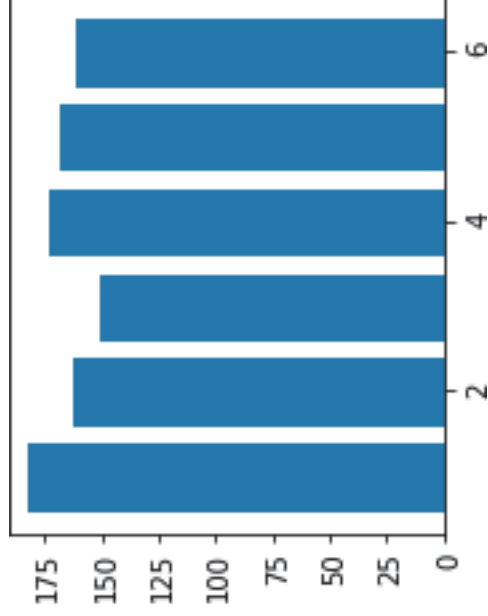
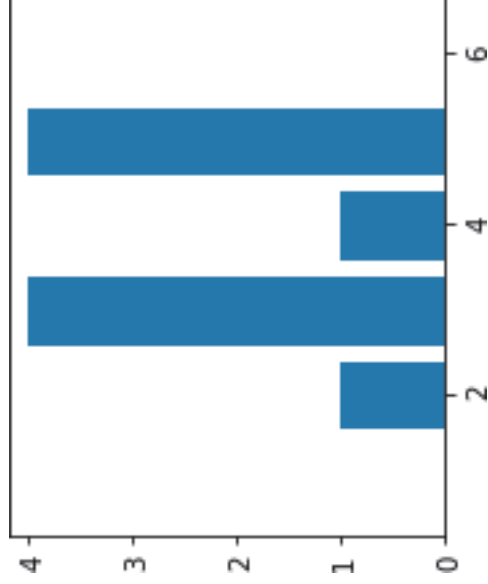
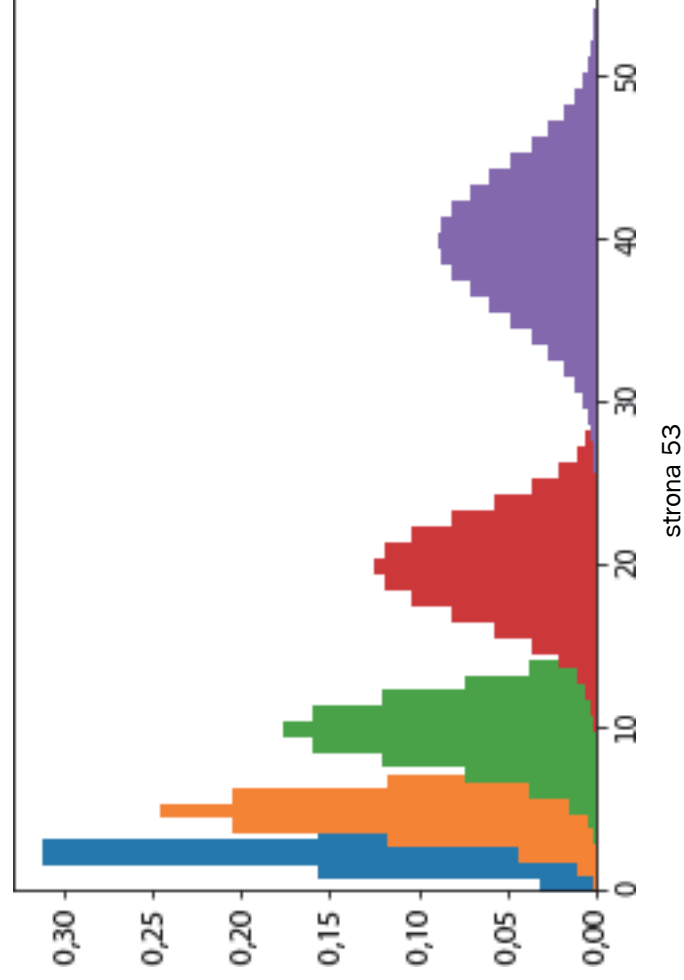
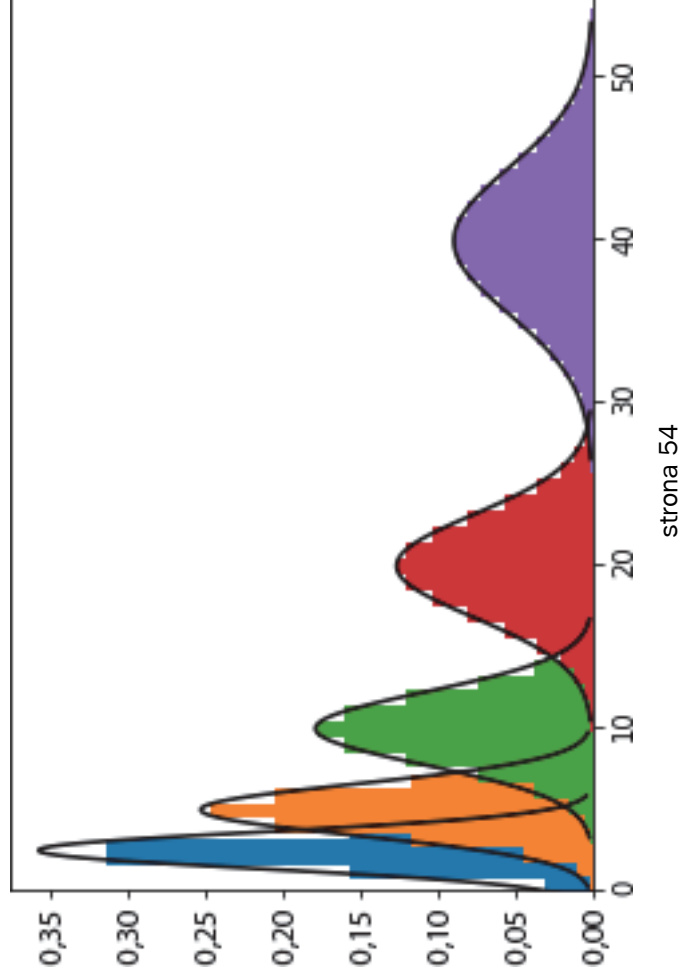


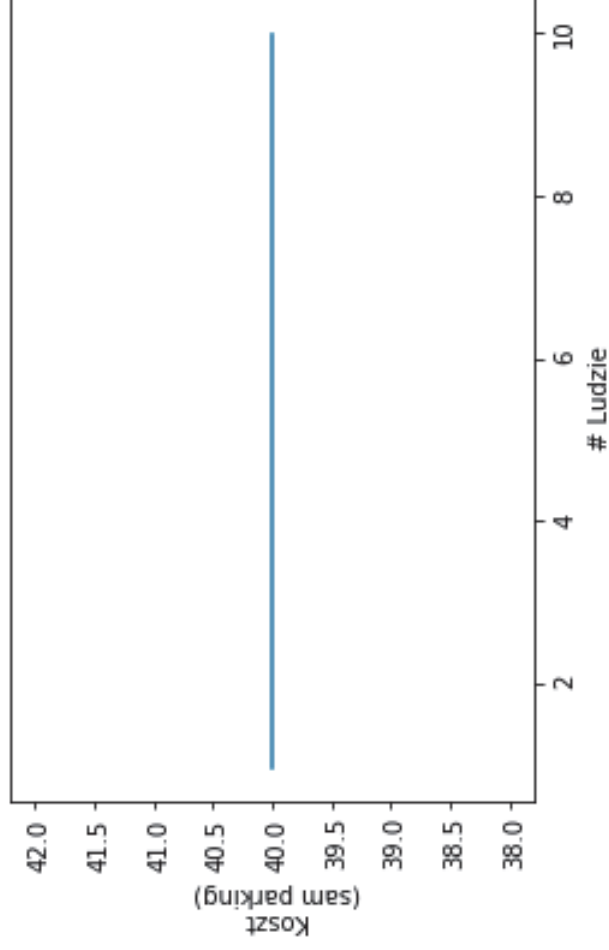
KOLOROWE WERSJE RYSUNKÓW

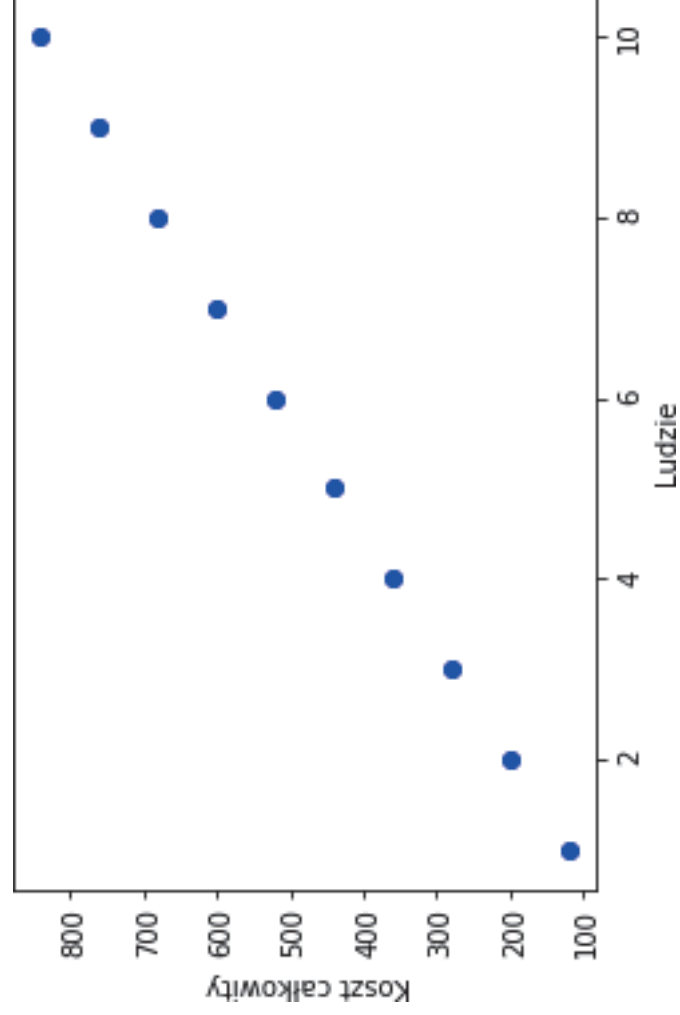
Uczenie maszynowe w Pythonie dla każdego

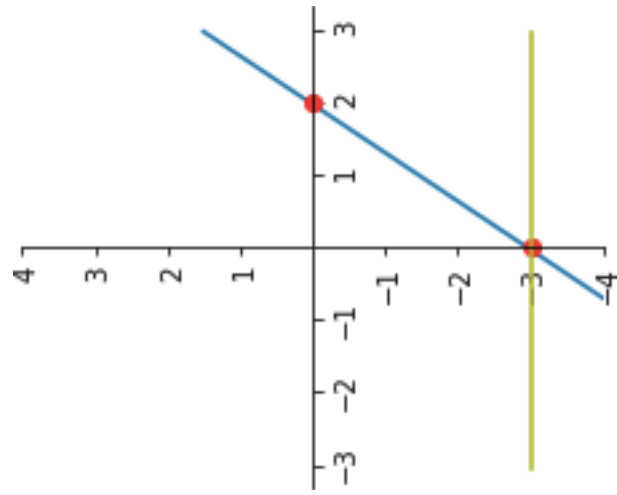


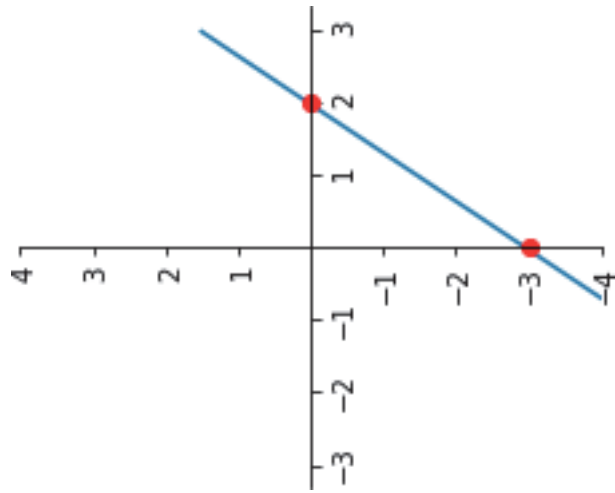


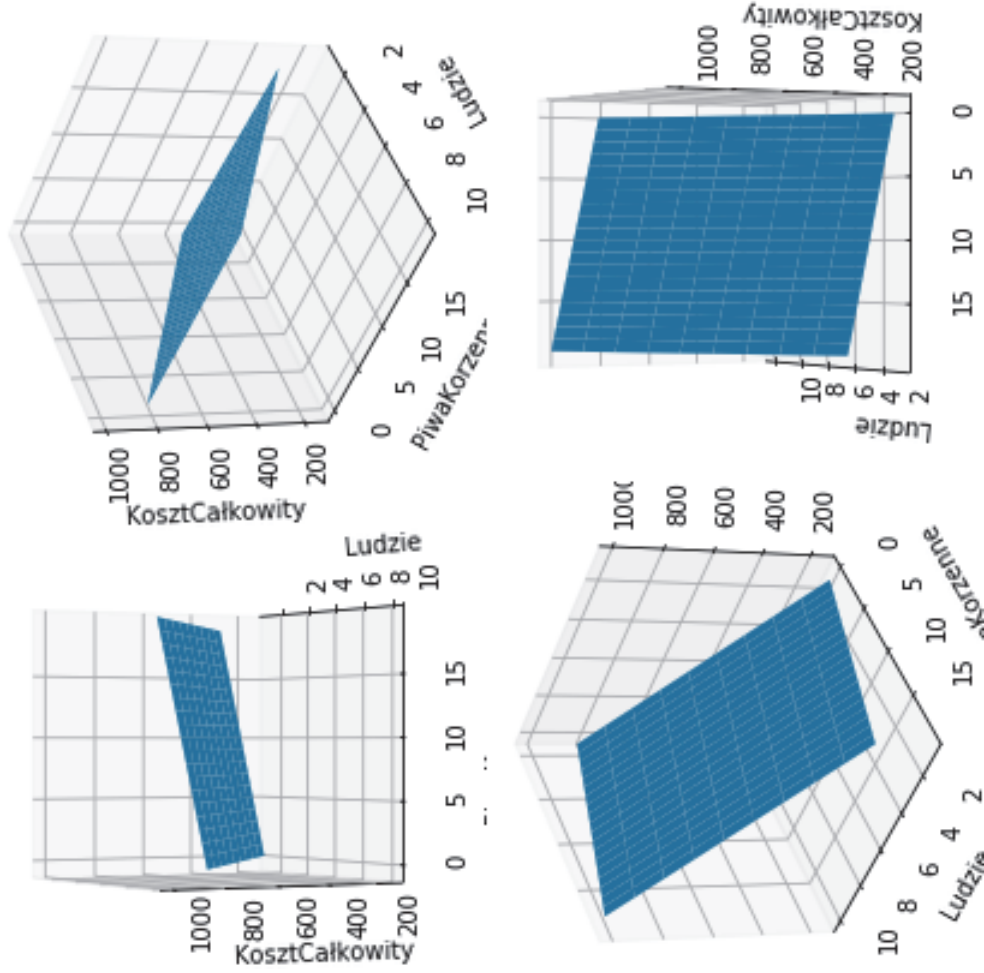


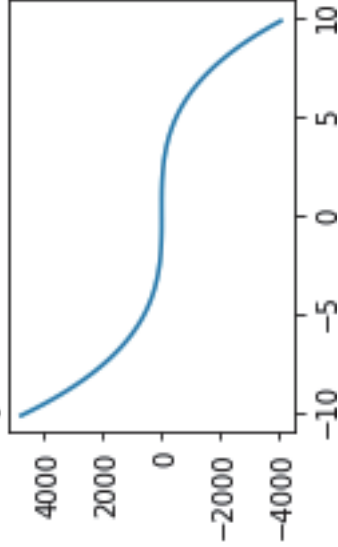
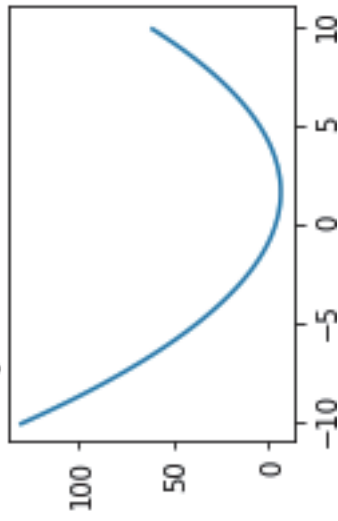
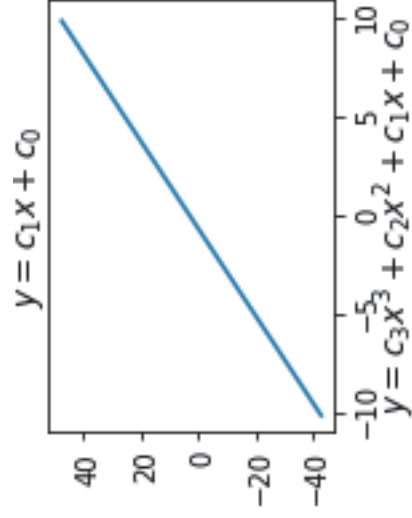
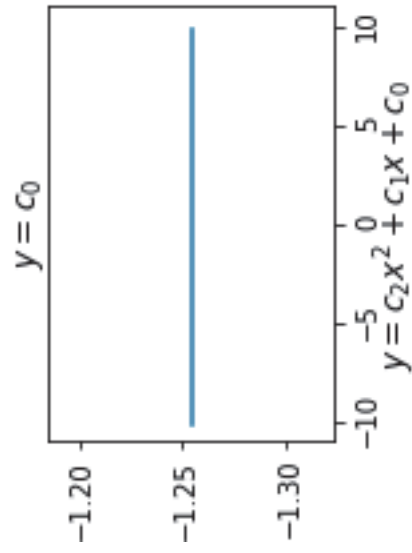


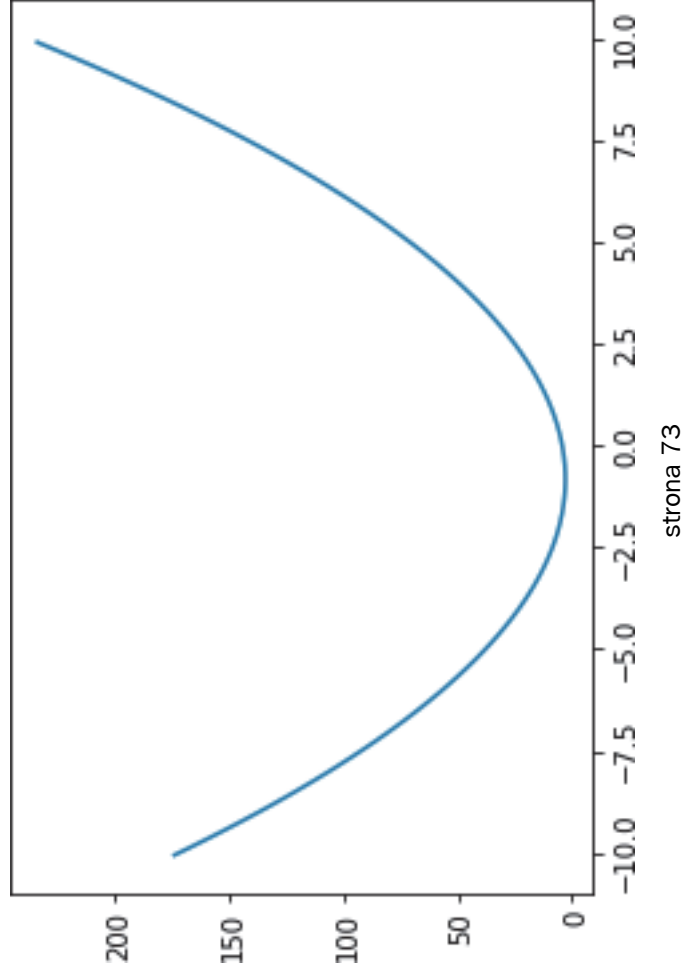


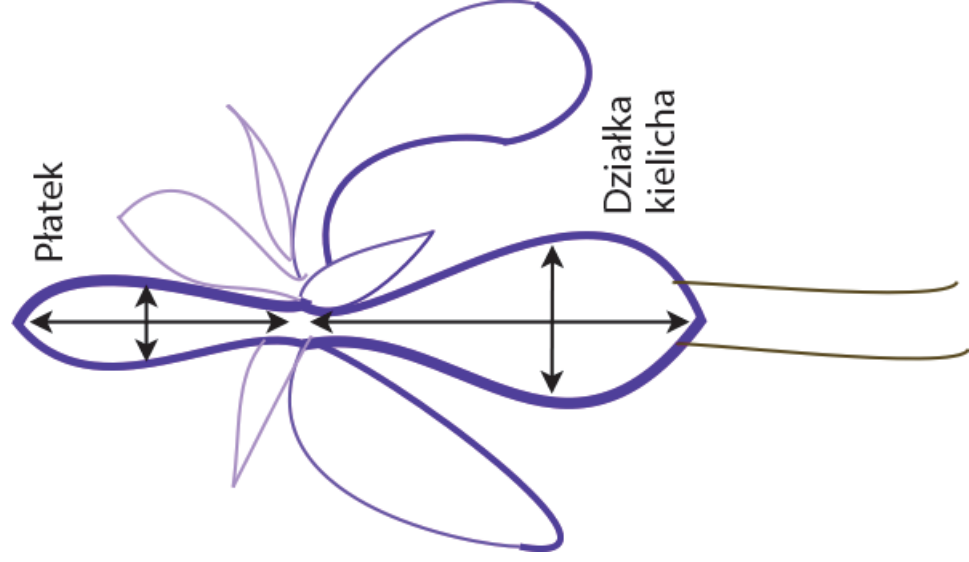




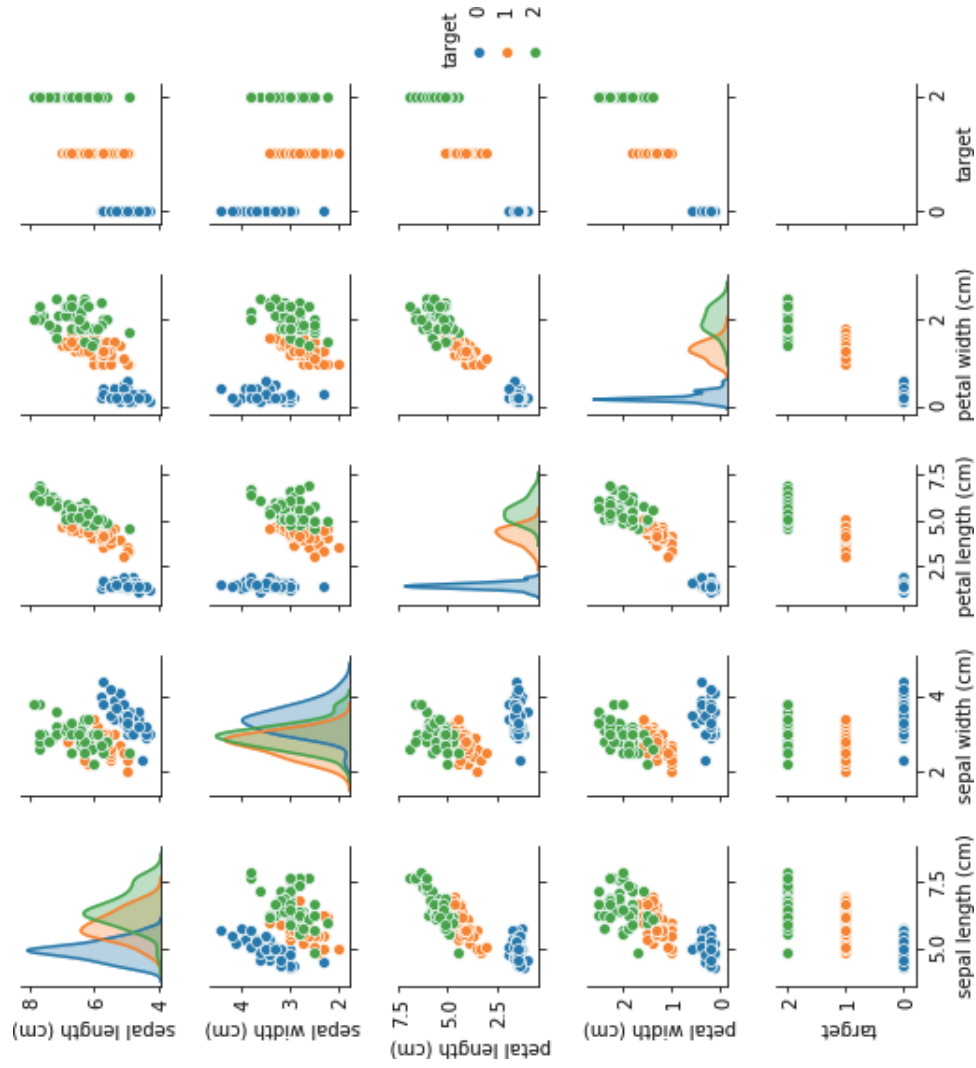


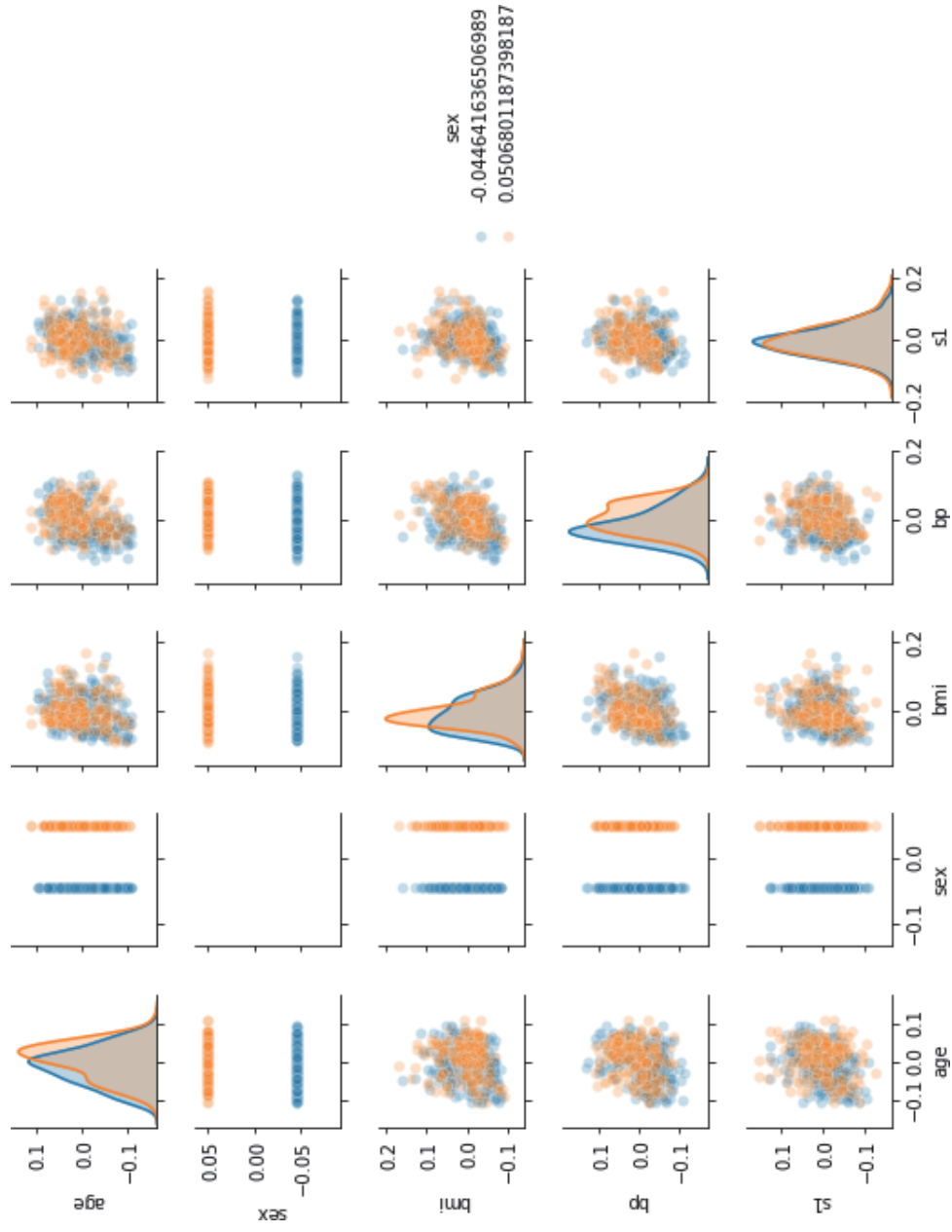


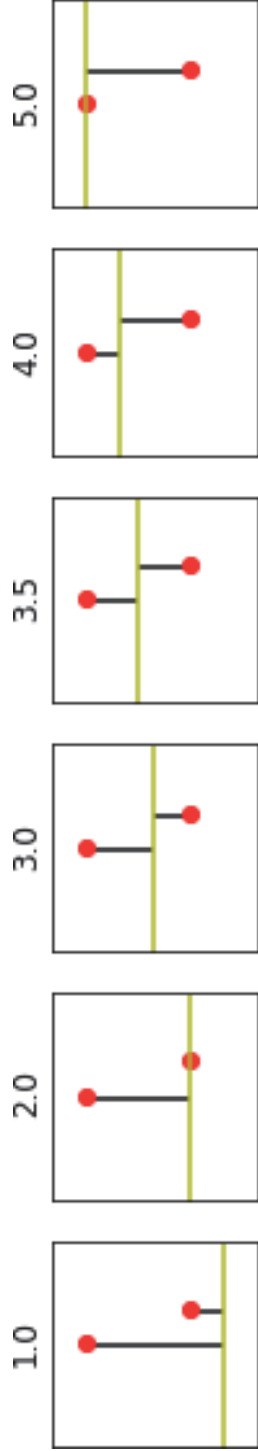




Rysunek 3.1. Inys i jego części (strona 82)



