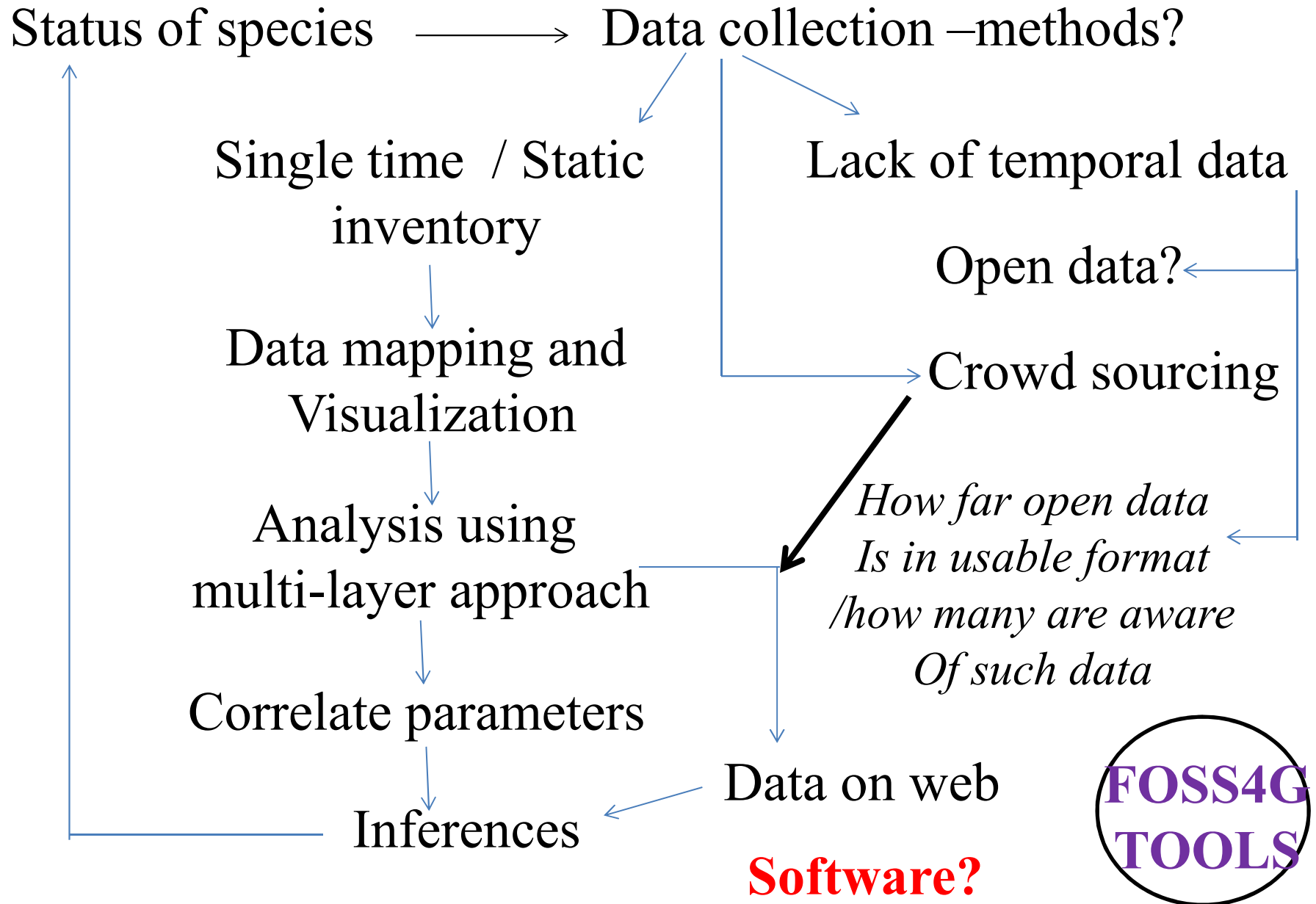
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Biodiversity Conservation



What these software can do?

