Systemy CAD/CAE

Zadanie 3

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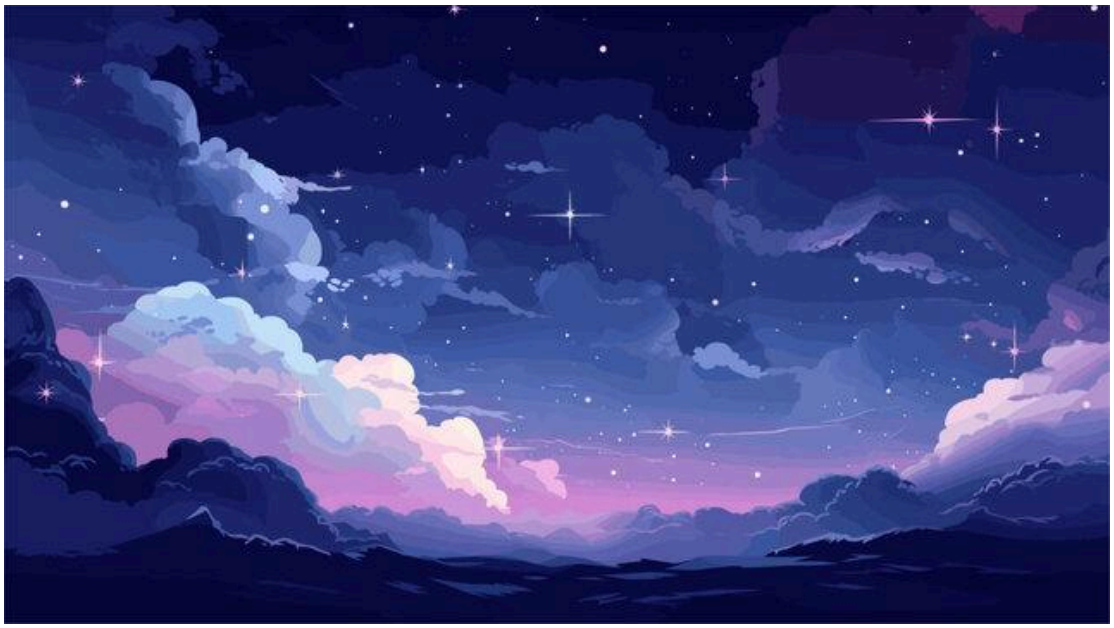
