

 $\,$  Pис. 1: Accelerometry time series from HASC project Target time series HASC1001

Data	Models	MAPE target	MAPE full	AIC
	VAR	1120304570816.356	1120304570816.356	6907.577
1	SVR	1.214	1.214	538.965
	Neural network	0.661	0.661	465.974
	VAR	6039408138201.831	6039408138201.831	7206.588
2	SVR	1.337	1.337	488.377
	Neural network	1.279	1.279	514.971
	VAR	6988686166.756	6988686166.756	5851.561
3	SVR	0.289	0.289	217.969
	Neural network	0.428	0.428	318.439
	VAR	1690270546.666	1690270546.666	5453.202
4	SVR	0.695	0.695	461.662
	Neural network	0.767	0.767	505.080
	VAR	417246658469.861	417246658469.861	6717.623
5	SVR	0.533	0.533	338.911
	Neural network	0.630	0.630	392.916
	VAR	1795670105962.151	1795670105962.151	7102.525
6	SVR	0.785	0.785	458.761
	Neural network	0.664	0.664	463.748
	VAR	760658400670.849	760658400670.849	6840.654
7	SVR	0.810	0.810	486.241
	Neural network	0.931	0.931	546.321
	VAR	122095954208.764	122095954208.764	6485.710
8	SVR	0.808	0.808	494.041
	Neural network	0.705	0.705	514.873
	VAR	870930402818.931	870930402818.931	6866.990
	-			

	SVR	0.738	0.738	439.700
	Neural network	0.698	0.698	468.527
	VAR	2257879192407.105	2257879192407.105	7146.840
10	SVR	1.095	1.095	473.892
	Neural network	1.035	1.035	547.795
	VAR	722974585332.060	722974585332.060	6975.583
11	SVR	0.472	0.472	524.962
	Neural network	0.586	0.586	594.106
	VAR	134915153696.328	134915153696.328	6465.315
12	SVR	0.662	0.662	492.203
	Neural network	0.906	0.906	552.600
	VAR	259584915183.095	259584915183.095	6691.148
13	SVR	0.695	0.695	425.604
	Neural network	0.765	0.765	477.582
	VAR	28562396677.239	28562396677.239	6198.002
14	SVR	0.649	0.649	540.584
	Neural network	0.551	0.551	540.832
	VAR	32954861541.872	32954861541.872	6059.772
15	SVR	0.962	0.962	503.383
	Neural network	0.783	0.783	499.527
	VAR	13156158543201.650	13156158543201.650	7469.809
16	SVR	1.641	1.641	445.430
	Neural network	1.053	1.053	411.494
	VAR	204113750894.582	204113750894.582	6435.257
17	SVR	1.943	1.943	496.190
	Neural network	1.276	1.276	524.516
	VAR	5068127216048.081	5068127216048.081	7109.426
18	SVR	1.927	1.927	493.345
	Neural network	1.948	1.948	540.622
	VAR	32876731920963232.000	32876731920963232.000	2843.012
19	SVR	0.847	0.847	445.210
	Neural network	0.699	0.699	432.327
	VAR	33062597757652932.000	33062597757652932.000	2833.969
20	SVR	0.932	0.932	435.596
	Neural network	0.138	0.138	337.222
	VAR	3546260314784630.000	3546260314784630.000	1690.481
21	SVR	0.283	0.283	397.450
	Neural network	0.375	0.375	407.805
	VAR	20232478839226940.000	20232478839226940.000	1749.881
22	SVR	0.210	0.210	384.824
- <b>-</b>	Neural network	0.256	0.256	391.737
	VAR	9239926680388686.000	9239926680388686.000	1735.756
23	VIII	220022000000000000000000000000000000000	223320000000000000000000000000000000000	1100.100

	SVR	0.176	0.176	394.862
	Neural network	0.219	0.219	404.739
	VAR	1313981263100460.700	1313981263100460.700	1662.323
24	SVR	0.257	0.257	403.547
	Neural network	0.319	0.319	408.984
	VAR	2069304322706104.700	2069304322706104.700	1677.398
25	SVR	0.281	0.281	400.797
	Neural network	0.323	0.323	408.007
	VAR	13795457076978750.000	13795457076978750.000	1732.355
26	SVR	0.315	0.315	398.966
	Neural network	0.735	0.735	428.075
	VAR	2469829022196093.500	2469829022196093.500	1681.779
27	SVR	0.300	0.300	402.176
	Neural network	0.249	0.249	396.151
	VAR	5978082549783731.000	5978082549783731.000	1719.743
28	SVR	0.248	0.248	407.195
	Neural network	0.450	0.450	427.467
	VAR	4097900730587129.000	4097900730587129.000	1739.159
29	SVR	0.199	0.199	410.548
	Neural network	0.113	0.113	378.580
	VAR	102062068921590260.000	102062068921590260.000	1850.206
30	SVR	0.348	0.348	405.777
	Neural network	0.473	0.473	421.186
	VAR	944078123779268740.000	944078123779268740.000	1932.571
31	SVR	0.169	0.169	384.956
	Neural network	0.292	0.292	404.421
	VAR	111357584338780590.000	111357584338780590.000	1860.089
32	SVR	0.144	0.144	383.413
	Neural network	0.226	0.226	398.816
	VAR	16976855728563968.000	16976855728563968.000	1788.319
33	SVR	0.138	0.138	389.323
	Neural network	0.110	0.110	371.847
	VAR	25511822208236780.000	25511822208236780.000	1764.769
34	SVR	0.315	0.315	408.234
	Neural network	0.391	0.391	414.318
	VAR	204791457966511140.000	204791457966511140.000	1827.957
35	SVR	0.391	0.391	403.998
	Neural network	0.318	0.318	395.923
	VAR	24687961790276116.000	24687961790276116.000	1755.140
36	SVR	0.540	0.540	409.002
	Neural network	1.146	1.146	432.234
	VAR	Inf	Inf	1752.454
37	,,,,,,			

