



Národní knihovna
České republiky
National Library
of the Czech Republic



DIFFER (Determinator of Image File Format propERTies)

Bedrich Vychodil

Institute of Information Studies and Librarianship, Faculty of Arts, Charles University in Prague

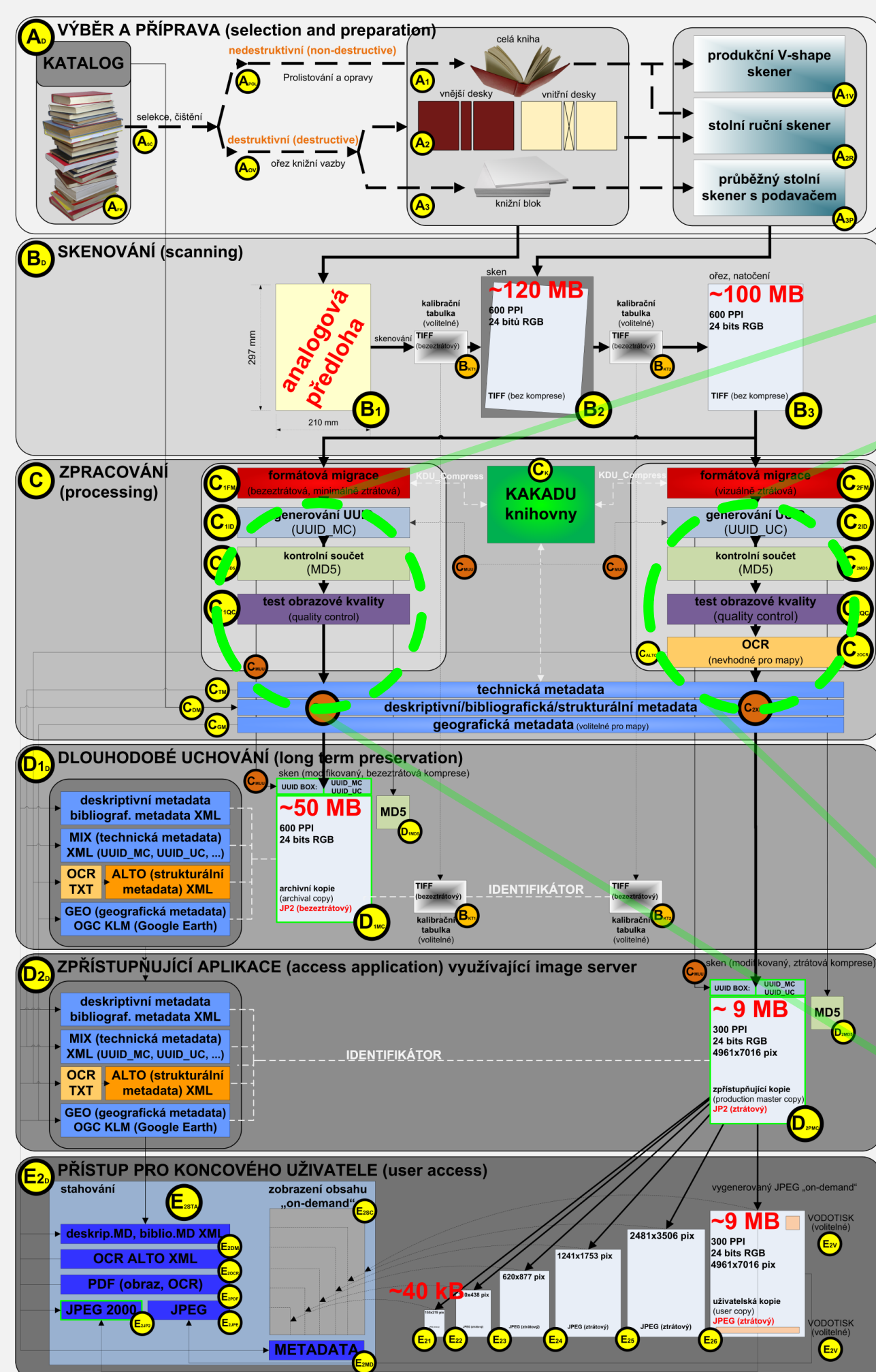
National Library of the Czech Republic

INPUT

Java-based GUI,
Command Line (batch)

DIGITIZATION

new data



OR

FORMAT MIGRATION

old (corrupted) data

API (Application programming interface) with REST (Representational State Transfer)

DIFFER

SUPPORTED FORMATS:

TIFF, JPEG, JPEG 2000,
DjVu, PNG, PDF, FITS

FUNCTIONALITIES:

VISUAL COMPARISON

SIMILARITY METRICS

RGB CHANNELS ANALYSIS

FILE FORMAT PROPERTIES
READER
METADATA SELECTION

JP2 PROFILE VALIDATOR

WHAT WE WRAP IN?