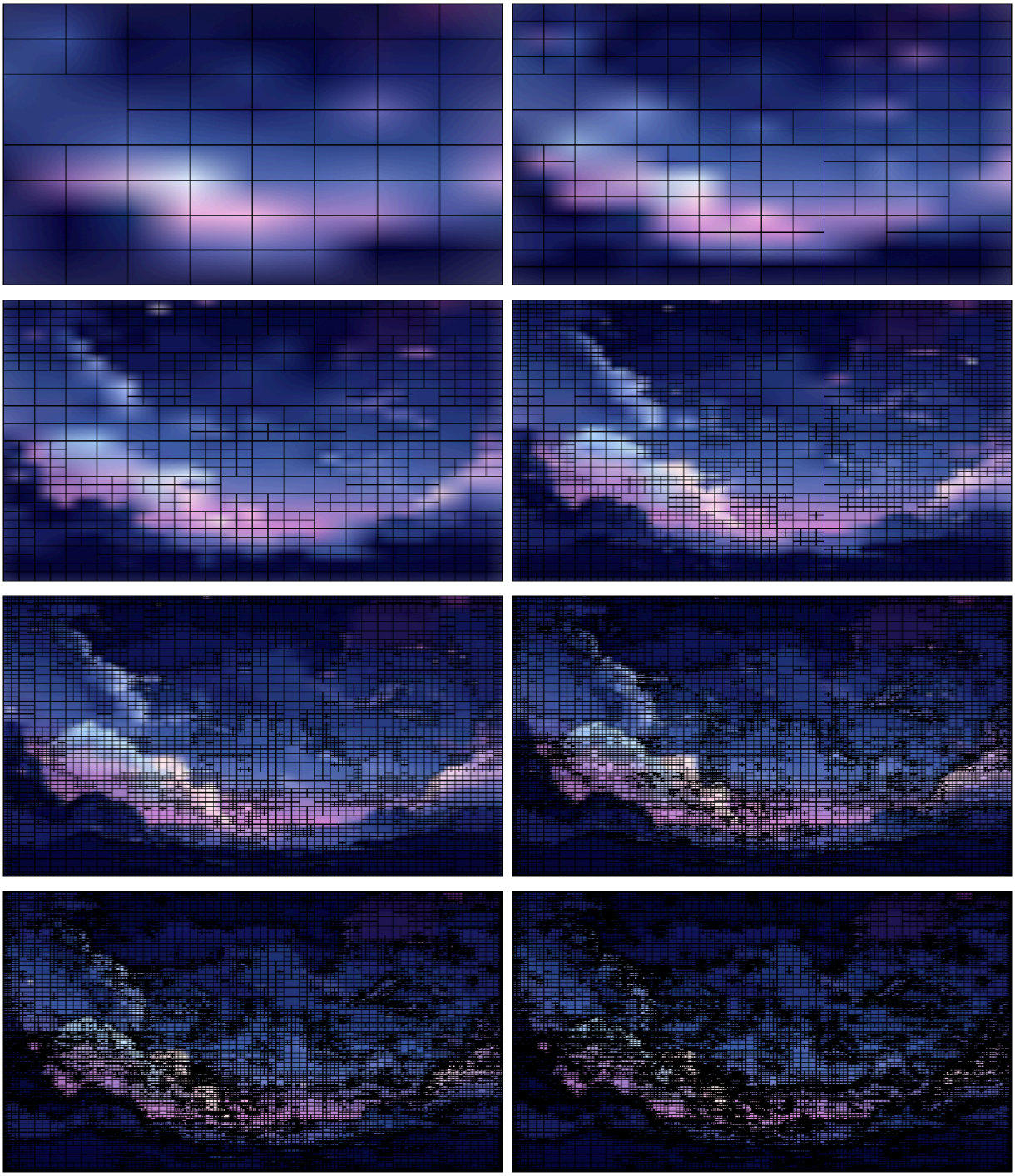
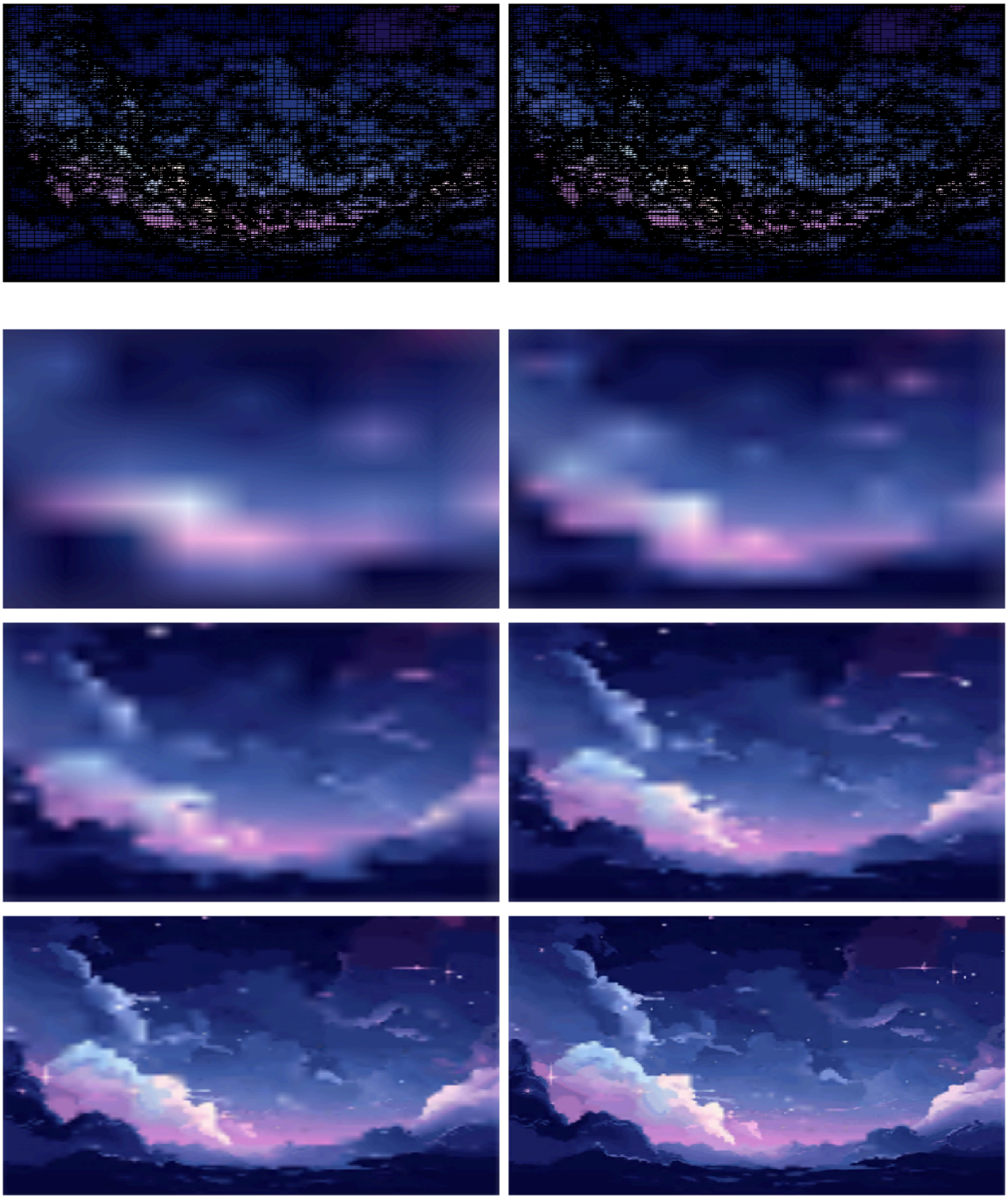
Bitmapa użyta w zadaniu:

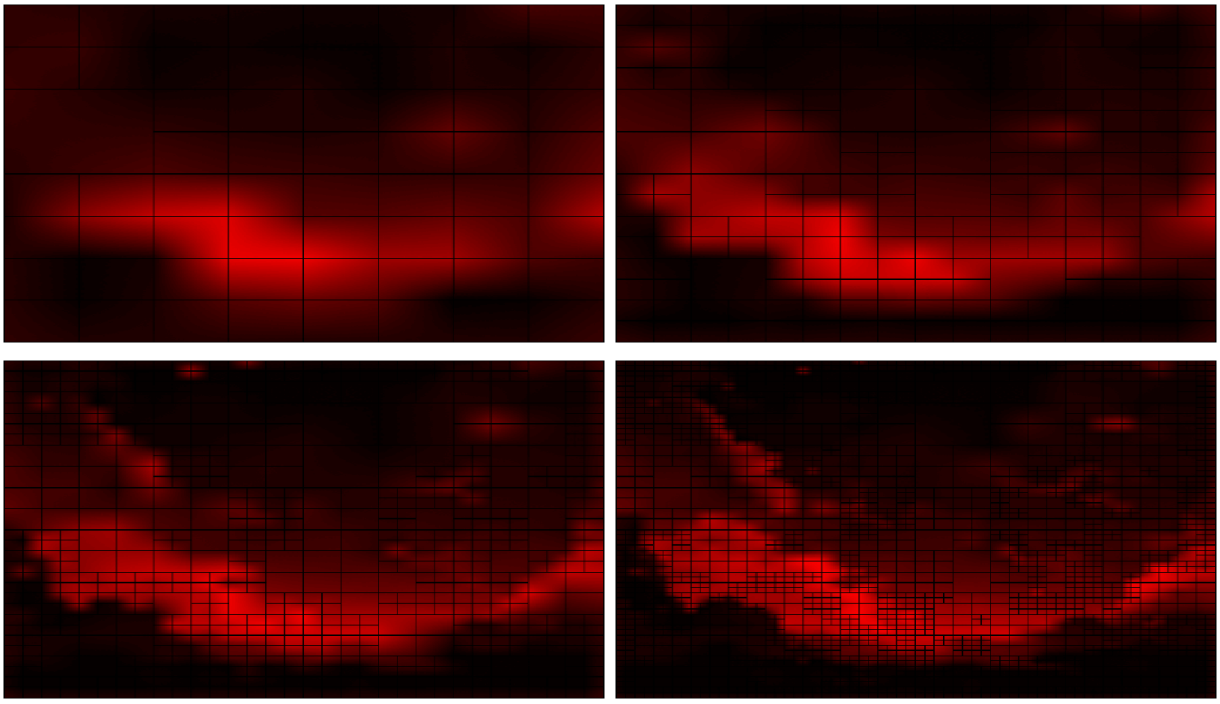


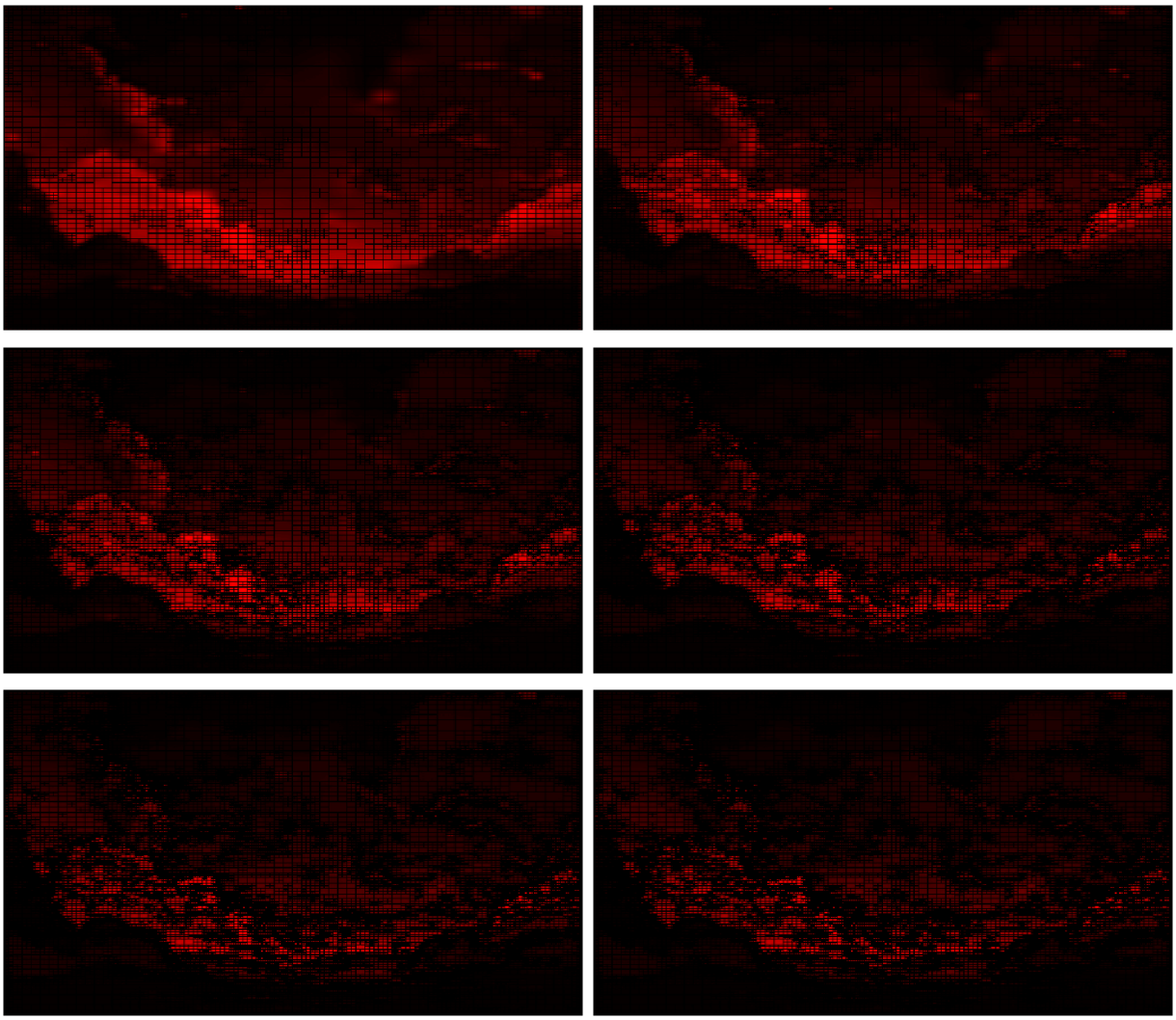
Sekwencja siatek po każdej iteracji i wynikowa aproksymacja dla całej bitmapy:

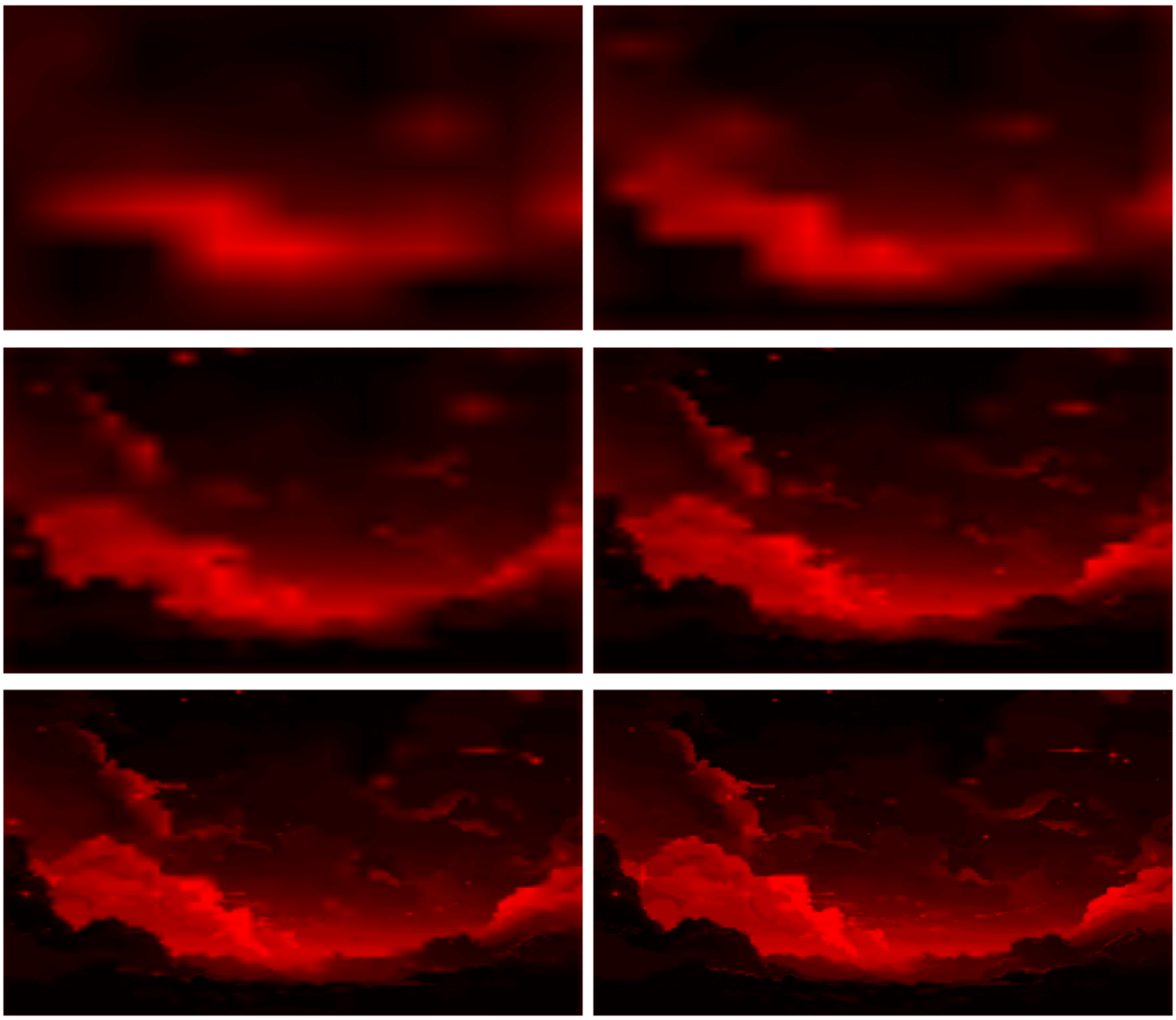


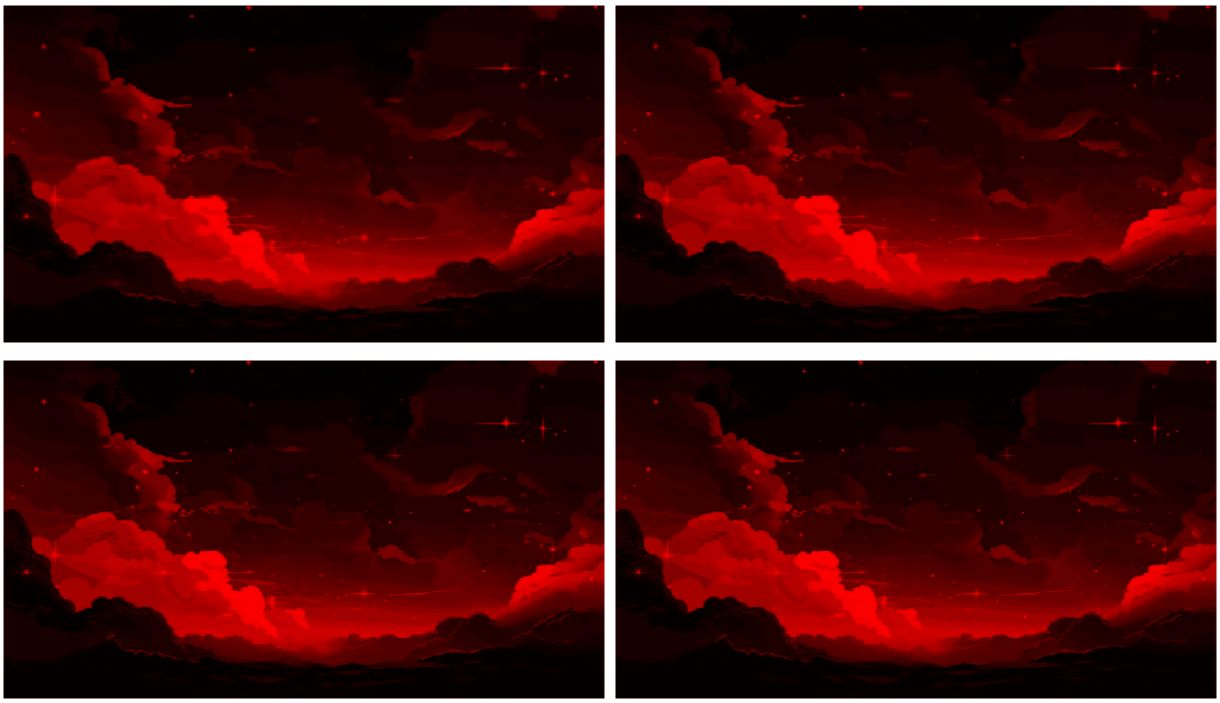


Sekwencja siatek po każdej iteracji i wynikowa aproksymacja dla części red bitmapy:

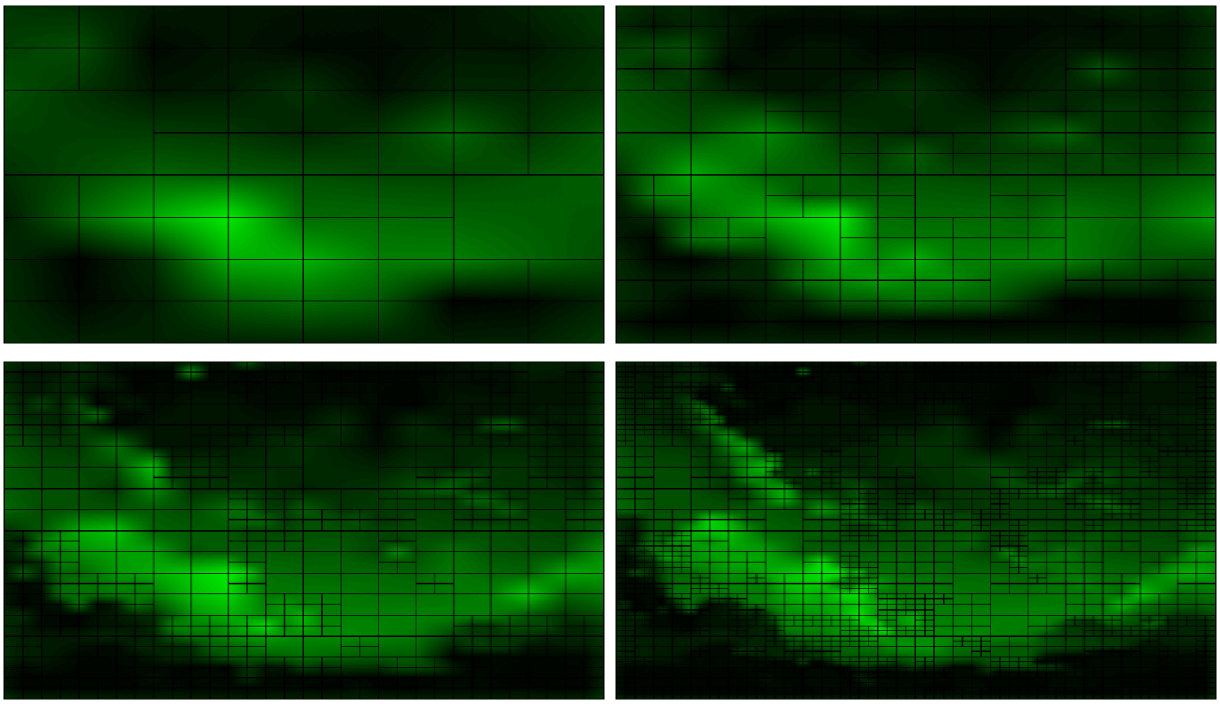


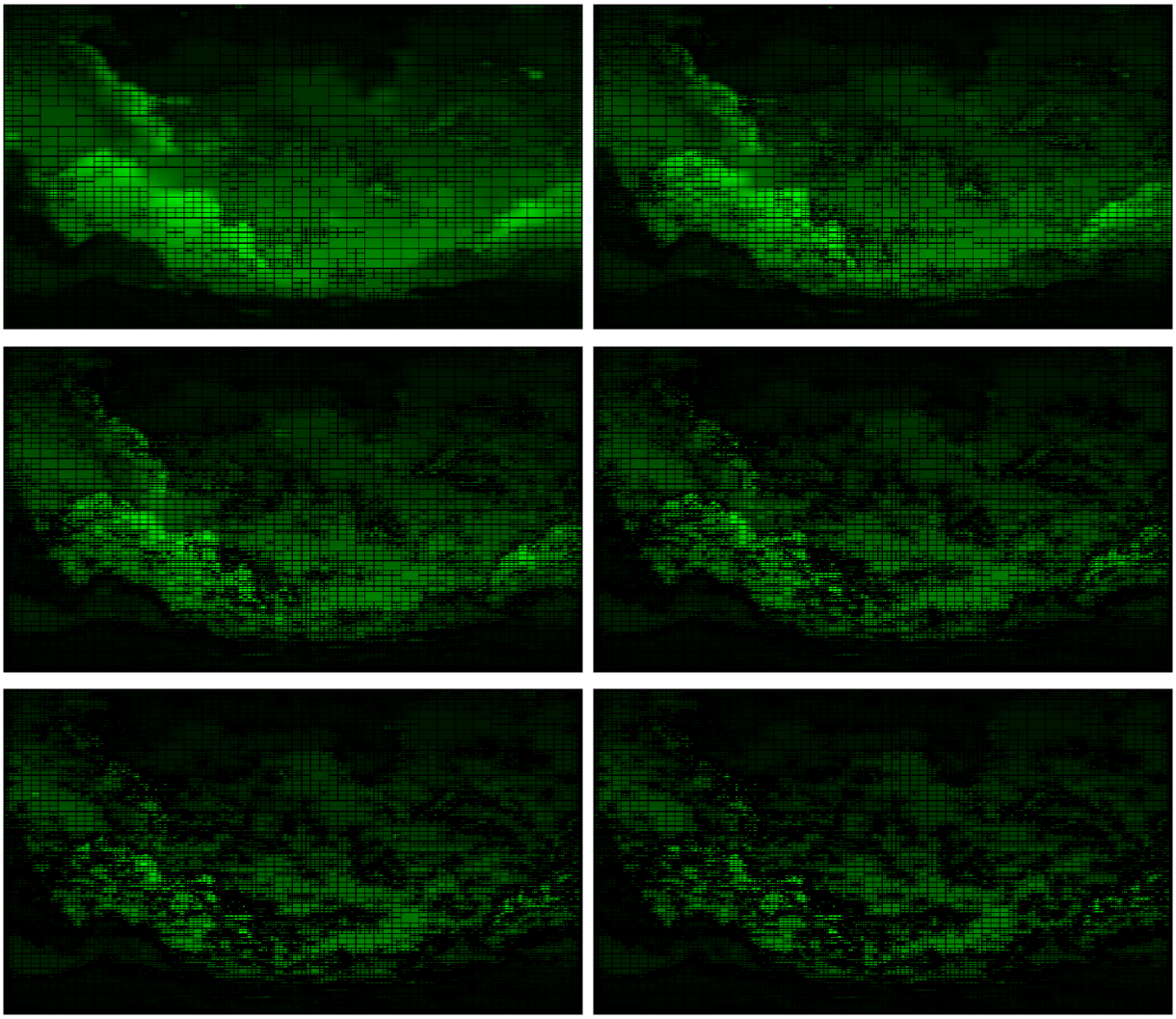


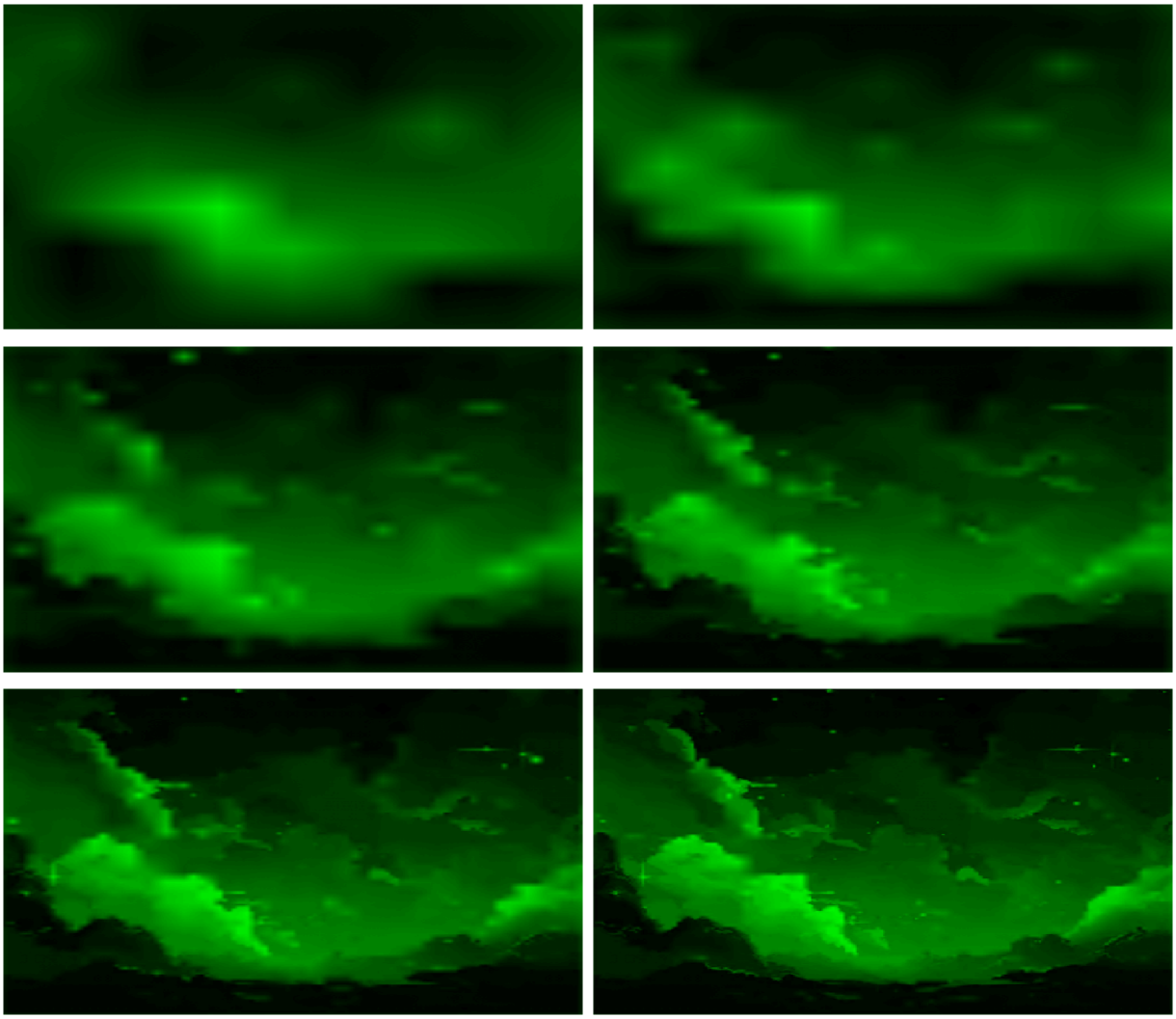