	SVR	NaN	NaN	440.867
	Neural network	Inf	Inf	418.055
	VAR	18111287948275848.000	18111287948275848.000	1741.611
38	SVR	0.269	0.269	394.542
	Neural network	0.467	0.467	410.864
	VAR	1233301332725942.200	1233301332725942.200	1653.853
39	SVR	0.269	0.269	396.851
	Neural network	0.512	0.512	423.198
	VAR	19446051632025556.000	19446051632025556.000	1753.934
40	SVR	0.276	0.276	402.672
	Neural network	0.445	0.445	417.093
	VAR	42277223647839136.000	42277223647839136.000	1771.458
41	SVR	0.182	0.182	379.808
	Neural network	0.323	0.323	399.110
	VAR	398852741185396740.000	398852741185396740.000	1853.649
42	SVR	0.375	0.375	401.497
	Neural network	0.499	0.499	418.491
	VAR	Inf	Inf	1769.162
43	SVR	Inf	Inf	415.065
	Neural network	Inf	Inf	424.767

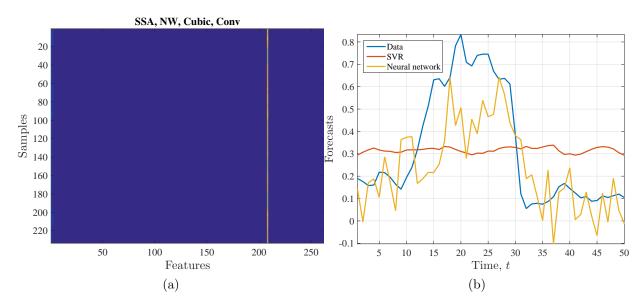


Рис. 2: (a) Feature generation results for HASC1001. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1001. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

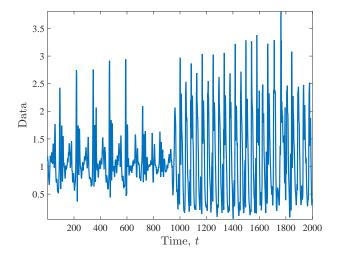


Рис. 3: Accelerometry time series from HASC project Target time series HASC1002

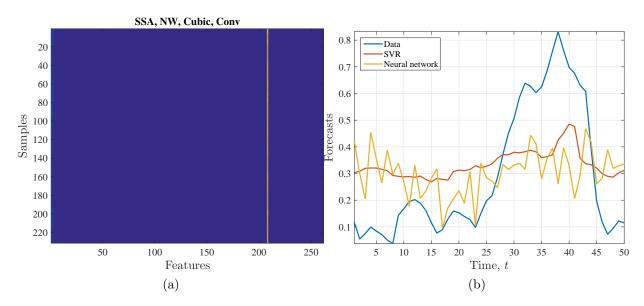


Рис. 4: (a) Feature generation results for HASC1002. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1002. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

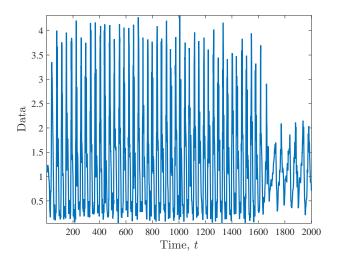


Рис. 5: Accelerometry time series from HASC project Target time series HASC1003

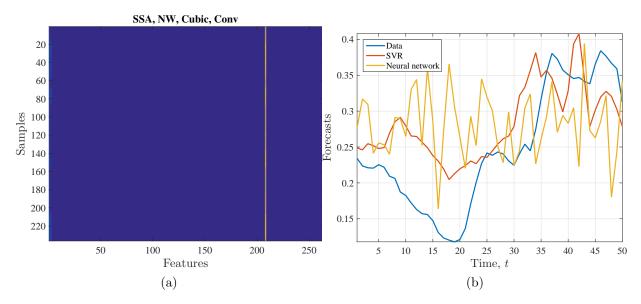


Рис. 6: (a) Feature generation results for HASC1003. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1003. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

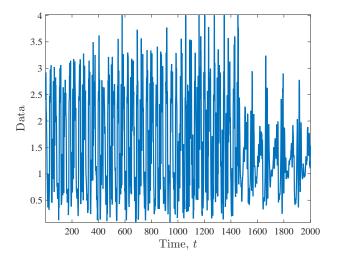


Рис. 7: Accelerometry time series from HASC project Target time series HASC1004

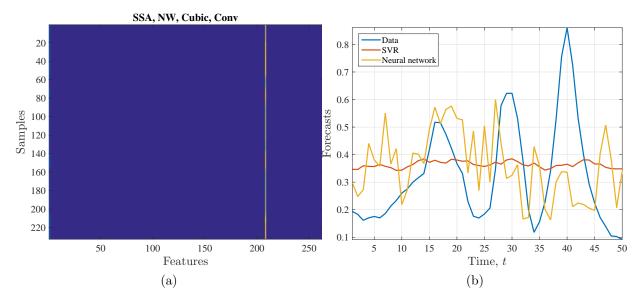


Рис. 8: (a) Feature generation results for HASC1004. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1004. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

