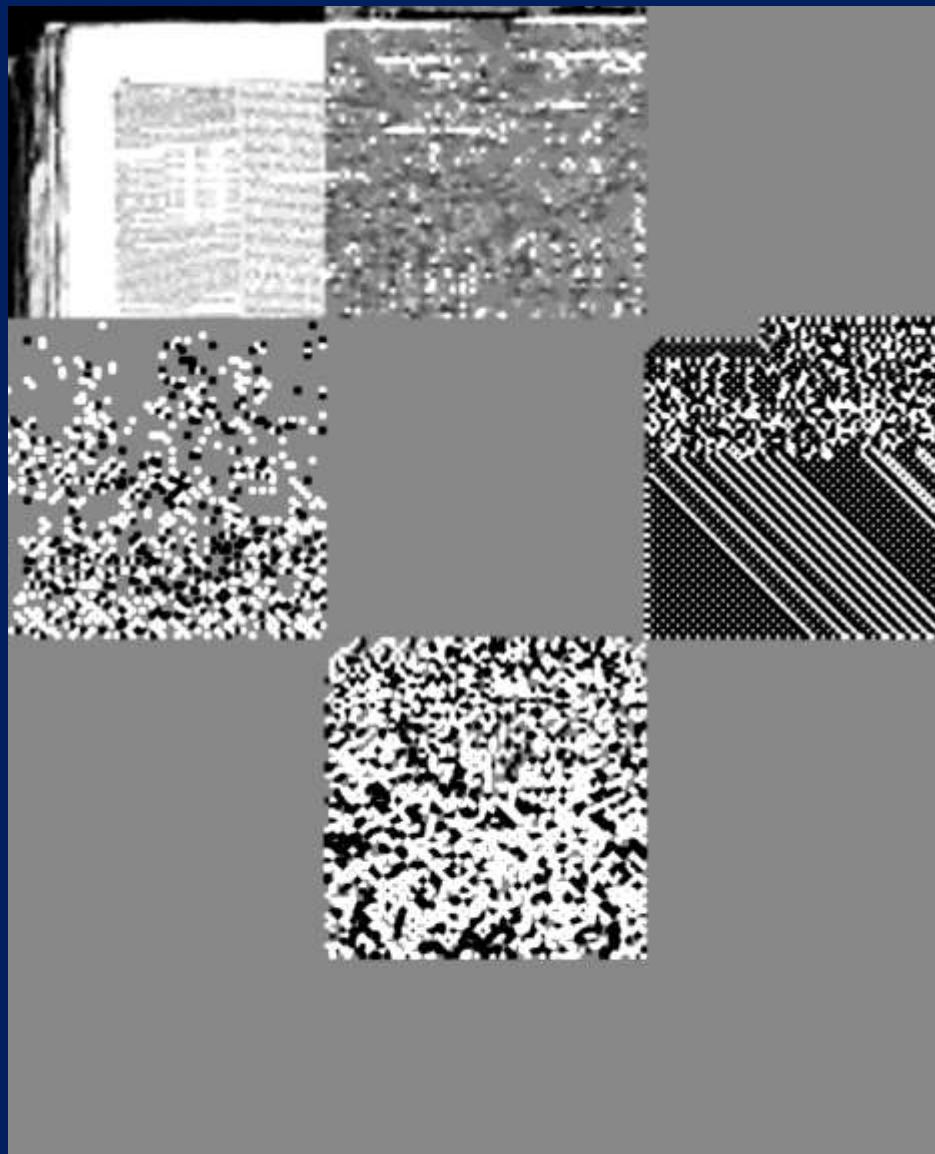
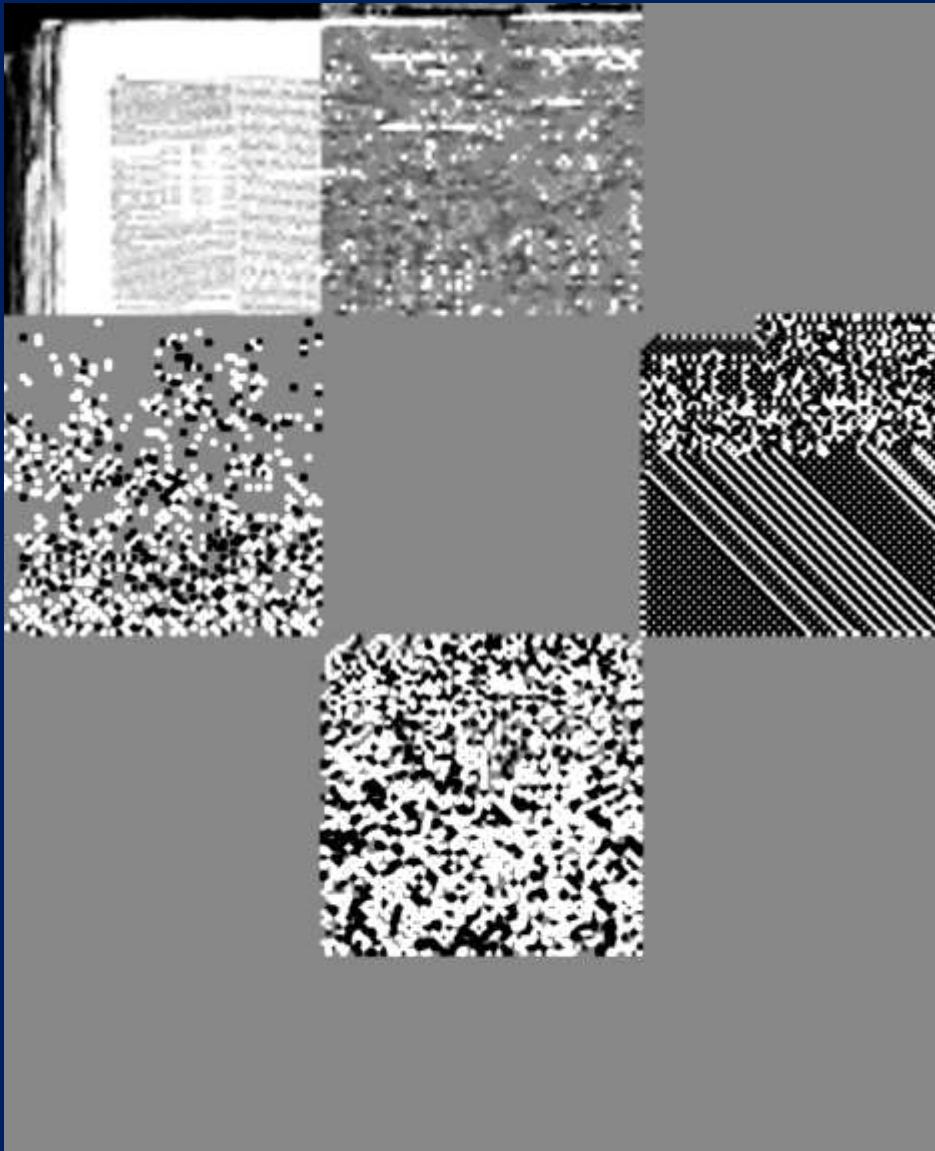




