

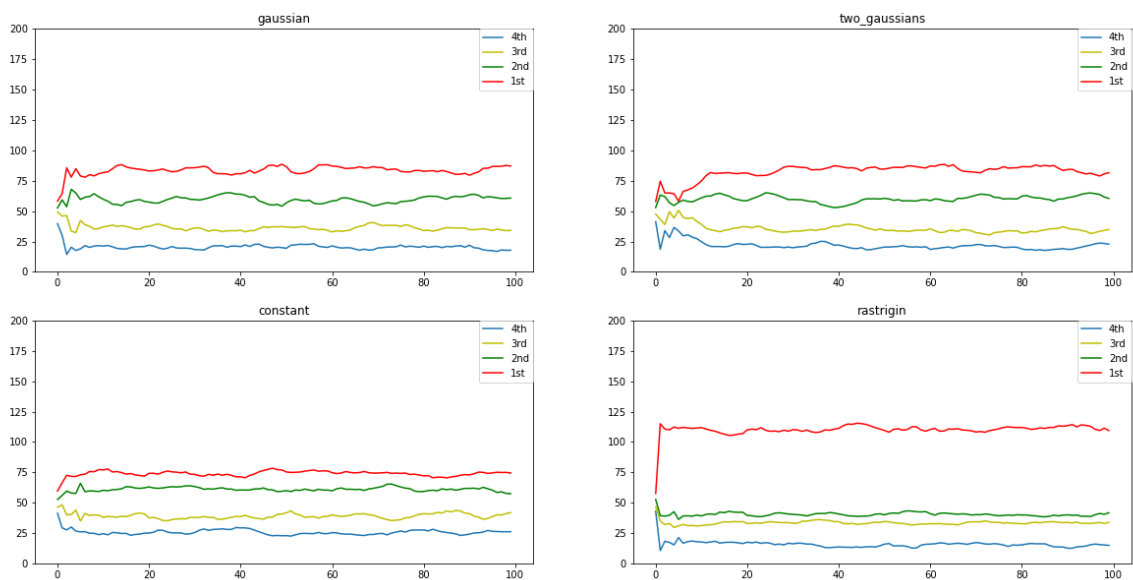
# Analiza skupień w populacjach generowanych klasycznym algorytmem ewolucyjnym - wyniki dla czterech klastrów

Piotr Bródka, Jacek Myna

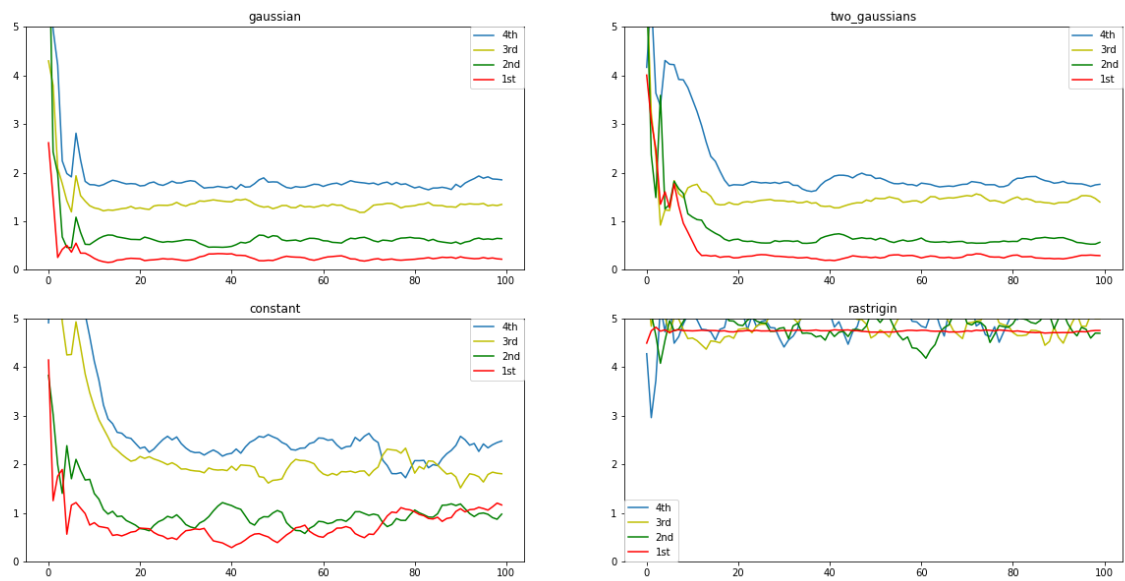
June 17, 2020

## 1 Porównanie wykresów dynamiki dla wszystkich funkcji dla 1d

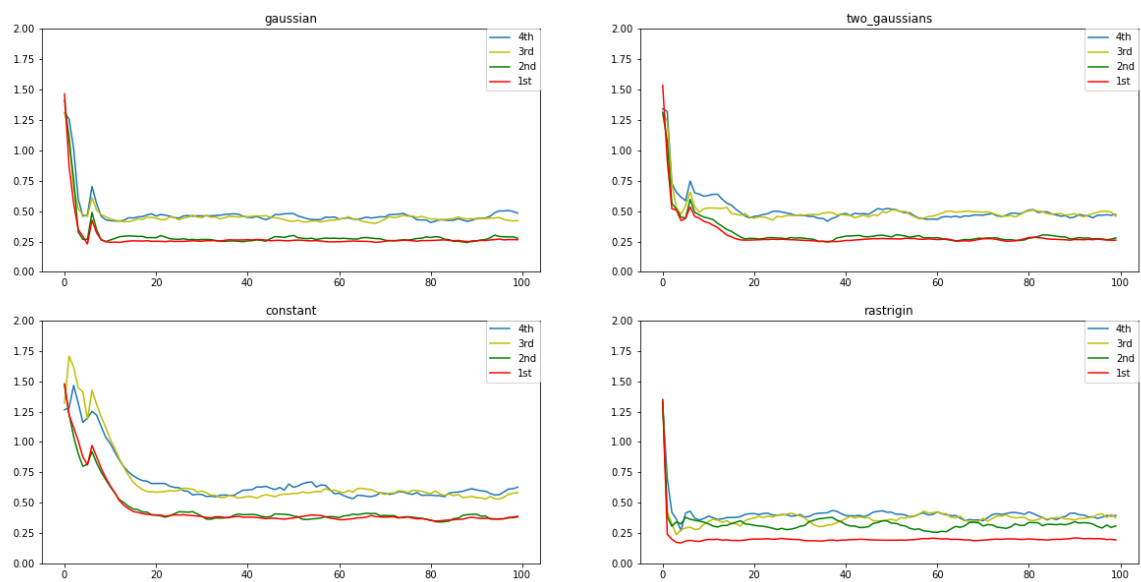
Liczność klastrów:



Odległość klastrów od minimów funkcji:

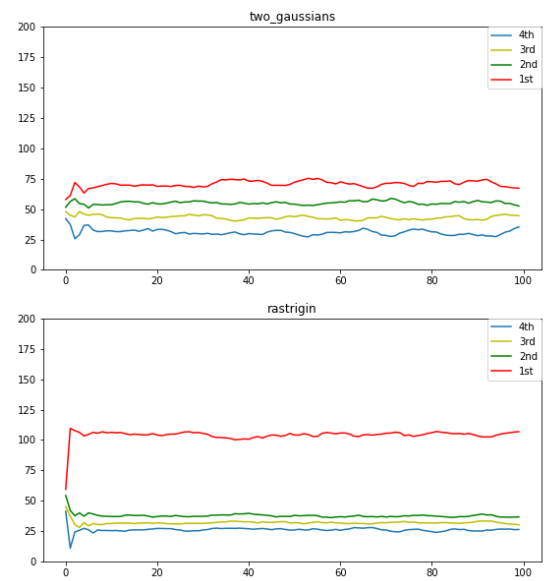
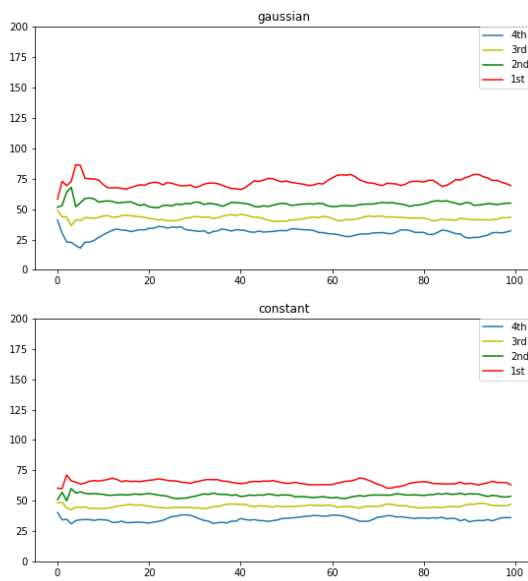


Odchylenie standardowe w klastrach:

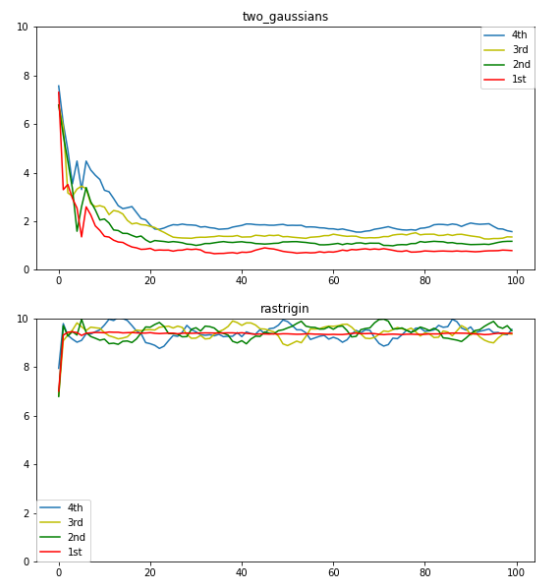
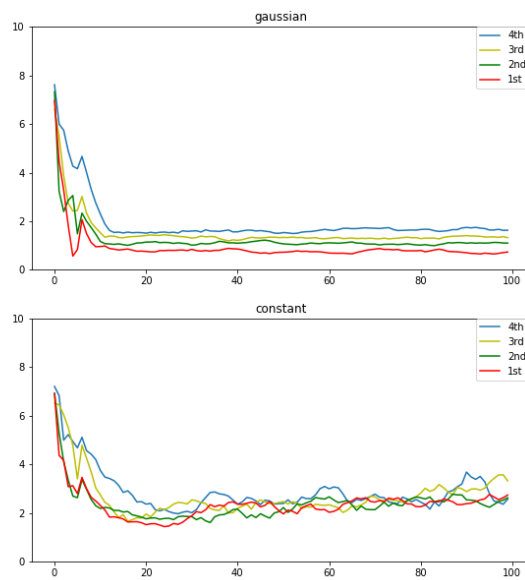