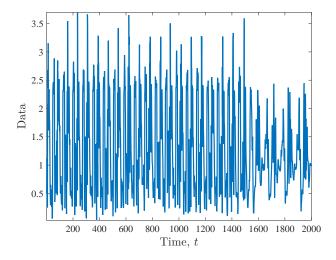


Рис. 9: Accelerometry time series from HASC project Target time series HASC1005

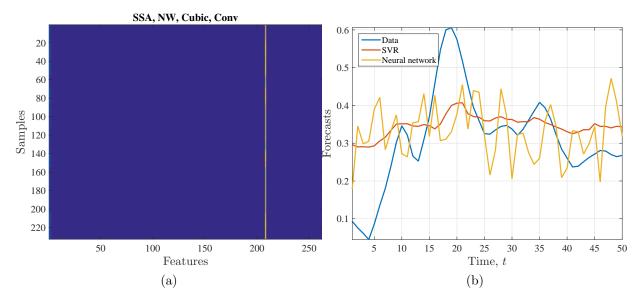


Рис. 10: (a) Feature generation results for HASC1005. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1005. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

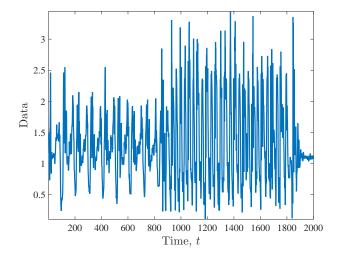


Рис. 11: Accelerometry time series from HASC project Target time series HASC1006

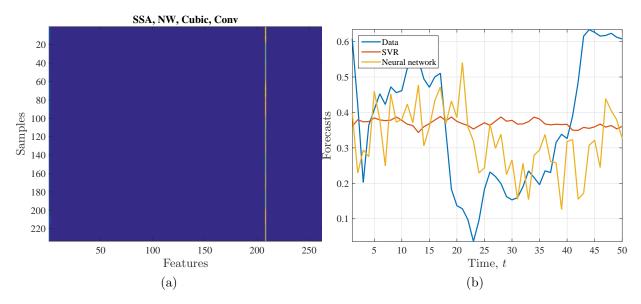


Рис. 12: (a) Feature generation results for HASC1006. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1006. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

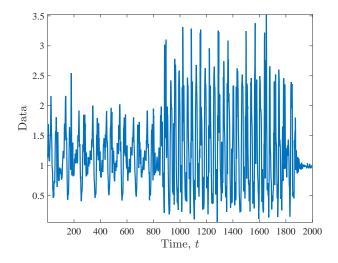


Рис. 13: Accelerometry time series from HASC project Target time series HASC1007

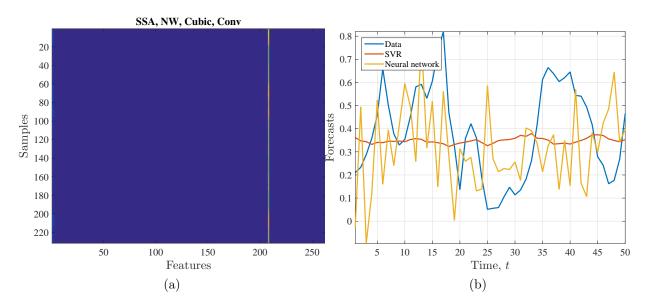


Рис. 14: (a) Feature generation results for HASC1007. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1007. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

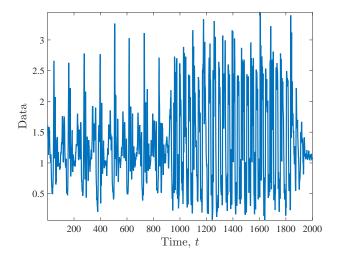


Рис. 15: Accelerometry time series from HASC project Target time series HASC1008

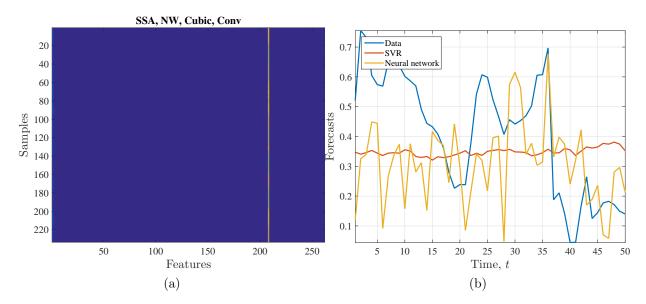


Рис. 16: (a) Feature generation results for HASC1008. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1008. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