JP2 validator / extractor

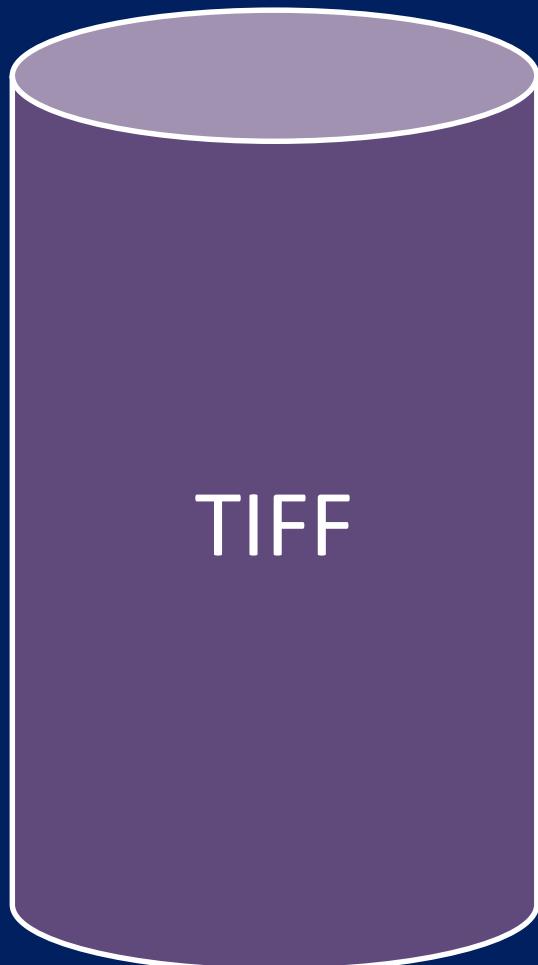
Johan van der Knijff



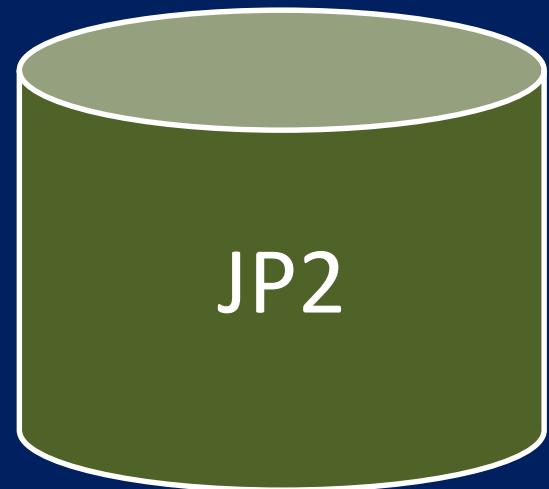


“Well-formed and valid”