## 2 Porównanie wykresów dynamiki dla wszystkich funkcji dla 2d

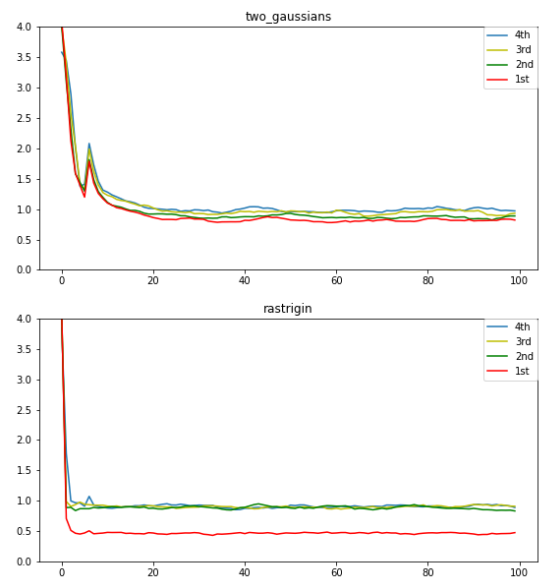
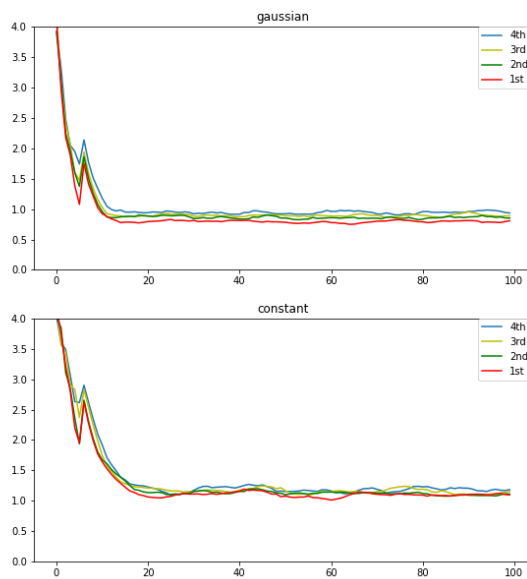
Liczność klastrów:



Odległość klastrow od minimów funkcji:



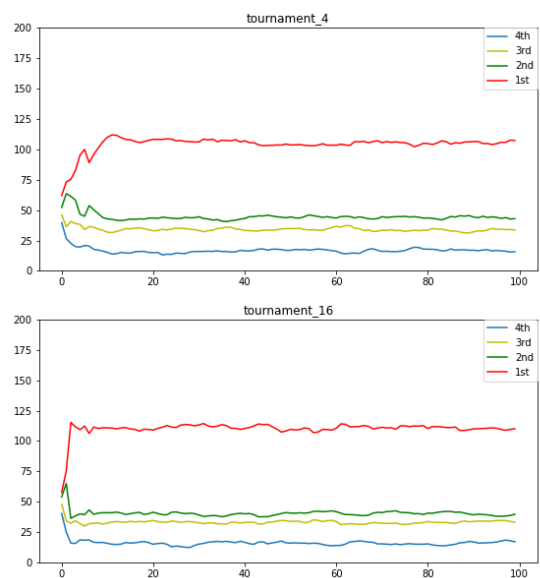
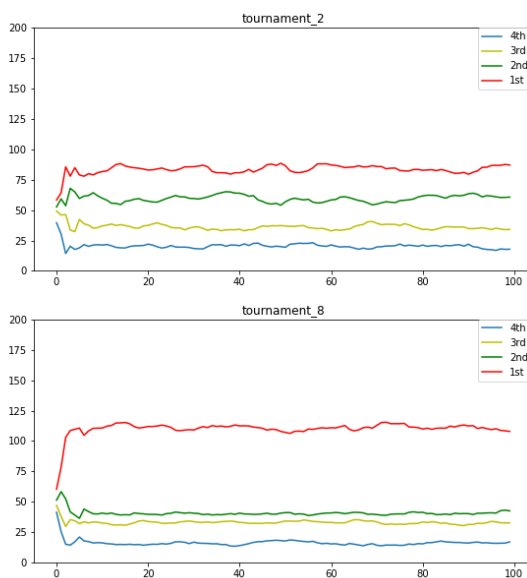
Odchylenie standardowe w klastrach:



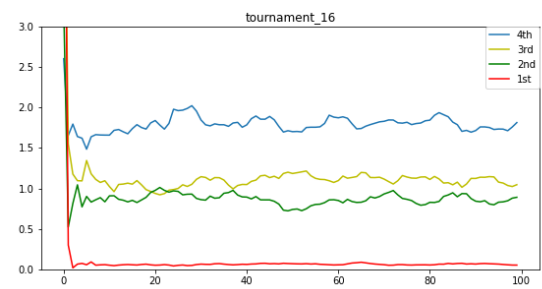
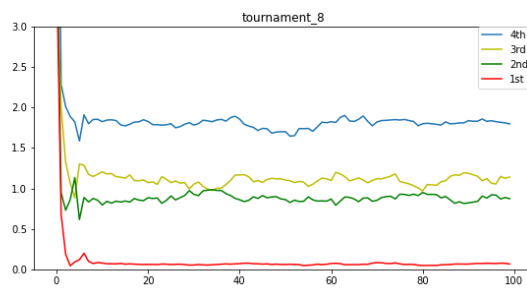
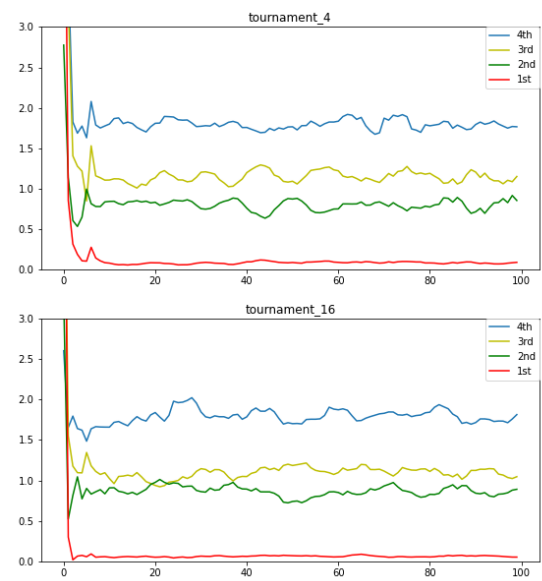
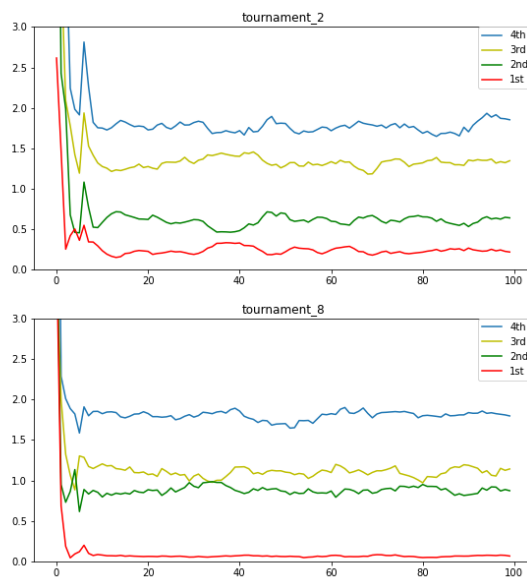
### 3 Porównanie wykresów dynamiki ze względu na wielkość turnieju

#### 3.1 Funkcja Gaussa

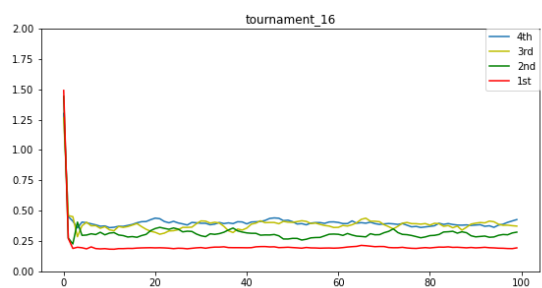
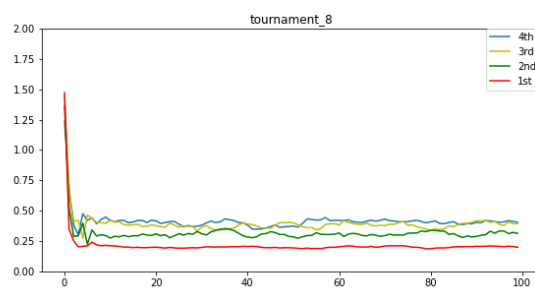
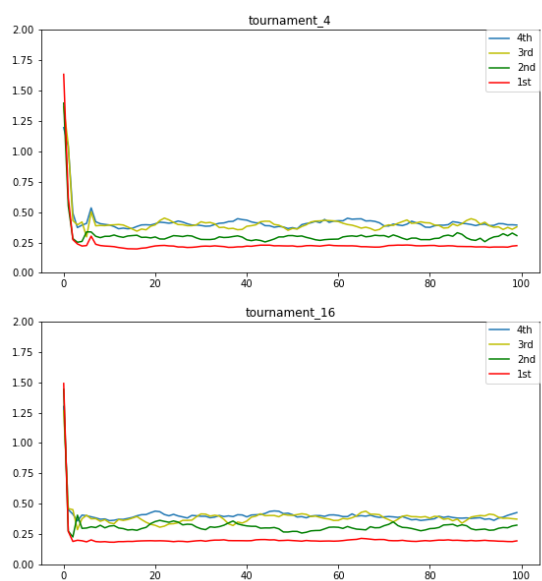
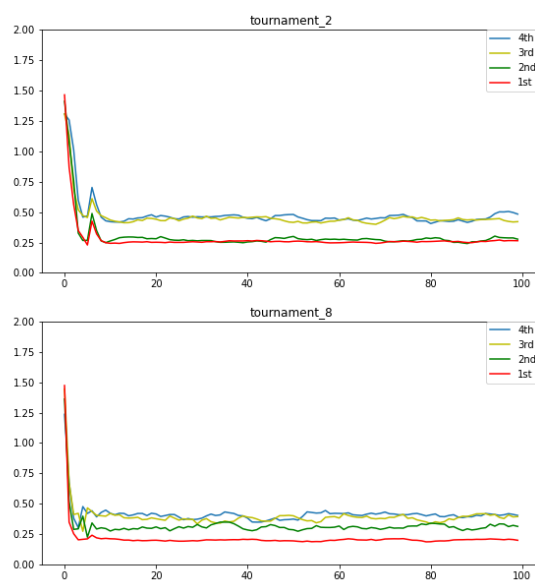
Liczność klastrow:



Odległość klastrow od minimów funkcji:

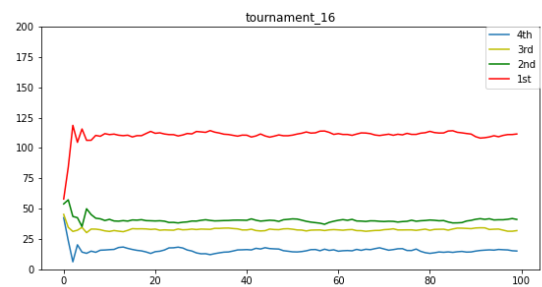
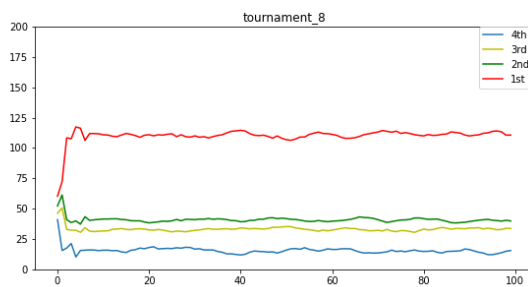
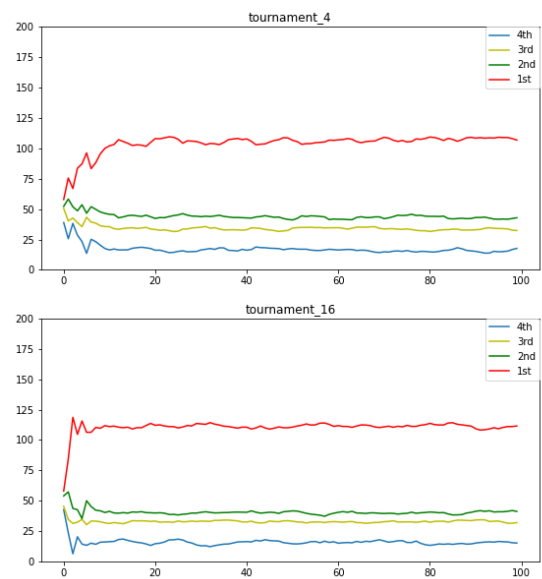
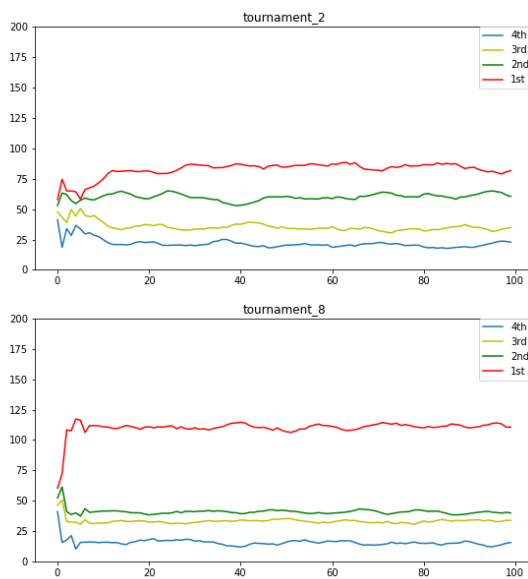


Odchylenie standardowe w klastrach:

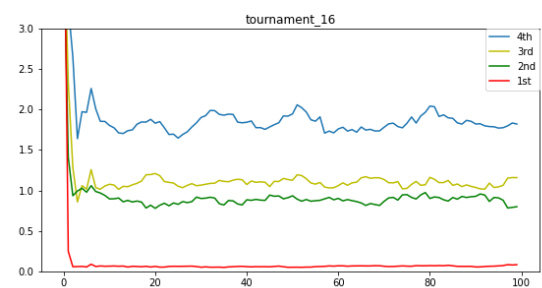
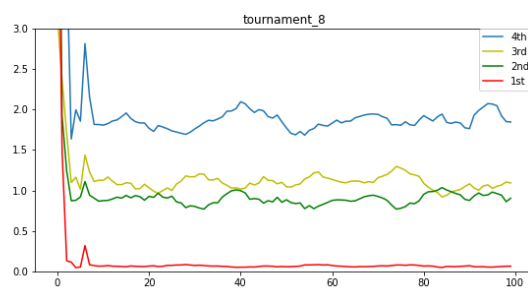
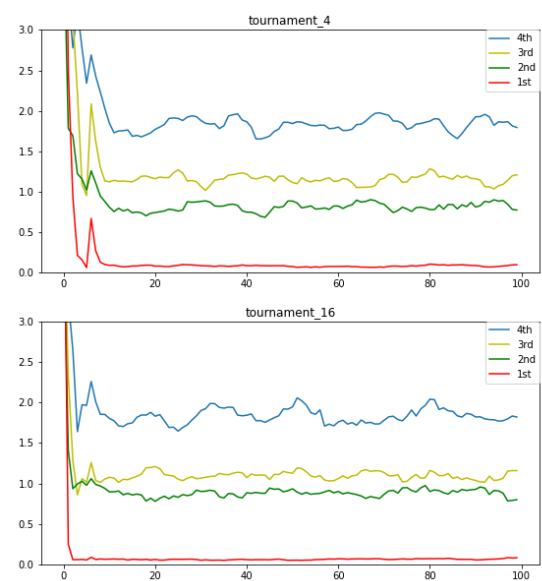
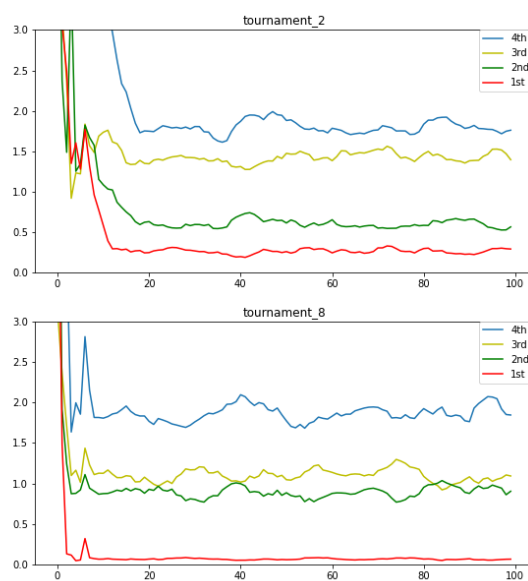


### 3.2 Suma dwóch funkcji Gaussa

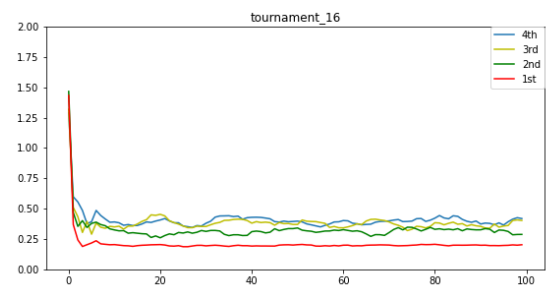
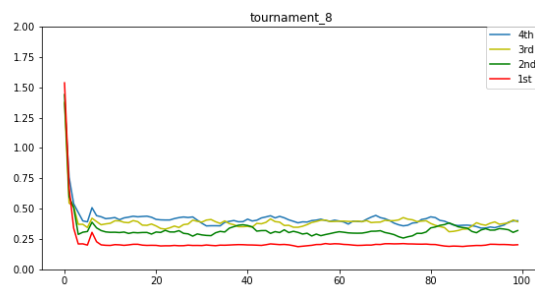
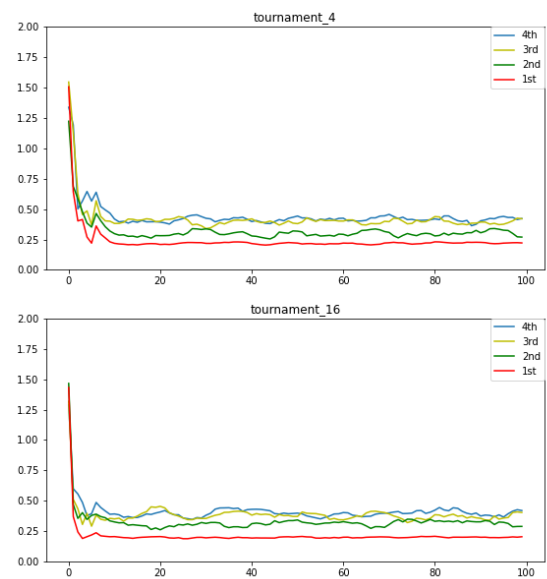
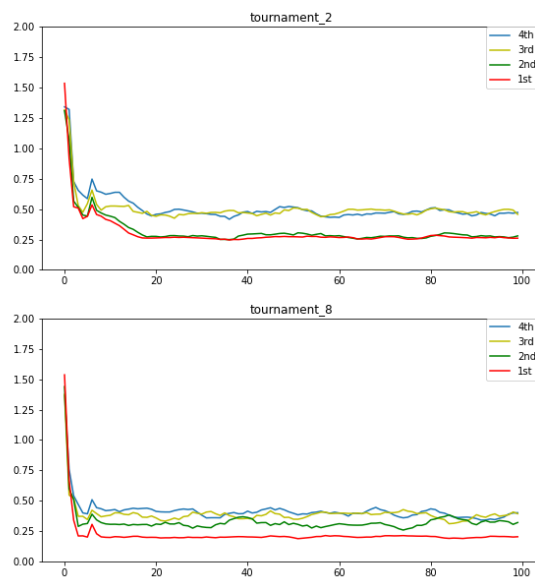
Liczność klastrów:



Odległość klastrow od minimów funkcji:

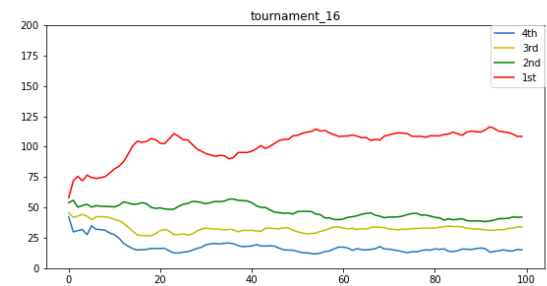
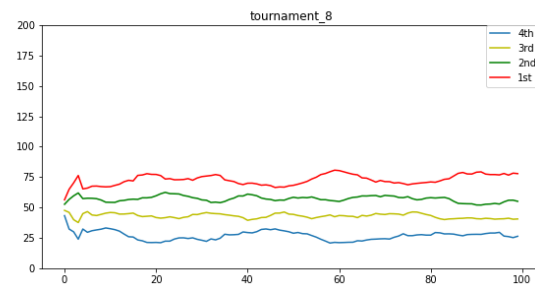
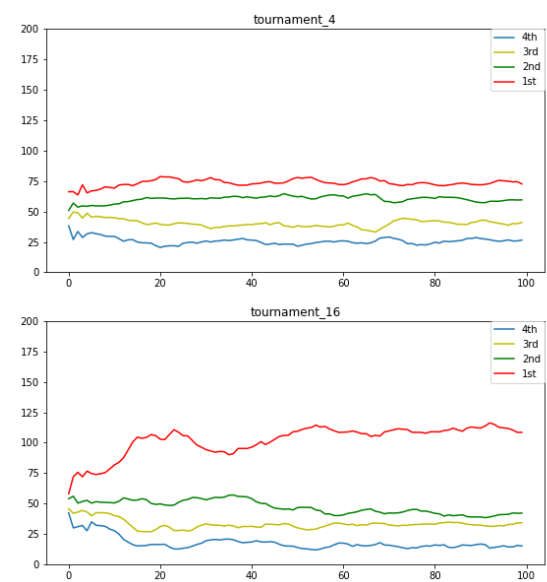
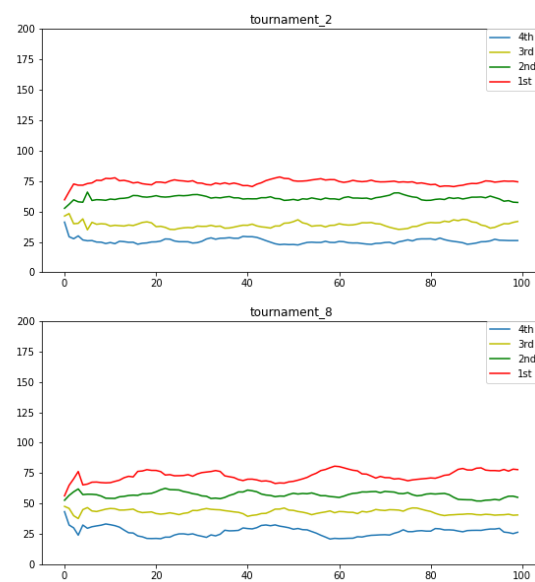


Odchylenie standardowe w klastrach:

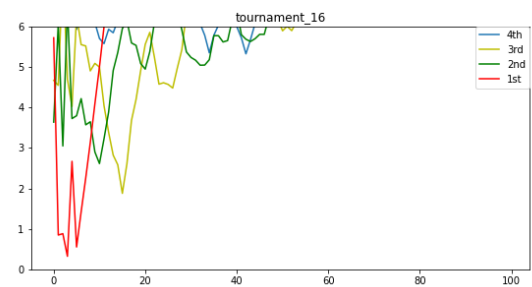
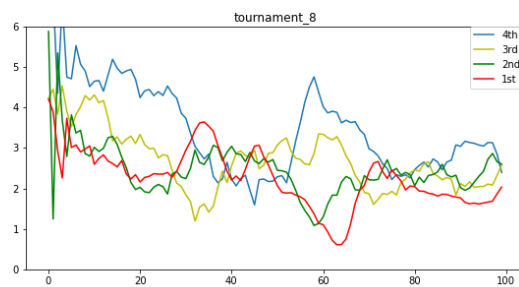
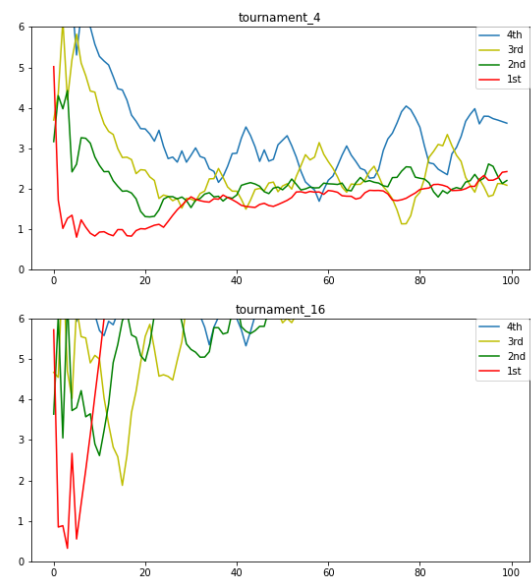
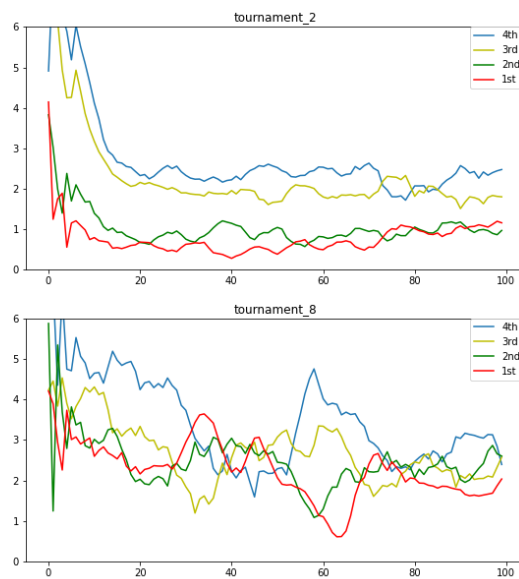


### 3.3 Funkcja stała

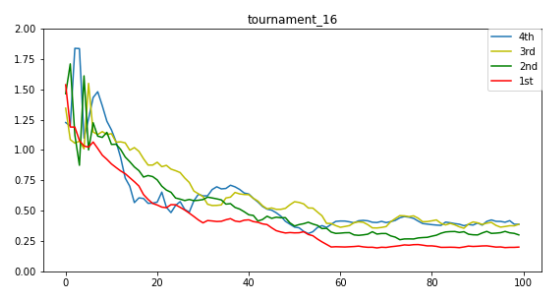
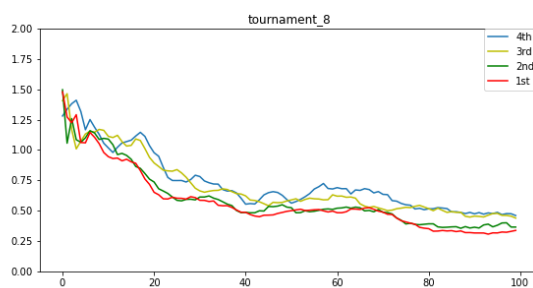
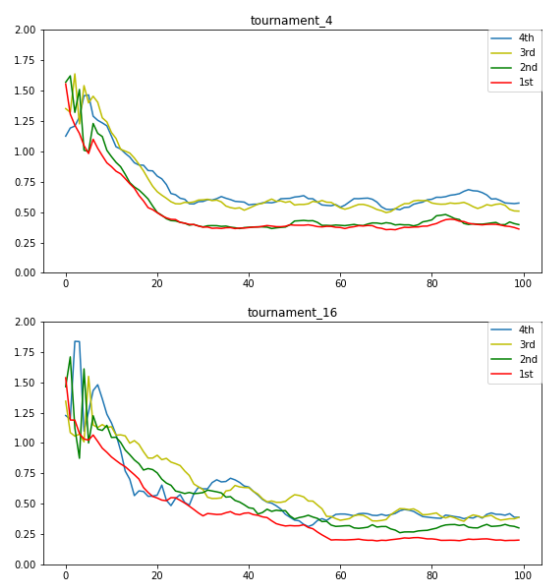
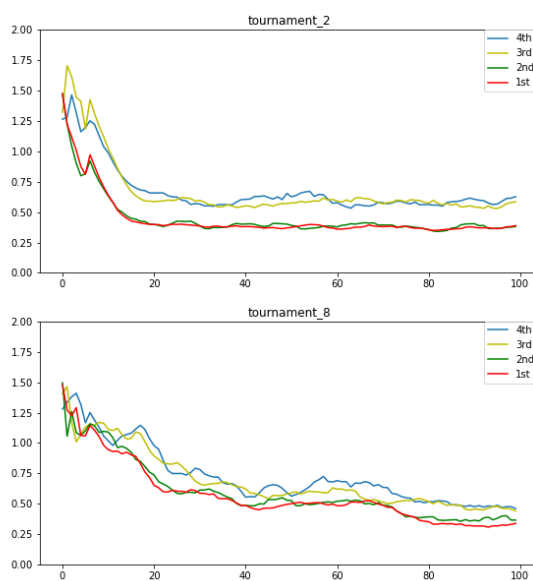
Liczność klastrow:



Odległość klastrow od minimów funkcji:



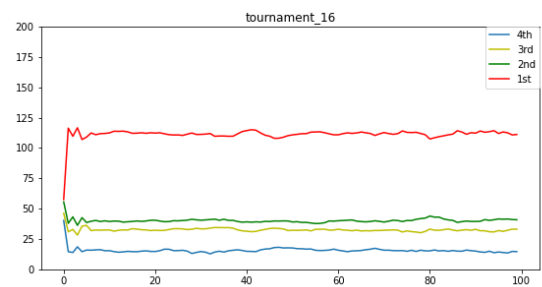
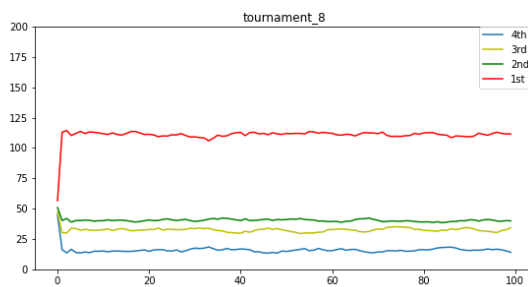
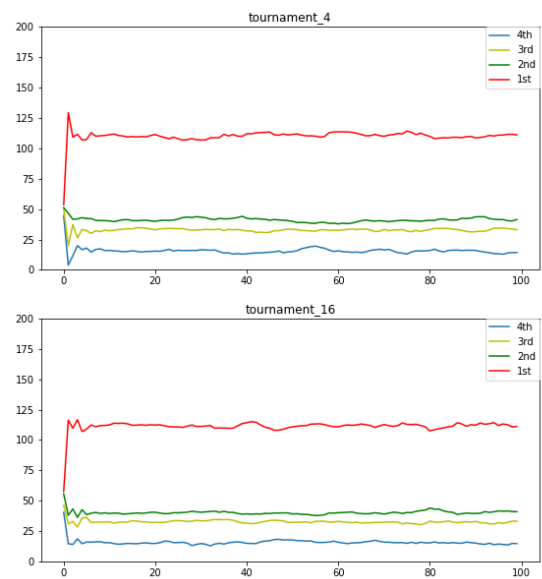
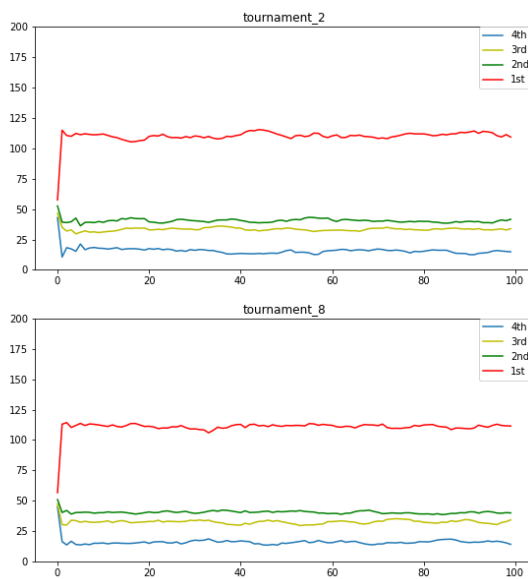
Odchylenie standardowe w klastrach:



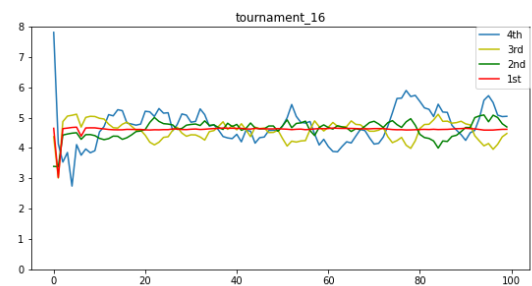
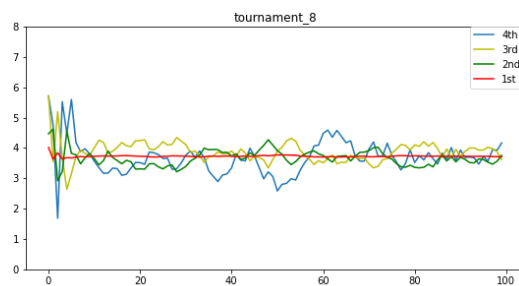
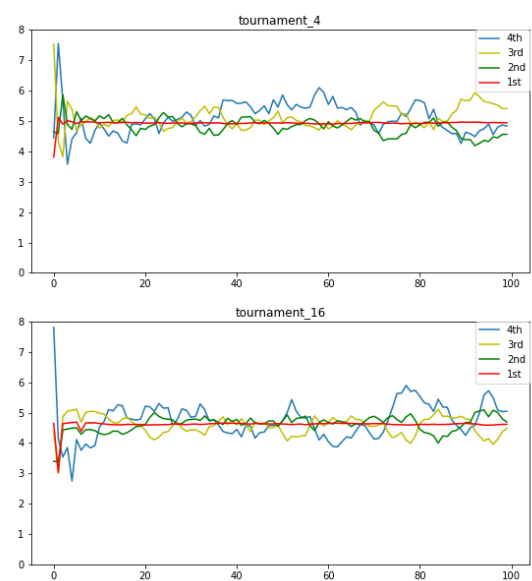
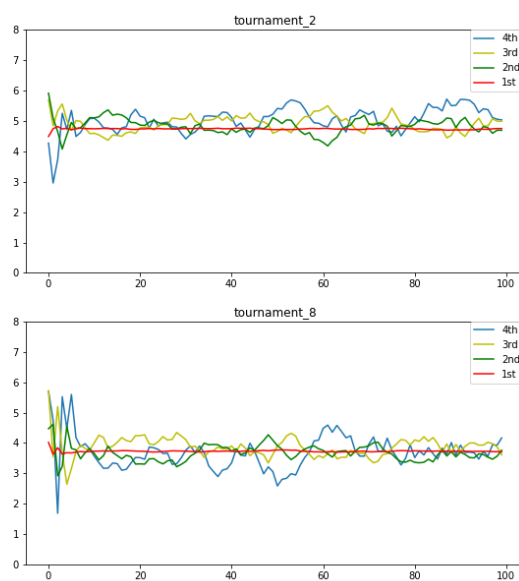
### 3.4 Funkcja Rastrigina

Liczność klastrów:

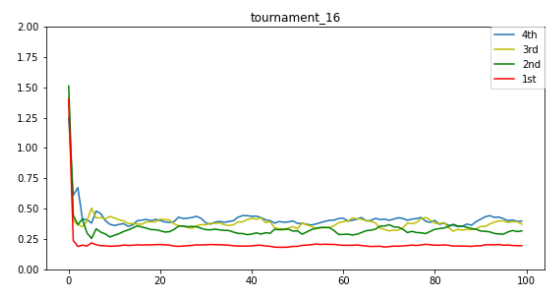
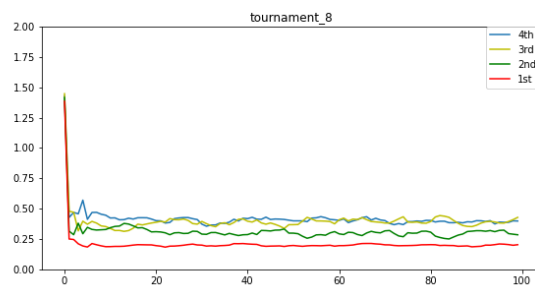
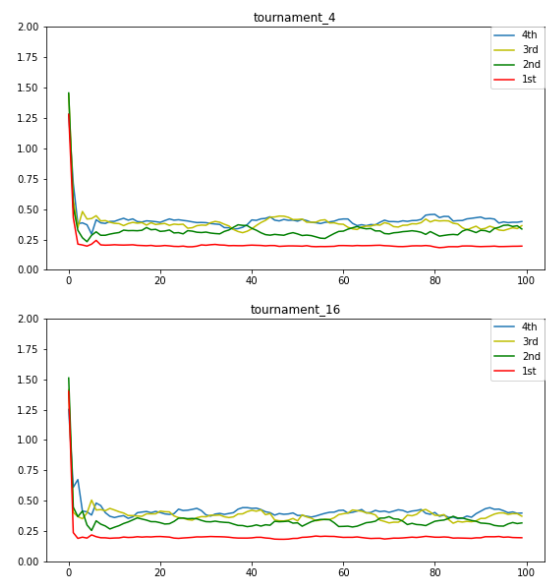
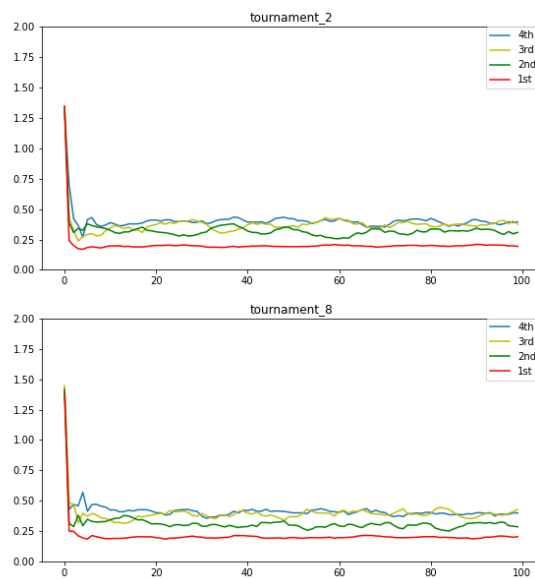




Odległość klastrow od minimów funkcji:



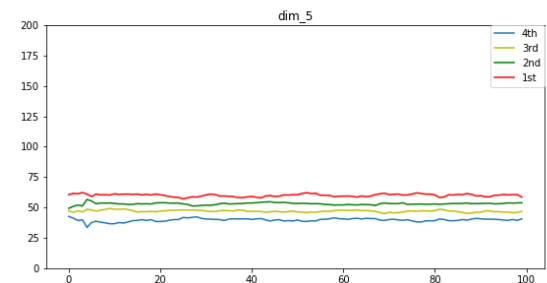
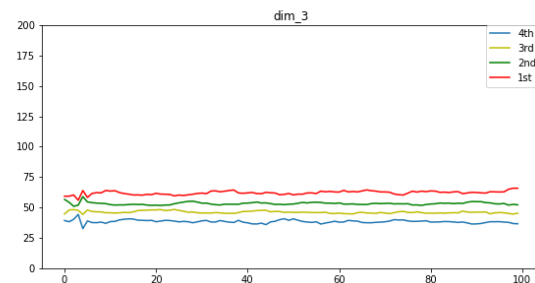
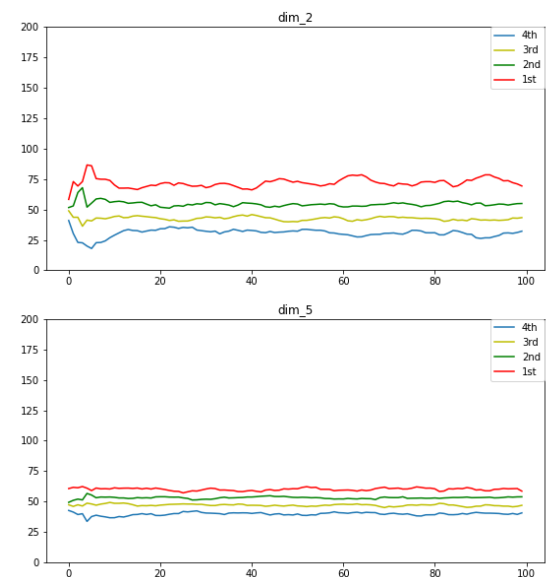
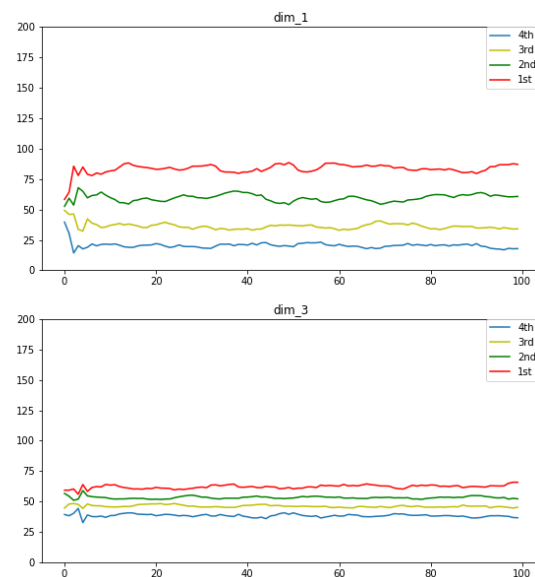
Odchylenie standardowe w klastrach:



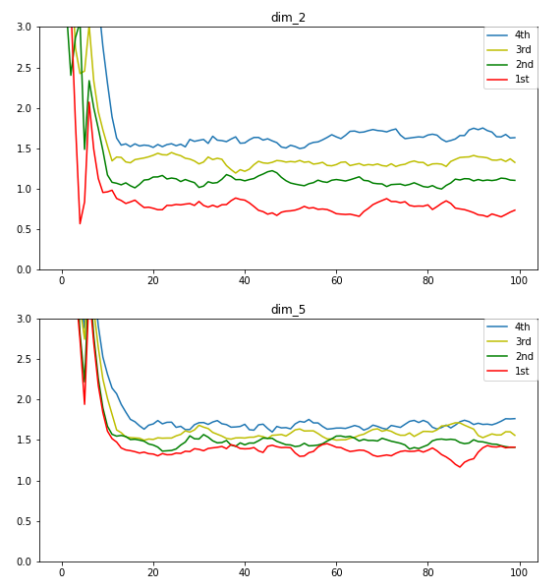
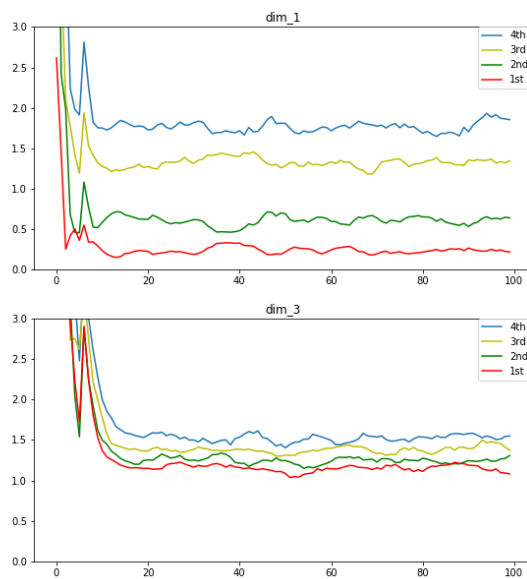
## 4 Porównanie wykresów dynamiki ze względu na wymiar

### 4.1 Funkcja Gaussa

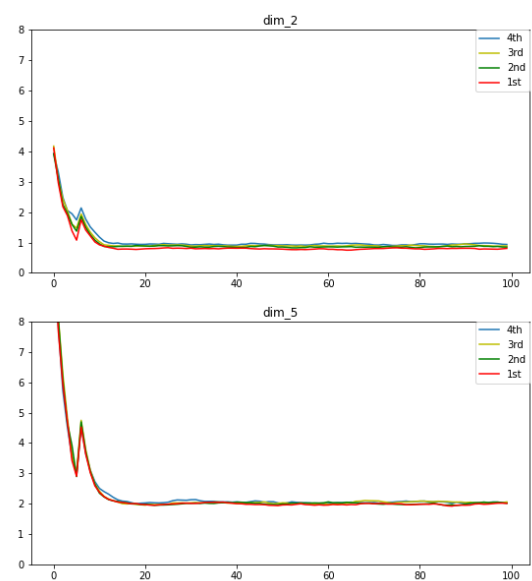
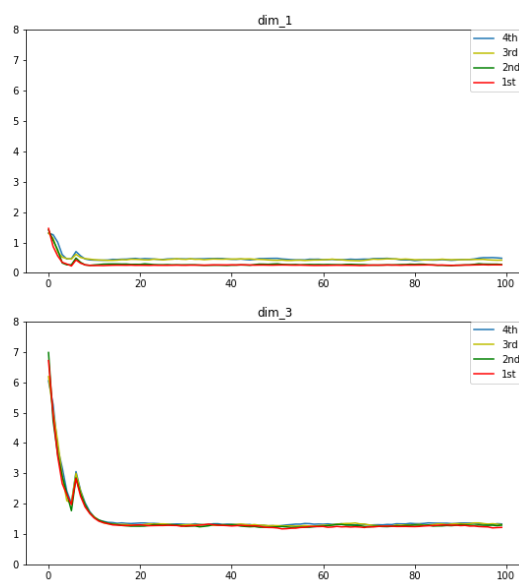
Liczność klastrow:



Odległość klastrow od minimów funkcji:

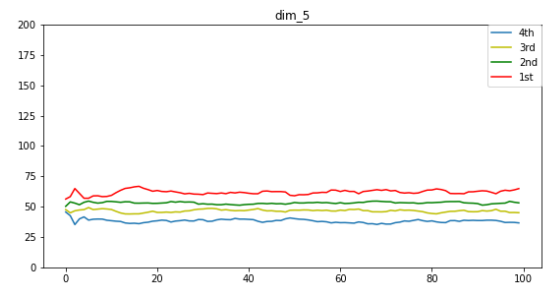
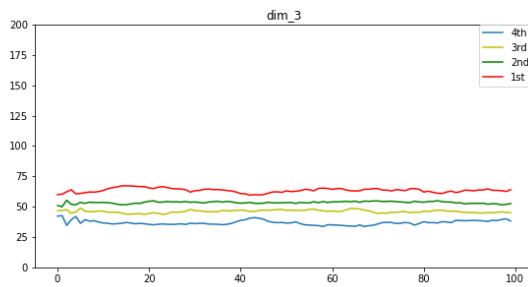
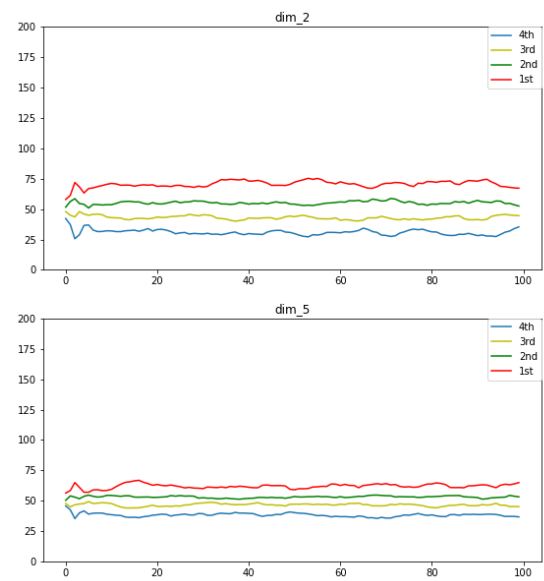
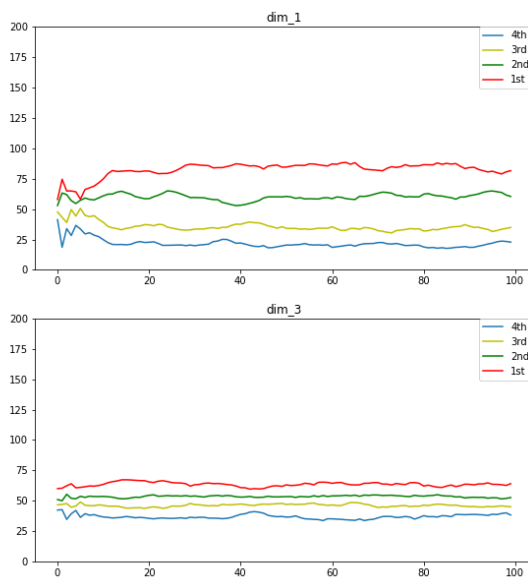


Odchylenie standardowe w klastrach:

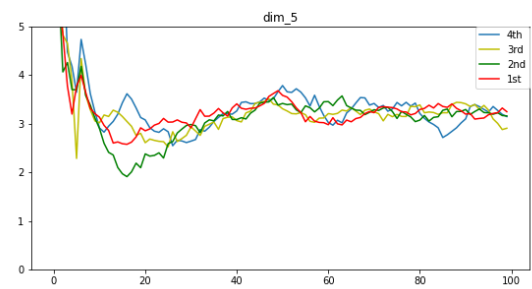
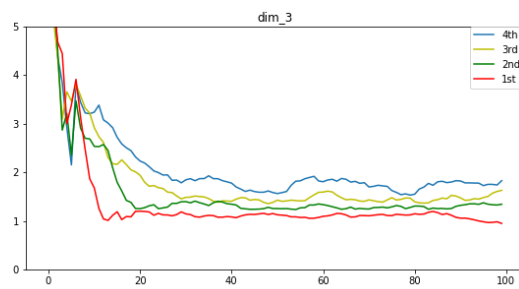
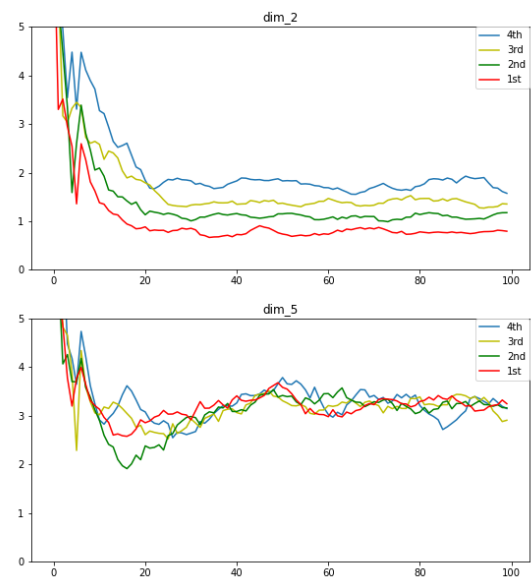
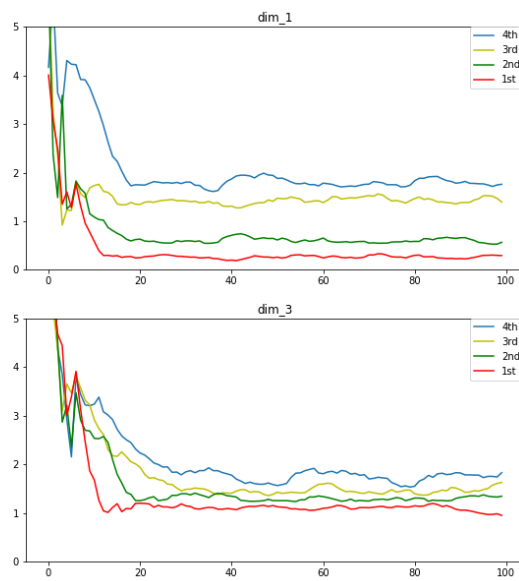