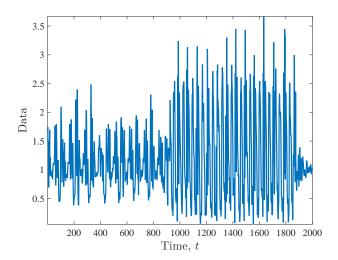


Рис. 17: Accelerometry time series from HASC project Target time series HASC1009

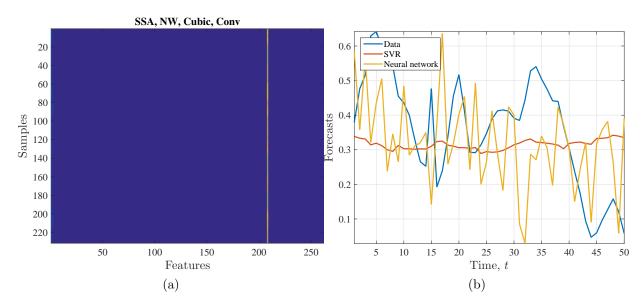


Рис. 18: (a) Feature generation results for HASC1009. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1009. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

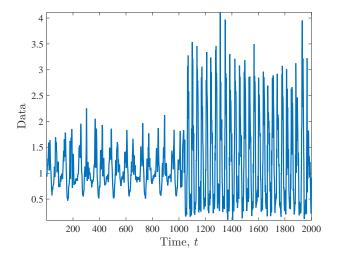


Рис. 19: Accelerometry time series from HASC project Target time series HASC1010

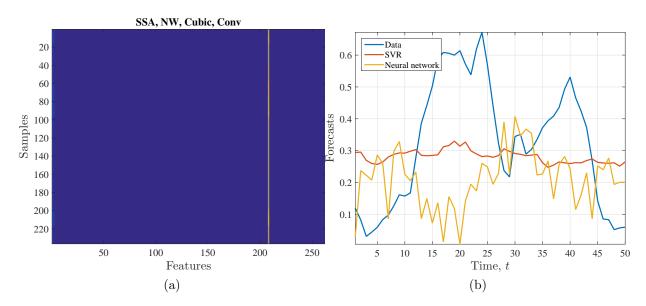


Рис. 20: (a) Feature generation results for HASC1010. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1010. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

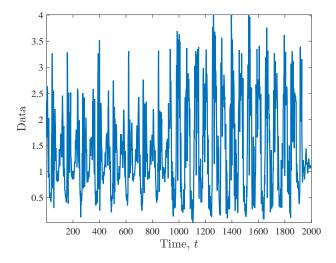


Рис. 21: Accelerometry time series from HASC project Target time series HASC1011

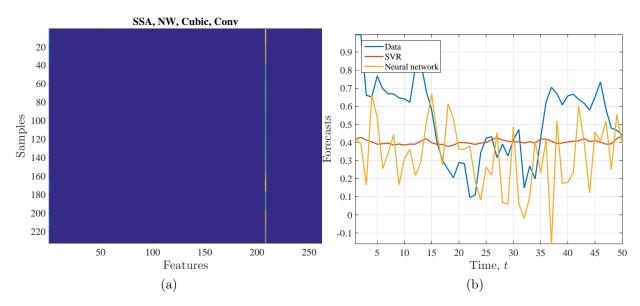


Рис. 22: (a) Feature generation results for HASC1011. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1011. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

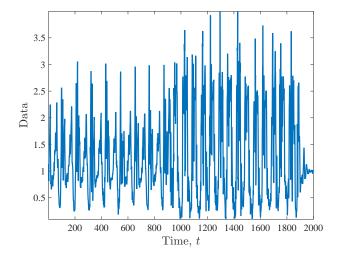


Рис. 23: Accelerometry time series from HASC project Target time series HASC1012

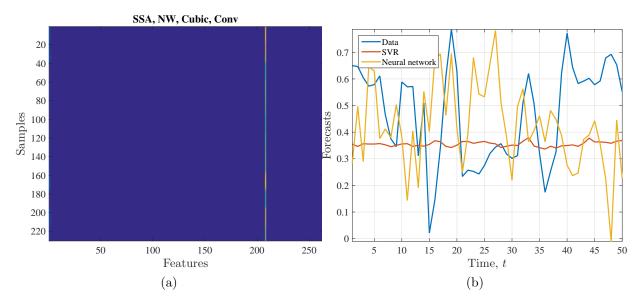
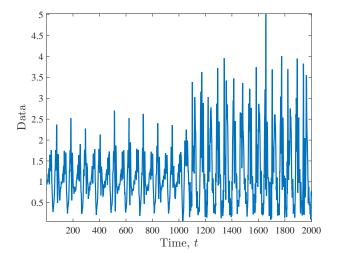


Рис. 24: (a) Feature generation results for HASC1012. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1012. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.