146 TB



KB



jpylyzer

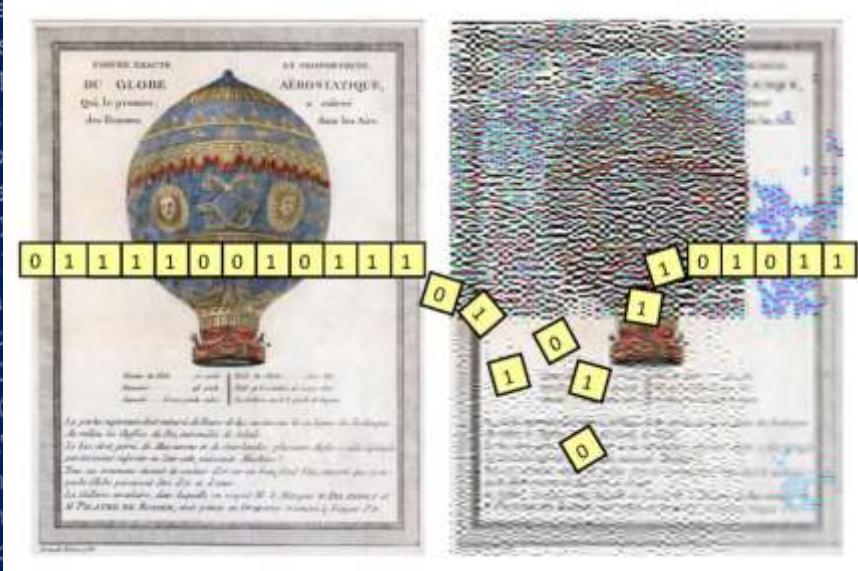
JP2 validator / extractor



```

<cod>
  <lcod>18</lcod>
  <precincts>yes</precincts>
  <sop>yes</sop>
  <eph>yes</eph>
  <order>1</order>
  <layers>1</layers>
  <multip>1</multip>
  <levels>1</levels>
  <codeB1>0 1 1 1 1 0 0 1 0 1 1 1</codeB1>
  <codeB2>0 1 0 1 1 0 1 0 1 1 1</codeB2>
  <codin>
    <reset></reset>
    <term0></term0>
    <vert0></vert0>
    <pred0></pred0>
    <segm0></segm0>
    <tran0></tran0>
    <pred1></pred1>
    <precincts>
      <precinctSizeX>128</precinctSizeX>
      <precinctSizeY>128</precinctSizeY>
      <precinctSizeX>128</precinctSizeX>
      <precinctSizeY>128</precinctSizeY>
      <precinctSizeX>128</precinctSizeX>
      <precinctSizeY>128</precinctSizeY>
      <precinctSizeX>256</precinctSizeX>
      <precinctSizeY>256</precinctSizeY>
      <precinctSizeX>256</precinctSizeX>
      <precinctSizeY>256</precinctSizeY>
    </precincts>
  </codin>
</cod>

```



```

<imageHeaderBox>
  <height>3701</height>
  <width>2717</width>
  <nC>3</nC>
  <bPCSign>unsigned</bPCSign>
  <bPCDepth>8</bPCDepth>
  <c>jpeg2000</c>
  <unkC>yes</unkC>
  <iPR>no</iPR>
</imageHeaderBox>

```



INTERNATIONAL
STANDARD

**ISO/IEC
15444-1**

Second edition
2004-09-15

Reference number
ISO/IEC 15444-1:2004(E)



© ISO/IEC 2004

INTERNATIONAL
STANDARD

ISO/IEC
15444-1

Second edition
2004-09-15

Reference number
ISO/IEC 15444-1:2004(E)



© ISO/IEC 2004





jpylyzer



jpylyzer

Valid (yes/no)
Errors
Properties

Binaries (version 1.13.0)

Windows



32 bit

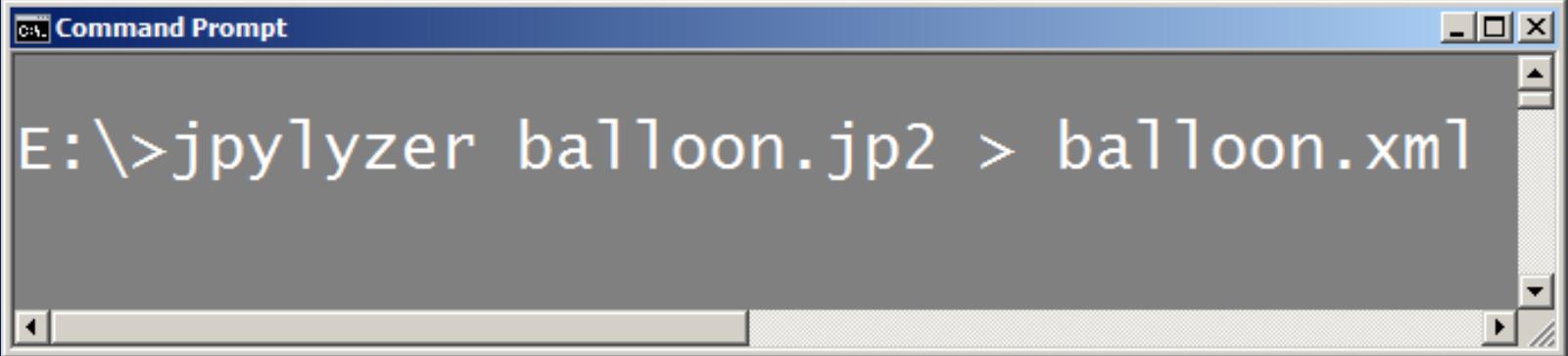
Debian



Amd 64



i386



E:\jpylyzer-test-files\truncated_at_byte_5000.xml - Internet Explorer

E:\jpylyzer-test-files\tru E:\jpylyzer-test-files\truncat...