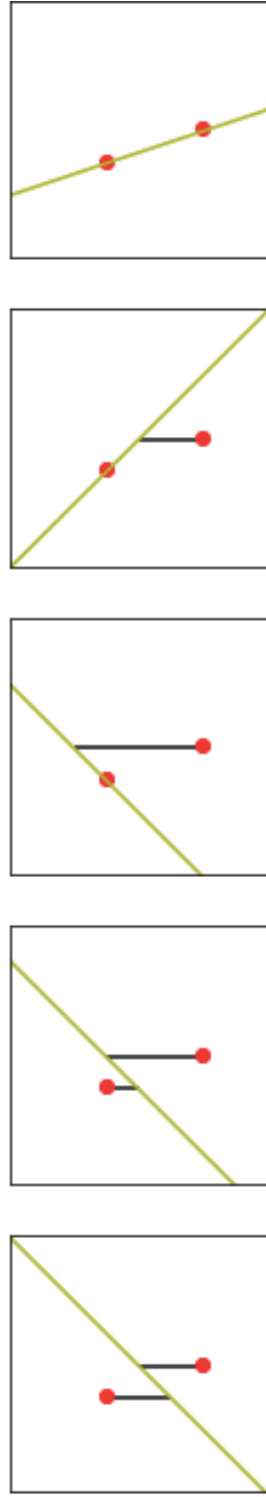




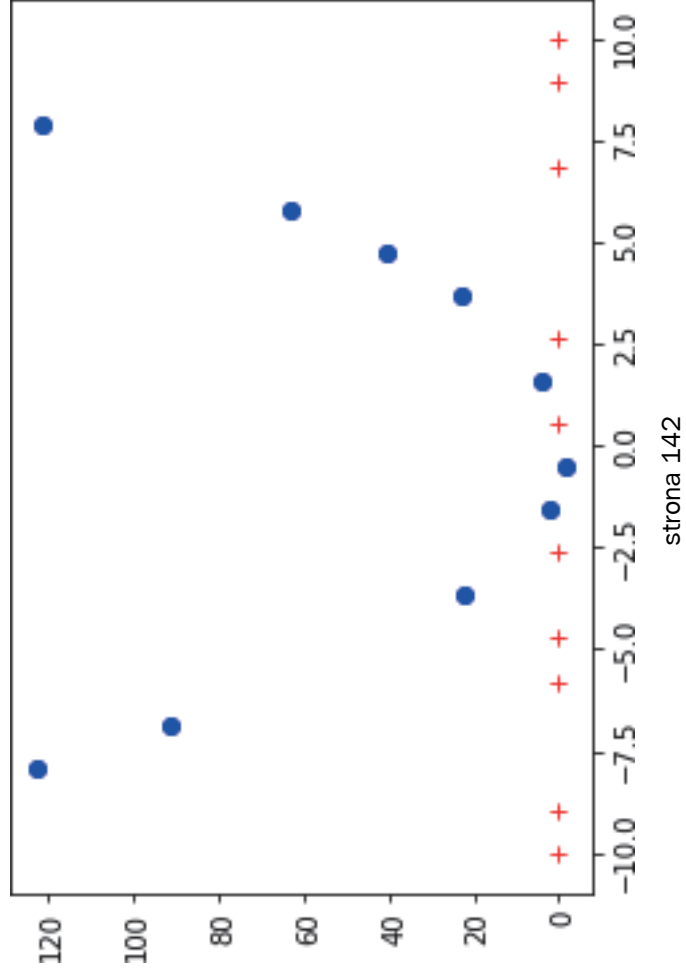
strona 119

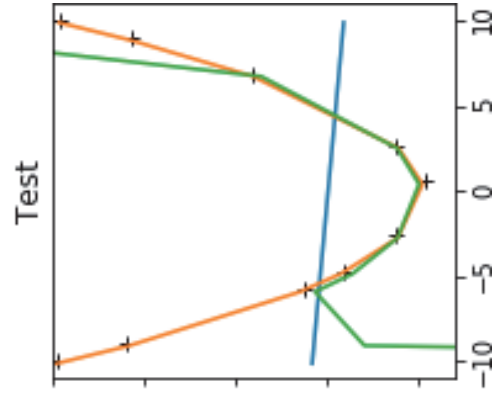
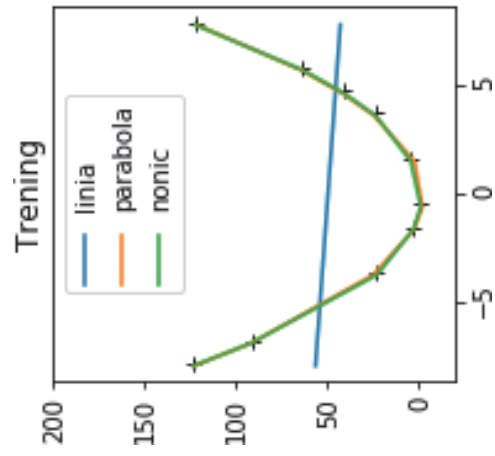
RawErrors Sum SSE TotDist

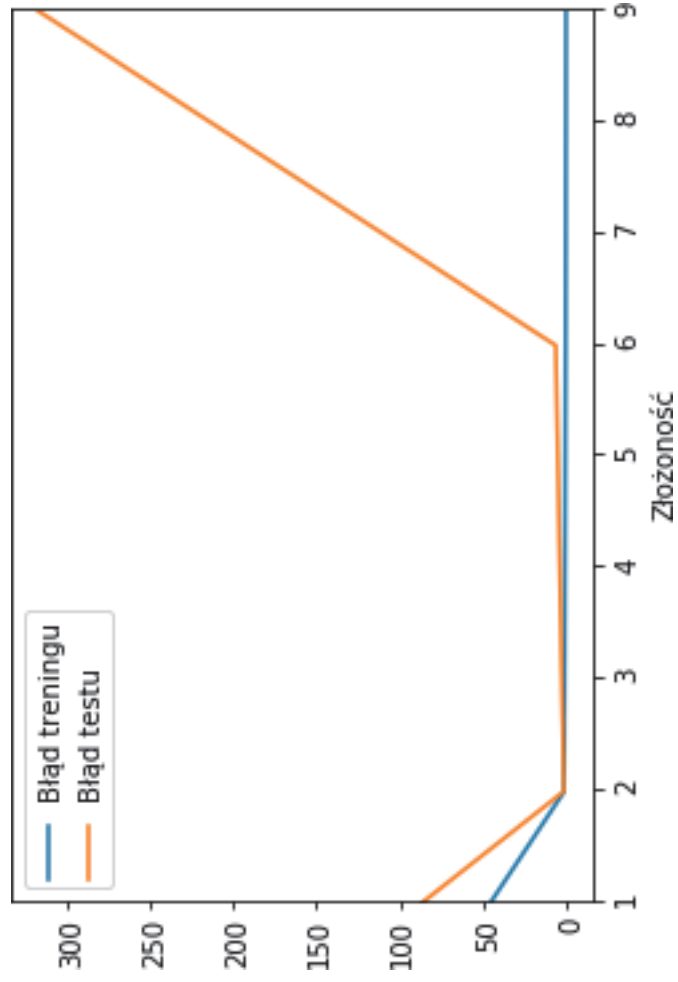
0	[2, -2]	0	8	2.8284
1	[1, -3]	-2	10	3.1623
2	[0, -4]	-4	16	4.0000
3	[0, -2]	-2	4	2.0000
4	[0, 0]	0	0	0.0000



strona 122









Po powtarzających się podziałach
na dane treningowe i testowe

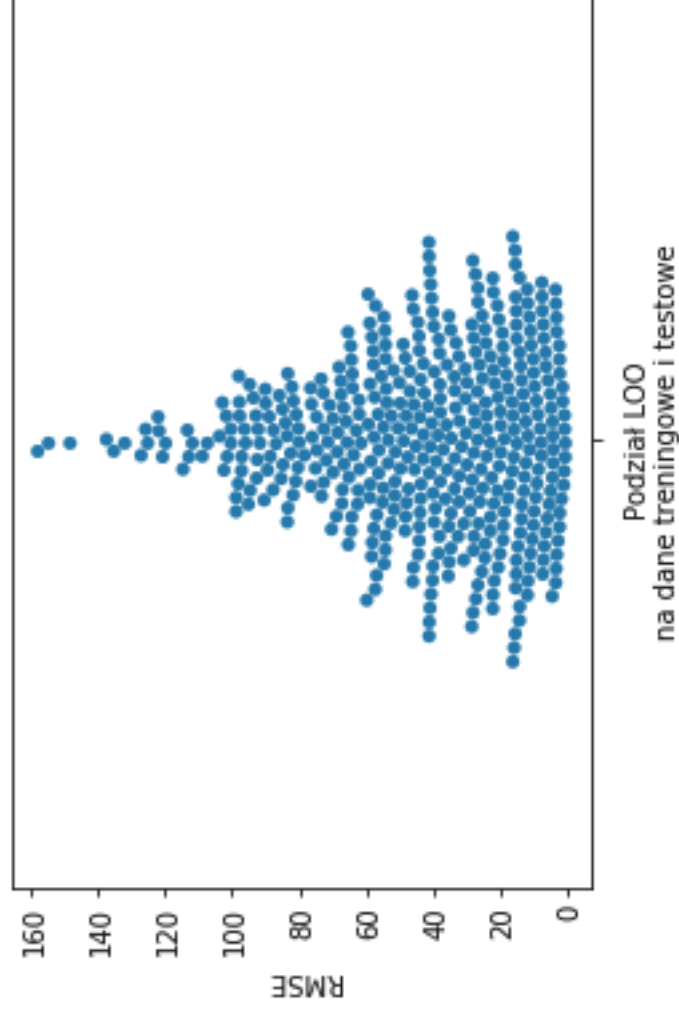
	count	mean	std	min	25%	50%	75%	max
--	-------	------	-----	-----	-----	-----	-----	-----

RMSE	10.0000	55.4388	3.5870	50.1900	52.9660	55.3967	58.3911	60.5432
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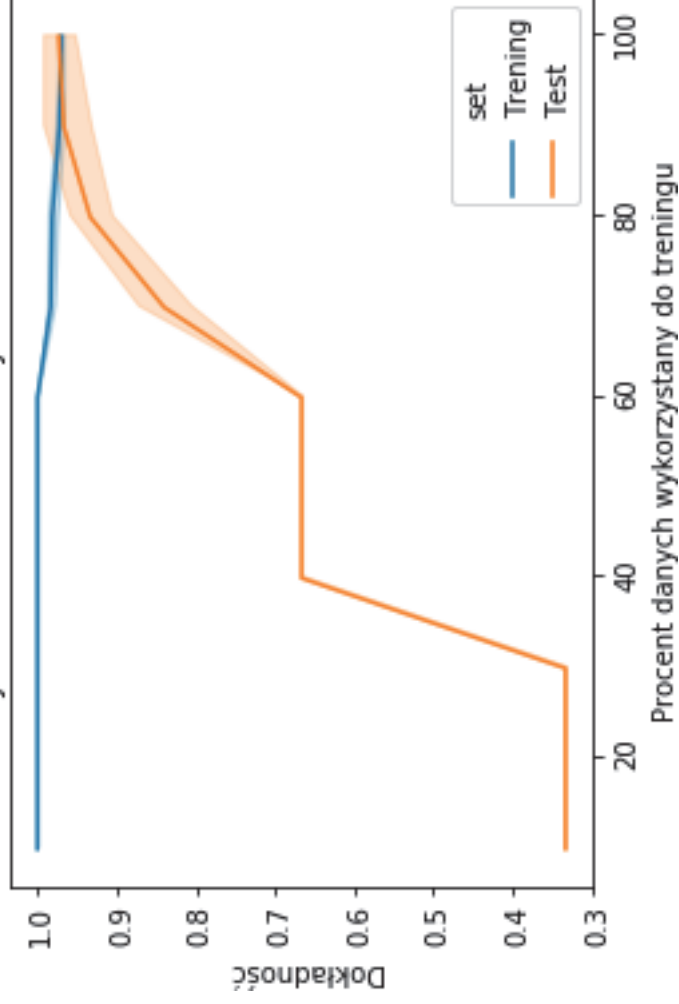


Po powtarzających się podziałach
na dane treningowe i testowe

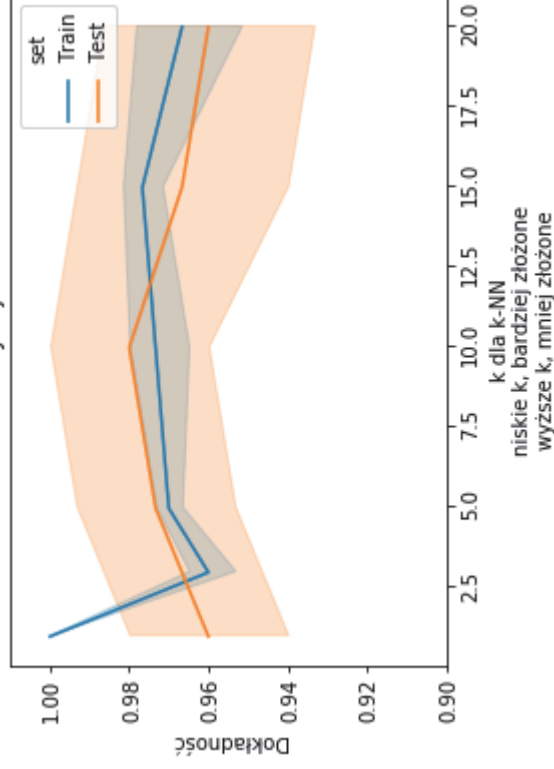
	count	mean	std	min	25%	50%	75%	max
RMSE	442.0000	44.3557	32.1973	0.2075	18.4820	39.5472	63.9738	158.2355

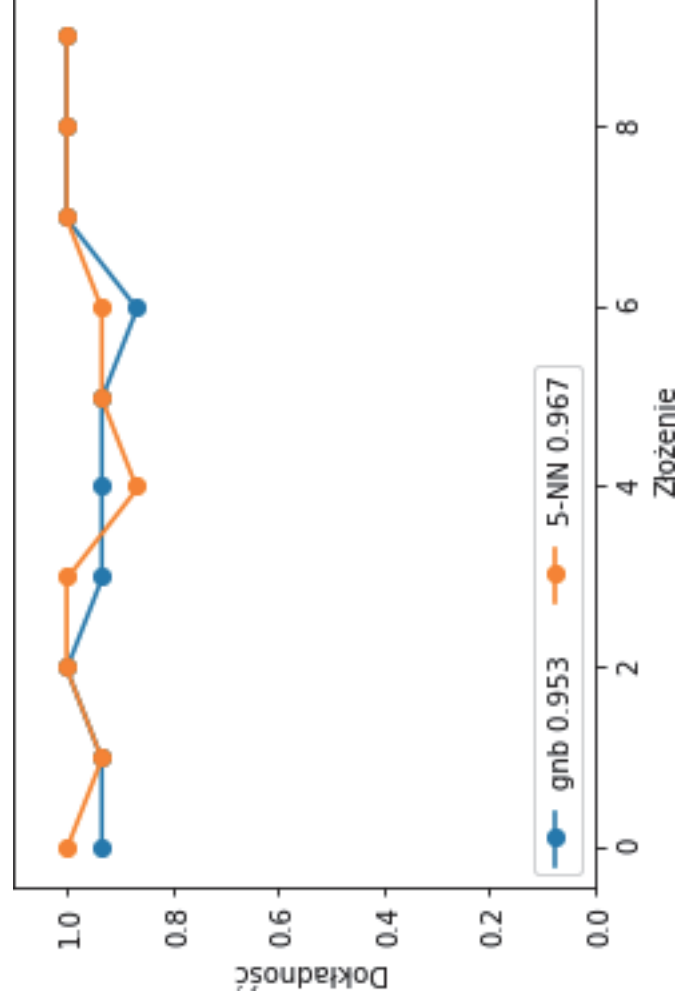


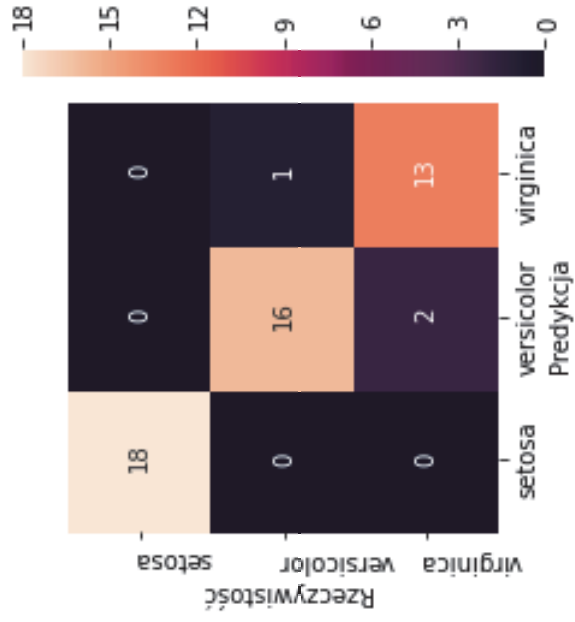
Krzywa uczenia dla klasyfikatora 5-NN



5-stronne CV wydajności dla k-NN







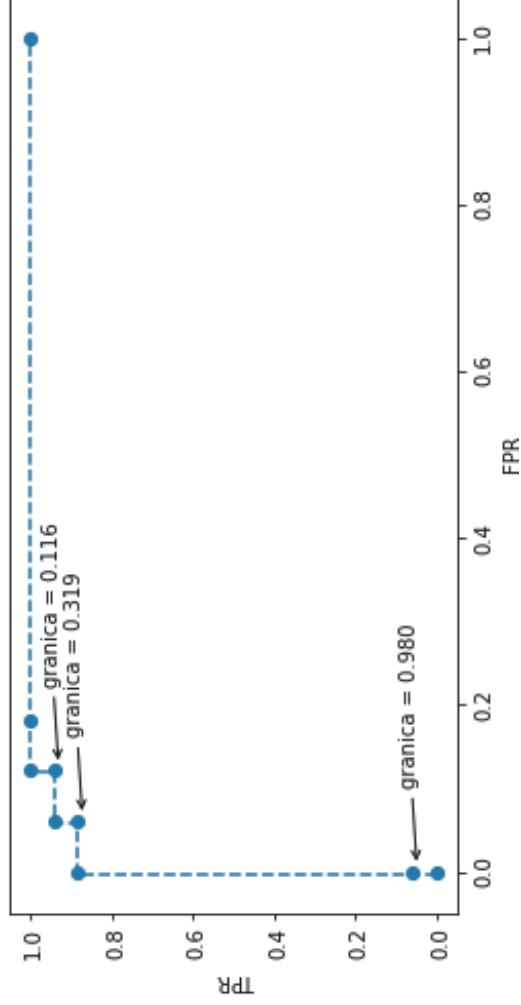

```

FPR : [0. 0. 0. 0.0606 0.0606 0.1212 0.1212 0.1212 0.1818 1. ]
TPR : [0. 0.0588 0.8824 0.8824 0.9412 0.9412 0.9412 1. 1. 1. ]