Puc. 25: Accelerometry time series from HASC project Target time series HASC1013

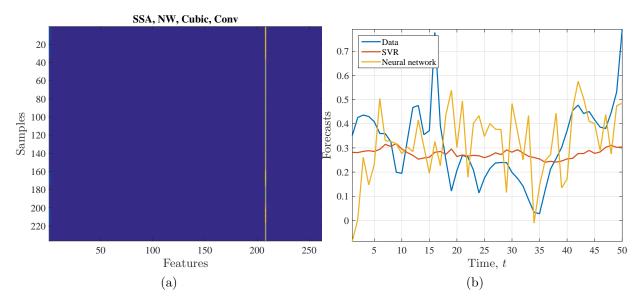


Рис. 26: (a) Feature generation results for HASC1013. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1013. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

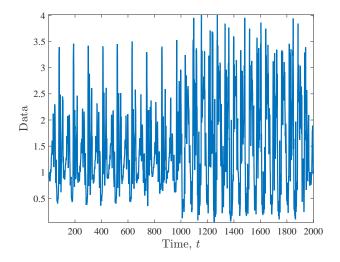


Рис. 27: Accelerometry time series from HASC project Target time series HASC1014

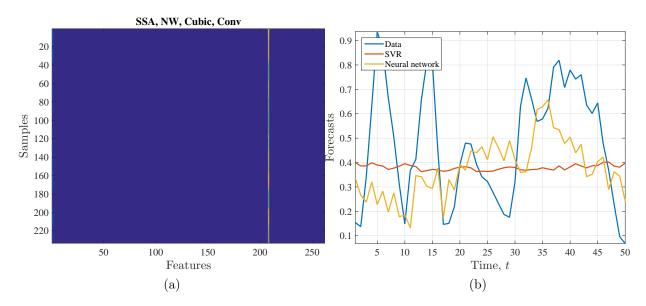
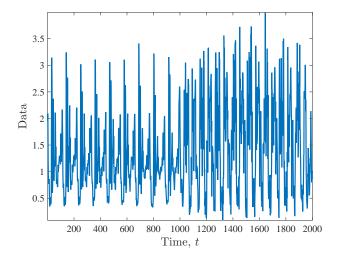


Рис. 28: (a) Feature generation results for HASC1014. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1014. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.



Puc. 29: Accelerometry time series from HASC project Target time series HASC1015

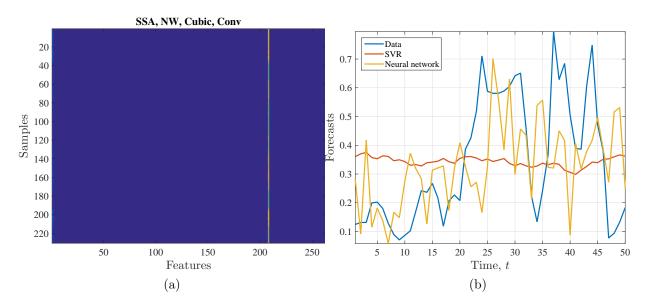


Рис. 30: (a) Feature generation results for HASC1015. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1015. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

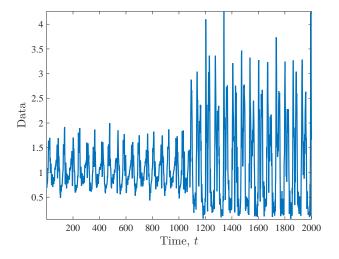


Рис. 31: Accelerometry time series from HASC project Target time series HASC1016

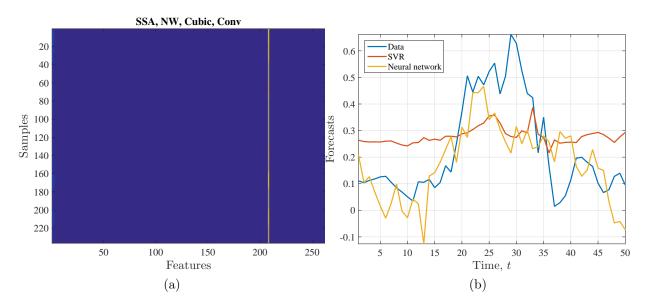


Рис. 32: (a) Feature generation results for HASC1016. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1016. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

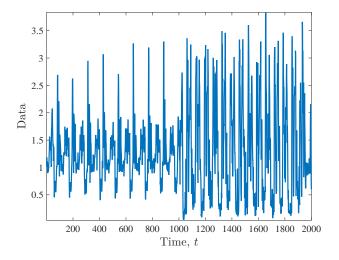


Рис. 33: Accelerometry time series from HASC project Target time series HASC1017

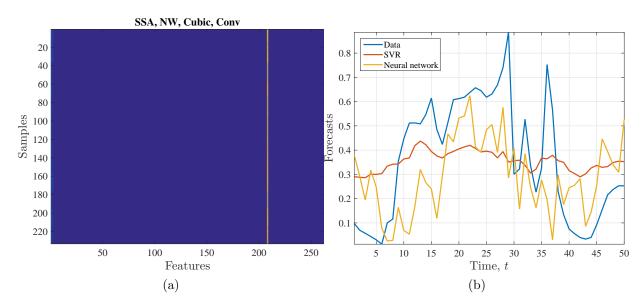


Рис. 34: (a) Feature generation results for HASC1017. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1017. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

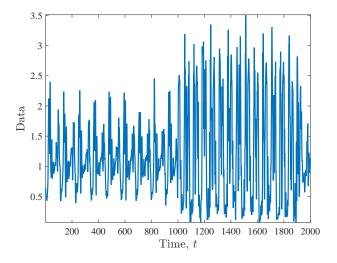


Рис. 35: Accelerometry time series from HASC project Target time series HASC1018

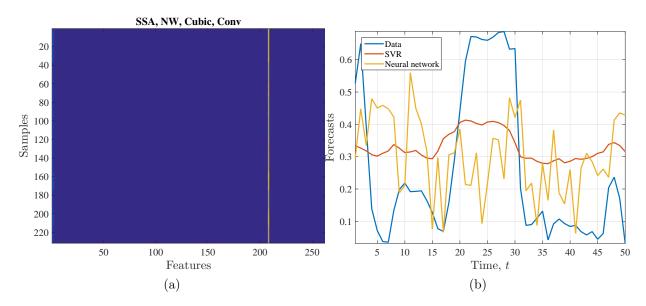


Рис. 36: (a) Feature generation results for HASC1018. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1018. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

