

# pixelarttikz-l3 (0.1.9)

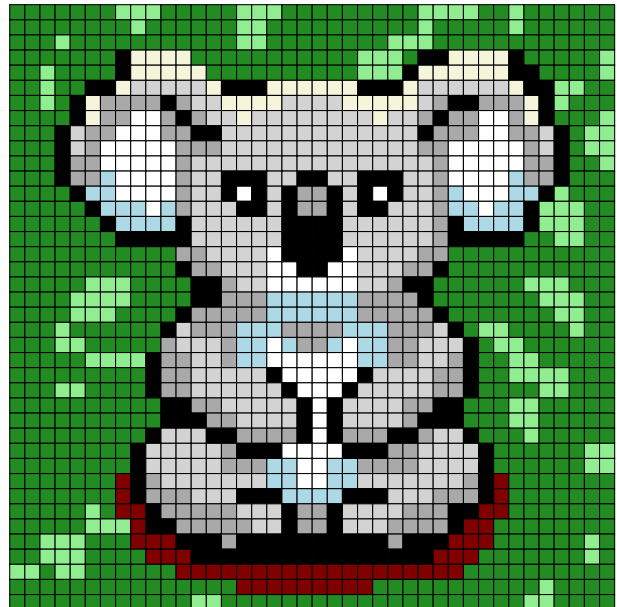
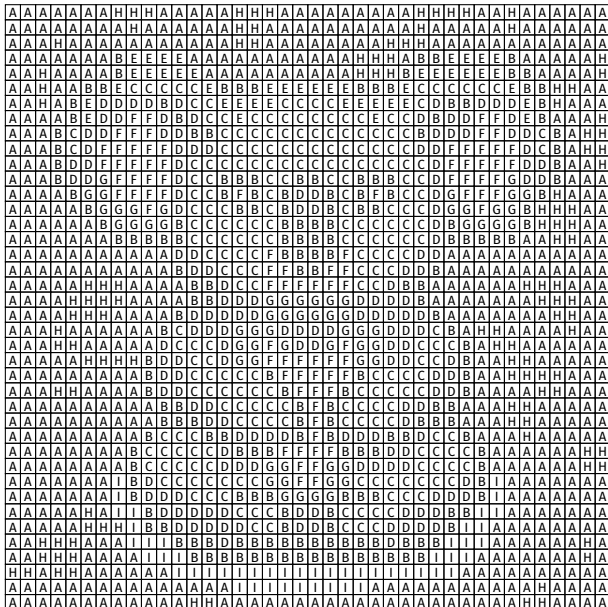
pixelart, with TikZ and  $\text{\LaTeX}$ 3

Cédric Pierquet\*

October 20, 2025

## Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
1.1	Loading	2
1.2	Idea(s)	2
1.3	First example(s)	2
<b>2</b>	<b>Global usage</b>	<b>4</b>
2.1	Main macro	4
2.2	Macro for individual block	4
2.3	Sample	5
<b>3</b>	<b>History</b>	<b>8</b>



\*cpierquet@outlook.fr

# 1 Introduction

## 1.1 Loading

To use `pixelarttikz-l3`, simply use:

### Loading (only l3)

```
\usepackage{pixelarttikz-l3}
```

### Loading (l3 and l2)

```
\usepackage[legacy]{pixelarttikz-l3} %with latex2e version of package and macros
```

## 1.2 Idea(s)

The idea behind this package is to provide a command for manipulating pixelarts, with a simplified syntax.

The basis of the macro is a csv file, which can be external file, or with internal generated version.

For *huge* pixelarts, Lua $\text{\LaTeX}$  is necessary for compiling !

## 1.3 First example(s)

### File csv sample



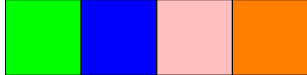
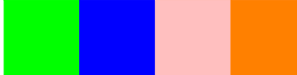