File Edit View Favorites Tools

```
<?xml version="1.0" encoding="UTF-8"?>
- <jpylyzer xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:ns8="http://ns.adobe.com/xap/1.0/sType/ResourceRef#"
  xmlns:ns7="http://ns.adobe.com/xap/1.0/mm/"
  xmlns:ns6="http://ns.adobe.com/xap/1.0/"
  xmlns:ns5="http://ns.adobe.com/tiff/1.0/"
  xmlns:ns4="http://ns.adobe.com/photoshop/1.0/"
  xmlns:ns3="http://ns.adobe.com/exif/1.0/" xmlns:ns0="adobe:ns:meta/"
  xmlns:dc="http://purl.org/dc/elements/1.1/">
  - <toolInfo>
    <toolName>jpylyzer.exe</toolName>
    <toolVersion>1.13.0</toolVersion>
  </toolInfo>
  + <fileInfo>
    <isValidJP2>False</isValidJP2>
  - <tests>
    - <contiguousCodestreamBox>
      <foundExpectedNumberOfTiles>False</foundExpectedNumberOfTiles>
      - <tileParts>
        - <tilePart>
          <foundNextTilePartOrEOC>False</foundNextTilePartOrEOC>
        </tilePart>
      </tileParts>
      <foundEOCMarker>False</foundEOCMarker>
    </contiguousCodestreamBox>
  </tests>
  + <properties>
</jpylyzer>
```

E:\jpylyzer-test-files\truncated_at_byte_5000.xml - Internet Explorer

File Edit View Favorites Tools

```
<?xml version="1.0" encoding="UTF-8"?>
- <jpylyzer xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:ns8="http://ns.adobe.com/xap/1.0/sType/ResourceRef#"
  xmlns:ns7="http://ns.adobe.com/xap/1.0/mm/"
  xmlns:ns6="http://ns.adobe.com/xap/1.0/"
  xmlns:ns5="http://ns.adobe.com/tiff/1.0/"
  xmlns:ns4="http://ns.adobe.com/photoshop/1.0/"
  xmlns:ns3="http://ns.adobe.com/exif/1.0/" xmlns:ns0="adobe:ns:meta/"
  xmlns:dc="http://purl.org/dc/elements/1.1/">
  - <toolInfo>
    <toolName>jpylyzer.exe</toolName>
    <toolVersion>1.13.0</toolVersion>
  </toolInfo>
  + <fileInfo>
    <isValidJP2>False</isValidJP2>
  - <tests>
    <contiguousCodestreamBox>
      <foundExpectedNumberOfTiles>False</foundExpectedNumberOfTiles>
      - <tileParts>
        - <tilePart>
          <foundNextTilePartOrEOC>False</foundNextTilePartOrEOC>
        </tilePart>
      </tileParts>
      <foundEOCMarker>False</foundEOCMarker>
    </contiguousCodestreamBox>
  </tests>
  + <properties>
</jpylyzer>
```

E:\jpylyzer-test-files\truncated_at_byte_5000.xml - Internet Explorer

File Edit View Favorites Tools

```
<?xml version="1.0" encoding="UTF-8"?>
- <jpylyzer xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:ns8="http://ns.adobe.com/xap/1.0/sType/ResourceRef#"
  xmlns:ns7="http://ns.adobe.com/xap/1.0/mm/"
  xmlns:ns6="http://ns.adobe.com/xap/1.0/" xmlns:ns5="http://ns.adobe.com/tiff/1.0/"
  xmlns:ns4="http://ns.adobe.com/photoshop/1.0/"
  xmlns:ns3="http://ns.adobe.com/exif/1.0/" xmlns:ns0="adobe:ns:meta/"
  xmlns:dc="http://purl.org/dc/elements/1.1/">
  + <toolInfo>
  + <fileInfo>
    <isValidJP2>False</isValidJP2>
  + <tests>
    - <properties>
      <signatureBox/>
      + <fileTypeBox>
      + <jp2HeaderBox>
      + <uuidInfoBox>
      + <xmlBox>
      + <contiguousCodestreamBox>
        <compressionRatio>6033.37</compressionRatio>
      </properties>
    </jpylyzer>
```