```

Krzywa ROC dla 1 klasy Iris

AUC:0.989

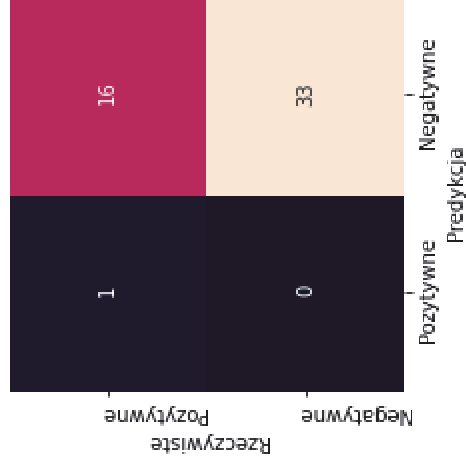


Granica 1

~0.980

TPR : 0.059

FPR : 0.000

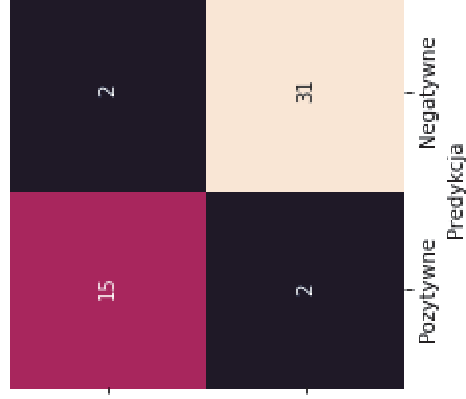


Granica 3

~0.319

TPR : 0.882

FPR : 0.061

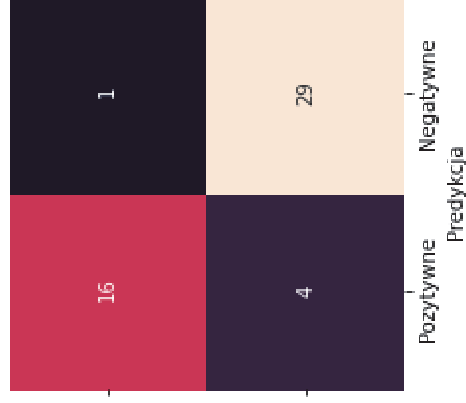


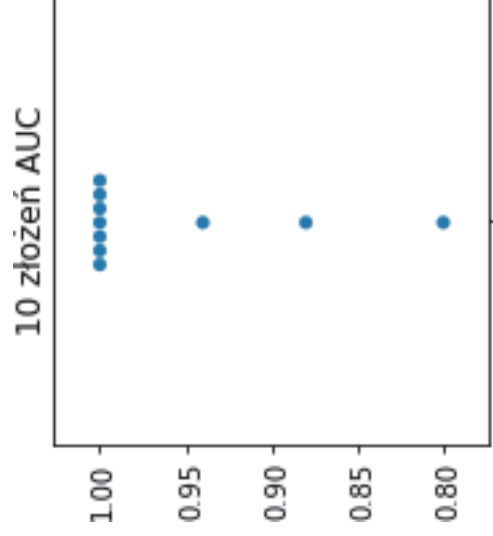
Granica 5

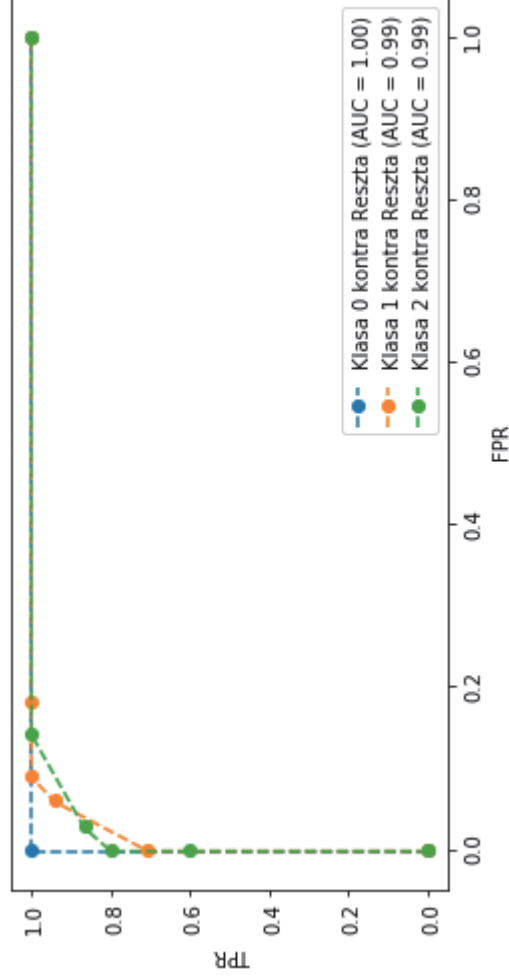
~0.116

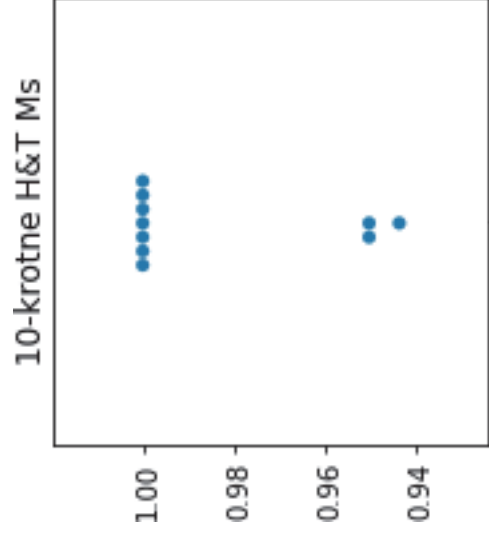
TPR : 0.941

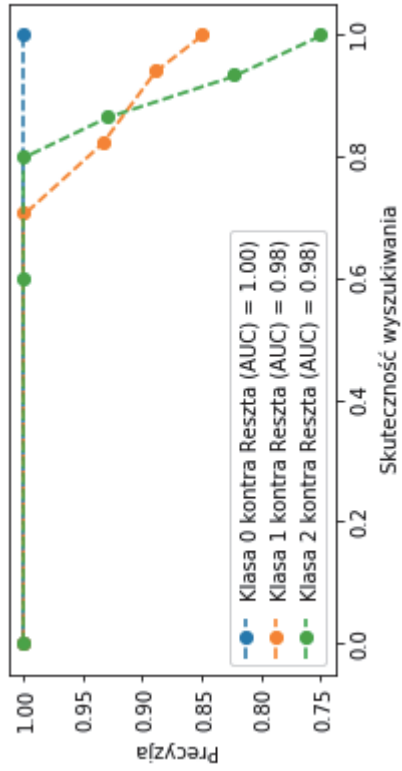
FPR : 0.121



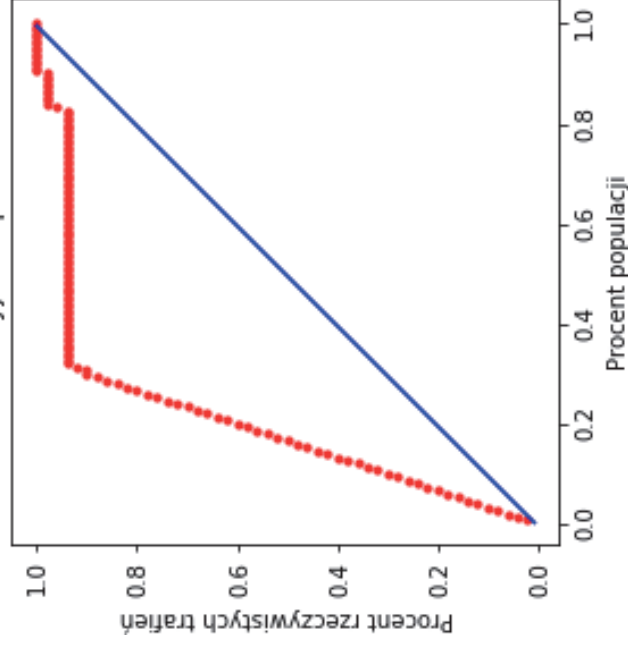






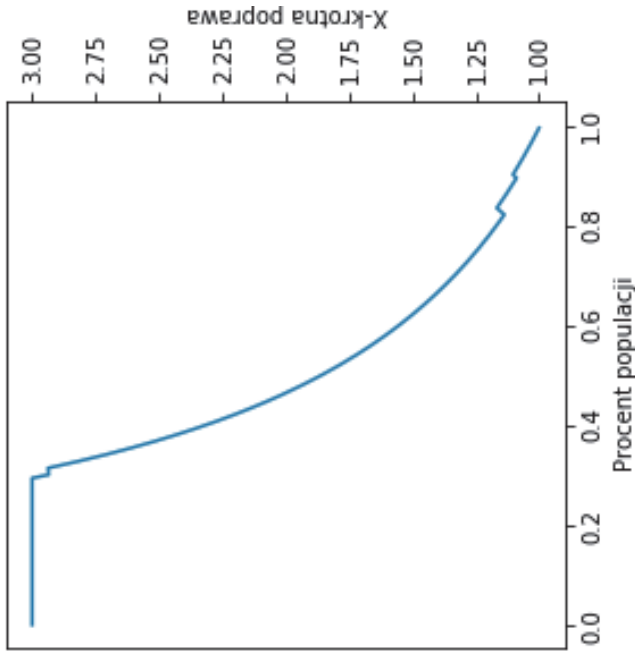


Kumulacyjna odpowiedź

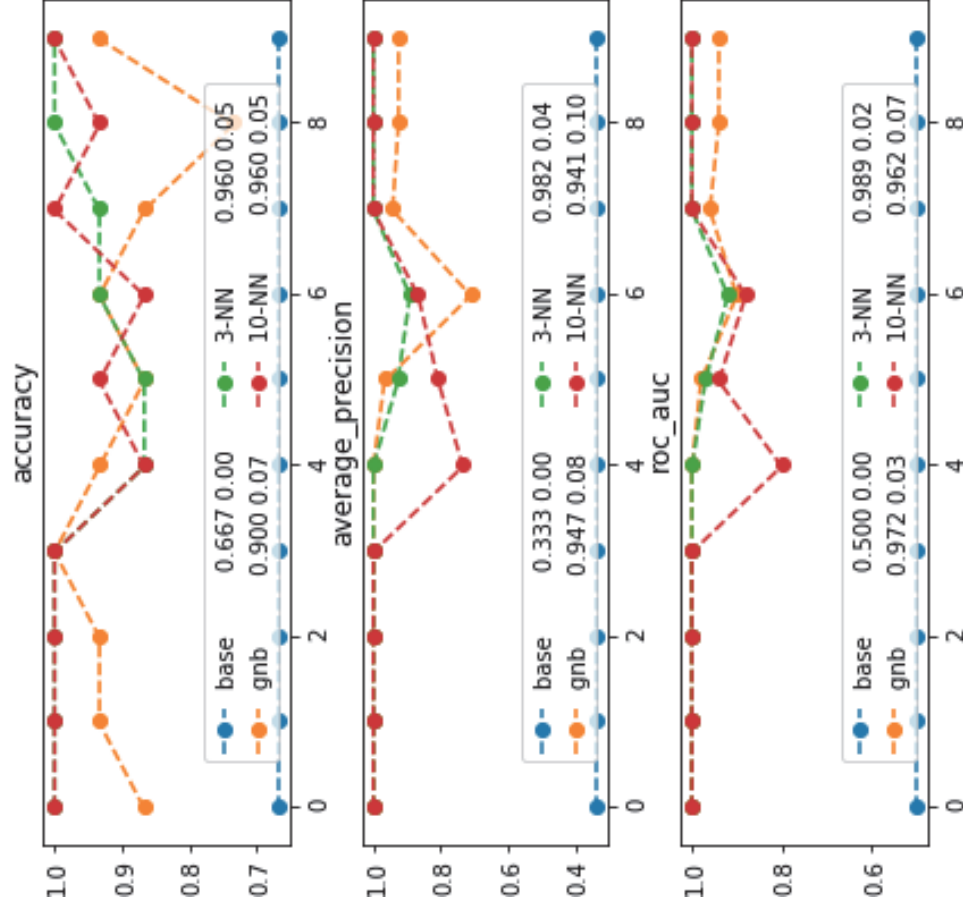


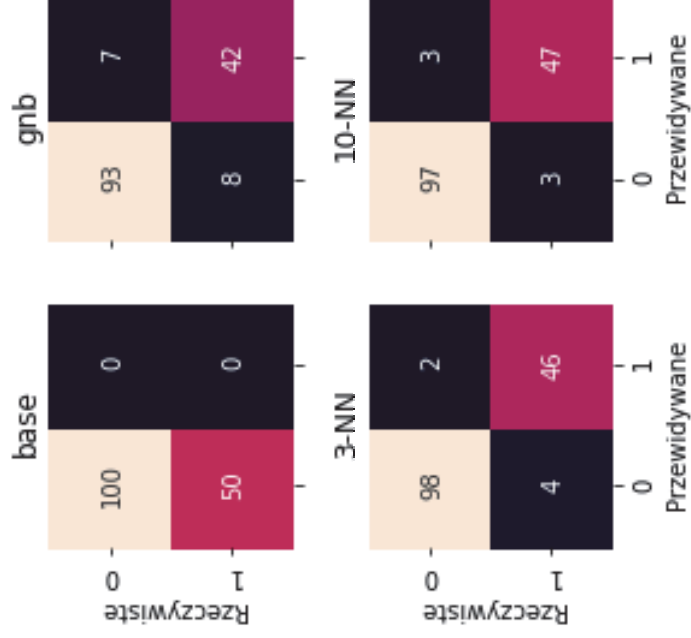
Zaczynając od najwyższych przewidywanych trafień

Wzniesienie kontra losowe

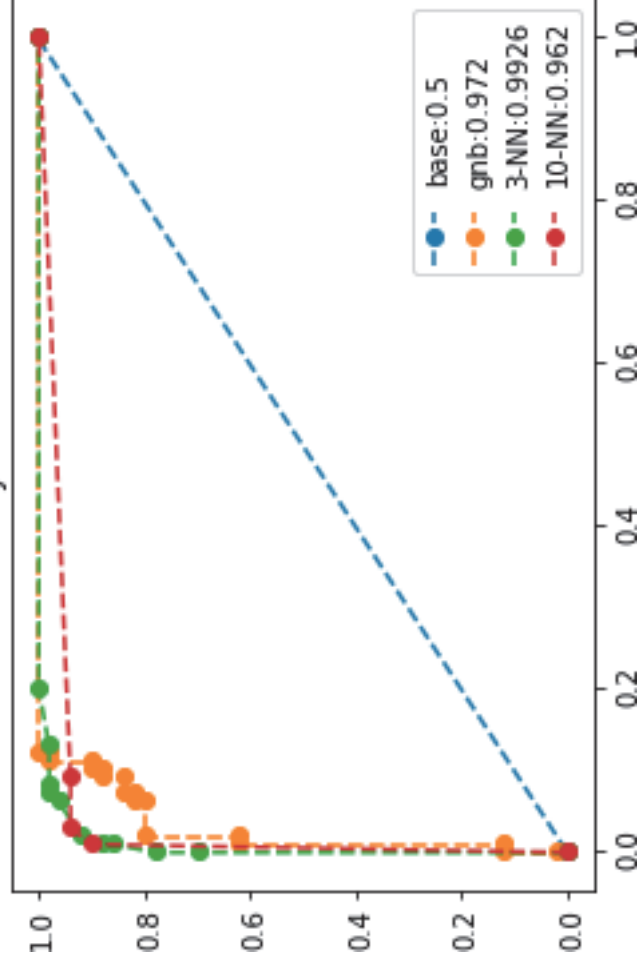


Zaczynając od najwyższych przewidywanych trafień

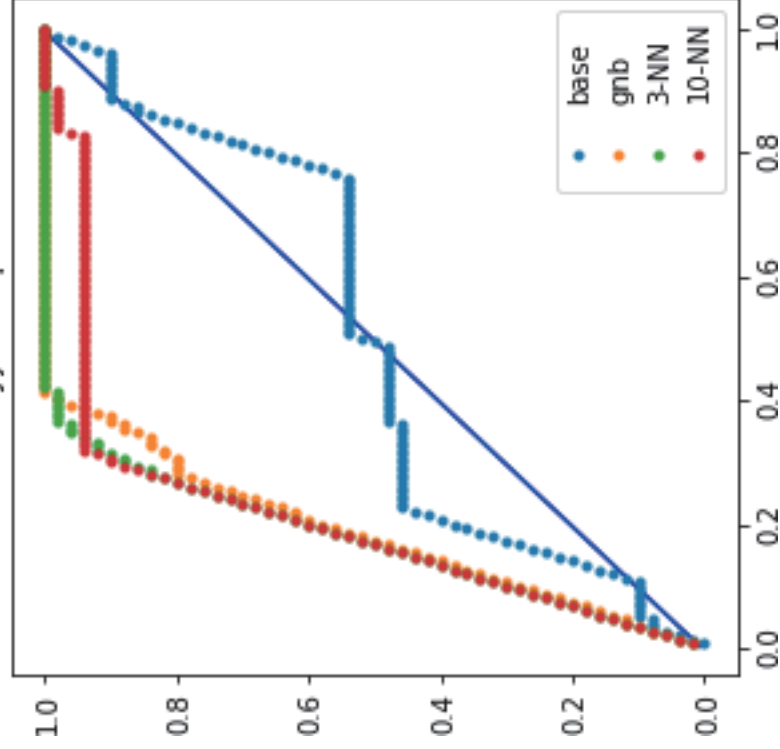




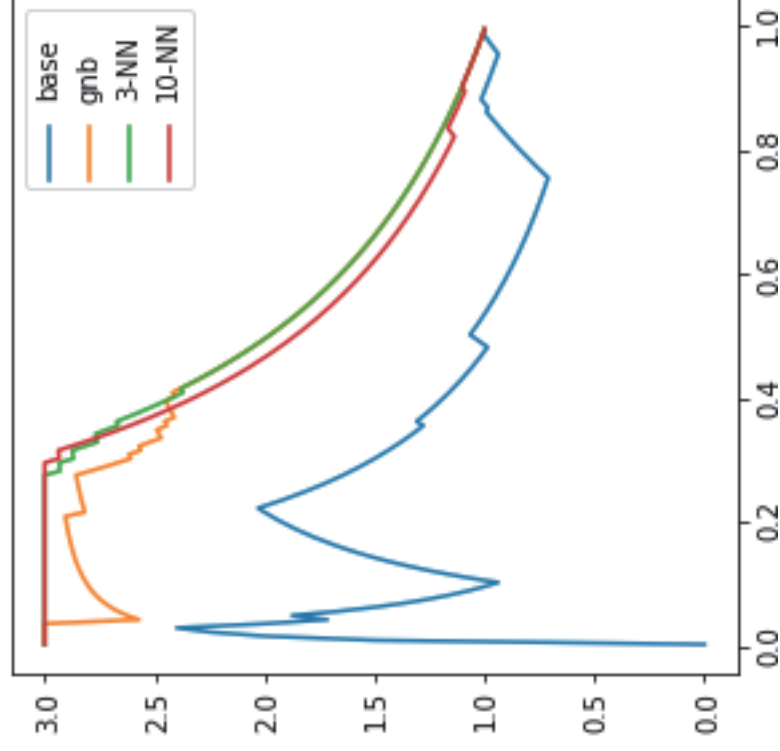
Krzywe ROC

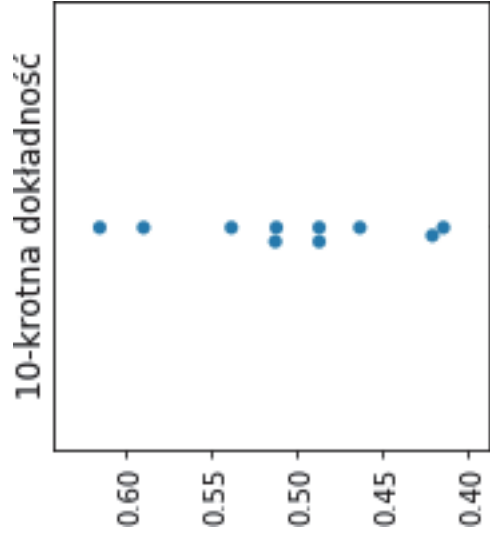


Kumulacyjna odpowiedź

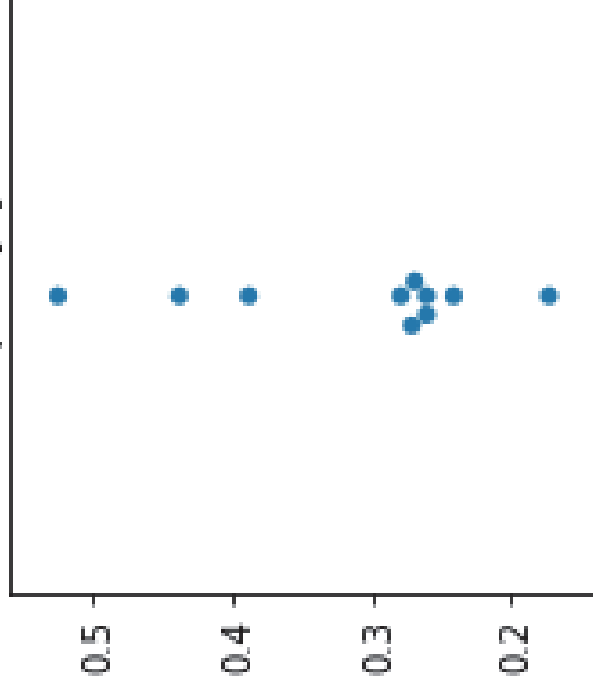


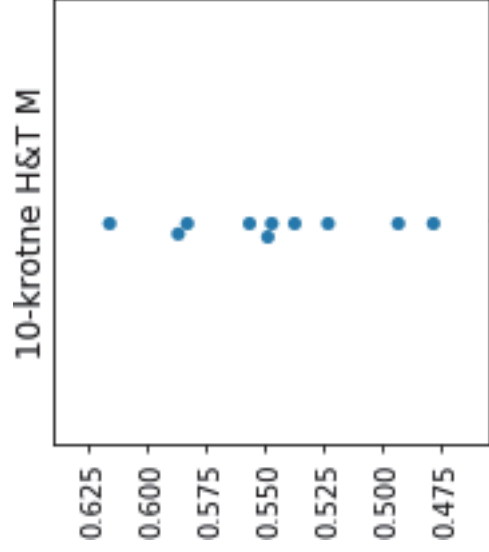
Wzniesienie kontra losowe

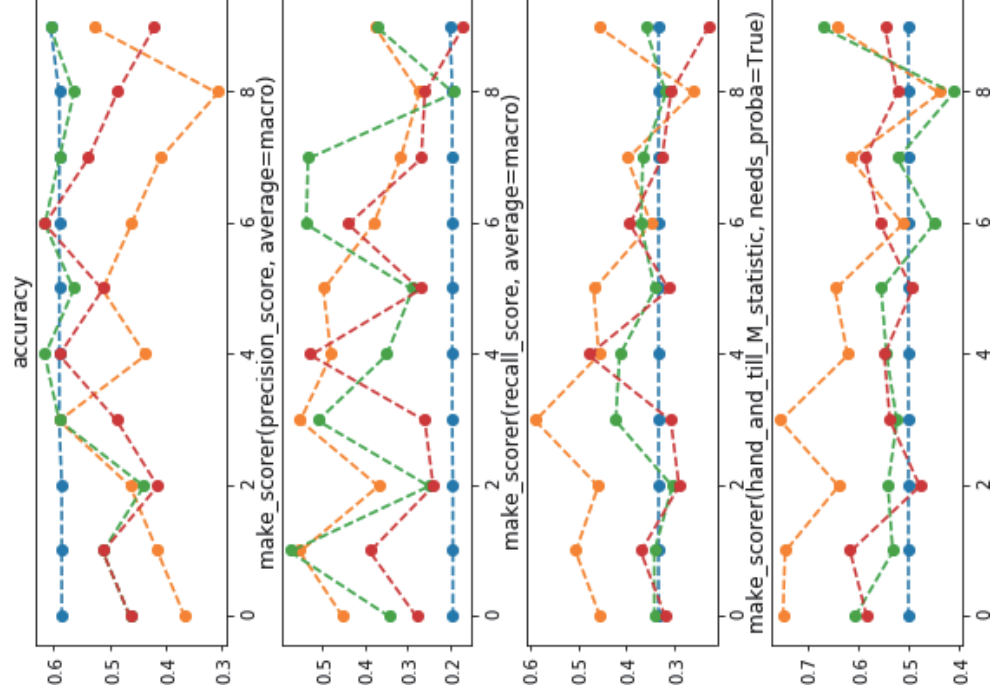


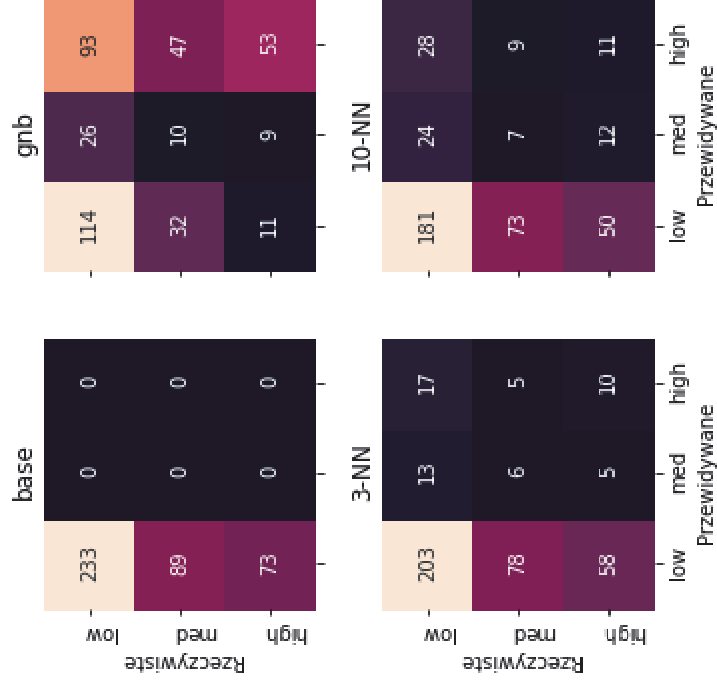


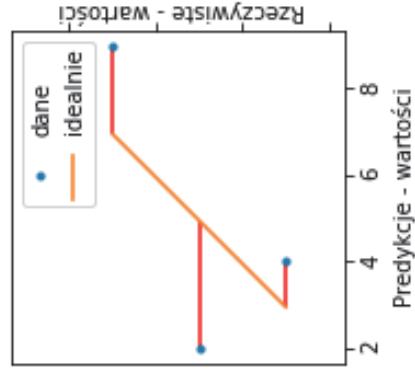
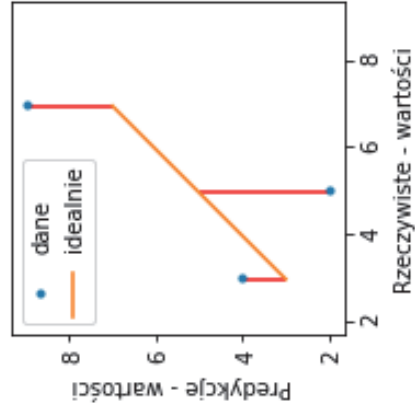
10-krotna precyzja macro

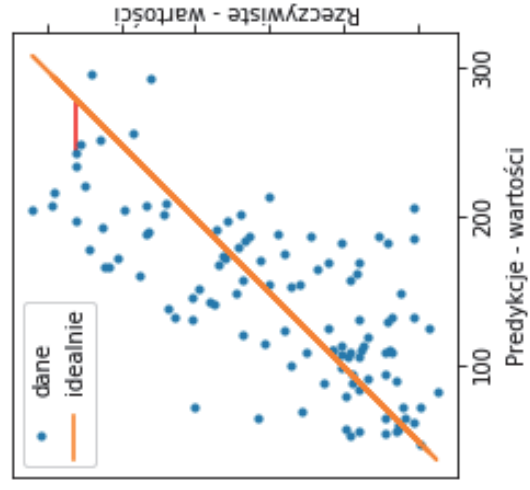
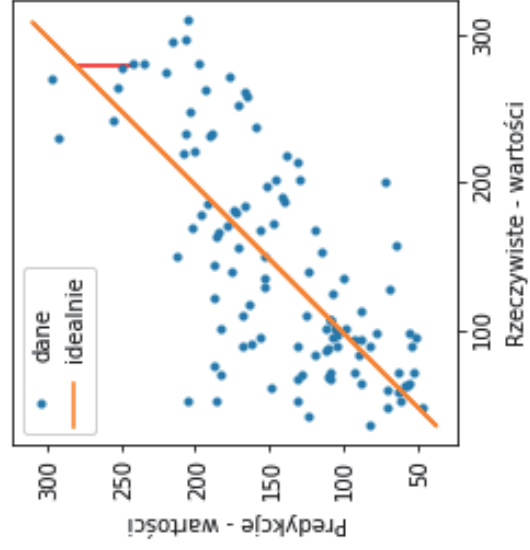


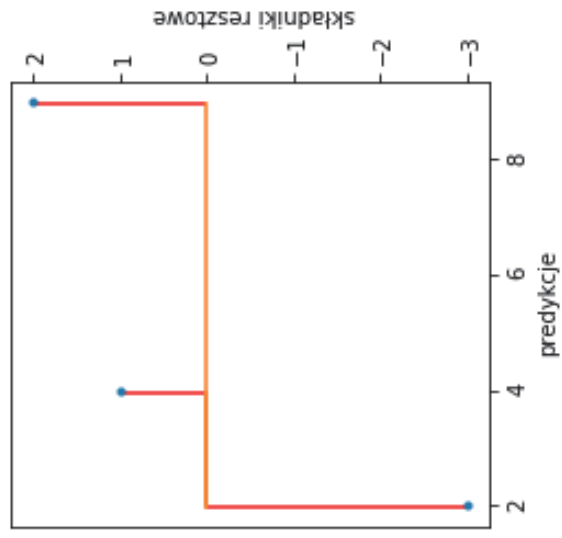
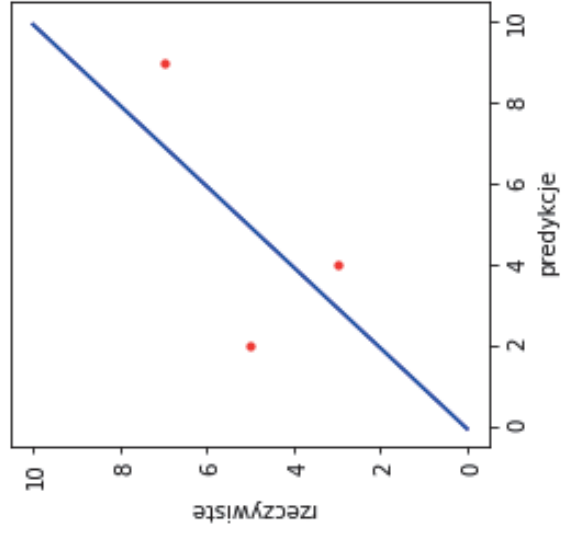