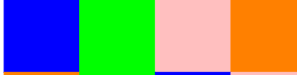

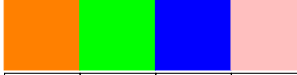
```
\begin{filecontents*}[overwrite]{base.csv}  
A,B,C,D  
A,B,D,C  
B,A,D,C  
C,A,B,D  
\end{filecontents*}
```

```

\pixlarttikz%with letters
{A,B,C,D}
{base.csv}
\pixlarttikz[correction]%with colors
{A=green,B=blue,C=orange,D=pink}%
{base.csv}
\pixlarttikz[correction,borders=false]%with colors w/o borders
{A=green,B=blue,C=orange,D=pink}%
{base.csv}

\pixlarttikz[symbols]%with symbols
{A=12,B=-5,C=4,D=0}
{base.csv}
\pixlarttikz[symbols,text size=0.875]%with symbols and custom scale
{A=12,B=-5,C=4,D=0}
{base.csv}
\pixlarttikz[symbols]%with random symbols
{A=1§2§3§4,B=5§6§7§8,C=9§10§11§12,D=13§14§15§16}
{base.csv}

```

A	B	C	D								
A	B	D	C								
B	A	D	C								
C	A	B	D								
12	-5	4	0	<b>12</b>	<b>-5</b>	<b>4</b>	<b>0</b>	2	6	10	16
12	-5	0	4	<b>12</b>	<b>-5</b>	<b>0</b>	<b>4</b>	1	7	16	11
-5	12	0	4	<b>-5</b>	<b>12</b>	<b>0</b>	<b>4</b>	6	4	16	12
4	12	-5	0	<b>4</b>	<b>12</b>	<b>-5</b>	<b>0</b>	12	4	7	16

## 2 Global usage

### 2.1 Main macro

The main macro is:

#### Main macro

```
\pixlarttikz%  
  [keys]%  
  <tikzpicture options>%  
  {letters association}%  
  {file.csv}
```

Available keys are:

- the key `unit` to specify unit, in cm; default 1
- the boolean codes to display codes; default true
- the boolean `correction` to color the pixlart; default false
- the boolean `symbols` to print the symbols (one or shuffle within list); default false
- the boolean `borders` to print borders of the cells; default true
- the key `font` for the font of codes/symbols; default \sffamily
- the key `cut` for cutting usage; default empty
- the key `text size` for adapting height automatically. default 0.55

The cut key can be given within the form:

- `<number of block length>x<number of block col>` to specify the size of the blocks;
- `<number of V blocks>+<number of H blocks>` to specify the number of blocks.

### 2.2 Macro for individual block

The macro for individual block is (keys are identical of main macro):

#### Individual block

```
\pixlarttikzblock%  
  [keys]%  
  <tikzpicture options>%  
  {letters association}%  
  {block number r/c}%  
  {file.csv}
```

