Upload the .json file of your colormap here

Choose File 5D.json

Colormap



Global Distances

The cell (i,j) contains the distance between the i-th and j-th color of the color map, which are displayed on the diagonal.

CieLAB 1976

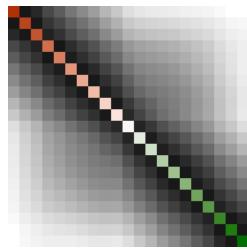
Maximum = 96.63

Average = 49.56

Minimum = 5.6

Deviation = 25.46

CieLAB 2000



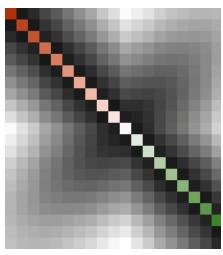
Maximum = 59.23

Average = 32.9

Minimum = 4.57

Deviation = 16.08

CieCAM 2002



Maximum = 64.48

Average = 32.24

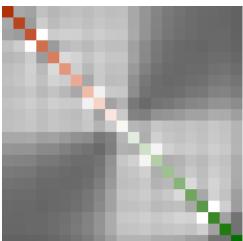
Minimum = 5.25

Deviation = 15.54

Global Speeds

The cell (i,j) contains the ratio of the distance between the i-th and j-th color of the color map and the difference of their corresponding values. The higher the global speed, the bett global discriminative power of the colormap.

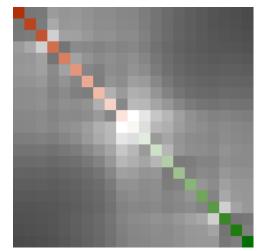




Maximum = 233.27

Average = 151.96

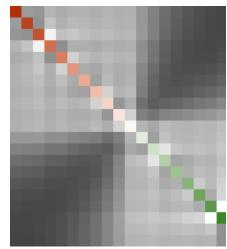
CieLAB 2000



Maximum = 187.8

Average = 101.47

CieCAM 2002

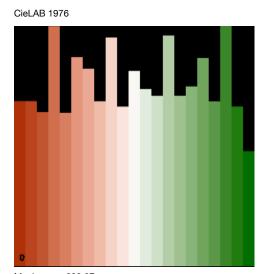


Maximum = 176.47

Average = 104.06

Local Speeds

The height of each column i shows the ratio of the distance between the i-th and (i+1)-st color of the color map and the difference of their corresponding values. The higher the local speed, the higher is the colormap's' local discriminative power in this area.

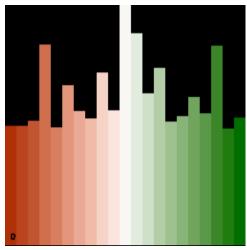


Maximum = 233.27 Average = 179.08

Minimum = 112.1

Deviation = 31.59

CieLAB 2000



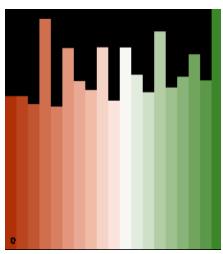
Maximum = 187.8

Average = 119.42

Minimum = 91.56

Deviation = 27.53

CieCAM 2002



Maximum = 176.47

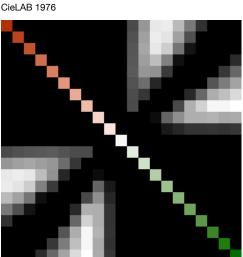
Average = 130.11

Minimum = 105.04

Deviation = 21.3

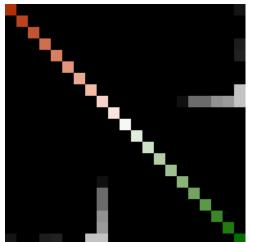
Global Triangle Distance Difference

The cell (i,j) contains the asolute value of the mimum of |c(i)-c(j)|-|c(i)-c(k)| over all k between i and j (i < k < j). As long as it is positive, the middle color is closer to each of the two ou ones than theses are to each other. That means, the colormap has an intuitive order everywhere between i and j. That is why, we only plot the values that are nageative, i.e. where t global, intuitive order is violated.