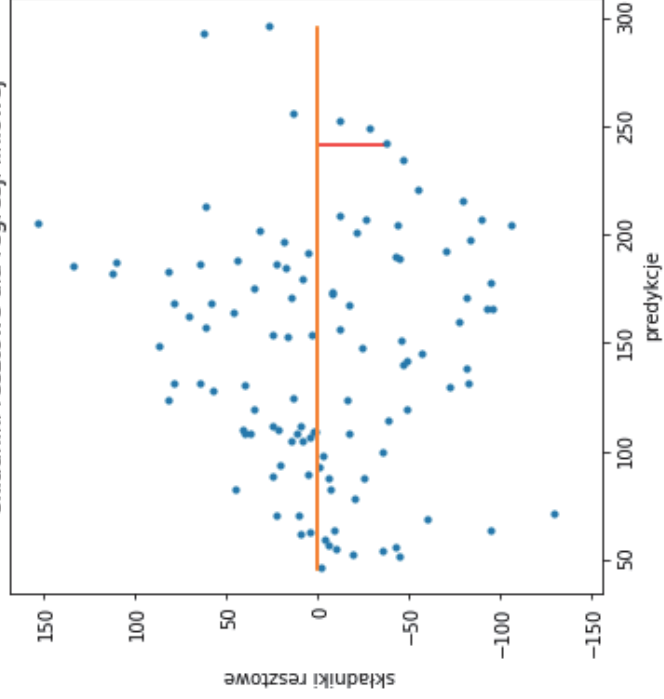




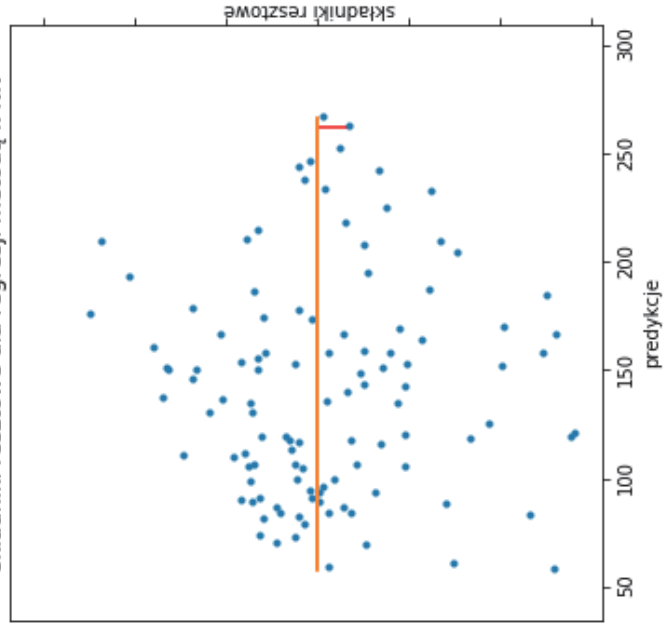




składniki resztowe dla regresji liniowej

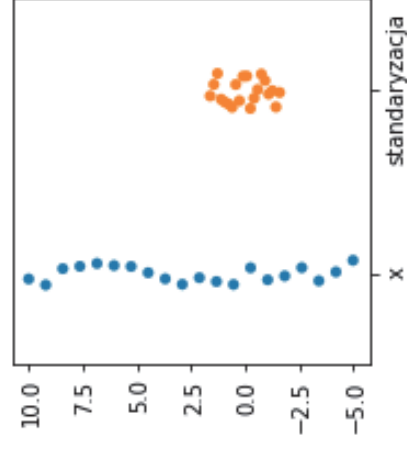


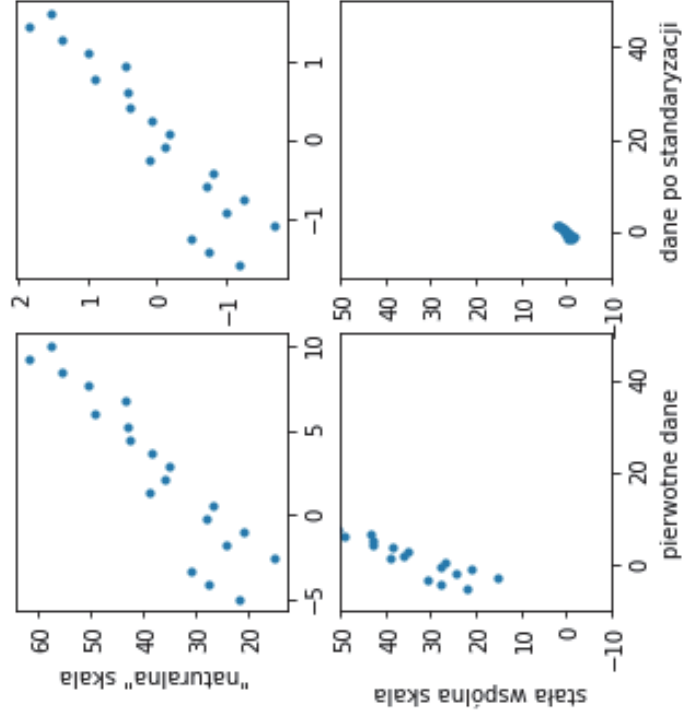
składniki resztowe dla regresji metodą k-NN

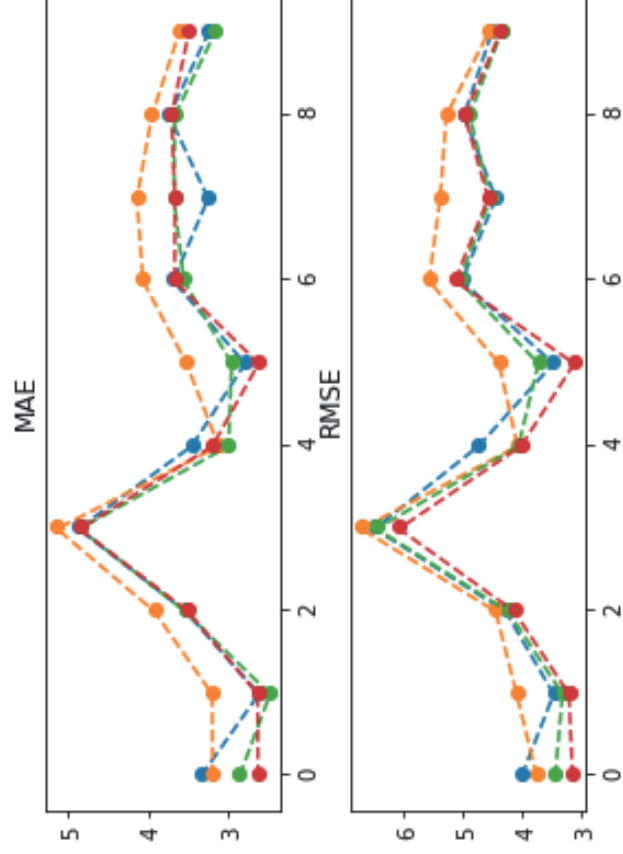


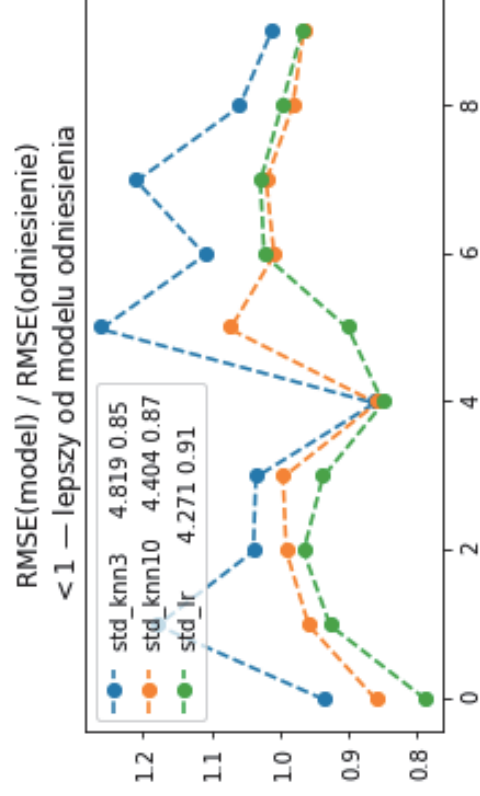
x standaryzacja

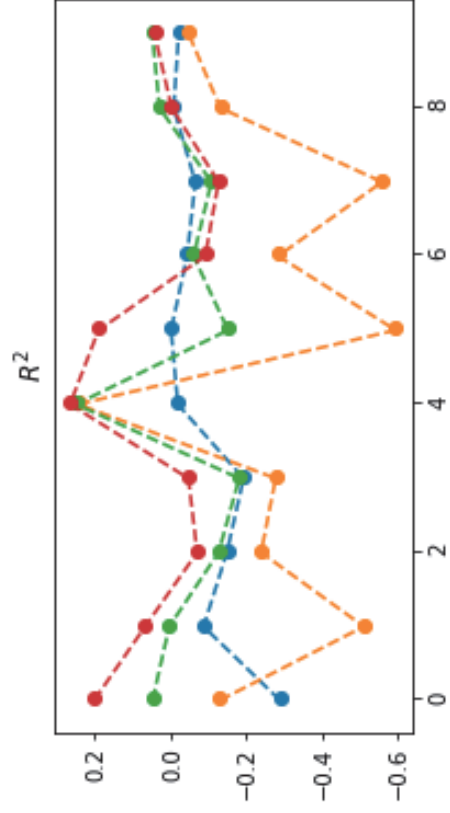
mean	2.5000	0.0000
std	4.6706	1.0000

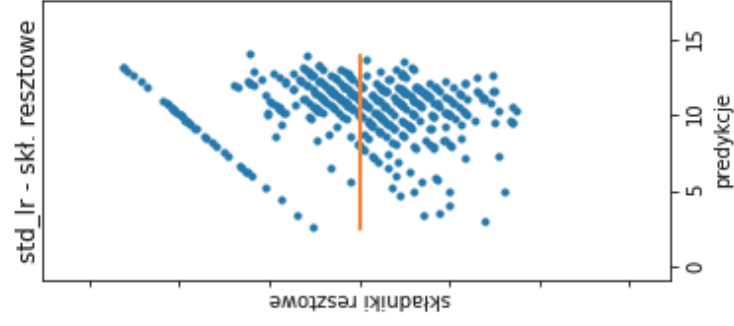
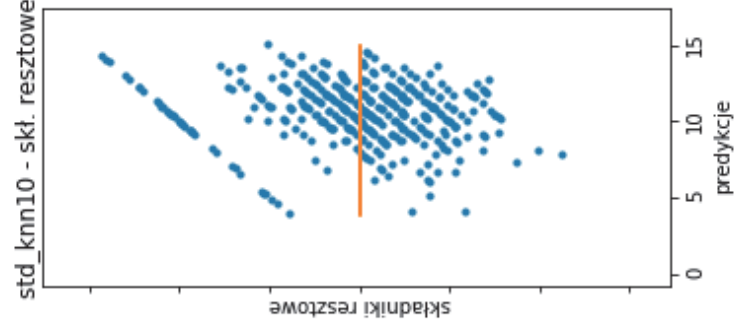
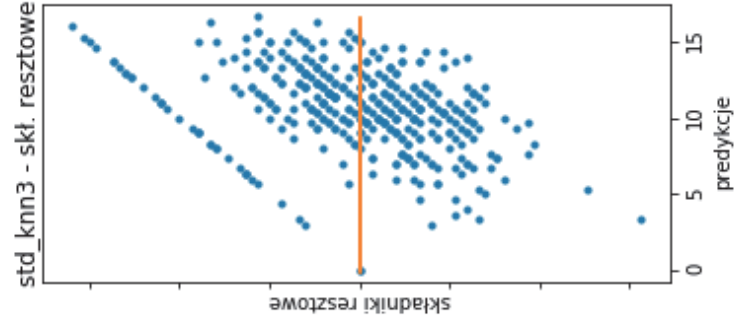
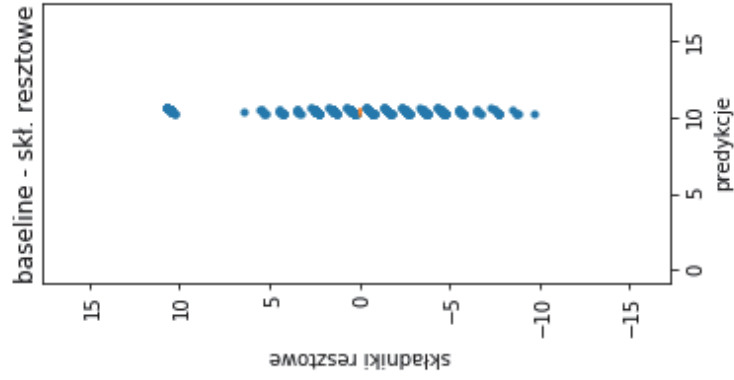




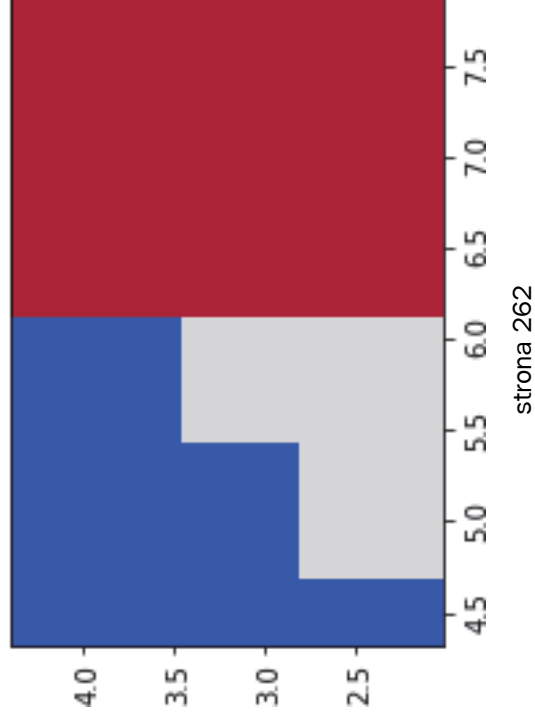


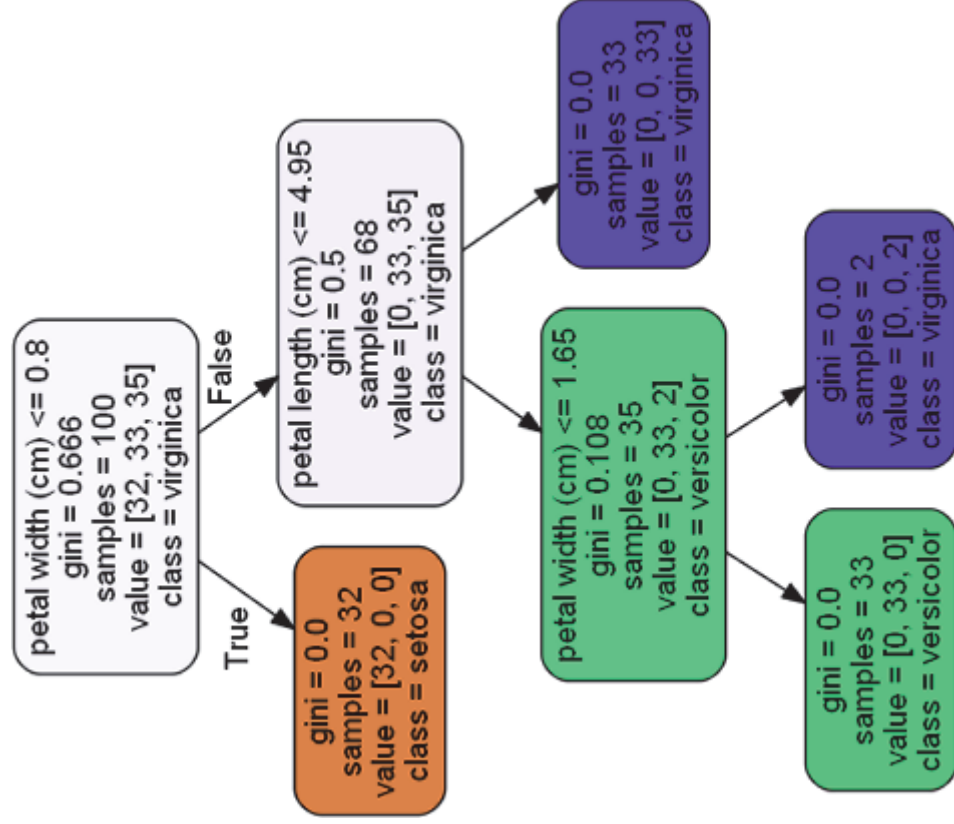




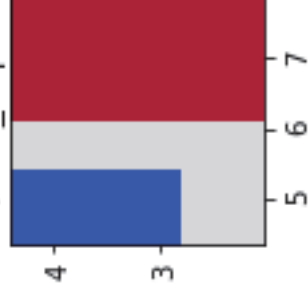
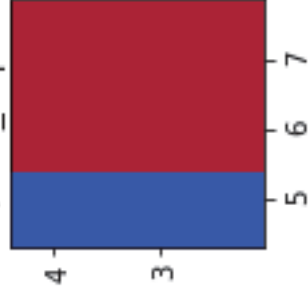


DTC

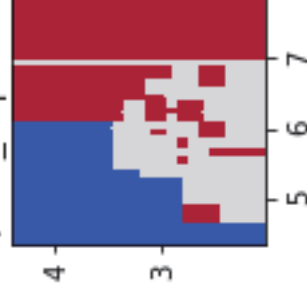
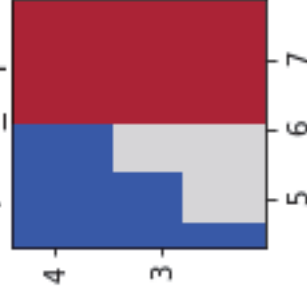


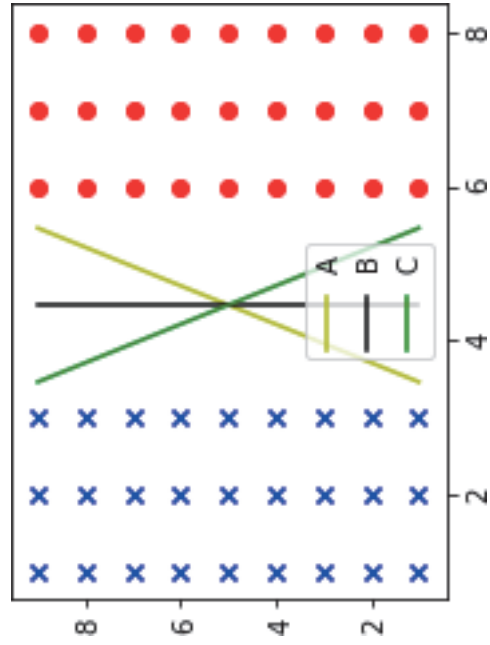


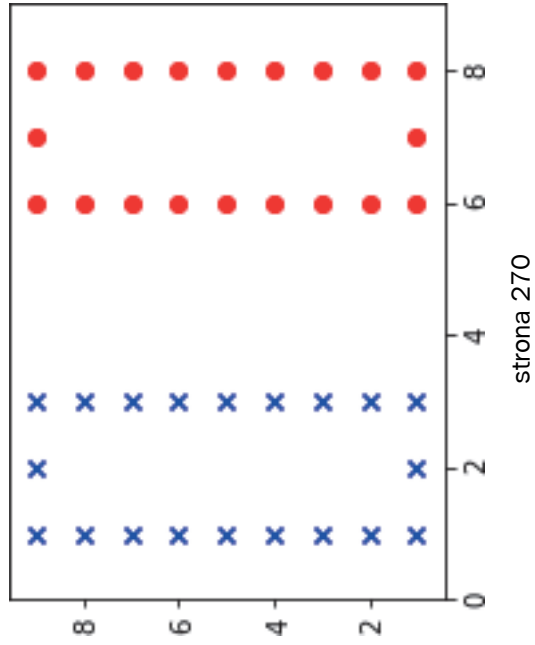
DTC (max_depth=1) DTC (max_depth=2)

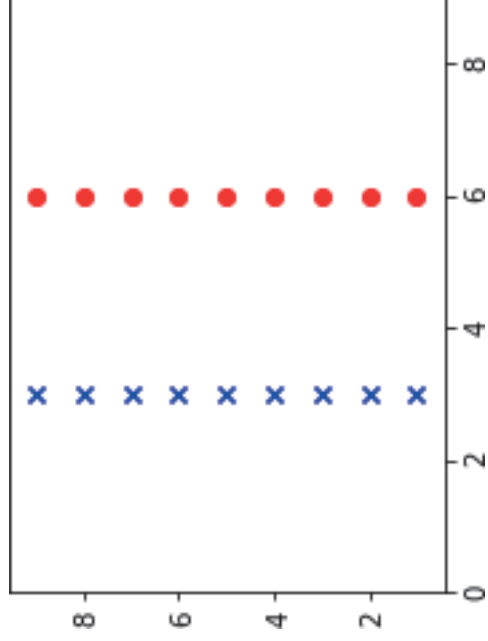


DTC (max_depth=3) DTC (max_depth=None)



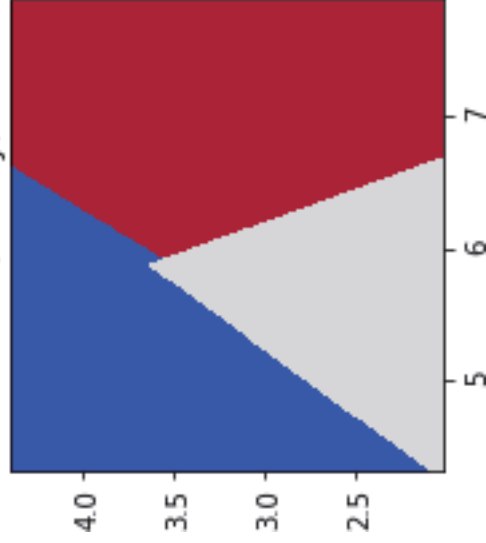




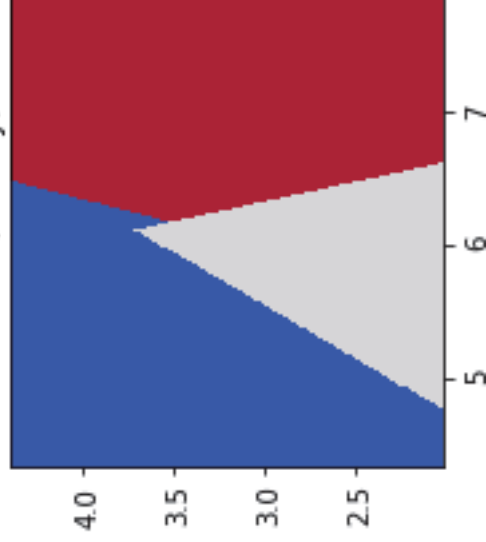


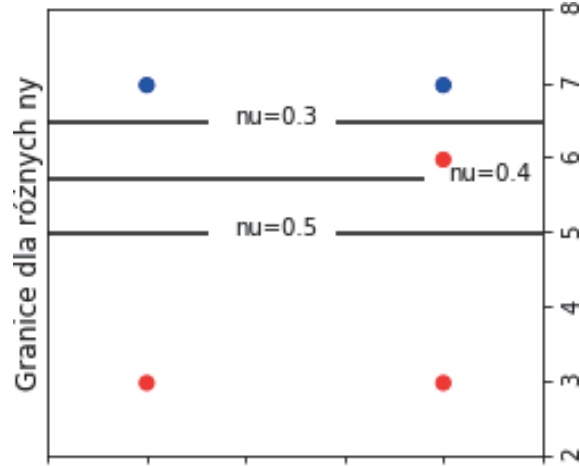
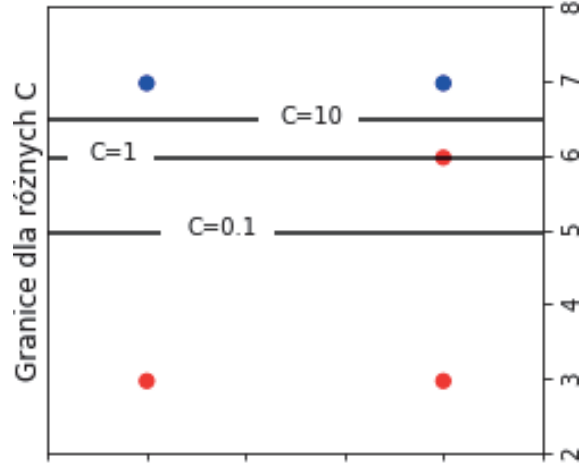
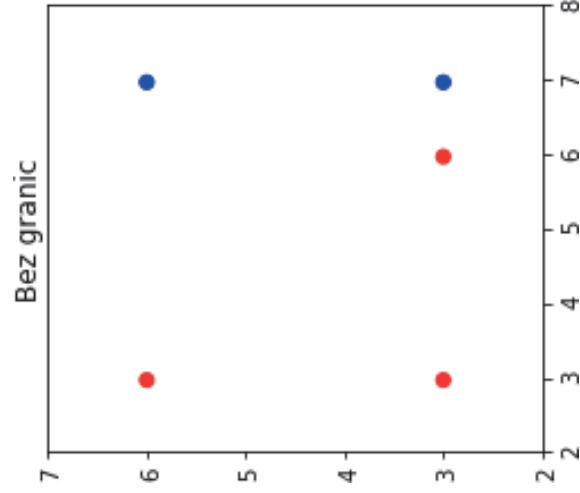
strona 271

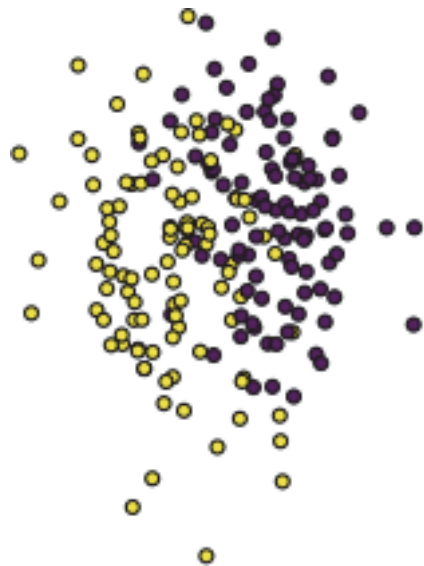
SVC (liniowy)



NuSVC (liniowy)