### 2.3 Sample

```

Useful data
\begin{filecontents*}[overwrite]{PAkoala.csv}
A,A,A,A,A,A,A,H,H,H,A,A,A,A,H,H,H,A,A,A,A,A,A,A,H,H,H,H,A,A,H,A,A,A,A,A,A
A,A,A,A,A,A,A,H,A,A,A,A,A,H,H,H,A,A,A,A,A,A,A,H,A,A,A,A,H,A,A,A,A,A,A
A,A,A,H,A,A,A,A,A,A,A,A,A,H,H,H,A,A,A,A,A,A,H,H,H,A,A,A,A,A,A,A,A,A,A
A,A,A,A,A,A,A,B,E,E,E,E,A,A,A,A,A,A,A,A,A,H,H,H,A,B,B,E,E,E,E,B,A,A,A,A,A,H
A,A,H,A,A,A,A,B,E,E,E,E,E,A,A,A,A,A,A,A,A,A,H,H,H,B,E,E,E,E,E,B,B,A,A,A,A,H
A,A,H,A,A,B,B,E,C,C,C,C,E,B,B,B,E,E,E,E,E,B,B,B,E,C,C,C,C,C,E,B,B,H,H,A,A
A,A,H,A,B,E,D,D,D,D,B,D,C,C,E,E,E,E,C,C,C,C,E,E,E,E,E,C,D,B,B,D,D,D,E,B,H,A,A,A
A,A,A,A,B,E,D,D,F,F,D,B,D,C,C,E,C,C,C,C,C,C,C,E,C,C,D,B,D,D,F,F,D,E,B,A,A,A,H
A,A,A,B,C,D,D,F,F,F,D,D,B,B,C,C,C,C,C,C,C,C,C,C,C,C,C,C,B,D,D,D,F,F,D,D,C,B,A,H,H
A,A,A,B,C,D,F,F,F,F,D,D,D,C,C,C,C,C,C,C,C,C,C,C,C,D,D,F,F,F,F,F,D,C,B,A,H,H
A,A,A,B,D,D,F,F,F,F,D,C,C,C,C,C,C,C,C,C,C,C,C,C,C,C,D,F,F,F,F,F,D,D,B,A,A,H
A,A,A,B,D,D,G,F,F,F,F,D,C,C,B,B,B,C,C,B,B,C,C,B,B,B,C,C,D,F,F,F,F,G,D,D,B,A,A,A
A,A,A,A,B,G,G,F,F,F,F,D,C,C,B,F,B,C,B,D,D,B,C,B,F,B,C,C,D,G,F,F,F,G,G,B,H,A,A,A
A,A,A,A,A,B,G,G,G,F,G,D,C,C,C,B,B,C,B,D,D,B,C,B,B,C,C,C,D,G,G,F,G,G,B,H,H,H,A,A
A,A,A,A,A,B,G,G,G,G,B,C,C,C,C,C,C,B,B,B,C,C,C,C,C,C,D,B,G,G,G,G,B,H,H,H,A,A
A,A,A,A,A,A,B,B,B,B,B,C,C,C,C,C,C,B,B,B,C,C,C,C,C,C,D,B,B,B,B,B,A,A,H,H,A,A
A,A,A,A,A,A,A,A,A,A,D,D,C,C,C,F,B,B,B,B,C,C,C,C,C,D,D,A,A,A,A,A,A,A,A,A,A
A,A,A,A,A,A,A,A,A,A,B,D,D,C,C,C,F,F,B,F,F,F,C,C,C,D,B,B,A,A,A,A,A,H,H,H,A,A,A
A,A,A,A,A,H,H,H,H,A,A,A,A,B,B,D,D,D,G,G,G,G,G,D,D,D,D,B,A,A,A,A,A,A,H,H,H,A,A
A,A,A,A,H,H,H,A,A,A,A,B,D,D,D,D,D,G,G,G,G,G,D,D,D,D,D,B,A,A,A,A,A,A,H,H,A,A
A,A,A,H,A,A,A,A,A,B,C,D,D,D,G,G,G,D,D,D,G,G,G,D,D,D,C,B,A,H,H,A,A,A,H,A,A
A,A,A,H,H,A,A,A,A,D,C,C,C,D,G,G,F,G,D,D,G,F,G,G,D,D,C,C,C,B,A,H,H,A,A,A,A,A
A,A,A,A,A,H,H,H,H,B,D,D,C,C,D,G,G,F,F,F,F,F,G,G,D,D,C,C,D,B,A,A,H,H,A,A,A,A,A
A,A,A,A,A,A,A,A,B,D,D,C,C,C,C,C,B,F,F,F,F,F,B,C,C,C,C,D,D,B,A,A,A,H,H,H,A,A,A
A,A,A,A,H,H,A,A,A,A,B,D,D,C,C,C,C,C,B,F,F,F,F,C,C,C,C,D,D,B,B,A,A,A,H,H,A,A,A
A,A,A,A,A,A,A,A,A,A,B,B,D,D,C,C,C,C,C,B,F,B,C,C,C,C,D,B,B,B,A,A,A,H,H,A,A,A,A
A,A,A,A,A,A,A,A,B,C,C,C,B,B,D,D,D,D,B,F,B,D,D,D,B,B,D,C,C,B,A,A,A,H,A,A,A,A,A
A,A,A,A,A,A,A,A,B,C,C,C,C,C,D,B,B,B,F,F,F,F,B,B,B,D,D,C,C,C,C,B,A,A,A,A,A,H,H
A,A,A,A,A,A,A,A,B,C,C,C,C,C,D,D,D,G,G,F,F,G,G,D,D,D,D,C,C,C,C,B,A,A,A,A,A,H,H
A,A,A,A,A,A,A,I,B,D,C,C,C,C,C,C,G,G,F,F,G,G,C,C,C,C,C,C,D,B,I,A,A,A,A,A,A,A
A,A,A,A,A,A,A,I,B,D,D,D,C,C,C,B,B,B,G,G,G,G,B,B,B,C,C,C,D,D,D,B,I,A,A,A,A,A,A
A,A,A,A,A,H,A,I,I,B,D,D,D,D,C,C,C,B,D,D,B,C,C,C,C,D,D,D,B,B,I,I,A,A,A,A,A,A,A
A,A,A,A,A,H,H,H,I,B,B,D,D,D,D,C,C,B,D,D,B,C,C,C,D,D,D,D,B,I,I,A,A,A,A,A,A,A
A,A,H,H,H,A,A,A,I,I,I,B,B,D,B,B,B,B,B,B,B,B,B,B,I,I,I,A,A,A,A,A,A,A,A,A,A
A,A,H,H,H,A,A,A,A,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,A,A,A,A,A,A,A
H,H,A,H,H,A,A,A,A,A,A,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,A,A,A,A,A,A,A,A,A,A
A,A,A,A,A,A,A,A,A,A,A,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,I,A,A,A,A,A,A,A,A,A,A
A,A,A,A,A,A,A,A,A,A,A,H,H,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,A,H,H,A,A,A,A
\end{filecontents*}

\def\pixlartcolorskoala{%french version :-p
A=VertForet,
B=Noir,
C=GrisClair,
D=GrisFonce,
E=Beige,
F=Blanc,
G=BleuClair,
H=VertClair,
I=Marron
}