E:\jpylyzer-test-files\truncated_at_byte_5000.xml - Internet Explorer

```
<isvalluJPZ>raise</isvalluJPZ>
+ <tests>
- <properties>
    <signatureBox/>
    + <fileTypeBox>
        - <jp2HeaderBox>
            - <imageHeaderBox>
                <height>3701</height>
                <width>2717</width>
                <nC>3</nC>
                <bPCSign>unsigned</bPCSign>
                <bPCDepth>8</bPCDepth>
                <c>jpeg2000</c>
                <unkC>yes</unkC>
                <iPR>no</iPR>
            </imageHeaderBox>
            - <colourSpecificationBox>
                <meth>Enumerated</meth>
                <prec>0</prec>
                <approx>0</approx>
                <enumCS>sRGB</enumCS>
            </colourSpecificationBox>
        </jp2HeaderBox>
        + <uuidInfoBox>
        + <xmlBox>
        + <contiguousCodestreamBox>
            <compressionRatio>6033.37</compressionRatio>
        </properties>
    </iDvIvzler>
```



6.3 File Type box

This box specifies file type, version and compatibility information, including specifying if this file is a conforming JP2 file or if it can be read by a conforming JP2 reader.

6.3.1 Element name

fileTypeBox

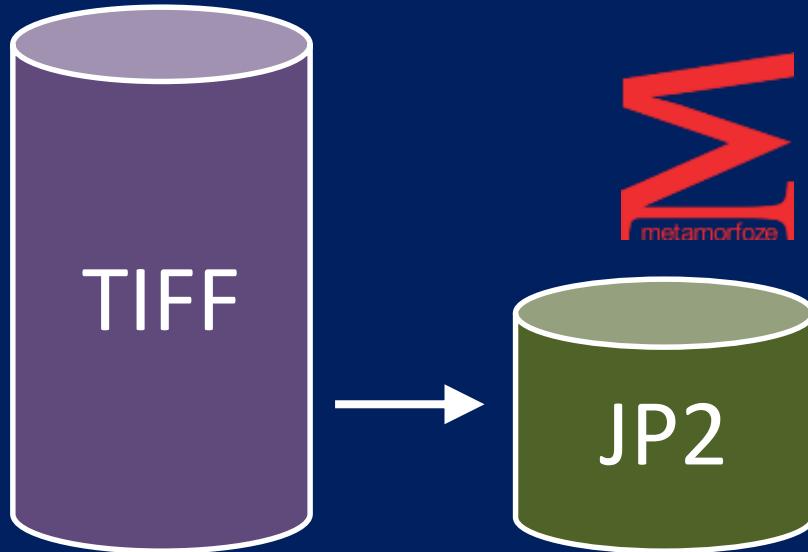
6.3.2 Reported properties

Property	Description
br	Brand
minV	Minor version
cL [*]	Compatibility field (repeatable)