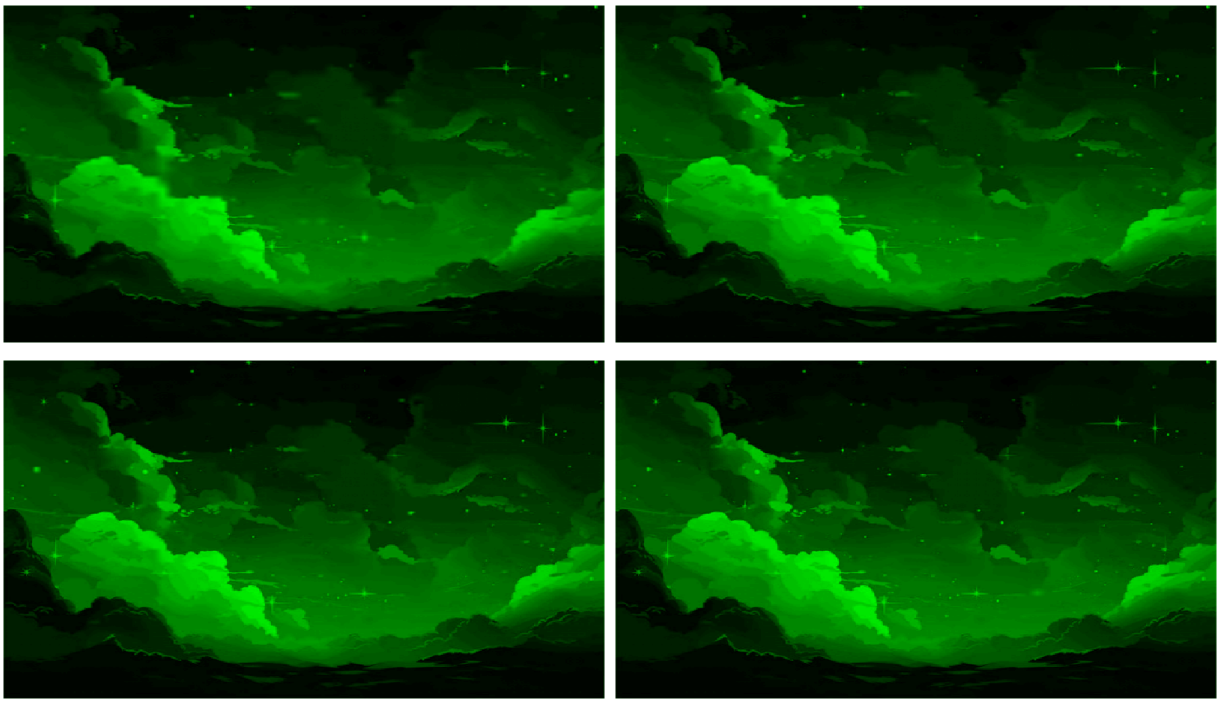


Sekwencja siatek po każdej iteracji i wynikowa aproksymacja dla części green bitmapy:

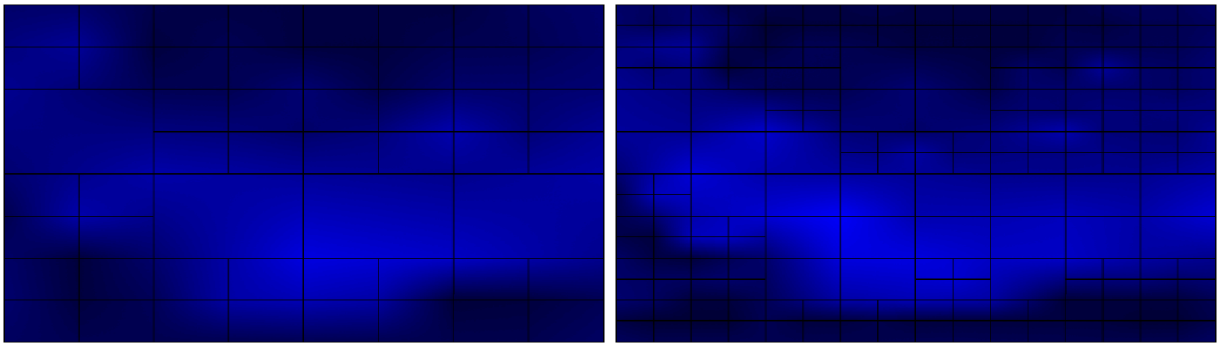


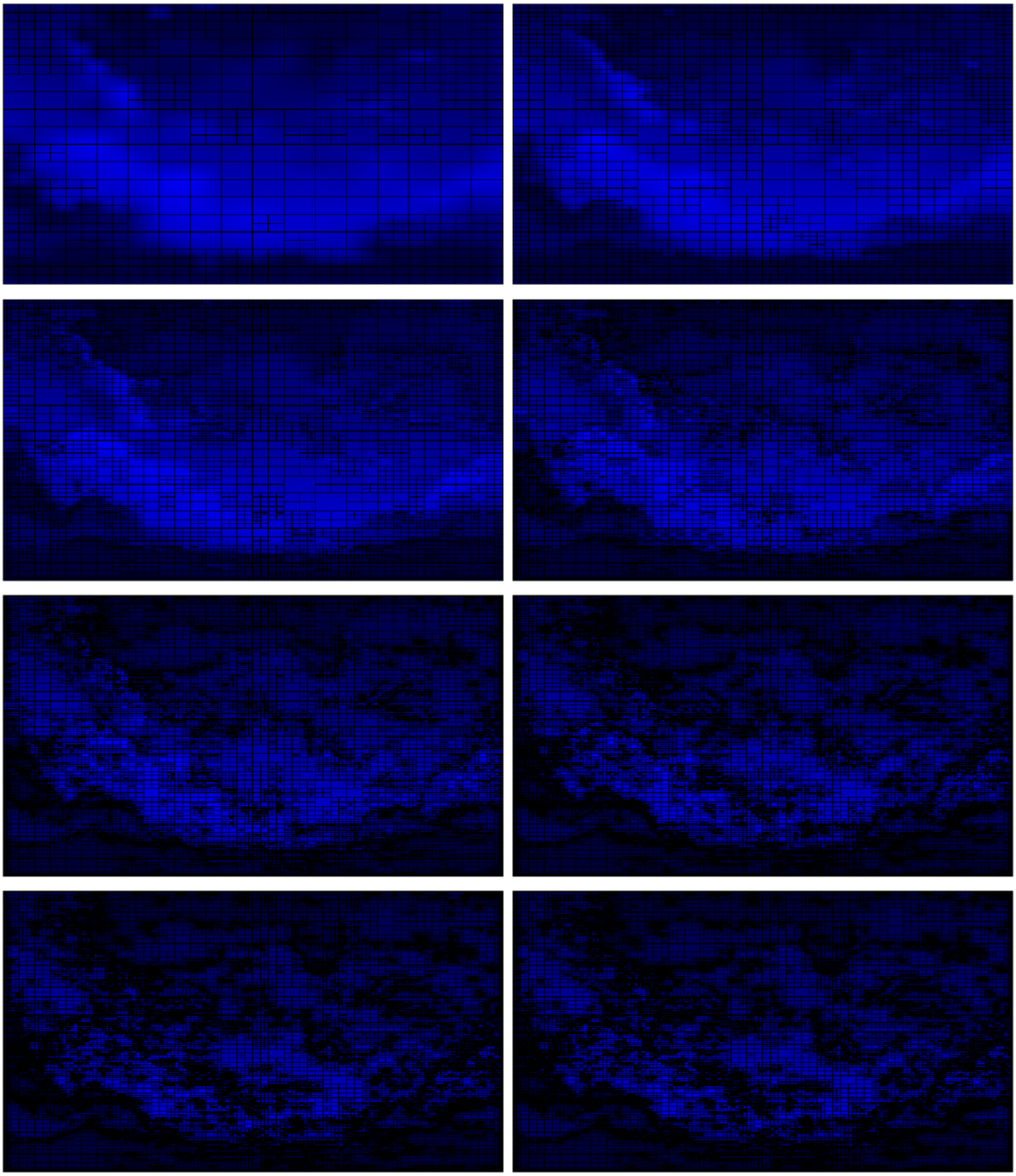


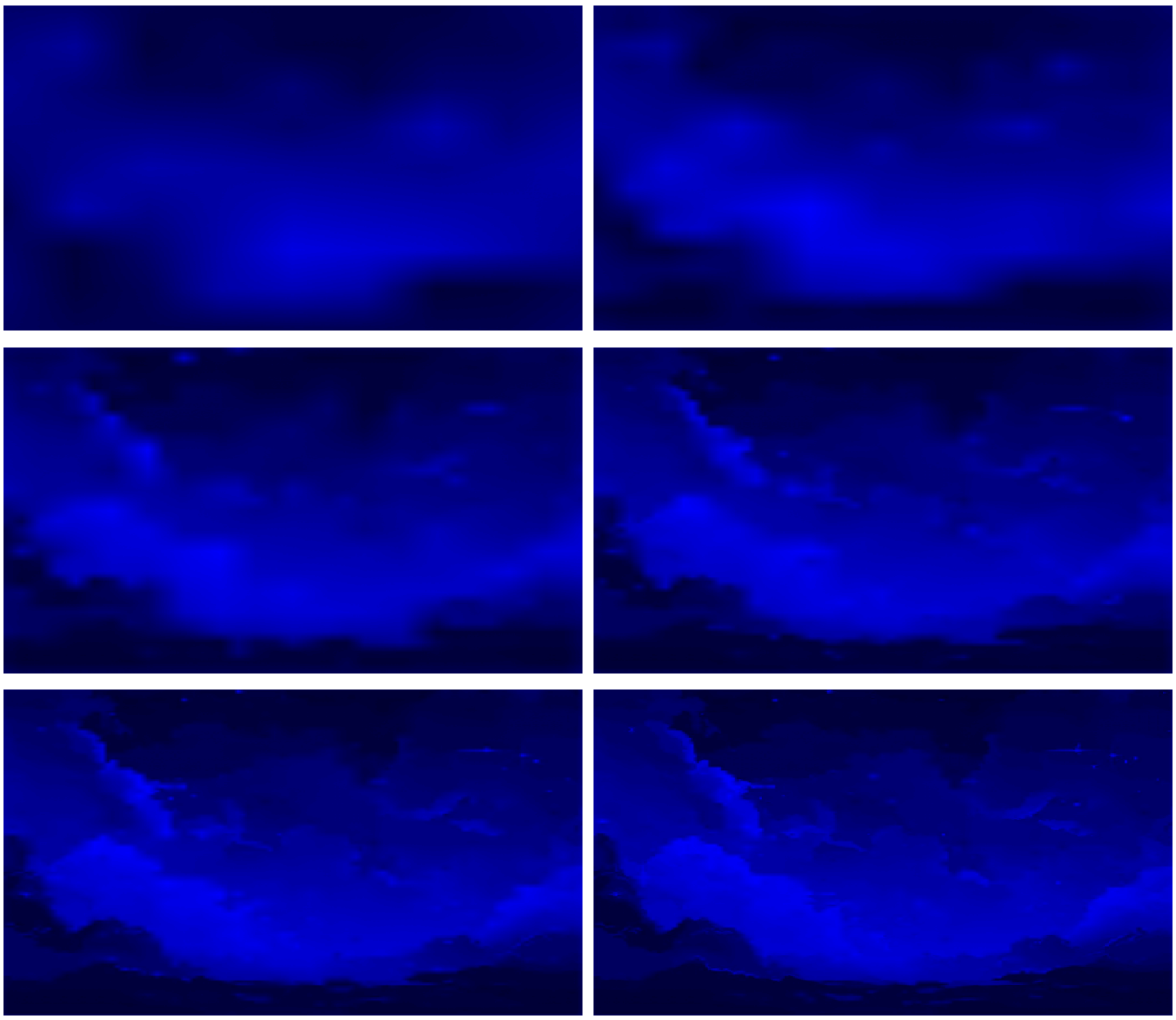


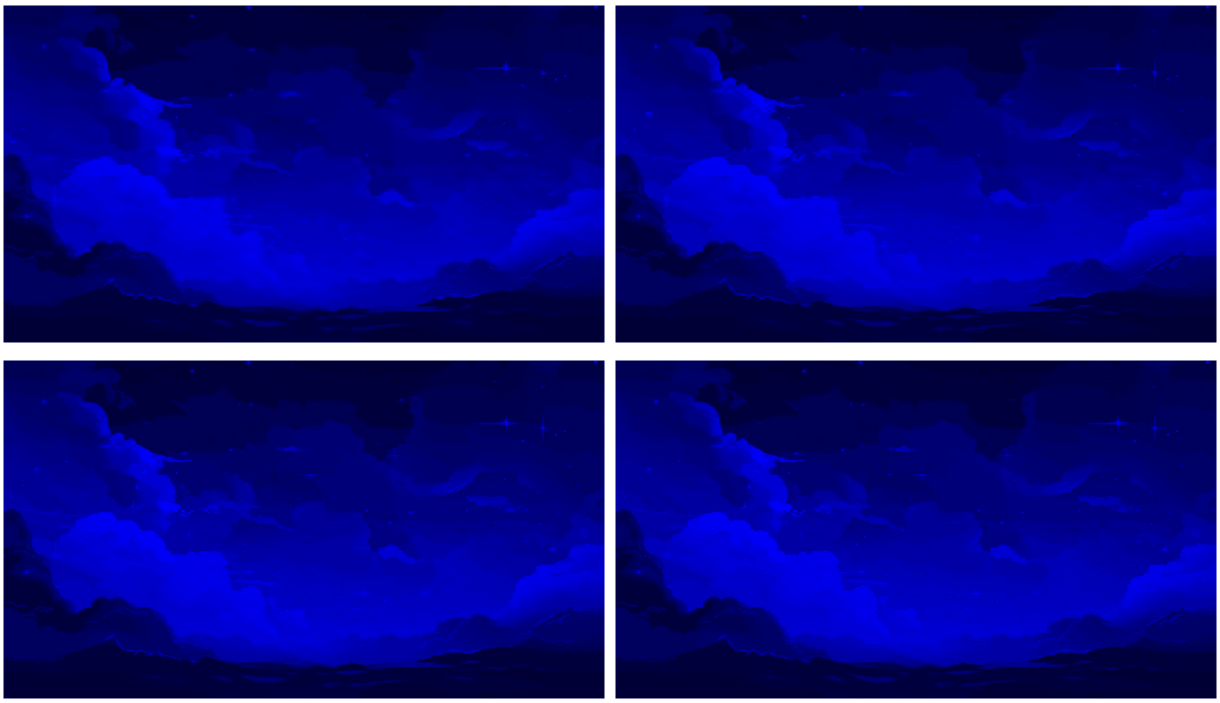


Sekwencja siatek po każdej iteracji i wynikowa aproksymacja dla części blue bitmapy:









Modyfikacje w *bitmap_h* które przełączają procesowanie całej bitmapy na tryb Red / Green / Blue:

```
% read image from file
XX = imread(filename);
XX(:,:,[2 3]) = 0; % RED

% exctract red, green and blue components
RR = XX(:,:,1); %Red color [0,255]
GG = XX(:,:,2); %Green color [0,255]
BB = XX(:,:,3); %Blue color [0,255]
```

```
% read image from file
XX = imread(filename);
XX(:,:,[1 3]) = 0; % GREEN

% exctract red, green and blue components
RR = XX(:,:,1); %Red color [0,255]
GG = XX(:,:,2); %Green color [0,255]
BB = XX(:,:,3); %Blue color [0,255]
```

```
% read image from file
XX = imread(filename);
XX(:,:,[1 2]) = 0; % BLUE

% exctract red, green and blue components
RR = XX(:,:,1); %Red color [0,255]
GG = XX(:,:,2); %Green color [0,255]
BB = XX(:,:,3); %Blue color [0,255]
```