Data

Creation

Editing

Georeference

Projection

Query

Analysis

Interpolate

Symbology

Map print

Special Models

GRASS

Watershed modeling

Erosion and transportation models

Landscape modeling

SAGA (System for automated Geoscientific Analyses)

Terrain analysis (water shed modeling)

Simulation -

Cell automata

Modeling the human impact on nature

Fire spreading

Hydrology – Top model

ILWIS (Integrated Land and Water Information System)

DEM-Hydro processing

Stereo pair from DTM

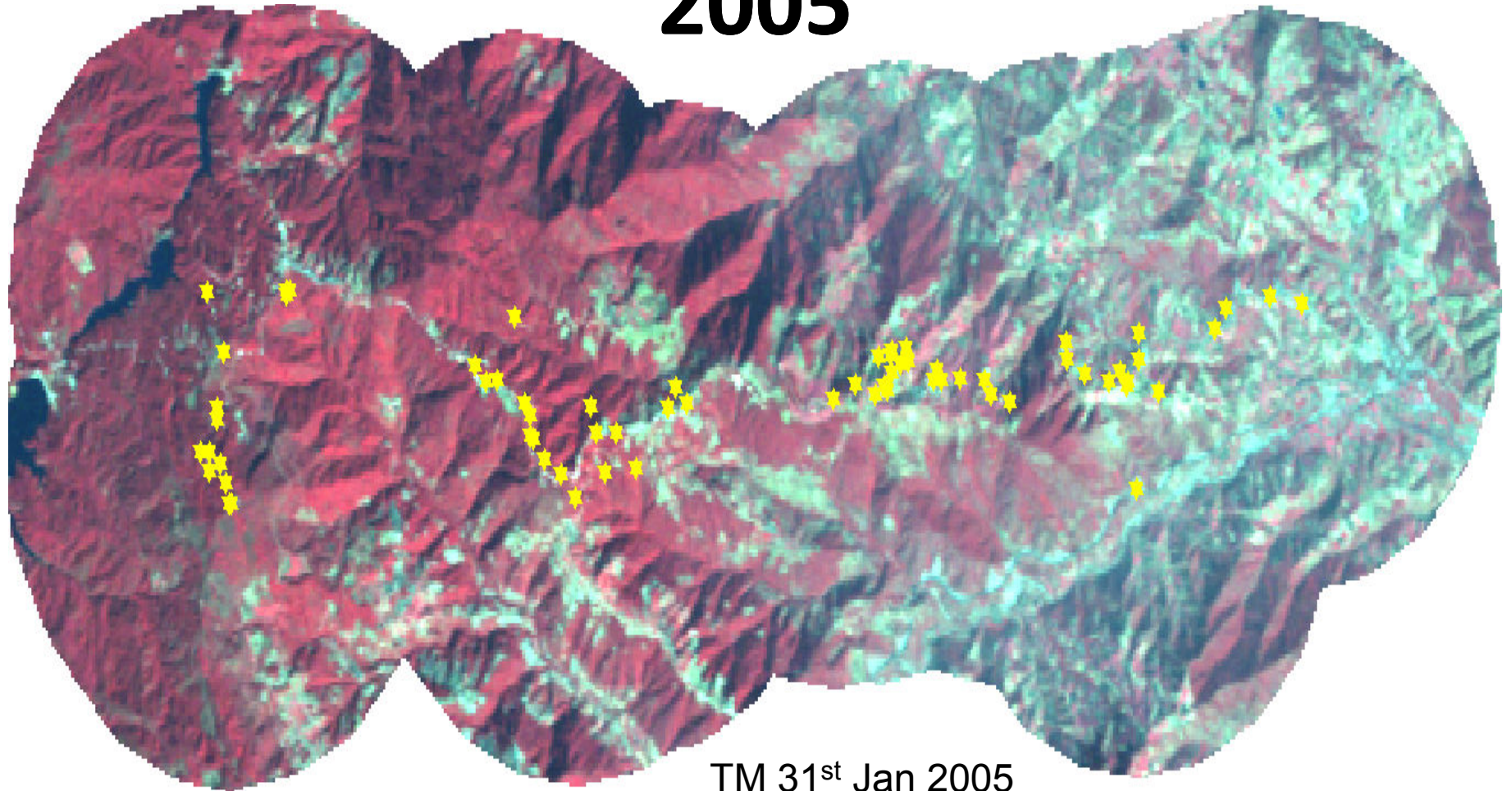
Interpolation

OSSIM (Open Source Software Image Map)