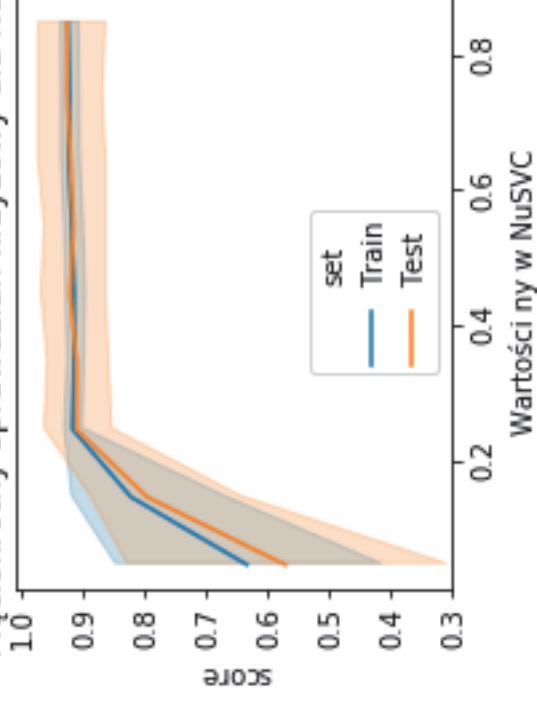




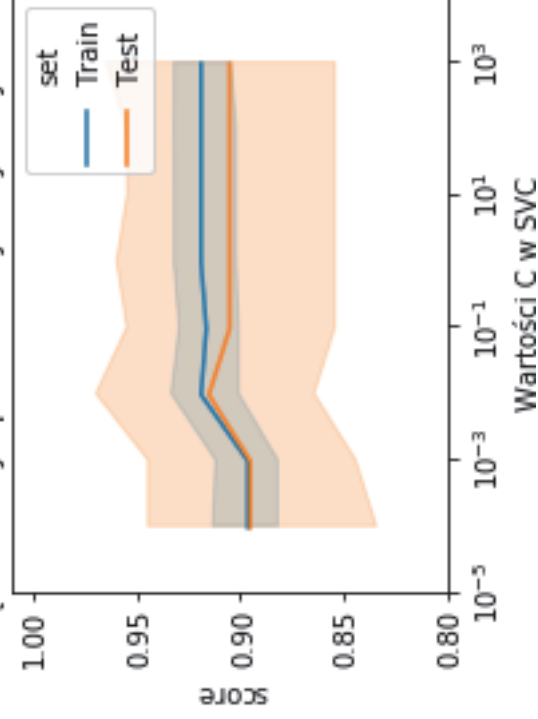


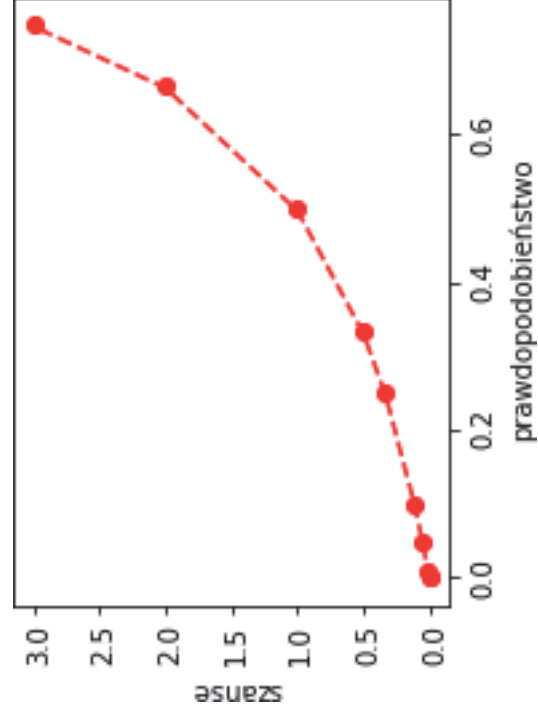
strona 275

Pięciokrotny sprawdzian krzyżowy dla NuSVC

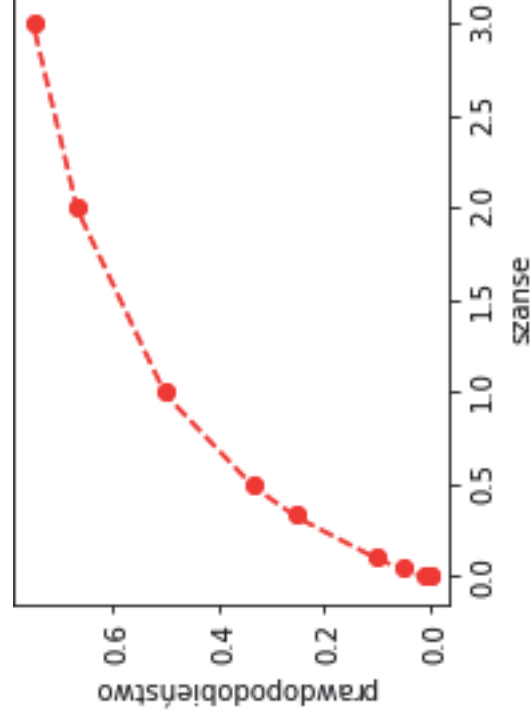


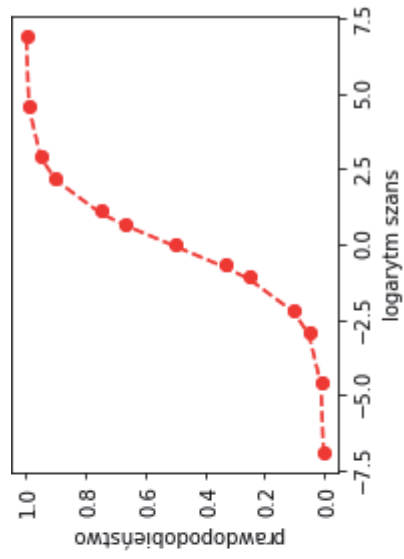
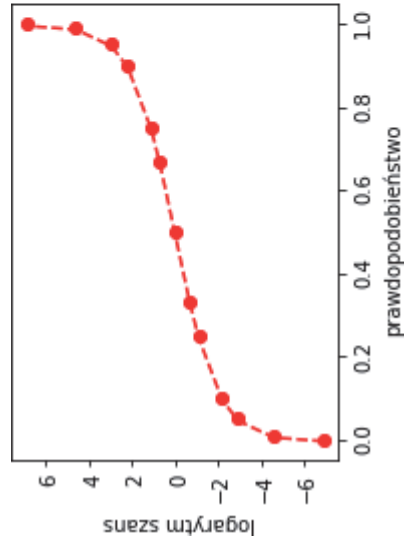
Pięciokrotny sprawdziany krzyżowy dla SVC

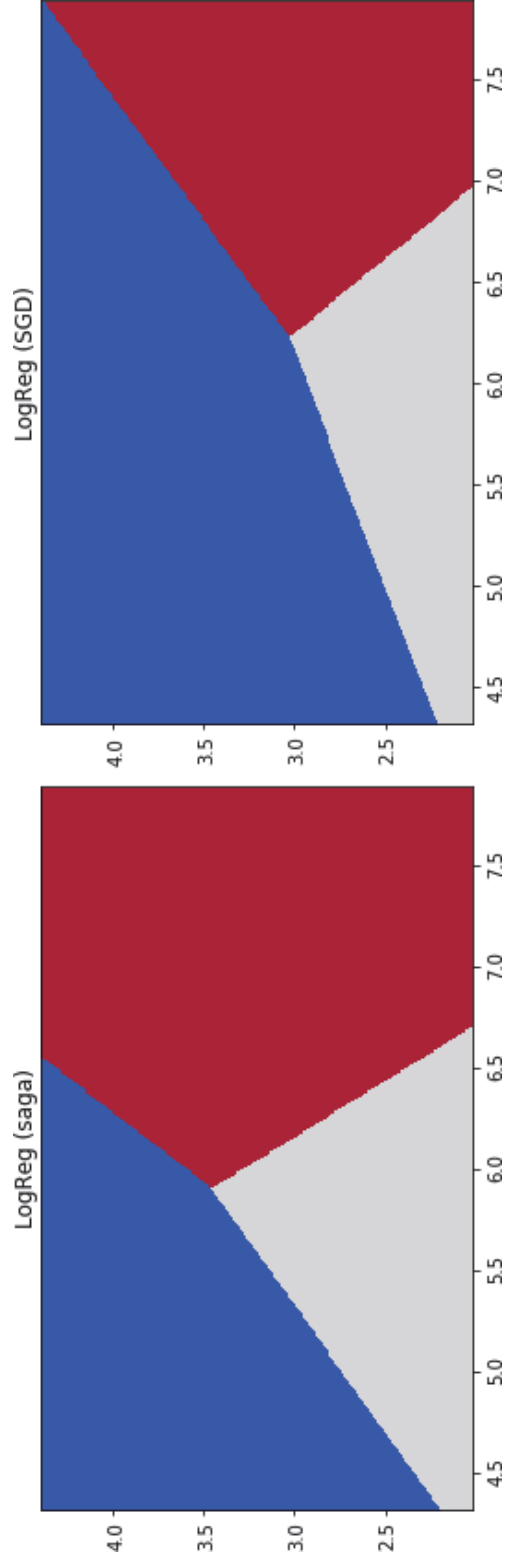




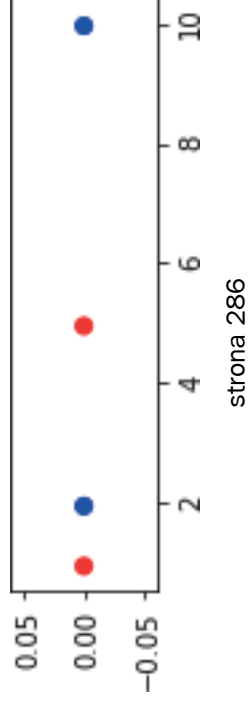
strona 282



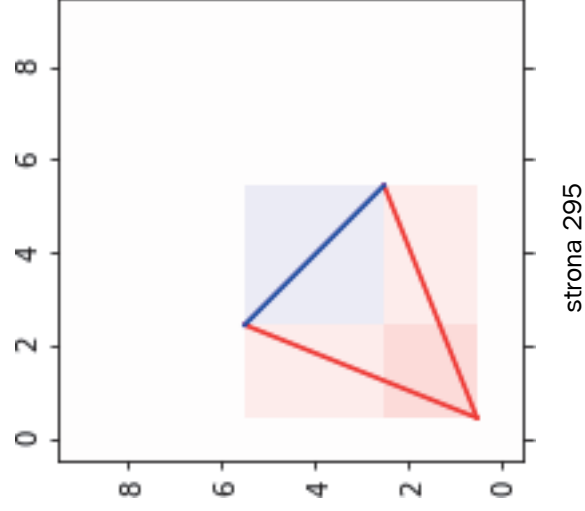
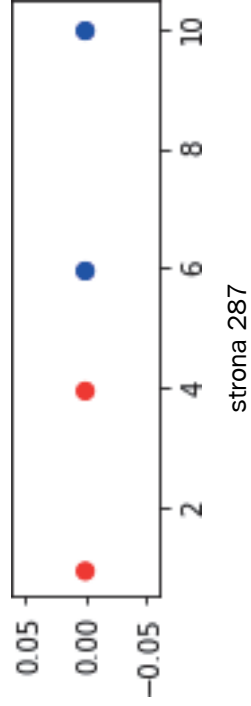


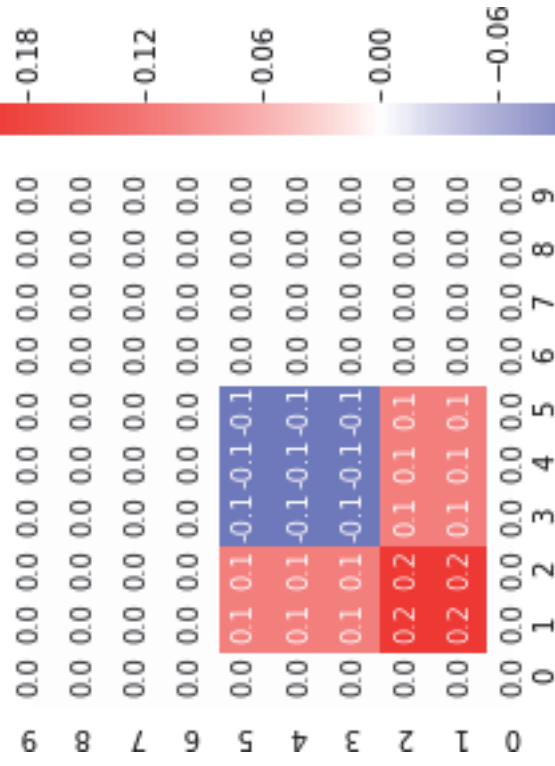


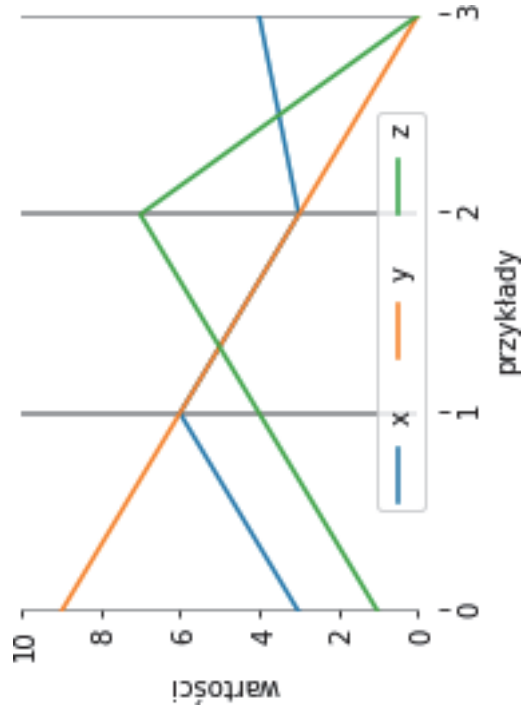
strona 286

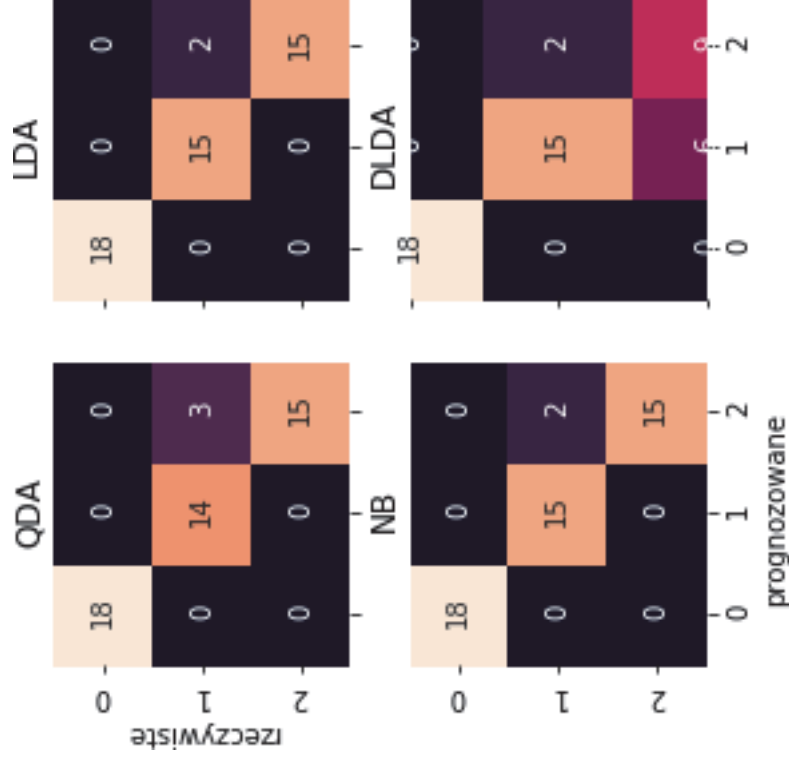


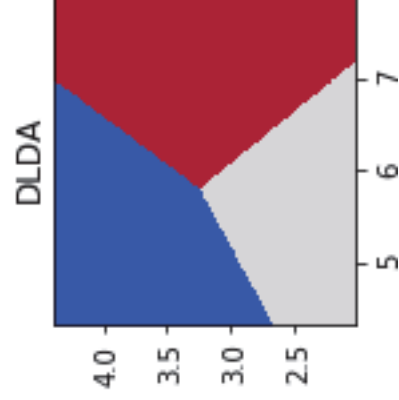
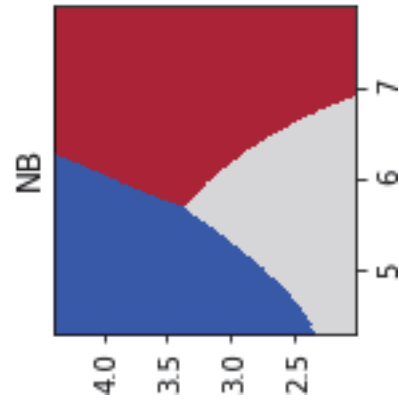
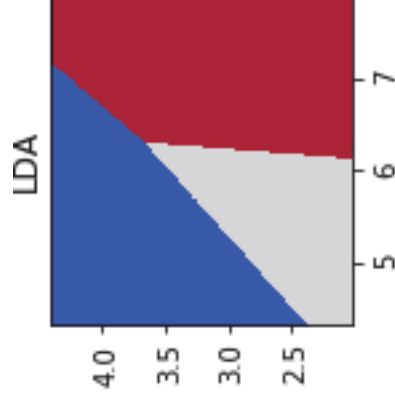
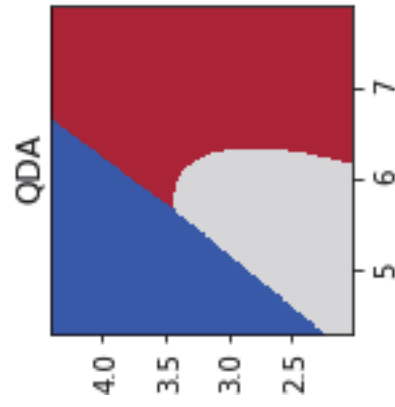
strona 286