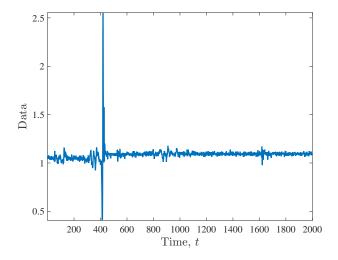


Рис. 37: Accelerometry time series from HASC project Target time series HASC1161

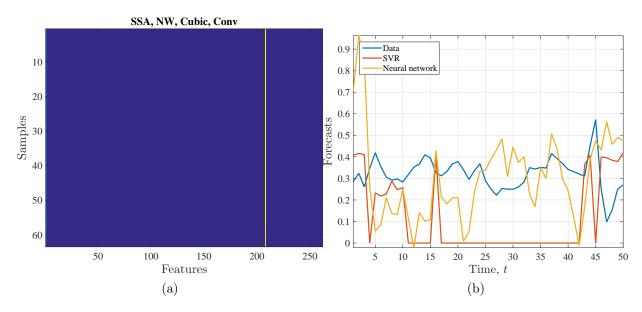


Рис. 38: (a) Feature generation results for HASC1161. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1161. SVR, Neural network Error exceeds 1000 for the following models: VAR.The forecasts for VAR are not displayed.

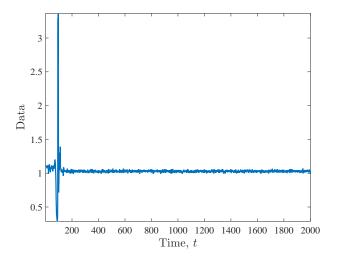


Рис. 39: Accelerometry time series from HASC project Target time series HASC1162

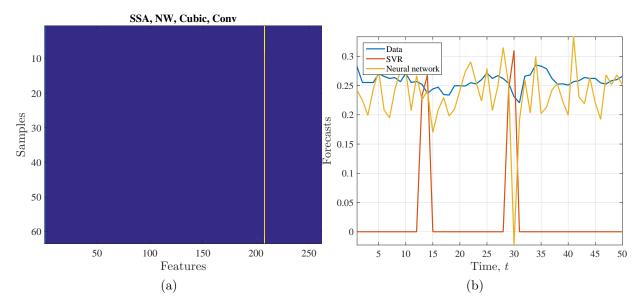


Рис. 40: (a) Feature generation results for HASC1162. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1162. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

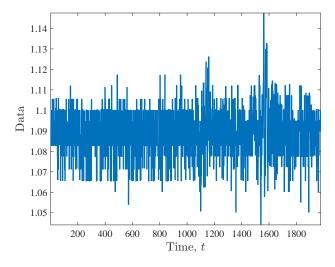


Рис. 41: Accelerometry time series from HASC project Target time series HASC1163

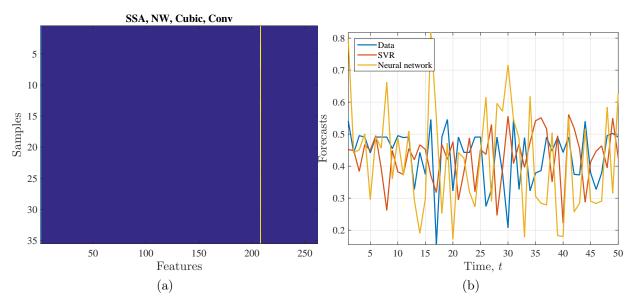


Рис. 42: (a) Feature generation results for HASC1163. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1163. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

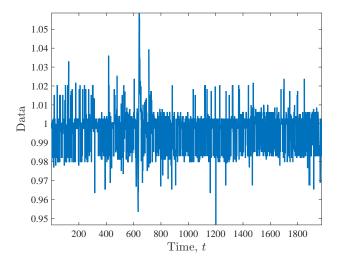


Рис. 43: Accelerometry time series from HASC project Target time series HASC1164

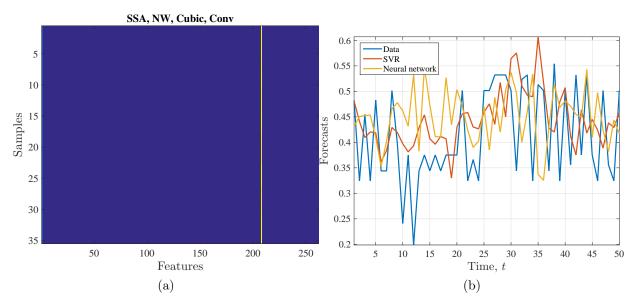


Рис. 44: (a) Feature generation results for HASC1164. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1164. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