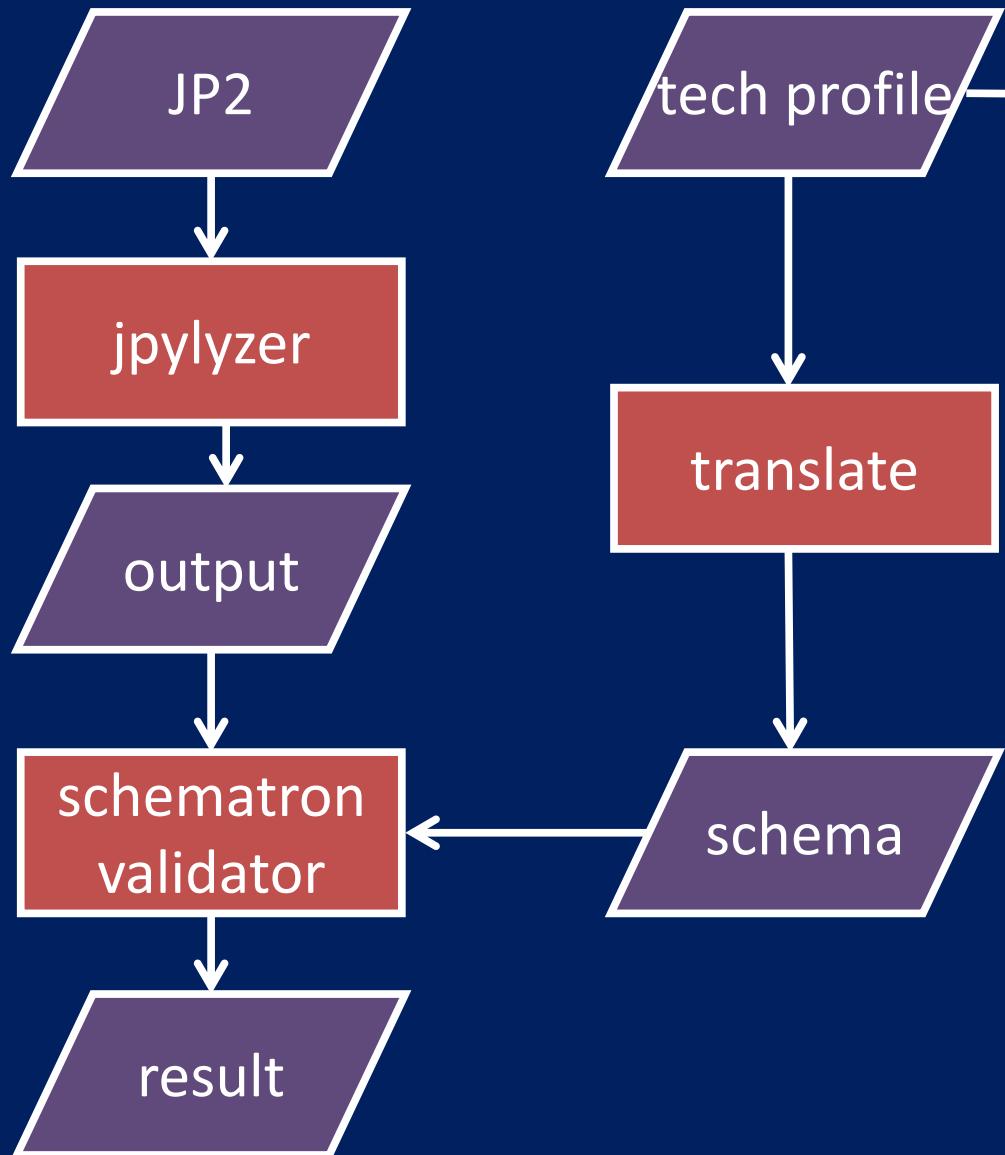
6.3.3 Tests

Test name	True if
boxLengthisValid	(Size of box – 8) /4 is a whole number (integer)
brandisValid	br equals 0x6a703220 ("jp2 ")
minorVersionisValid	minV equals 0
compatibilityListisValid	Sequence of compatibility (cL) fields includes one entry that equals 0x6a703220 ("jp2 ")

KB



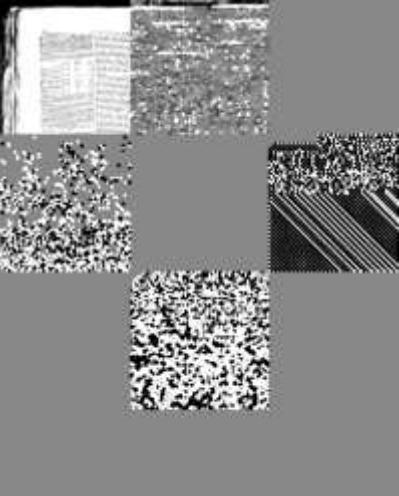
Parameter	Value
Compression type	Lossy (irreversible 9-7 wavelet filter)
# decomposition levels	5
Progression order	RPCL
Tile size	1024 x 1024
Code block size	64 x 64 ($2^6 \times 2^6$)
Precinct size	256 x 256 for 2 highest resolution levels; 128 x 128 for remaining resolution levels
Number of quality layers	8
Target compression ratio	20:1
Error resilience	Start-of-packet headers; end-of-packet headers; segmentation symbols
Grid resolution	Stored in “Capture Resolution” fields
ICC profiles	Embedded using “Restricted ICC” method



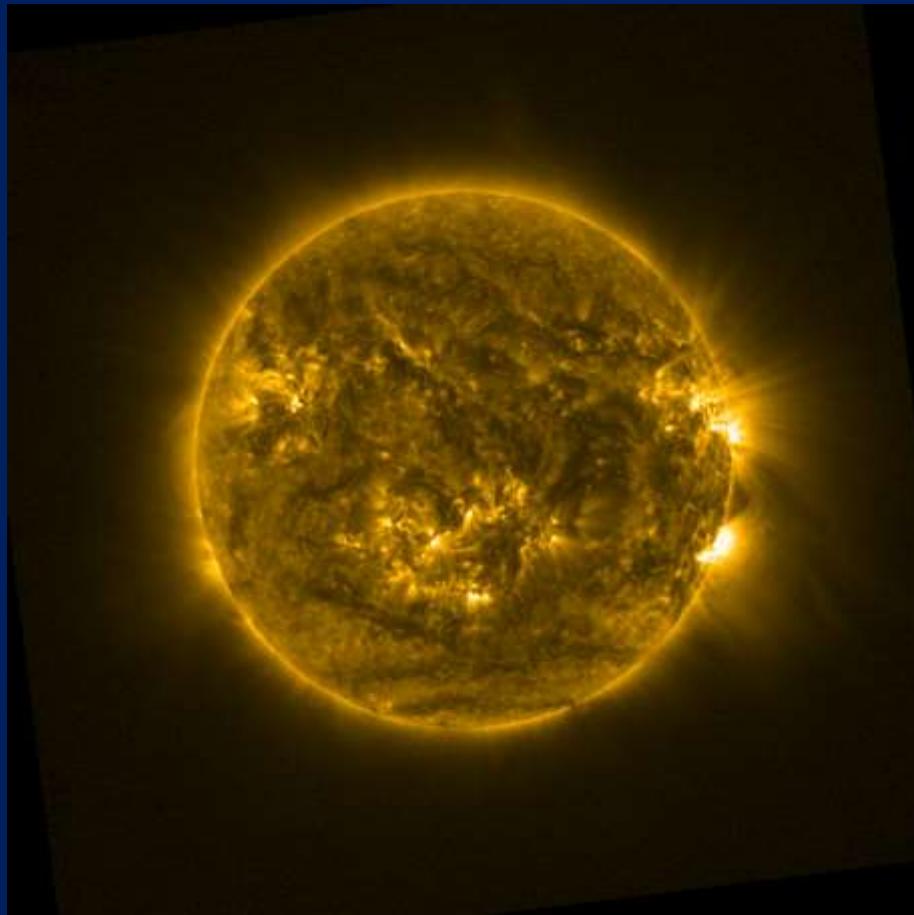
Parameter	Value
Compression type	Lossy (irreversible 9-7 wavelet filter)
# decomposition levels	5
Progression order	RPCL
Tile size	1024 x 1024
Code block size	64 x 64 ($2^6 \times 2^6$)
Precinct size	256 x 256 for 2 highest resolution levels; 128 x 128 for remaining resolution levels
Number of quality layers	8
Target compression ratio	20:1
Error resilience	Start-of-packet headers; end-of-packet headers; segmentation symbols
Grid resolution	Stored in "Capture Resolution" fields
ICC profiles	Embedded using "Restricted ICC" method