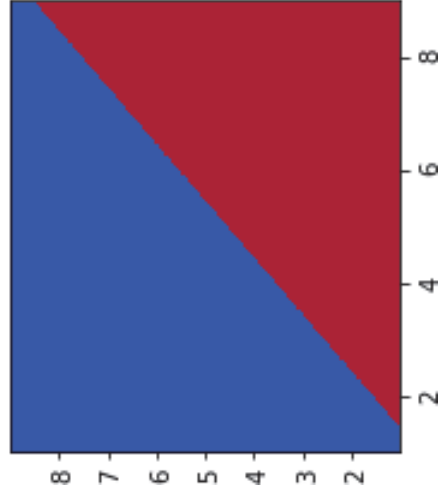




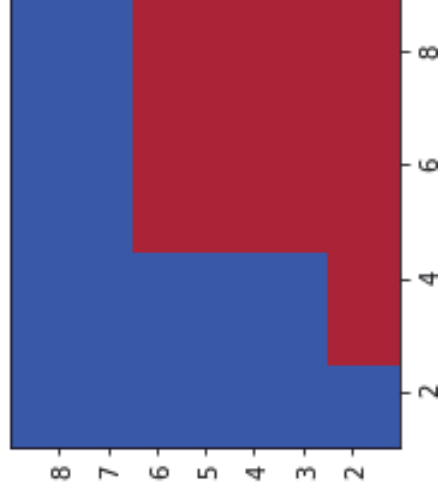




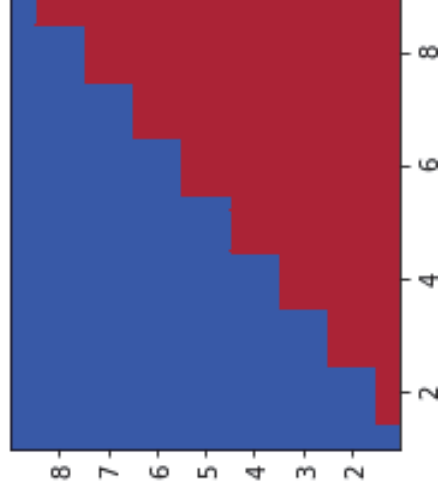
SVC



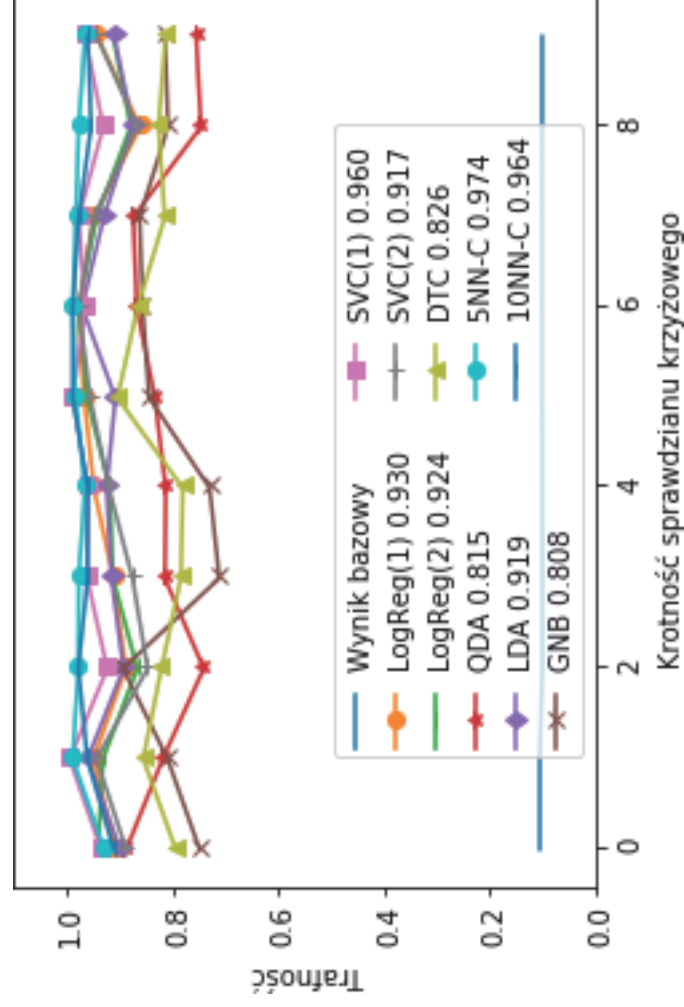
DecisionTreeClassifier

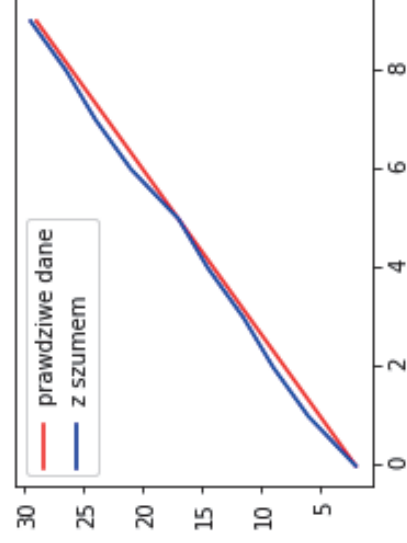


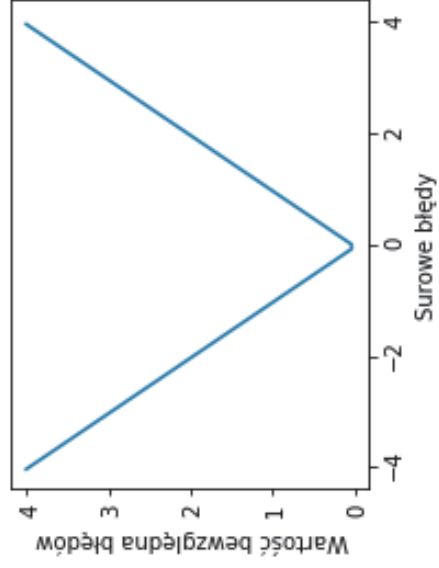
DecisionTreeClassifier



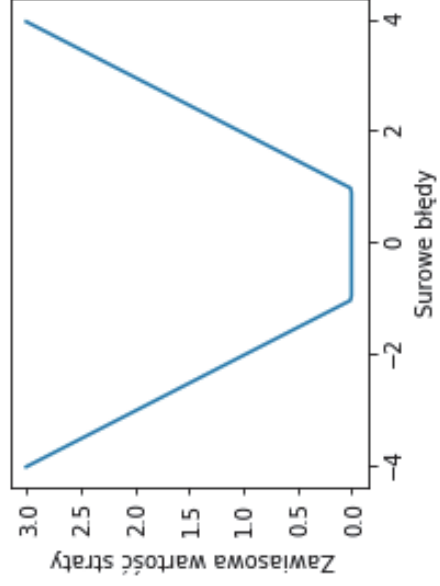
strona 303

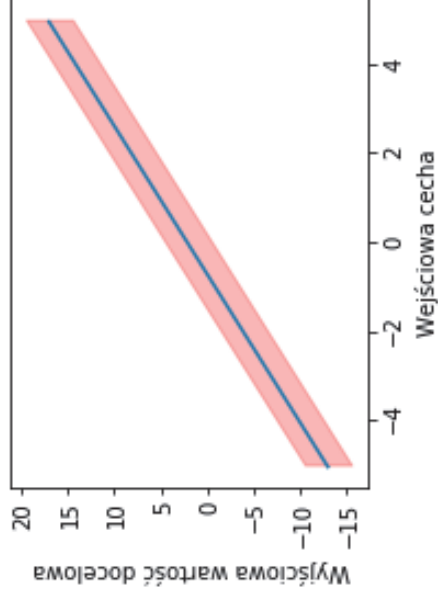


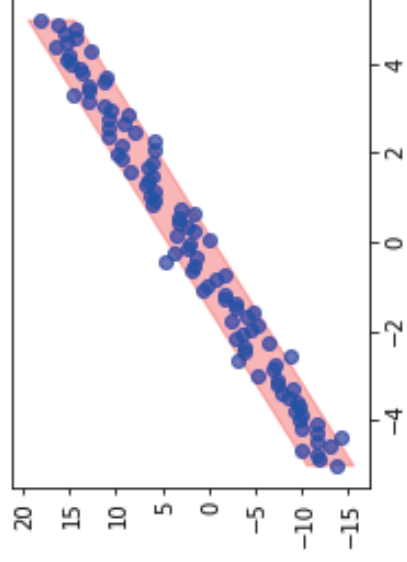


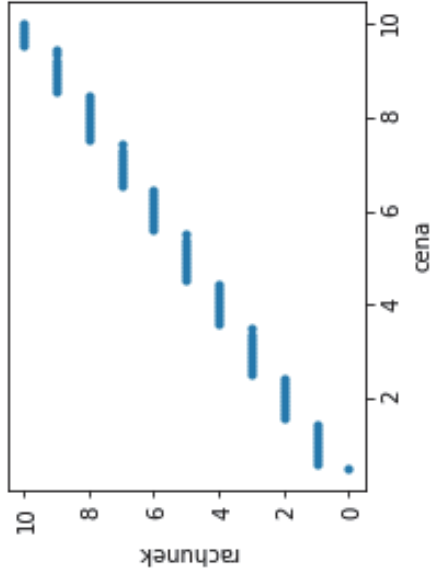


strona 320

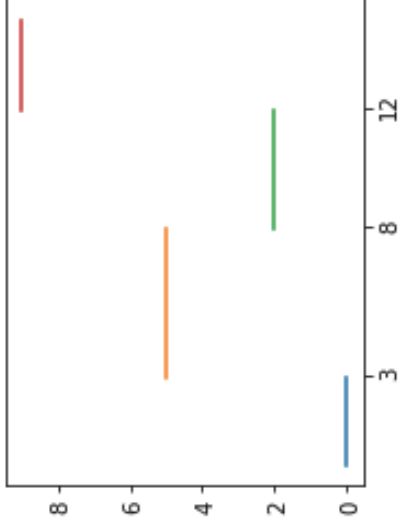




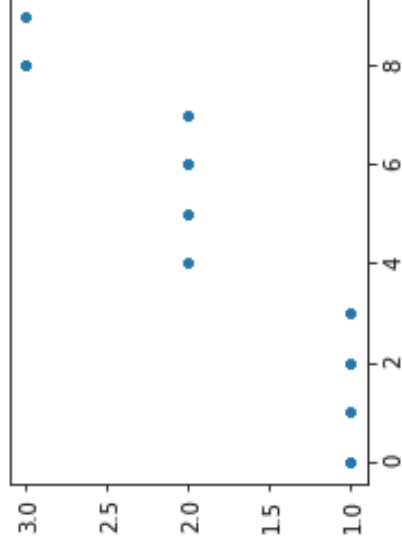




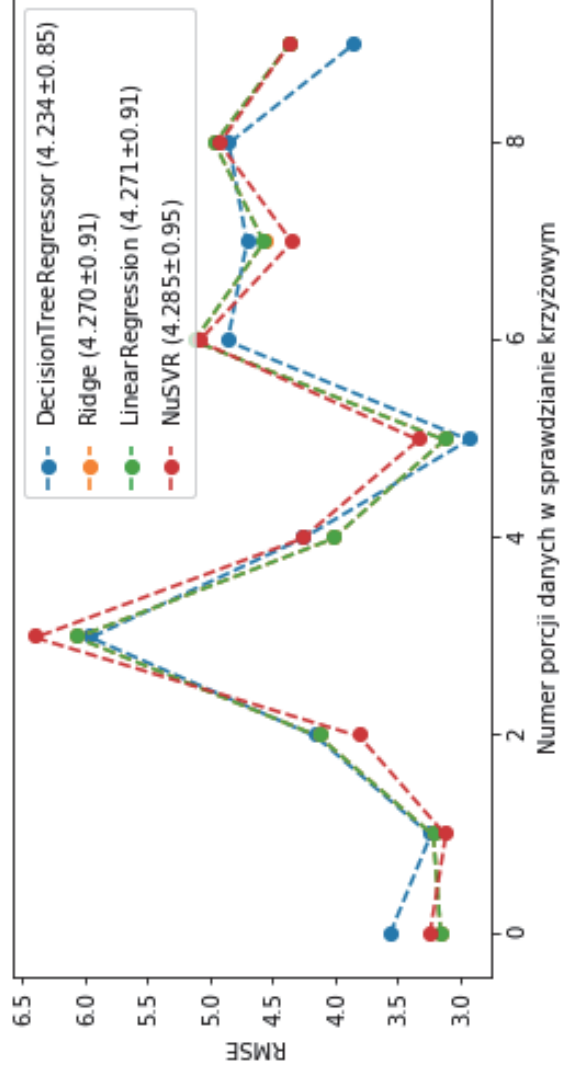
strona 326

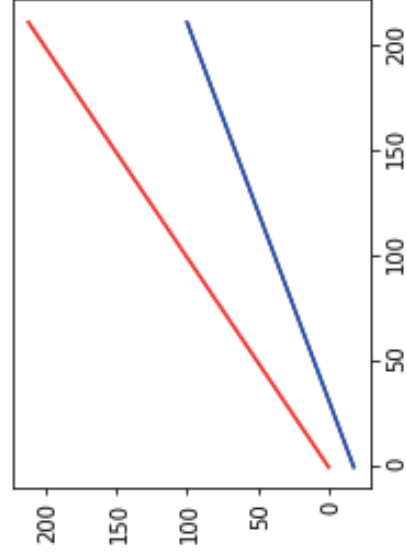


strona 327

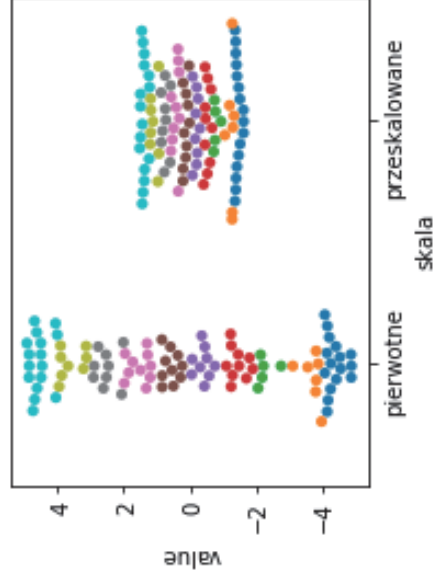


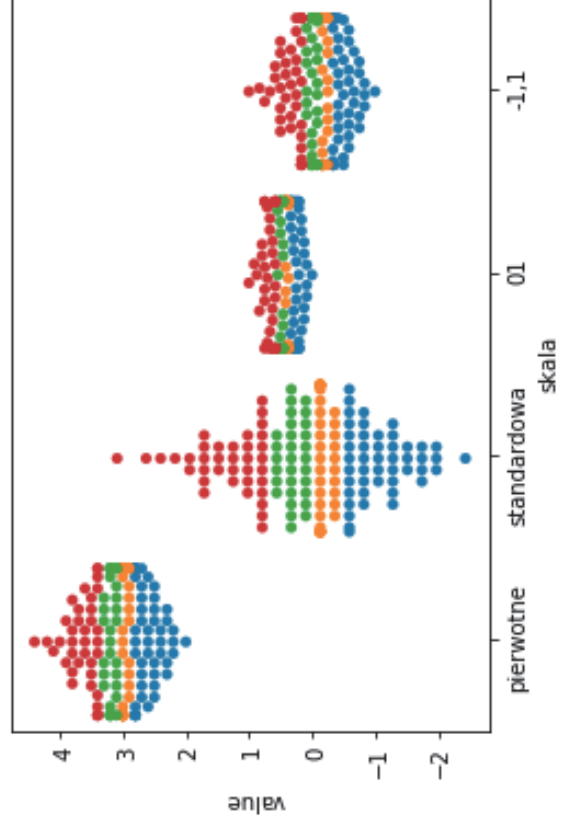
strona 330

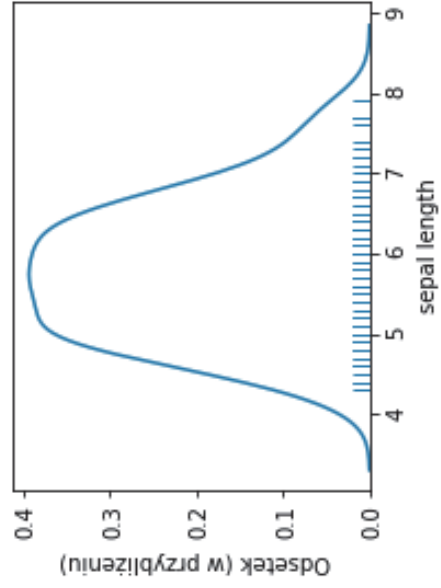




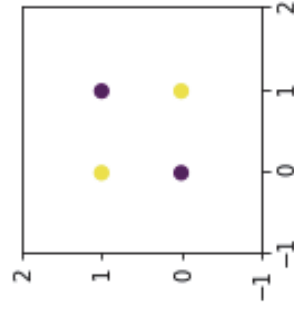
strona 343



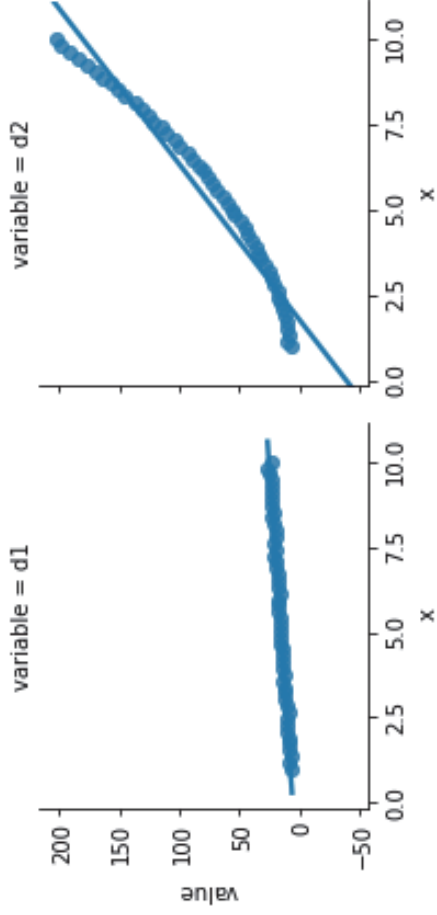




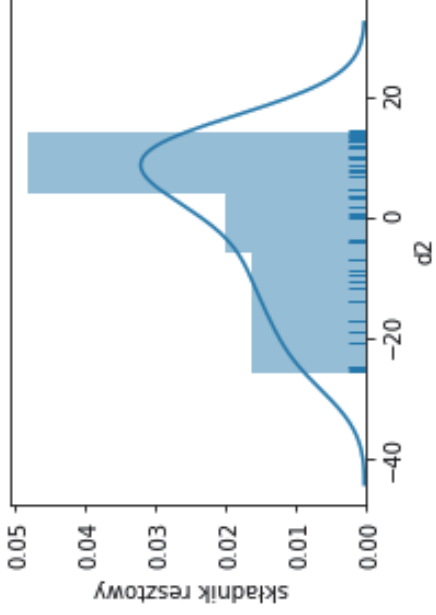
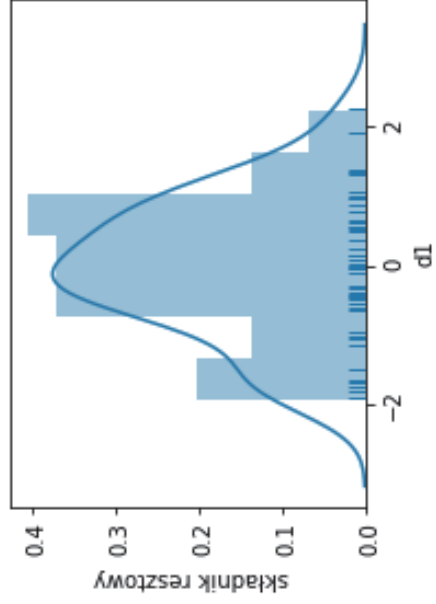
strona 346

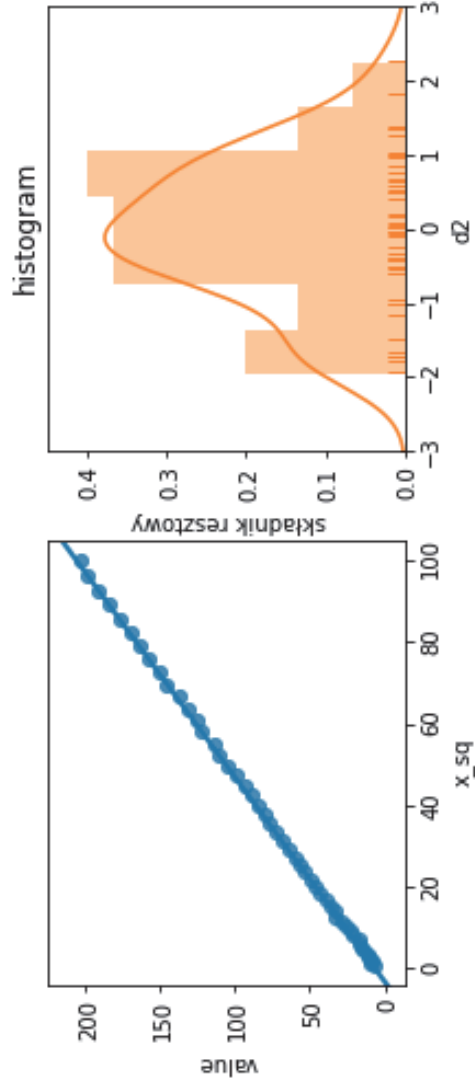


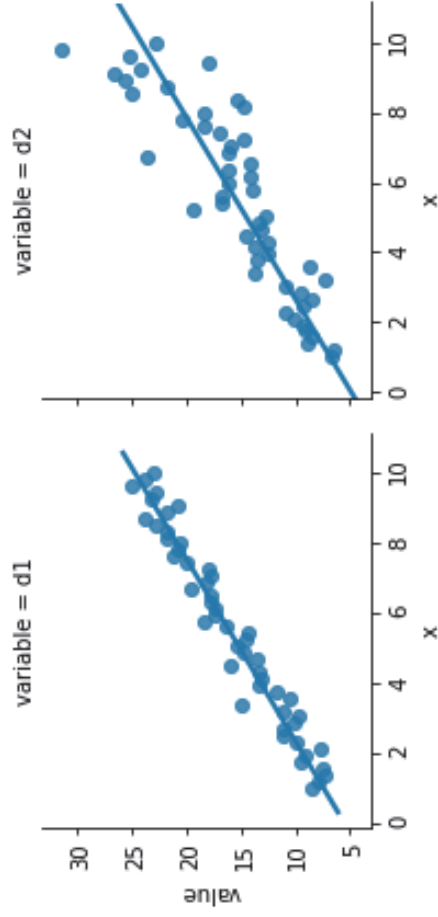
strona 359

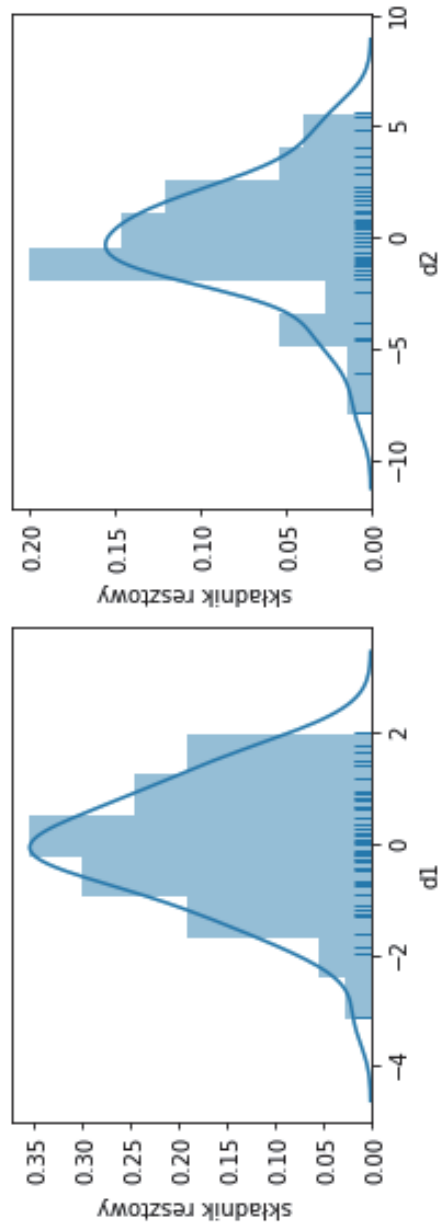


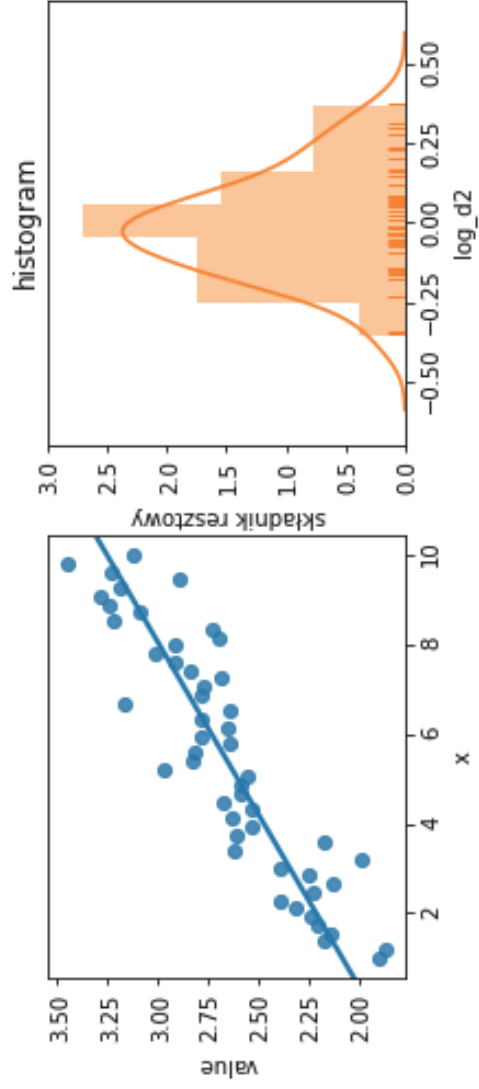
strona 367

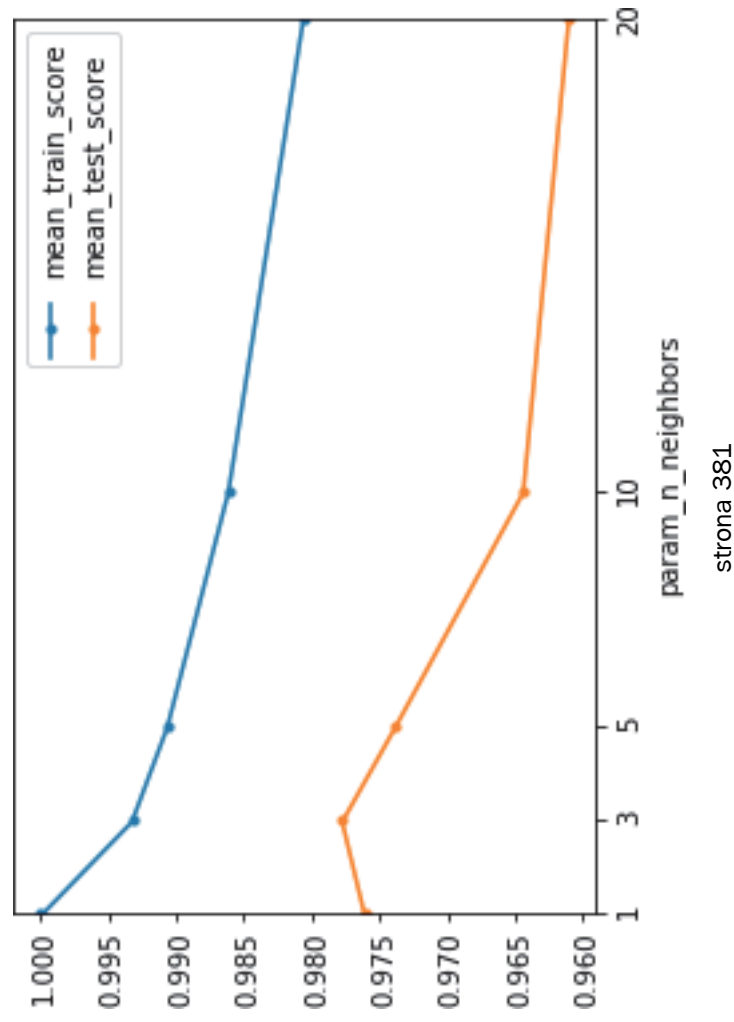


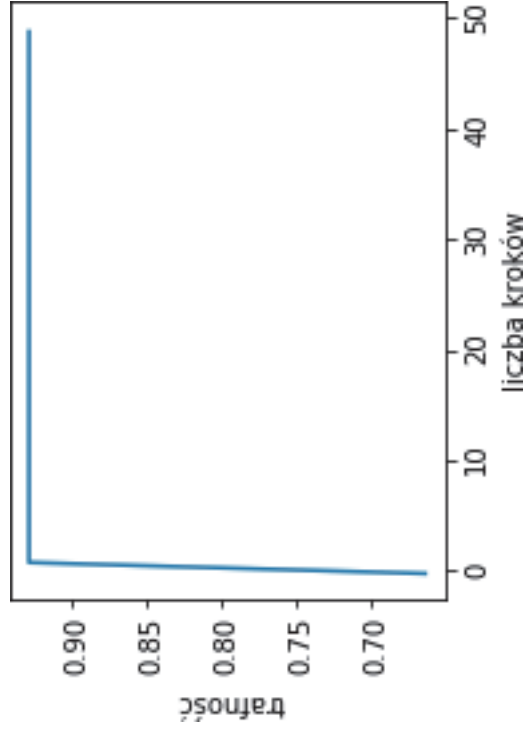


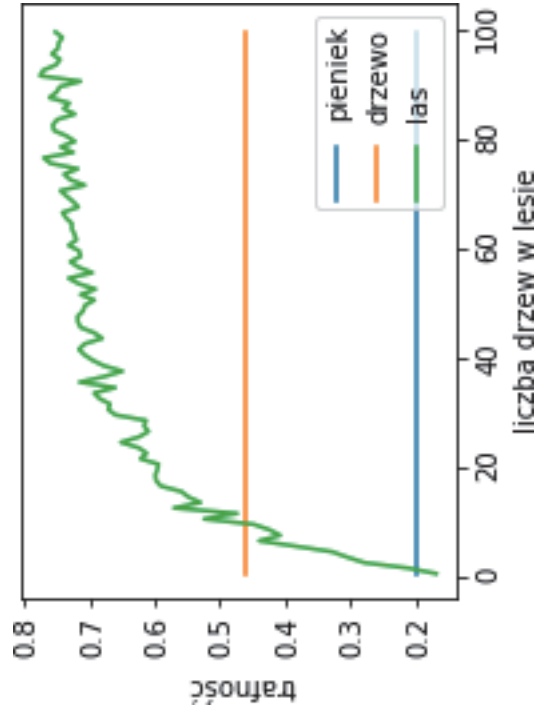


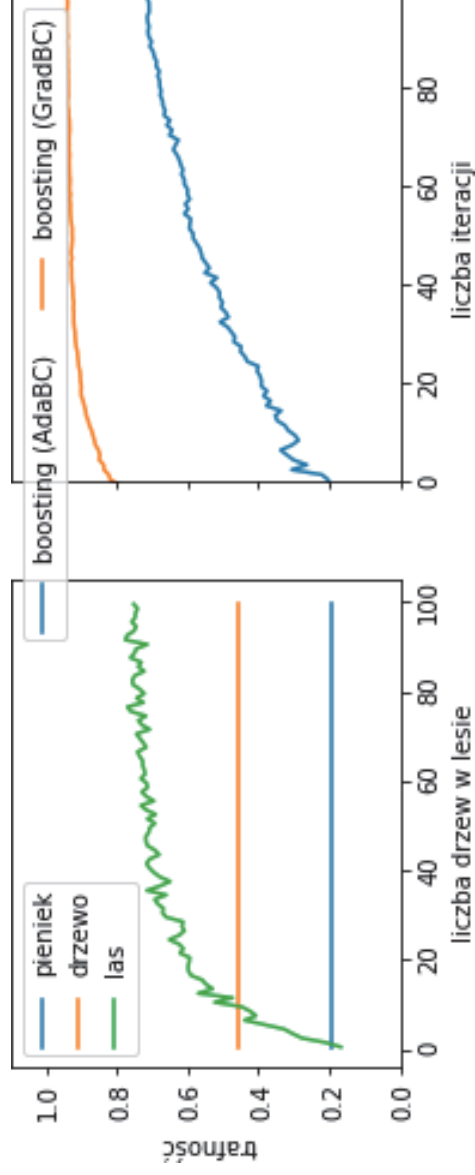


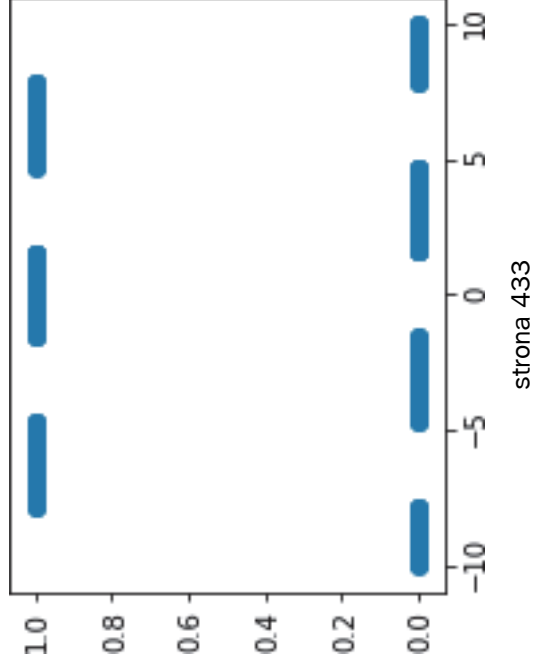


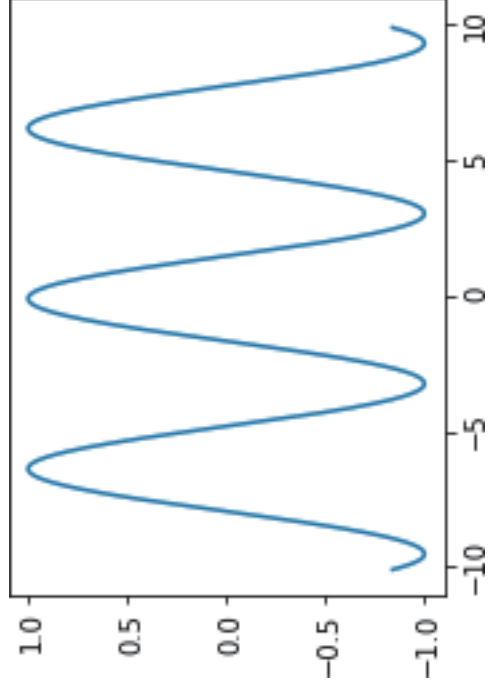






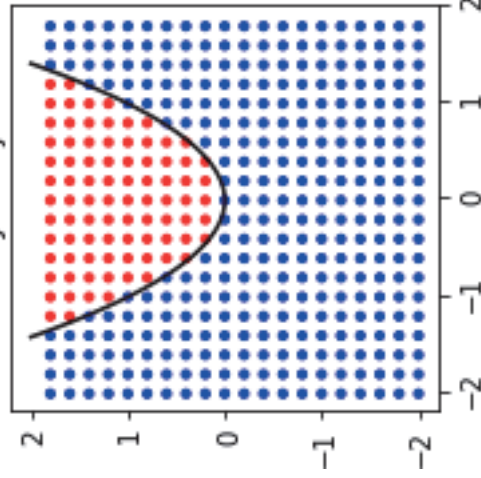




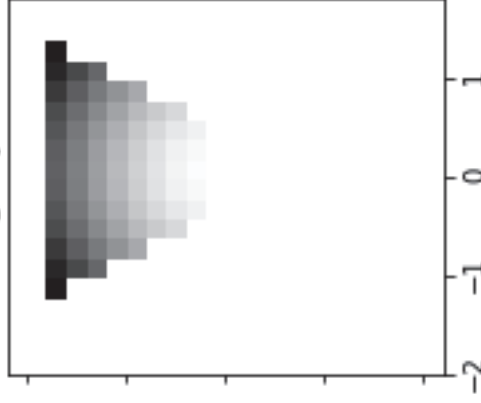


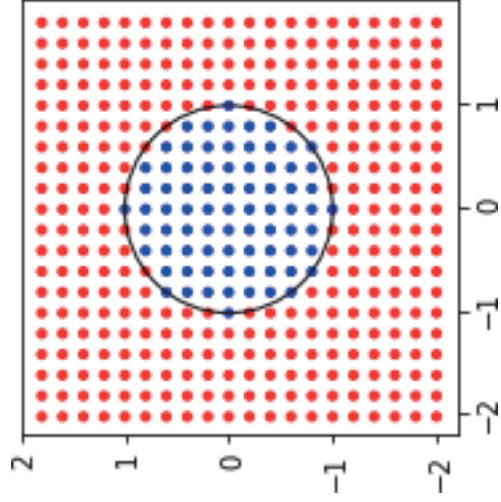
strona 433

klasyfikacja



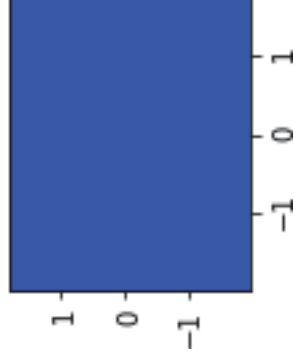
regresja



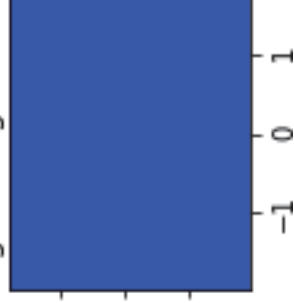


strona 442

SVC

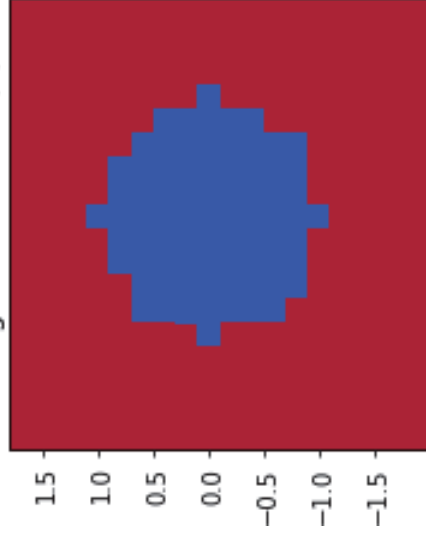


LogisticRegression



strona 442

KNeighborsClassifier(1)