```

```

\tikzset{pixlartcut/.style={semithick,blue}}
\pixlarttikz%
[unit=0.2,cut=8x8,text size=0.875]%
{A,B,C,D,E,F,G,H,I,J}%
{PAkoala.csv}

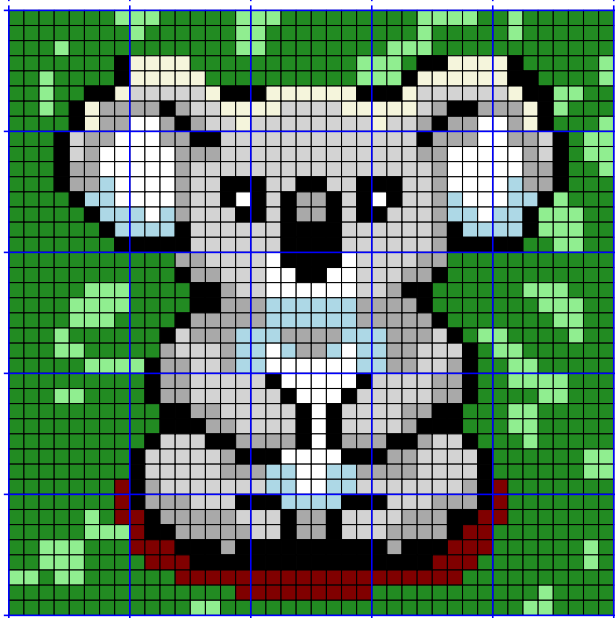
\pixlarttikz%
[unit=0.2,cut=8x8,correction]%
{\pixlartcolorskoala}%
{PAkoala.csv}