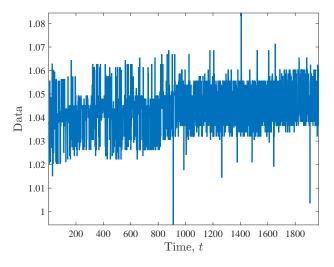


Рис. 45: Accelerometry time series from HASC project Target time series HASC1165

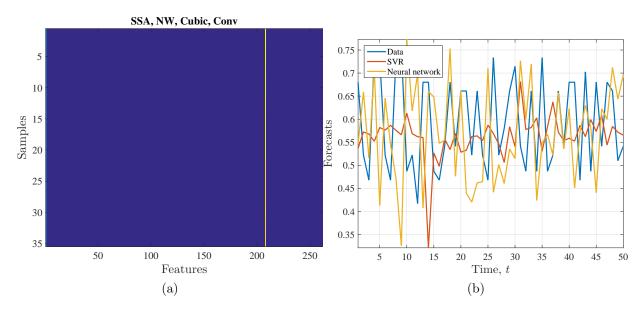


Рис. 46: (a) Feature generation results for HASC1165. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1165. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

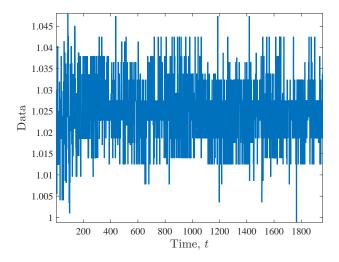


Рис. 47: Accelerometry time series from HASC project Target time series HASC1166

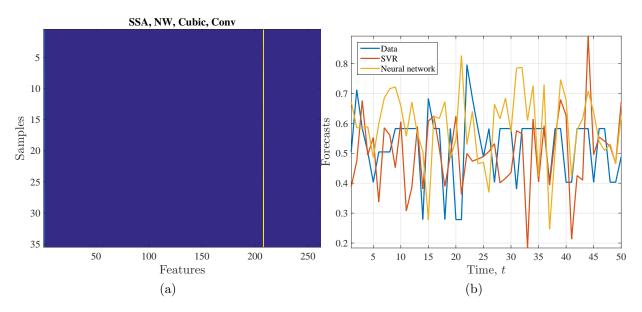


Рис. 48: (a) Feature generation results for HASC1166. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1166. SVR, Neural network Error exceeds 1000 for the following models: VAR.The forecasts for VAR are not displayed.

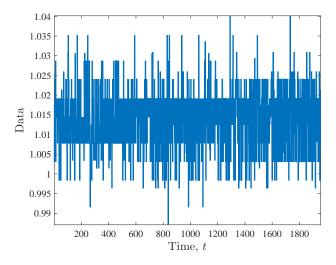


Рис. 49: Accelerometry time series from HASC project Target time series HASC1167

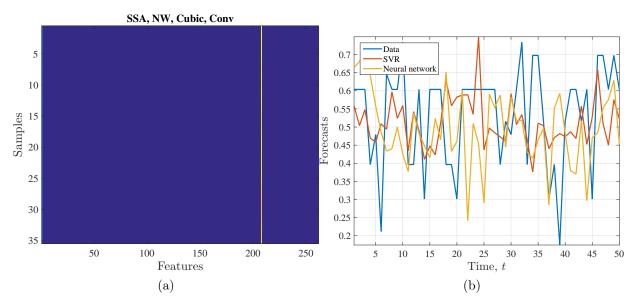
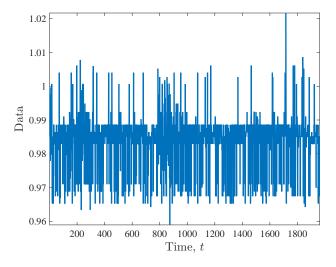


Рис. 50: (a) Feature generation results for HASC1167. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1167. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.



Puc. 51: Accelerometry time series from HASC project Target time series HASC1168

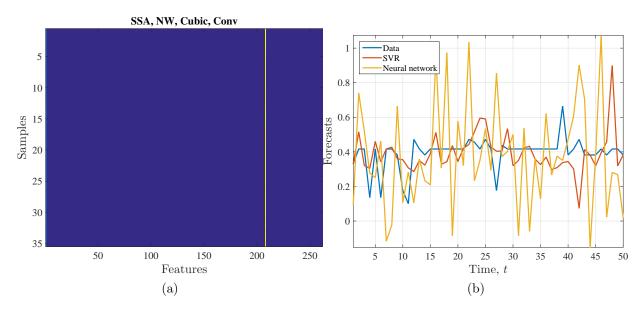


Рис. 52: (a) Feature generation results for HASC1168. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1168. SVR, Neural network Error exceeds 1000 for the following models: VAR.The forecasts for VAR are not displayed.