BRITISH
LIBRARY

2m
JP2s



700
broken



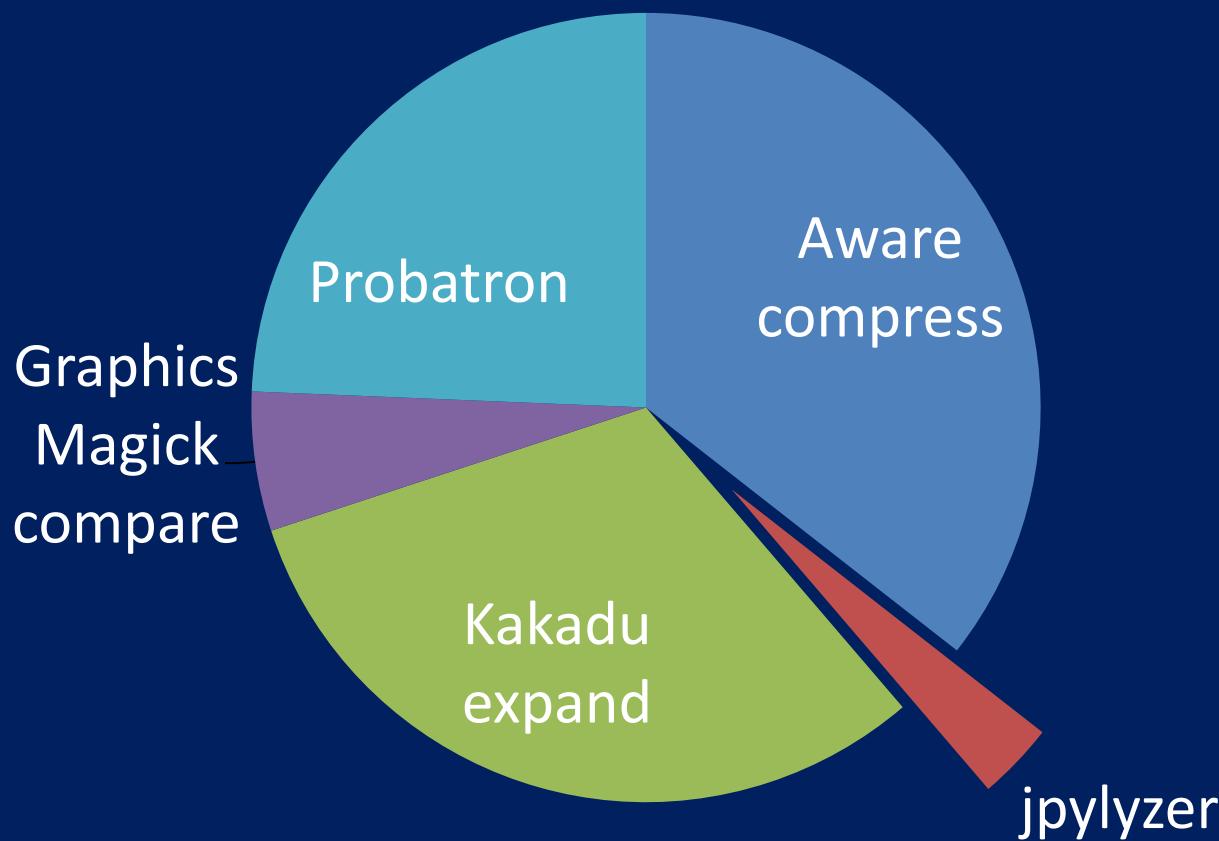
wellcome trust

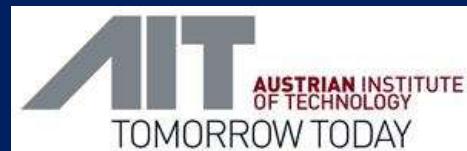


{ BnF }

STATS**BIBLIOTEKET**

Processing time TIFF -> JP2 Workflow







Ubuntu - Details of package

packages.ubuntu.com/en/utopic/python-jpylyzer

ubuntu packages

package names Search

Ubuntu > Packages > utopic > python > python-jpylyzer

[Source: jpylyzer] [raring][saucy][trusty][utopic]