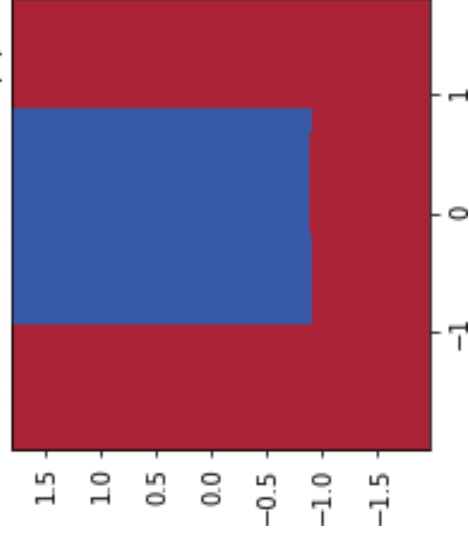
KNeighborsClassifier(20)



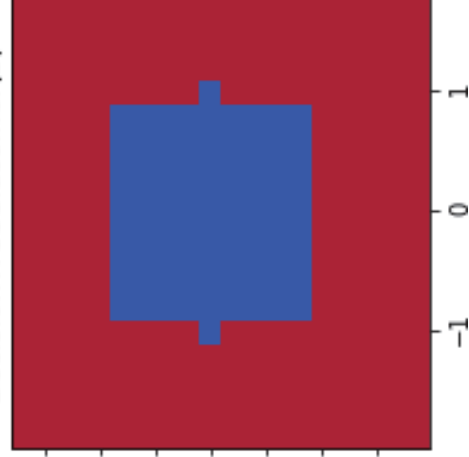
DecisionTreeClassifier(1)



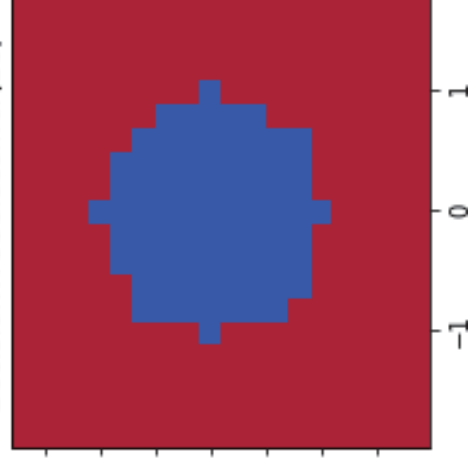
DecisionTreeClassifier(3)



DecisionTreeClassifier(5)

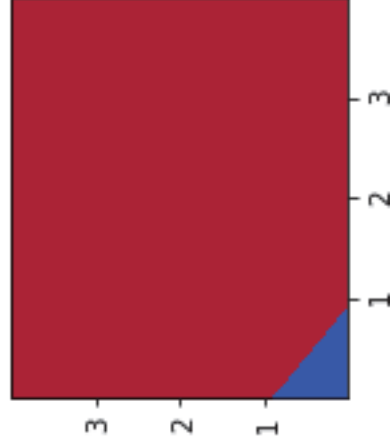


DecisionTreeClassifier(10)

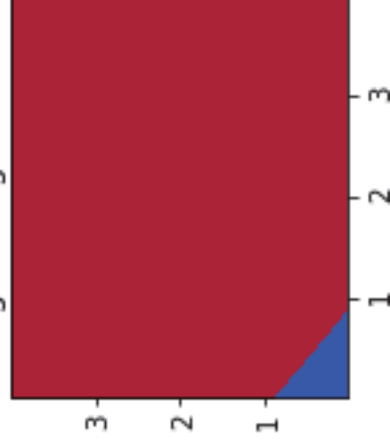


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rozbudowane dane: (400, 4)
pierwszy wiersz: [-2.  4.  4.]
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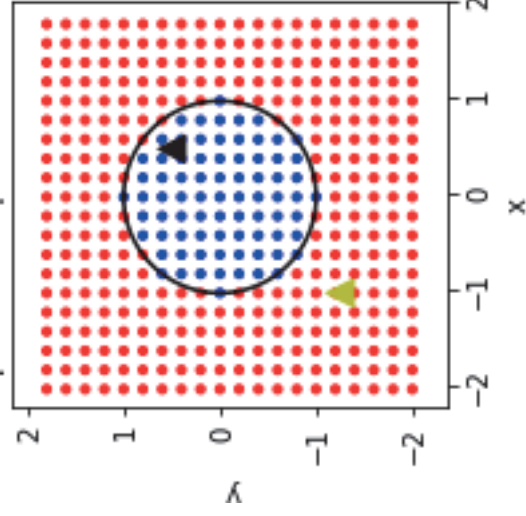
SVC



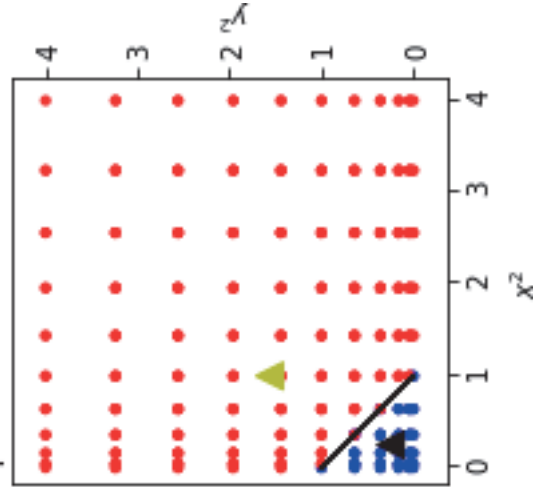
LogisticRegression

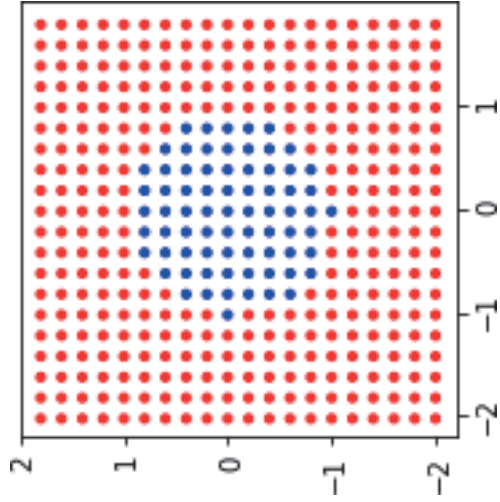


pierwotna przestrzeń

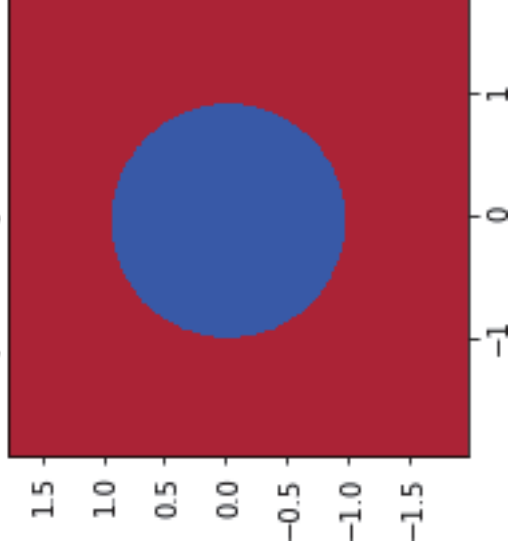


po podniesieniu do kwadratu

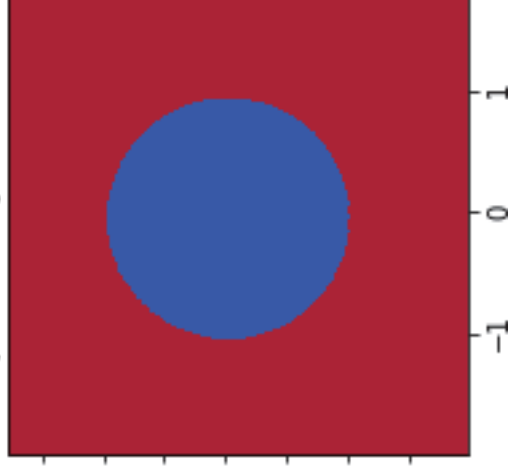




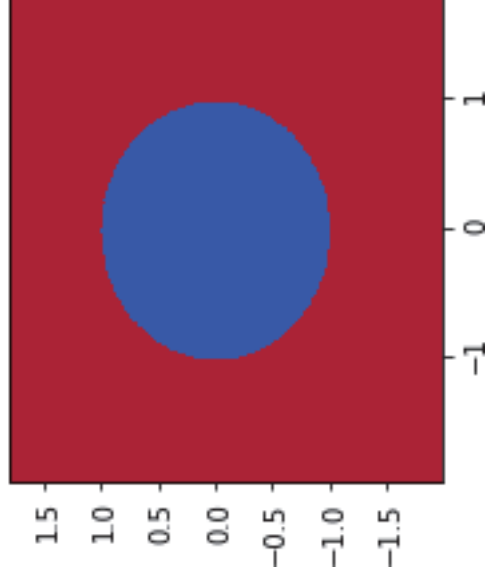
Pipeline(Nystroem)



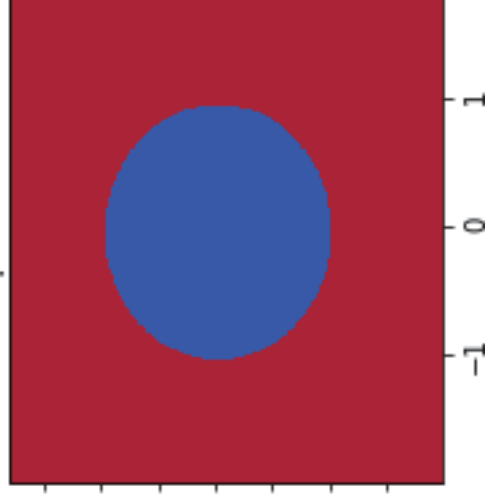
Pipeline(PolyKernel)

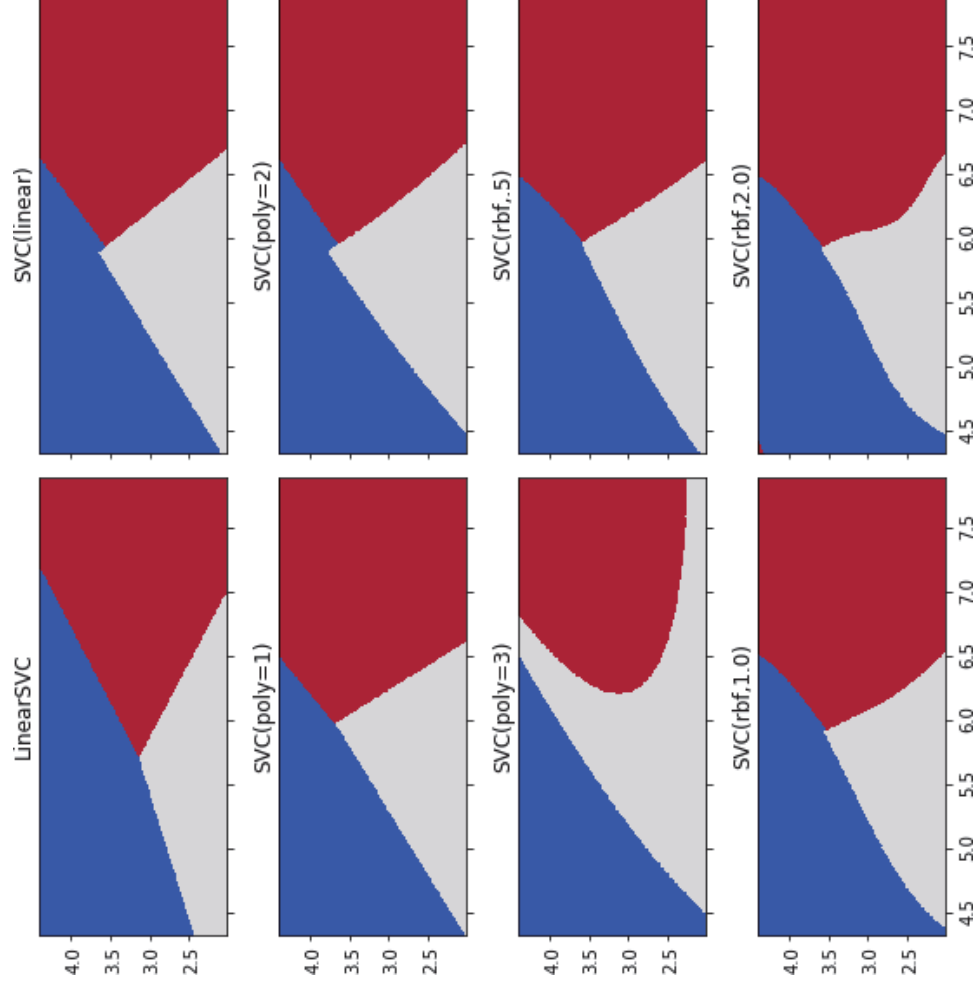


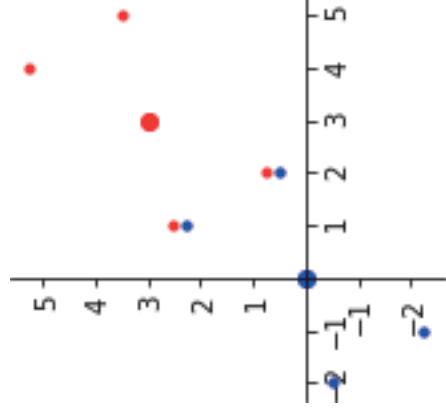
SVC



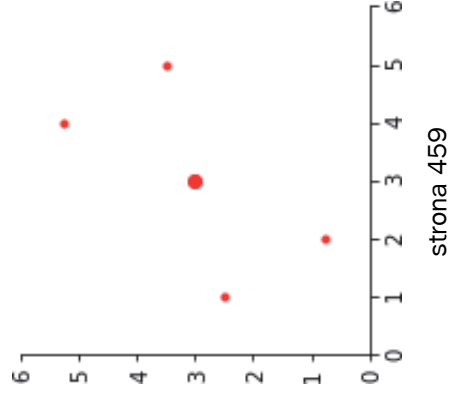
Pipeline



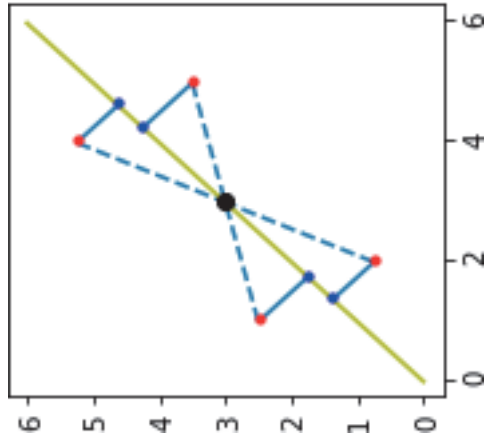
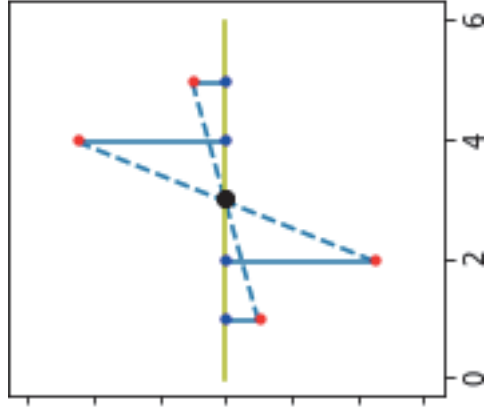
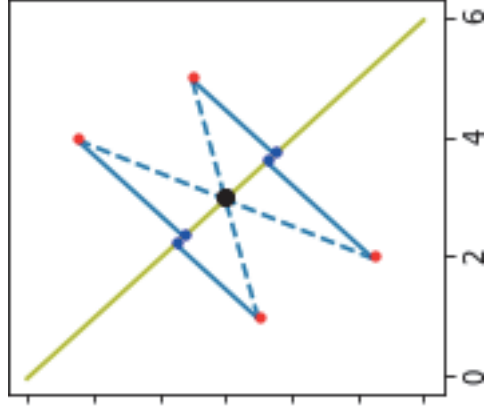




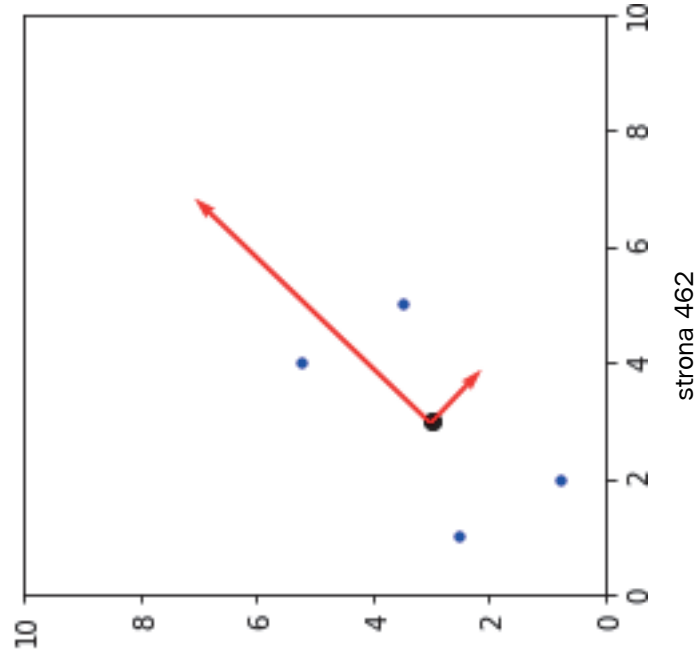
strona 458

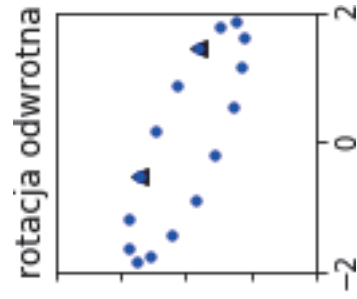
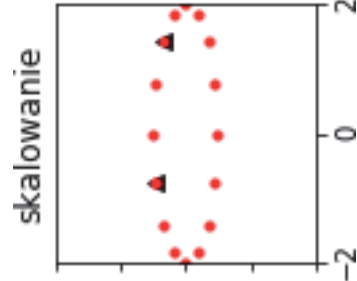
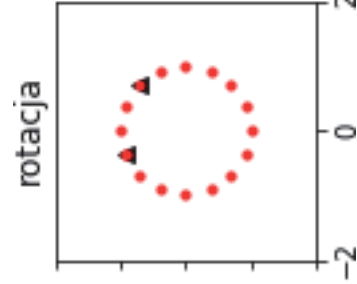
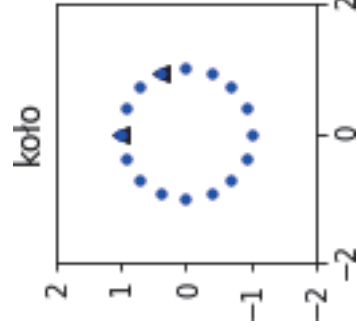


strona 459

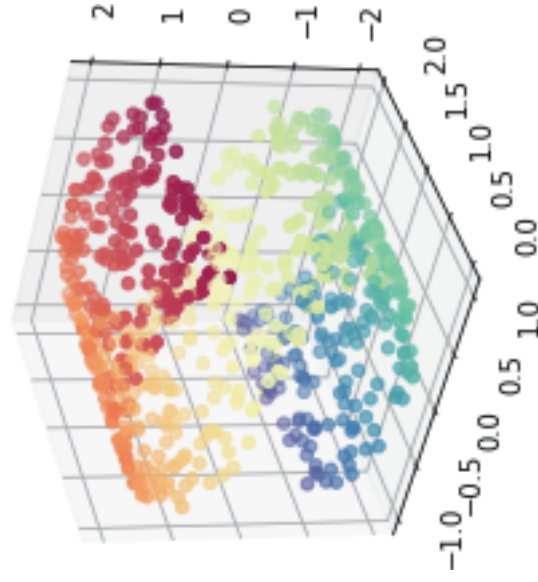


długości: [5.6067 1.2683]

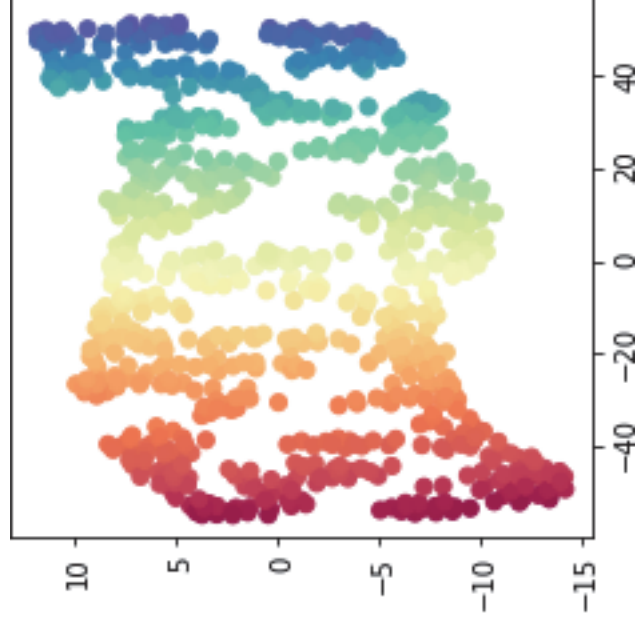
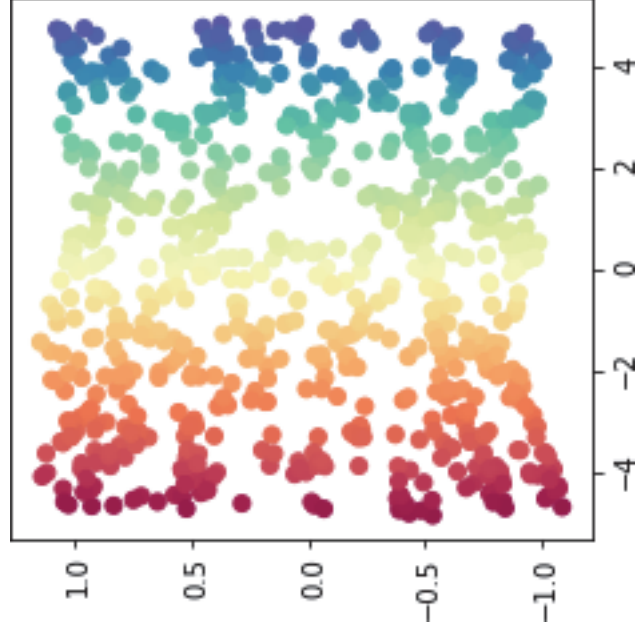