Sensor Model

Hyperspectral capable

Land use change from 1976 to 2005



Altitude gradient

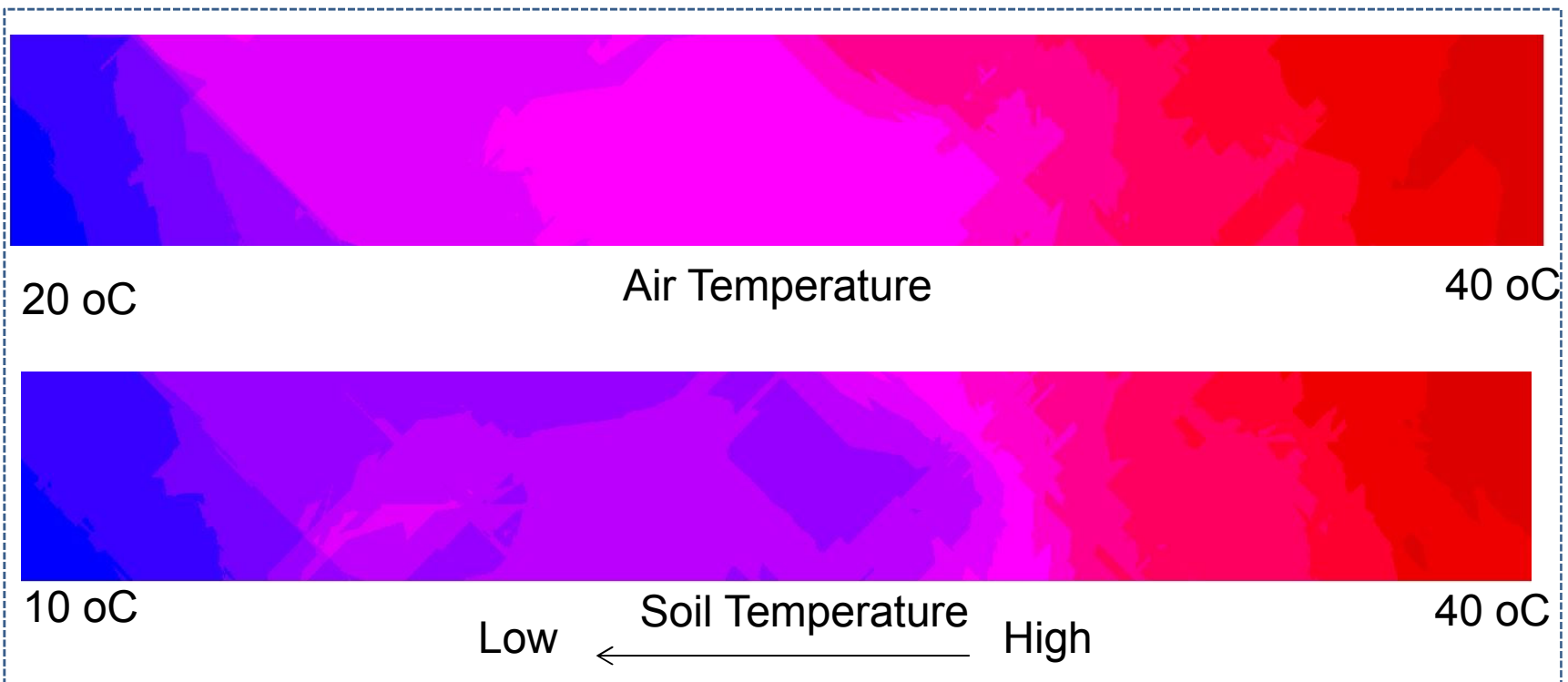
High ----- Low



100 %

High Humidity → Low

40%



20 oC

Air Temperature

40 oC

10 oC

Low ← Soil Temperature High

40 oC

Interpolation with environmental variables taken in the field