Package: python-jpylyzer (1.13.0-1) [universe]

JP2 (JPEG 2000 Part 1) validator and properties extractor

Other Packages Related to python-jpylyzer

• depends ● recommends ■ suggests • enhances

- [python](#)
interactive high-level object-oriented language (default version)
- [python \(<< 2.8\)](#)
- [python \(>= 2.7\)](#)
- [pdl-image-tools](#)
PIRL Image Tools

Download python-jpylyzer

Architecture	Package	Size	Installed Size	Files
all	33.0 kB	190.0 kB	[list of files]	

Links for python-jpylyzer

No screenshot available

Ubuntu Resources:

- [Bug Reports](#)
- [Ubuntu Changelog](#)
- [Copyright File](#)

Download Source Package jpylyzer:

- [\[jpylyzer_1.13.0-1.dsc\]](#)
- [\[jpylyzer_1.13.0-1.orig.tar.gz\]](#)
- [\[jpylyzer_1.13.0-1.debian.tar.xz\]](#)

Maintainer:

- [Ubuntu MOTU Developers \(Mail Archive\)](#)

Debian - Details of package

https://packages.debian.org/sid/python/python-jpylyzer

PACKAGES

About Debian Getting Debian Support Developers' Corner

debian / packages / sid (unstable) / python / python-jpylyzer

[Source: jpylyzer] [wheezy] [jessie] [sid]

Search package names

Package: python-jpylyzer (1.13.0-1)

JP2 (JPEG 2000 Part 1) validator and properties extractor

Validator and feature extractor for JP2 (JPEG 2000 Part 1 - ISO/IEC 15444-1) images. Jpylyzer was specifically created to check that a JP2 file really conforms to the format's specifications. Additionally jpylyzer is able to extract the technical characteristics of each image.

Other Packages Related to python-jpylyzer

• depends ■ recommends ♦ suggests ▲ enhances

- dep: [python \(<< 2.8\)](#)
interactive high-level object-oriented language (default version)
- dep: [python \(>= 2.7\)](#)
- ♦ sug: [pirl-image-tools](#)
PIRL Image Tools

Download python-jpylyzer

Links for python-jpylyzer

No screenshot available

Debian Resources:

- Bug Reports
- Developer Information (PTS)
- Debian Changelog
- Copyright File
- Debian Patch Tracker

Download Source Package jpylyzer:

- [jpylyzer_1.13.0-1.dsc]
- [jpylyzer_1.13.0.orig.tar.gz]
- [jpylyzer_1.13.0-1.debian.tar.xz]

Maintainers:

- Debian Python Modules Team
(QA Page, Mail Archive)
- Mathieu Malaterre (QA Page)

External Resources:

- Homepage [github.com]

Similar packages:

- python-jpylyzer-doc
- libjpylyzer0

The screenshot shows a web browser window displaying the Debian package details for 'python-jpylyzer'. The URL is https://packages.debian.org/sid/python/python-jpylyzer. The page header includes the Debian logo and navigation links for About Debian, Getting Debian, Support, and Developers' Corner. Below the header, there are search fields for 'Search package names' and links for 'wheezy', 'jessie', and 'sid'. The main content area starts with the package title 'Package: python-jpylyzer (1.13.0-1)' and its description: 'JP2 (JPEG 2000 Part 1) validator and properties extractor'. It then provides a detailed description of the package's function: validating JP2 files and extracting technical characteristics. Below this, a section titled 'Other Packages Related to python-jpylyzer' lists dependencies: 'dep: python (<< 2.8)' (with a note about being the default version), 'dep: python (>= 2.7)', and 'sug: pirl-image-tools' (with a note about PIRL Image Tools). A 'Download python-jpylyzer' section follows, featuring a large red circle with a white question mark indicating 'No screenshot available'. To the right of the main content, there are several sidebar sections: 'Debian Resources' (Bug Reports, Developer Information, Changelog, Copyright File, Patch Tracker), 'Download Source Package jpylyzer' (links for .dsc, .tar.gz, and .deb files), 'Maintainers' (Debian Python Modules Team, Mathieu Malaterre), 'External Resources' (link to GitHub), and 'Similar packages' (links for python-jpylyzer-doc and libjpylyzer0).

thorough simple
transparent



performant open
community-supported



jpylyzer

<http://openplanets.github.io/jpylyzer/>

Funding

This work was partially supported by the SCAPE Project.

The SCAPE project is co-funded by the European Union under FP7 ICT-2009.4.1 (Grant Agreement number 270137).

<http://www.scape-project.eu>

Image attribution

- The Man From Planet X – author unknown, copyrighted
- May the Source Be With You – author unknown
- Balloon - Public Domain, released under CC-BY license
- Sun - Centre Spatial de Liege / Royal Observatory of Belgium (public domain)
- Haystack - Myrabella / Wikimedia Commons / CC-BY-SA-3.0