## 4.2 Suma dwóch funkcji Gaussa

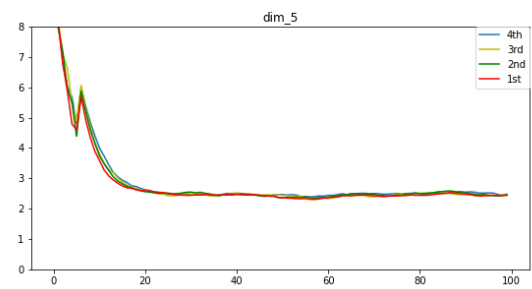
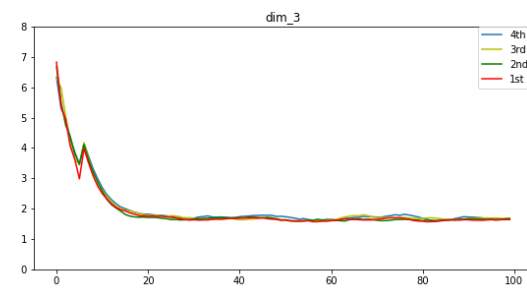
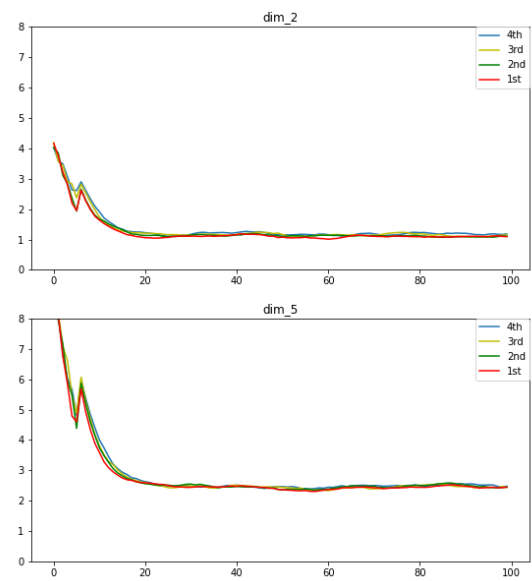
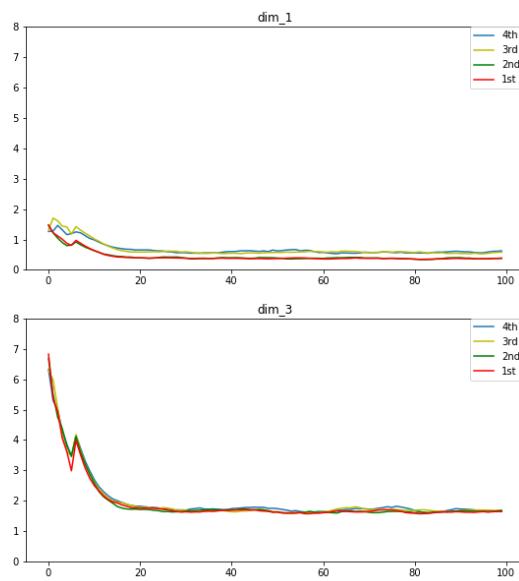
Liczność klastrów:



Odległość klastrow od minimów funkcji:

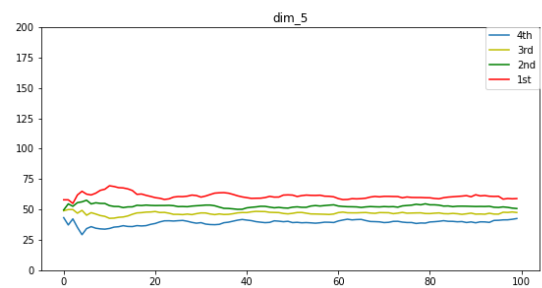
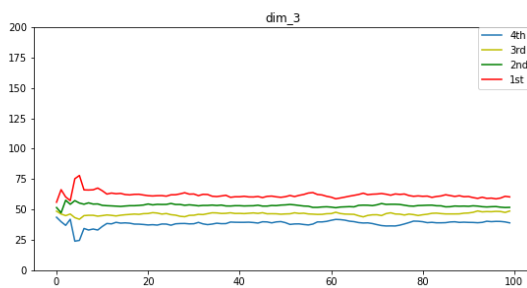
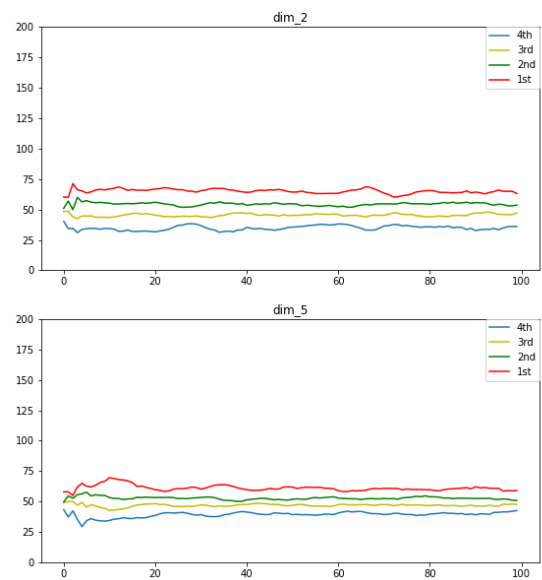
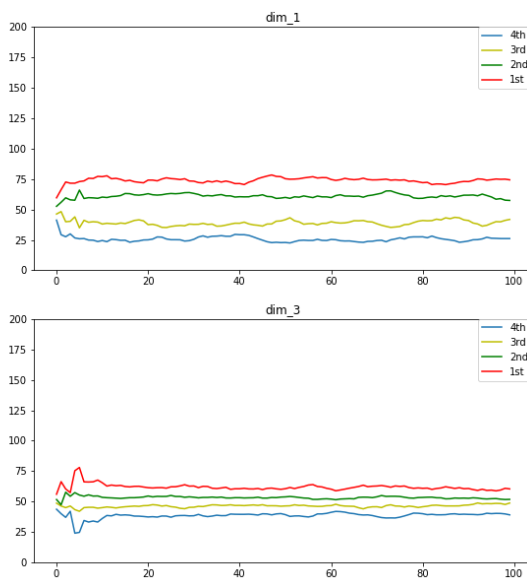


Odchylenie standardowe w klastrach:

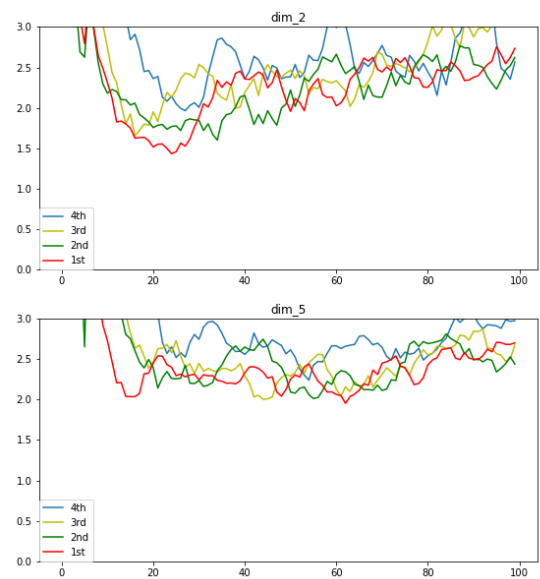
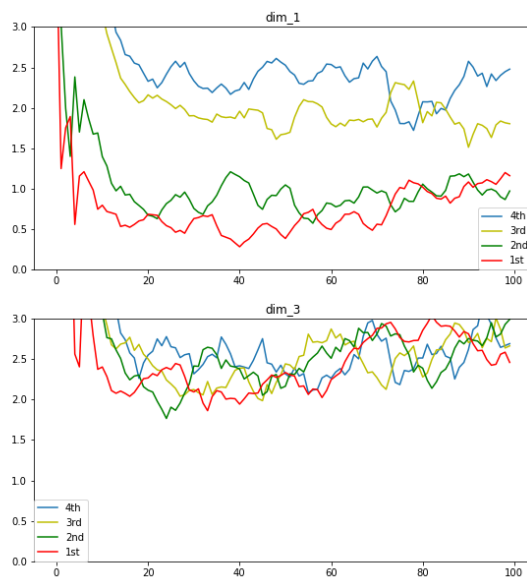


### 4.3 Funkcja stała

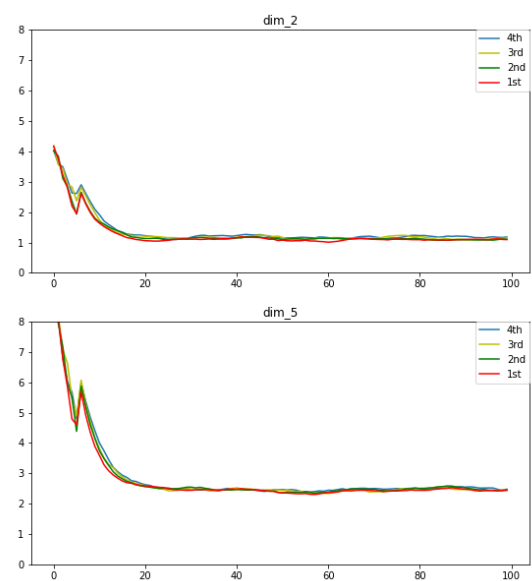
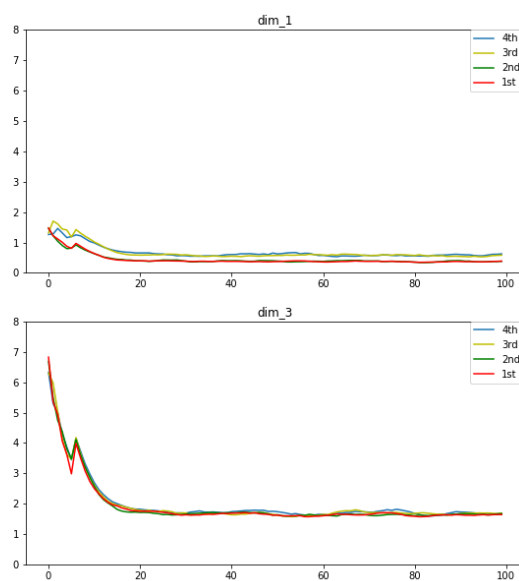
Liczność klastrow:



Odległość klastrow od minimów funkcji:

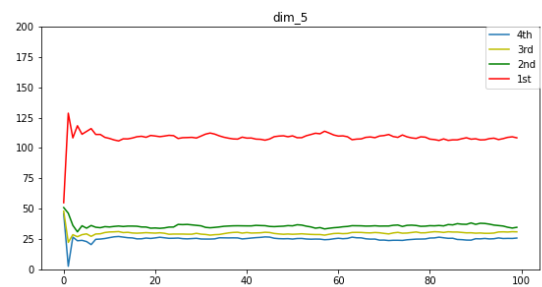
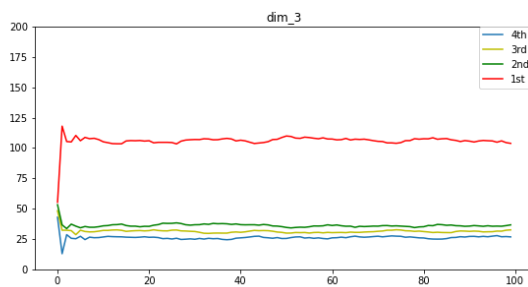
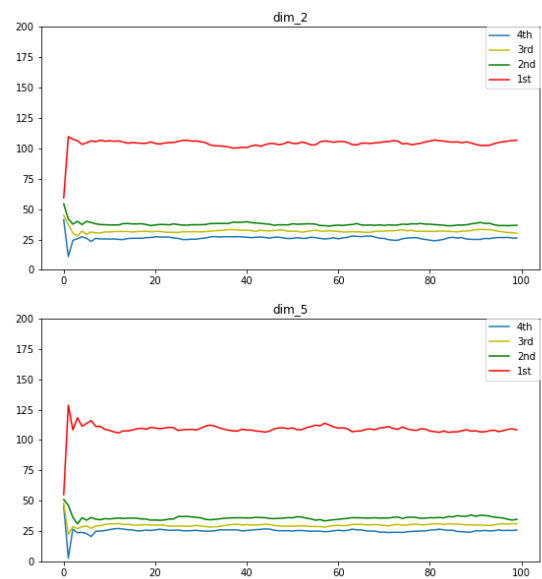
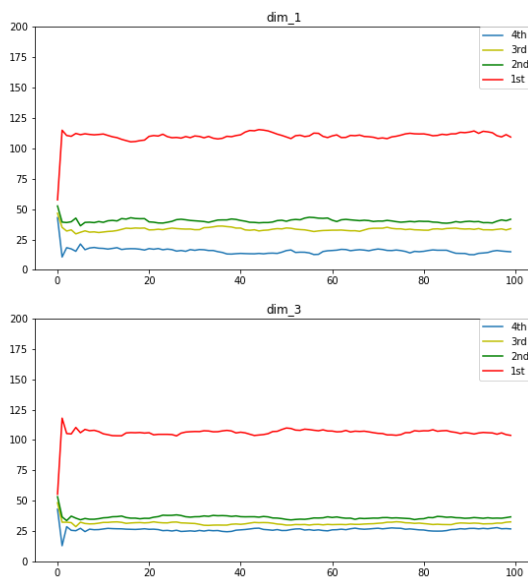


Odchylenie standardowe w klastrach:

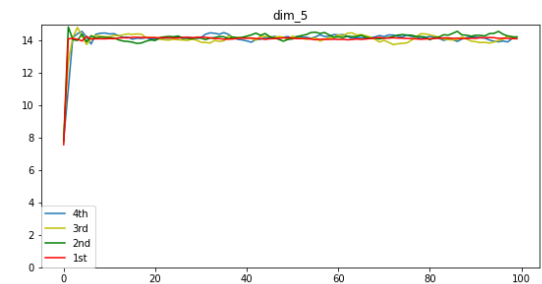
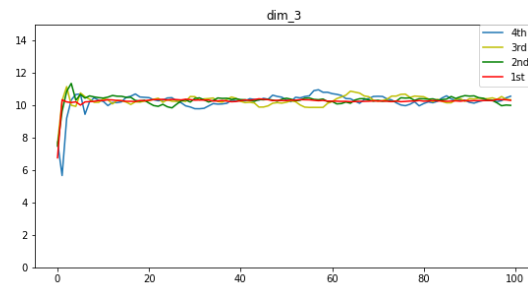
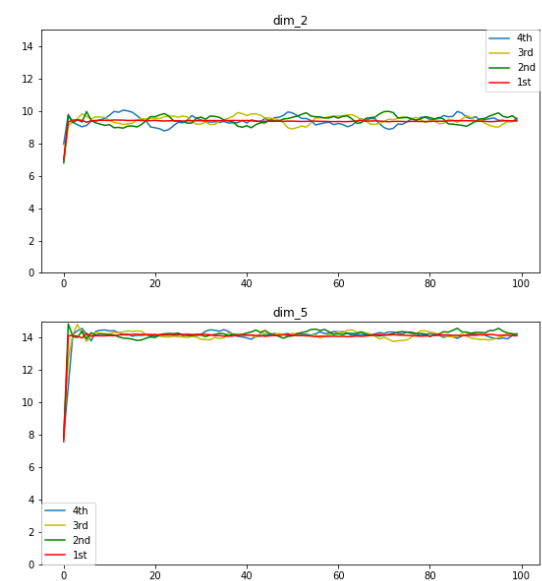
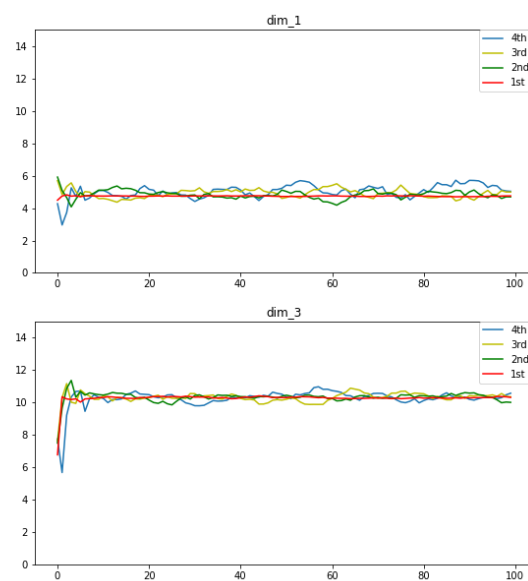


## 4.4 Funkcja Rastrigina

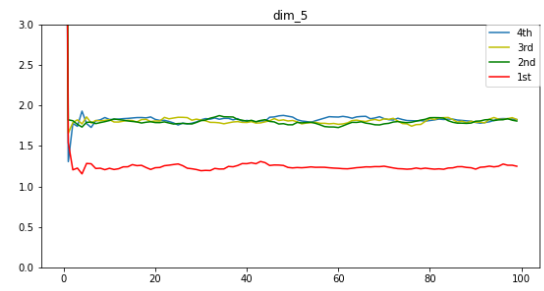
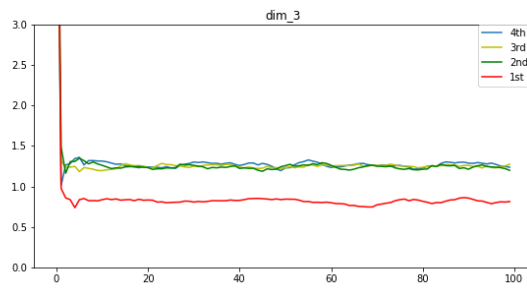
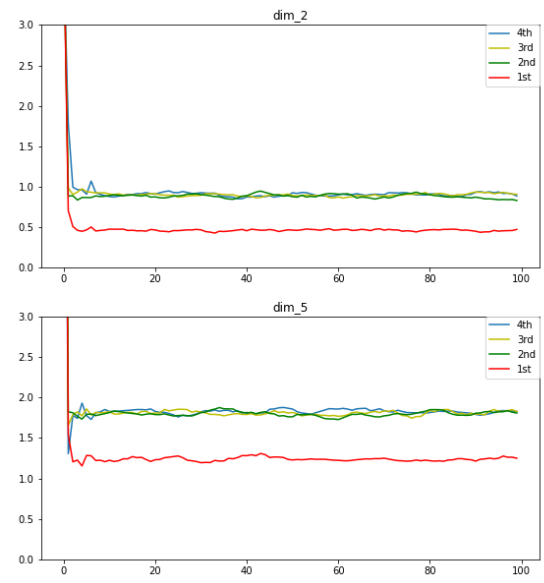
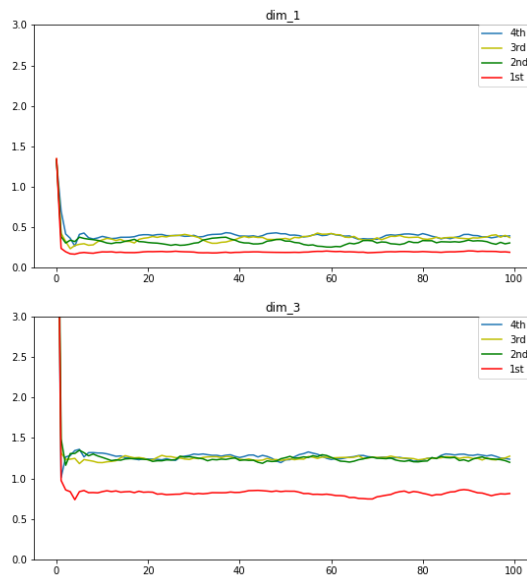
Liczność klastrów:



Odległość klastrow od minimów funkcji:



Odchylenie standardowe w klastrach:



## References