```

```

A A A A A A A A H H H A A A A A H H A A A A A A A A A A H H H H H A A A H A A A A A A A
A A A A A A A A A H A A A A A A H A A A A A A A A A A H A A A A A A A A H A A A A A A A
A A A H A A A A A A A A A A A A H A A A A A A A A A H H H A A A A A A A A A A A A A A
A A A A A A A A B E E E E A A A A A A A A A A H H H A B B E E E E B B A A A A A A H
A A H A A A A A B E E E E A A A A A A A A A A H H H B E E E E E E B B A A A A A A H
A A H A A B B E C C C C E B B B E E E E E E B B B E C C C C C E B B H H A A A
A A H A B E D D D D B D C C E E E E C C C C E E E E E C D B B D D D E B H A A A
A A A A B E D D F F D B D C C C C C C C C C C C C C C D B B D F F D F B A A A H
A A A B C D D F F F D B D C C C C C C C C C C C C C C B D D F F F D D C B A A H
A A A B C D F F F F F D D D C C C C C C C C C C C C C C D D F F F F D C B A A H
A A A B D D F F F F F D C C C C C C C C C C C C C C D F F F F F D D B A A A H
A A A A B D D G F F F F D C C B B B C C B B C C B B C C D F F F F F G D B A A A A
A A A A B G G F F F F D C C B F B C B D D B C B F B C C D G F F F F G G B H A A A
A A A A A B G G G F G D C C B B C B D D B C B C C C C D G G F G G B H H H A A
A A A A A B G G G G B C C C C C B B B B C C C C C C D B G G G G B H H H A A
A A A A A A B B B B C C C C C C B B B B C C C C C C D B B B B B A A H H A A
A A A A A A A A A A A D D C C C F B B B B F C C C C D D A A A A A A A A A A A A
A A A A A A A A A A A A B D D C C C F F B B B F F C C C D D B A A A A A A A A A A
A A A A A H H H A A A A B B D C C F F F F F F C C D B B A A A A A A H H H A A A
A A A A H H H H A A A A B B D D D G G G G G G D D D D B A A A A A A H H H A A
A A A A H H H A A A A B D D D D D G G G G G G D D D D B A A A A A A H H A A
A A A H A A A A A A B C D D D G G G D D D D G G G D D D C B A H H A A A A A A
A A A H H A A A A A A D C C D G G F G D D G F G G D D C C C B A H H A A A A A
A A A A H H H H B D D C C D G G F F F F F F G G D D C C D B A H H A A A A A A
A A A A A A A A A B D D C C C C B F F F F B C C C C D D B A A H H H H A A A
A A A H H A A A A B D D C C C C B F F F B C C C C D B A A A H H A A A A
A A A A A A A A A B B D D C C C C B F B C C C C D D B B A A A H H A A A A
A A A A A A A A A A B B D D C C C C B F B C C C C D B B B A A A H H A A A A
A A A A A A A A A B C C B B D D D B F B D D D B B D C C B A A A H A A A A A
A A A A A A A A A B C C C C D B B B F F F F B B B D D C C C C B A A A A A H H
A A A A A A A A A B C C C C D D D G G G F F F G G D D D C C C C B A A A A A H H
A A A A A A A I B D C C C C C G G F F G G C C C C C C D B I A A A A A A A
A A A A A A A I B D D C C C B B B G G G G B B B C C C D D D B I A A A A A A A
A A A A A H A I I B D D D D C C C B D D B C C C D D D D B I I A A A A A A A
A A A A A H H H I B B D D D D C C B D D D C C C D D D D B I I A A A A A A A
A A H H H A A A I I I B B B D B B B B B B B B B B B B B B I I I A A A A A A H A
A A H H H A A A A I I I B B B B B B B B B B B B B B B B B B I I I A A A A A A H A
H H A H H A A A A A A A I I I I I I I I I I I I I I I I I I I I I I A A A A A A A A
A A A A A A A A A A A A A A I I I I I I I I I I I A A A A A A A A A A H A A A A
A A A A A A A A A A A A H H A A A A A A A A A A A A A A A A A A A A A H H A A A

```



```

\tikzset{pixlartborder/.style={thin}}

\pixlarttikzblock%
[unit=0.75,cut=5+5,text size=0.9,font=\ttfamily]%
{A,B,C,D,E,F,G,H,I,J}%
{1/1}%first block
{PAkoala.csv}

\pixlarttikzblock%
[unit=0.75,cut=5+5,correction]%
{\pixlartcolorskoala}%
{1/1}%first block, correction
{PAkoala.csv}

\pixlarttikzblock%
[unit=0.75,cut=5+5,text size=0.9,font=\ttfamily]%
{A,B,C,D,E,F,G,H,I,J}%
{2/3}%intermediate block R2&C3
{PAkoala.csv}

\pixlarttikzblock%
[unit=0.75,cut=8x8,correction]%
{\pixlartcolorskoala}%
{2/3}%intermediate block R2&C3, correction
{PAkoala.csv}

```

A	A	A	A	A	A	A	H												
A	A	A	A	A	A	A	A												
A	A	A	H	A	A	A	A												
A	A	A	A	A	A	A	B												
A	A	H	A	A	A	A	B												
A	A	H	A	A	B	B	E												
A	A	H	A	B	E	D	D												
A	A	A	A	B	E	D	D												
C	C	C	C	C	C	C	C												
C	C	C	C	C	C	C	C												
C	C	C	C	C	C	C	C												
B	C	C	B	B	C	C	B												
B	C	B	D	D	B	C	B												
B	C	B	D	D	B	C	B												
C	C	B	B	B	B	C	C												
C	C	B	B	B	B	C	C												

### **3 History**

0.1.9: first version of l3 package