DAITSS (Digital Preservation Repository Software)
DJVUDUMP

DROID (Digital Record Object Identification)
ExifTool (Read, Write and Edit Meta Information!)
FFIdent (tool wrapper)

FITS (File Information Tool Set)
Imagemagick

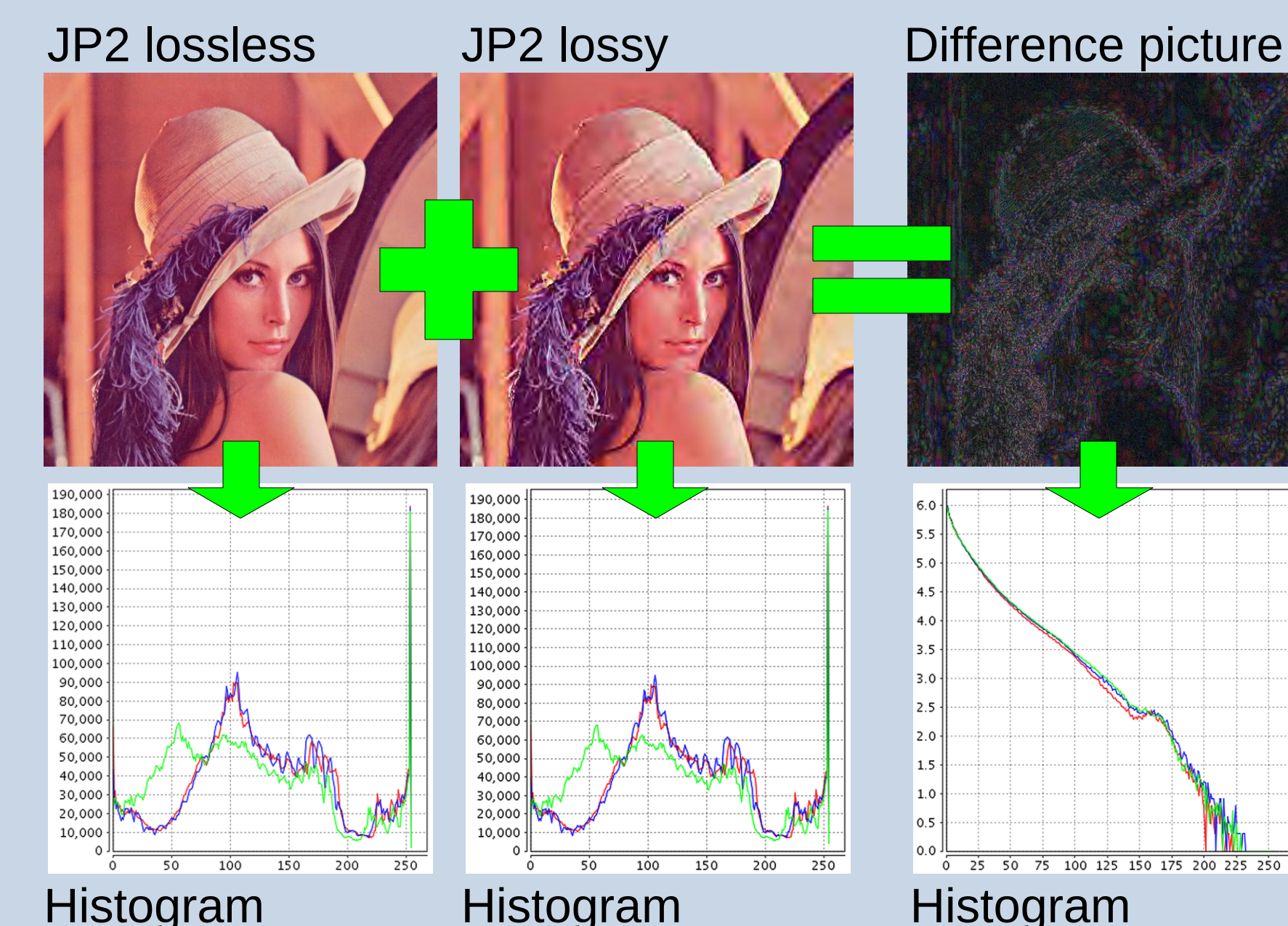
JHOVE (JSTOR/Harvard Object Validation Environment)
Jpylyzer (by van der Knijff)

KDU_expand (Kakadu library)
NLNZ MTD Extraction Tool (tool wrapper)
PRONOM (The technical registry PRONOM)

OUTPUT

Java-based GUI, selected
significant properties, XML RAW export, CSV

VISUAL COMPARISON:



PSNR, SSIM, MSSIM, UIQI

ARTEFACTS, OBSCURE, GLARE DETECTION

GLITCHES DETECTION:



IDENTIFICATION, VALIDATION,
CHARACTERIZATION

VISUAL AND TEXTUAL EXPORT



Source Code



Documentation



Presentation



Home page