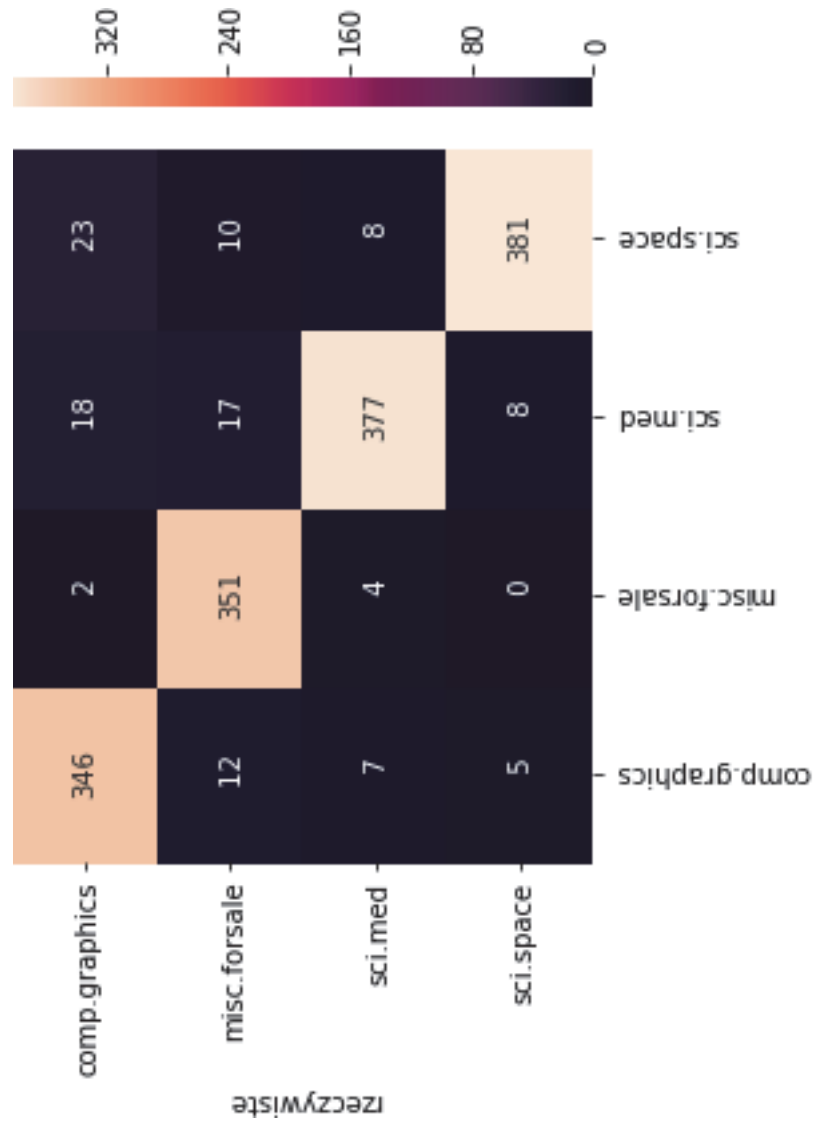


strona 465

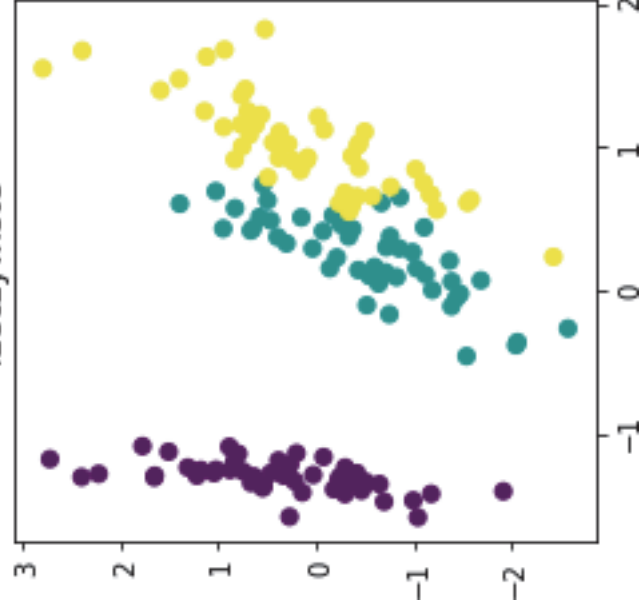


strona 472

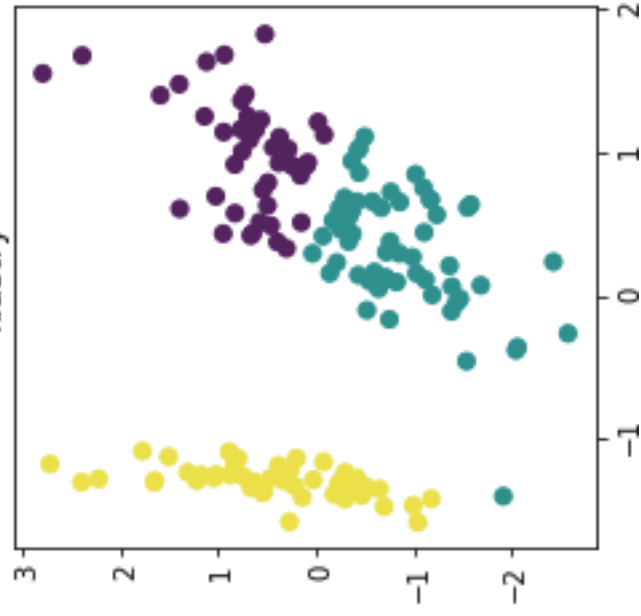




rzeczywiste



klastry



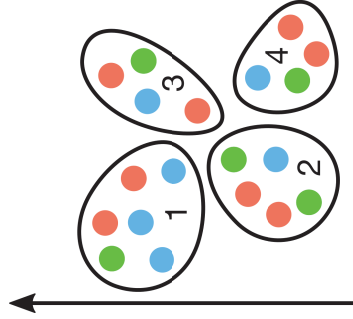
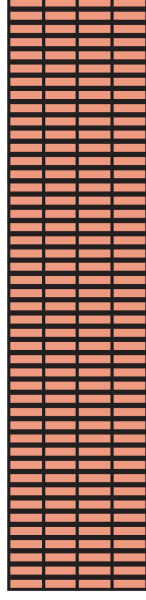


accordion

Identyfikator
lokalnego słowa

A1
A2
A3
A4

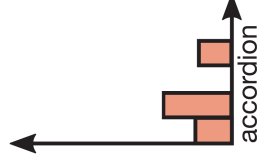
Opis lokalnych słów (128 kolumn)



Ze słów
lokalnych na
słowa globalne

4
1
2
2

g1	g2	g3	g4
1	2	0	1



Rysunek 14.2. Graficzny przegląd kroków w systemie etykietowania obrazów (strona 495)



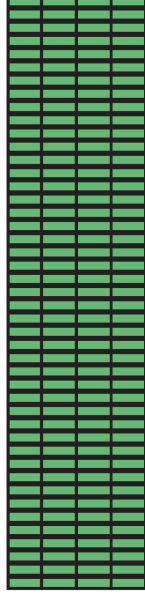
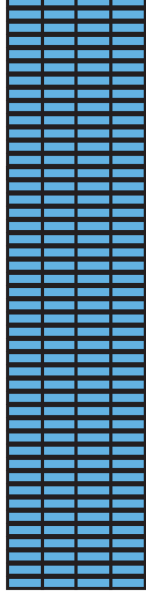
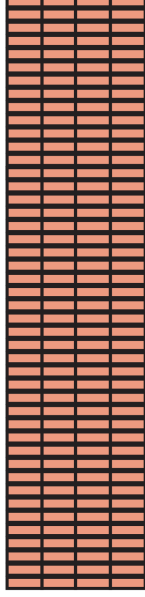
Identyfikator
lokalnego słowa

A1
A2
A3
A4

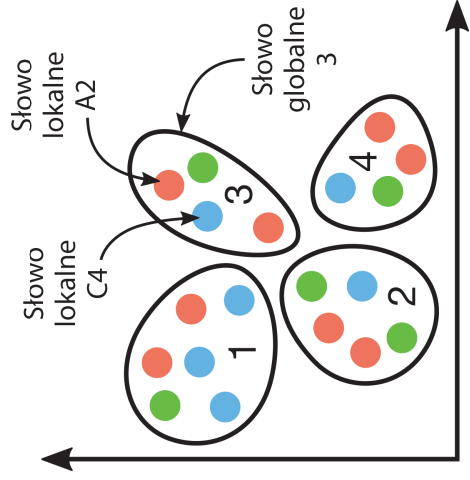
B1
B2
B3
B4

C1
C2
C3
C4

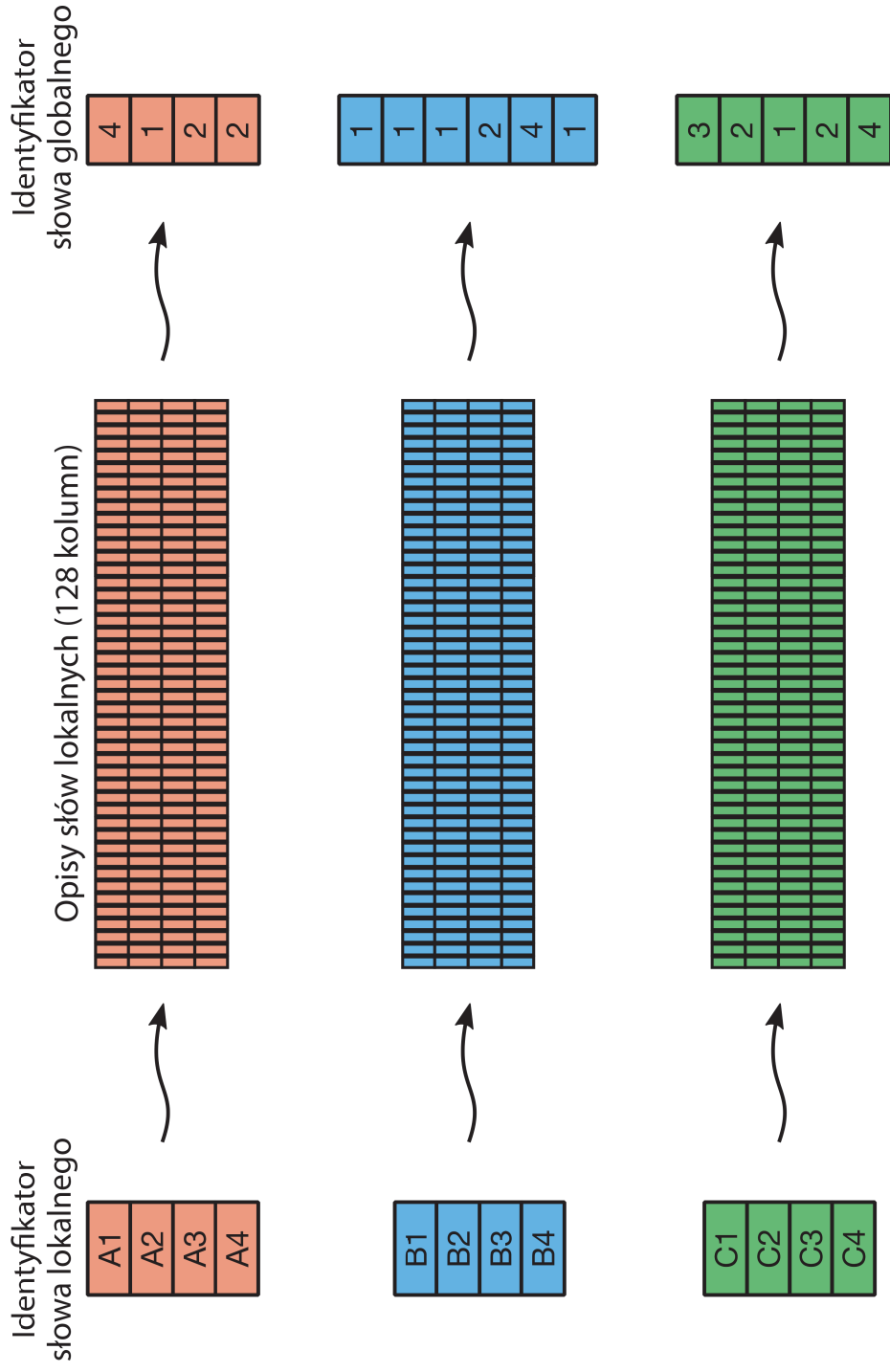
Opisy lokalnych słów (128 kolumn)



Rysunek 14.3. Wyodrębnianie lokalnych słów graficznych z obrazów (strona 496)

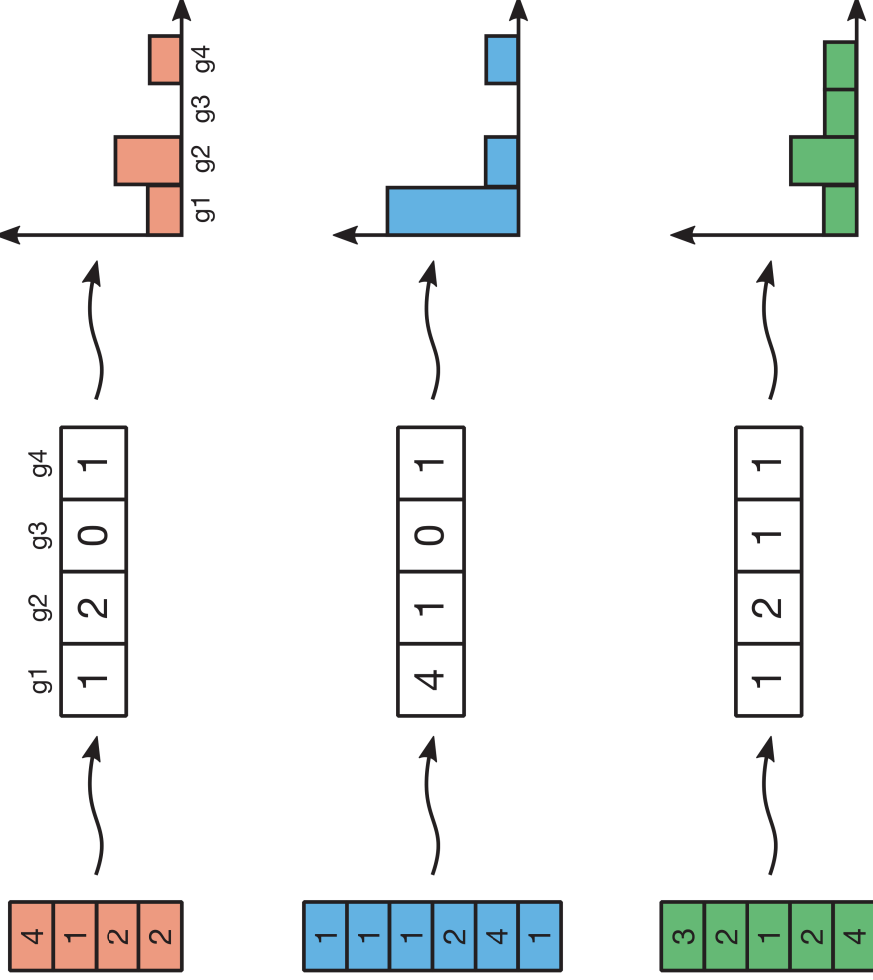


Rysunek 14.4. Tworzenie globalnego słownika (strona 498)

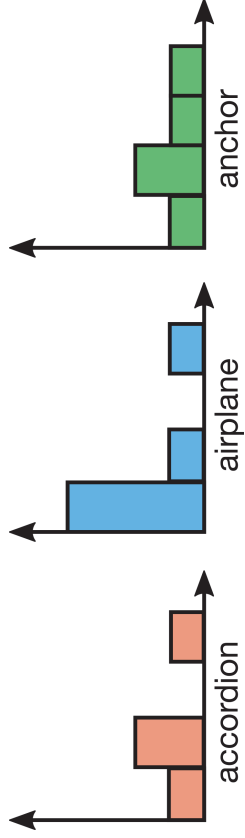


Rysunek 14.5. Przekształcanie słów lokalnych na globalny słownik (strona 499)

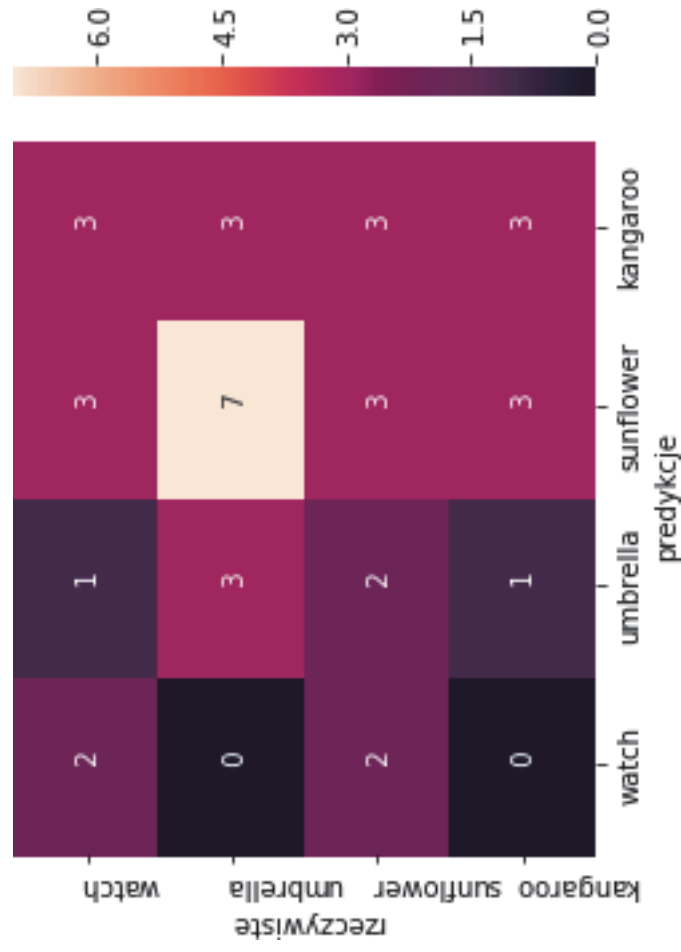
Identyfikator
słowa
globalnego

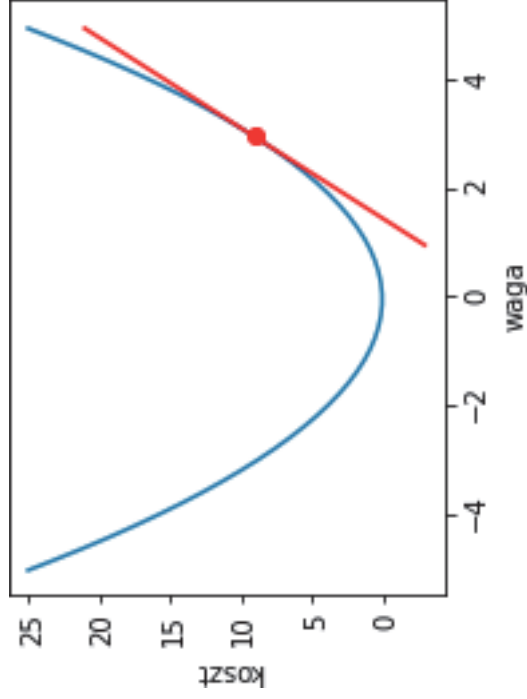


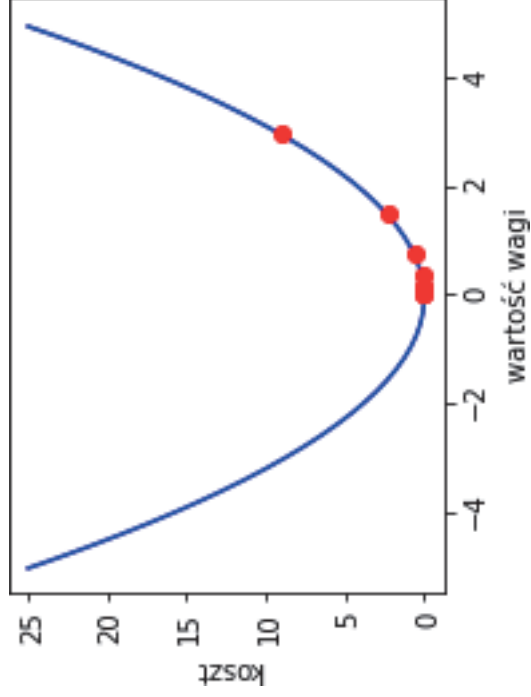
Rysunek 14.6. Zapisywanie liczby wystąpień słów ze słownika globalnego w formie histogramów (strona 499)

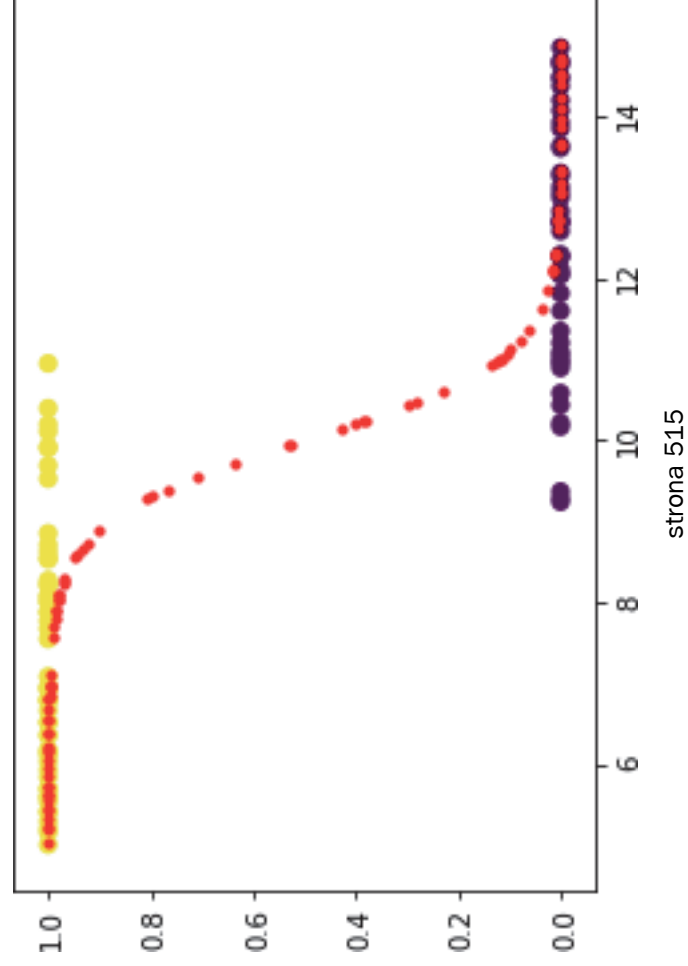


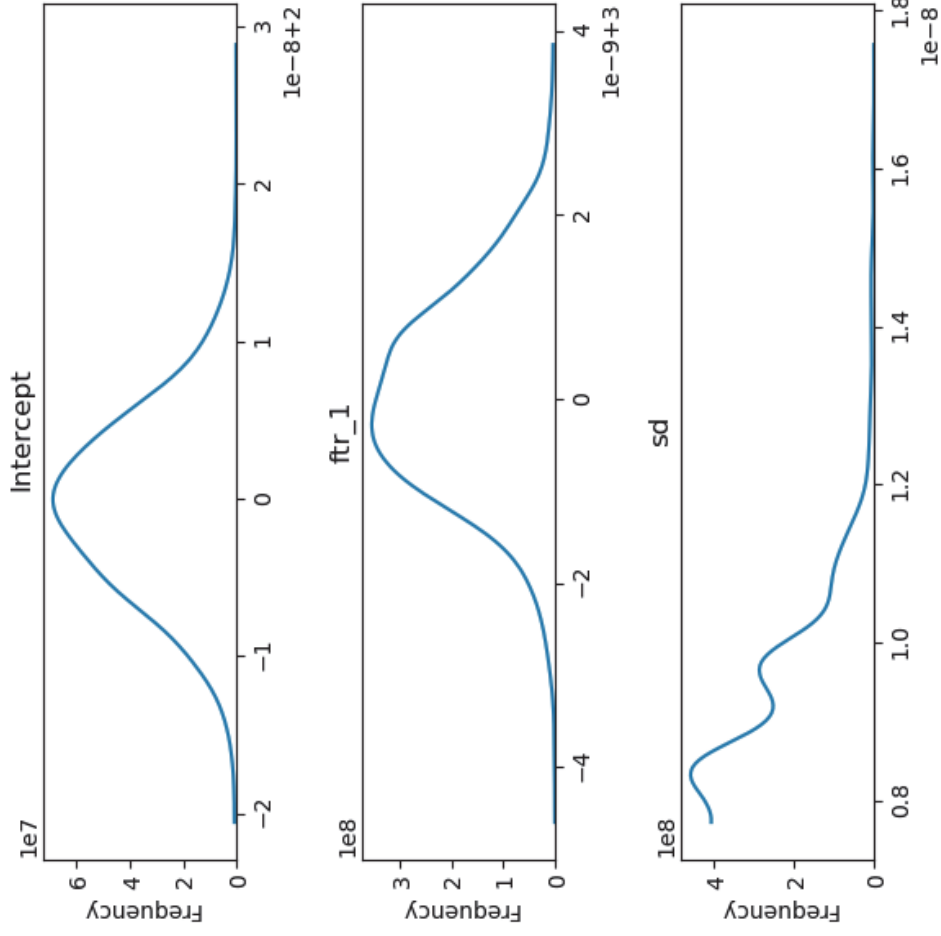
Rysunek 14.7. Łączenie histogramów z kategoriami (strona 500)

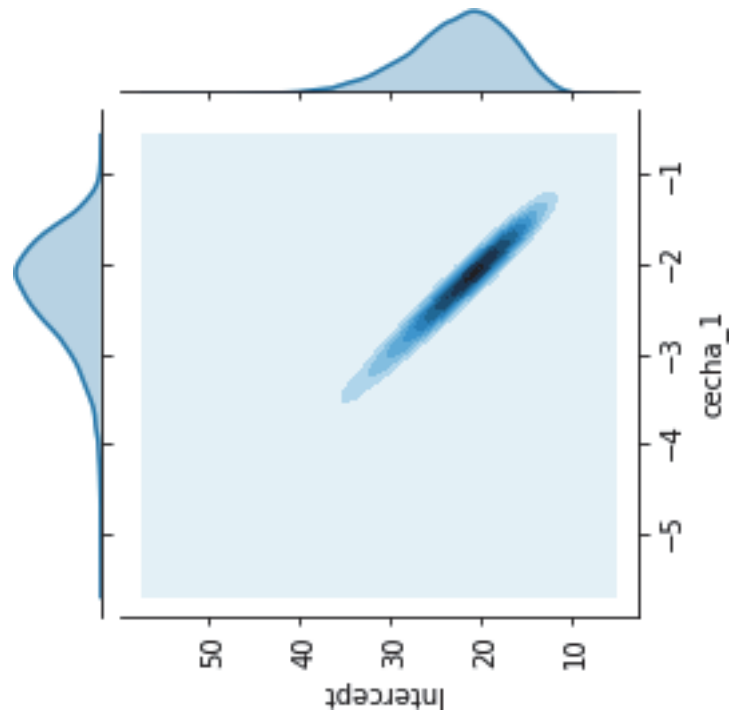












strona 533