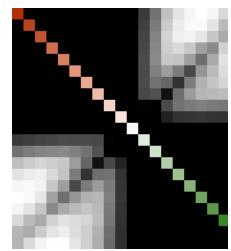
Minimum = -9.68

CieLAB 2000



Minimum = -0.79

CieCAM 2002

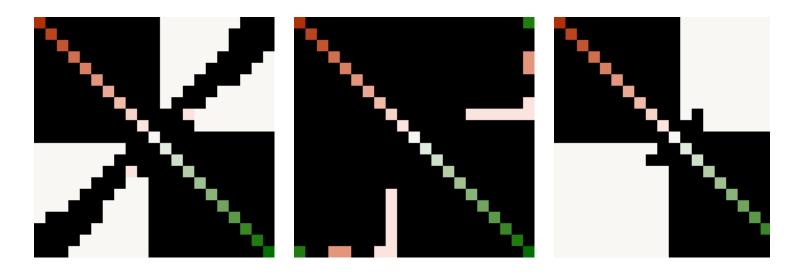


Minimum = -19.7

If there are k between i and j that violates the intuitive order, we plot the color c(k) that does so the most, i.e. the one that produces the minimum diplayed in the visualization above

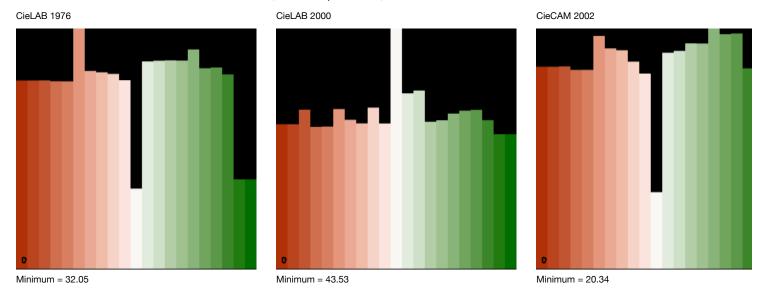
CieLAB 1976

CieCAM 2002



Local Triangle Distance Difference

The height of each column i shows the absolute value of the minimum of |c(i)-c(i-1)|-|c(i+1)-c(i-1)| and |c(i+1)-c(i)|-|c(i+1)-c(i-1)|. As long as it is positive, the middle color c(i) is closer of the two outer ones than theses are to each other. That means, the colormap has a local, intuitive order in this area. The bars strat at zero.



Stress

The stress is a global measure of how much the average color difference deviates from the corresponding value differences.

| CieLAB 1976 | CieLAB 2000 | CieCAM 2002 | |
|----------------|----------------|----------------|--|
| Stress = 42 86 | Stress = 57 81 | Stress = 56.52 | |

The Values for Copying

Columns are separated with "," and if applicable rows with ";" and the third tensor direction with ":".

| Color Measure \ Distance Metric | CieLAB 1976 | CieLAB 2000 | CieCAM 2002 |
|------------------------------------|--|-------------------------------------|--|
| Global Distances | 0,8.03,15.52,27.16,34.62 | 0,4.68,9.55,18.04,23.15,2 | 0,5.63,10.96,19.42,24.66 |
| Global Speeds | 0,160.62,155.2,181.09,17 | 0,93.63,95.57,120.27,115 | 0,112.68,109.67,129.46,1 |
| Local Speeds | 160.62,160.62,149.94,23 | 93.63,93.63,97.62,156.99 | 112.68,112.68,106.86,16 |
| Triangle Distance Differences | 0, | 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0 | 0, |
| Min Triangle Distance Differences | 0,0,74.89,53.44,37.28,32 | 0,0,46.76,33.64,25.55,22 | 0,0,53.33,37.43,26.22,22 |
| Local Triangle Distance Difference | 74.89,74.89,74.93,74.59, | 46.76,46.76,51.45,45.9,4 | 53.33,53.33,53.42,52.49, |