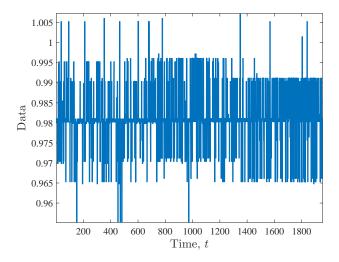


Рис. 53: Accelerometry time series from HASC project Target time series HASC1169

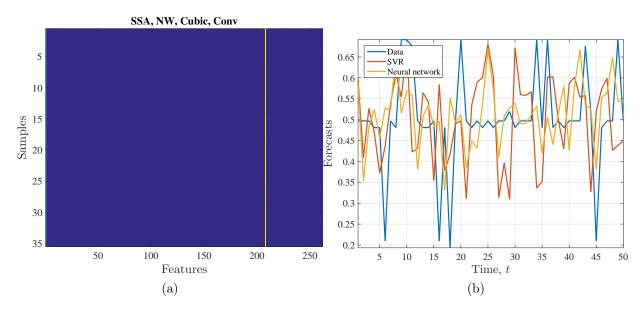


Рис. 54: (a) Feature generation results for HASC1169. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1169. SVR, Neural network Error exceeds 1000 for the following models: VAR.The forecasts for VAR are not displayed.

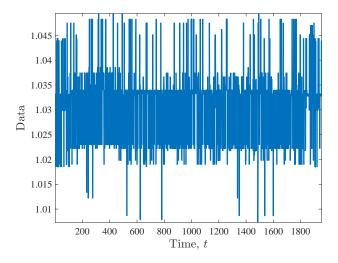


Рис. 55: Accelerometry time series from HASC project Target time series HASC1170

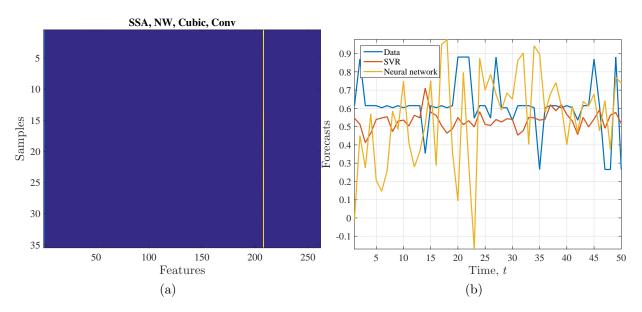


Рис. 56: (a) Feature generation results for HASC1170. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1170. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

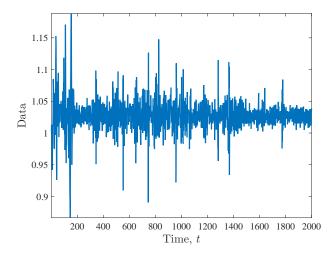


Рис. 57: Accelerometry time series from HASC project Target time series HASC1171

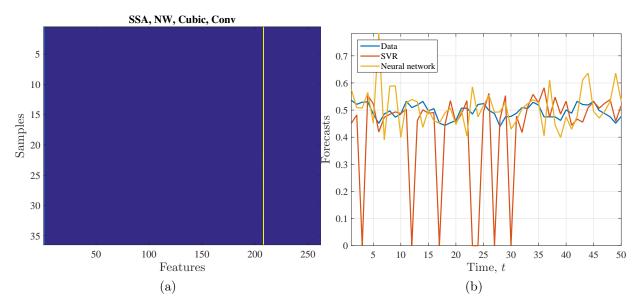
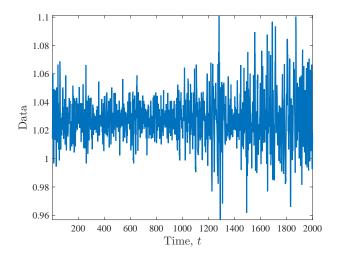


Рис. 58: (a) Feature generation results for HASC1171. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1171. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.



Puc. 59: Accelerometry time series from HASC project Target time series HASC1172

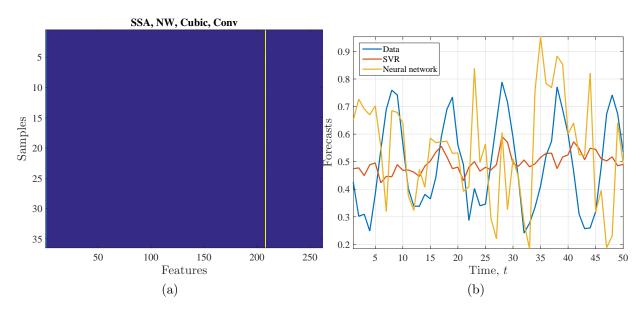


Рис. 60: (a) Feature generation results for HASC1172. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1172. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

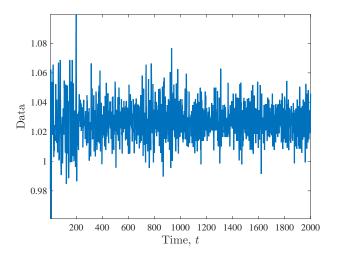


Рис. 61: Accelerometry time series from HASC project Target time series HASC1173

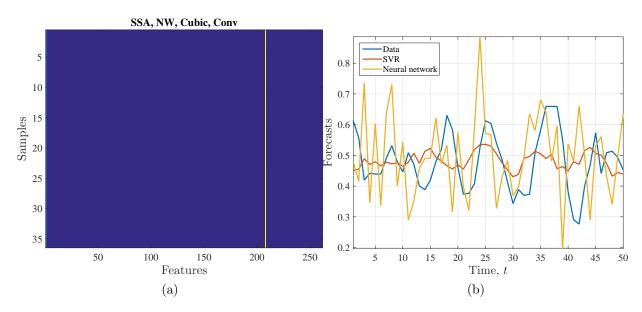


Рис. 62: (a) Feature generation results for HASC1173. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1173. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

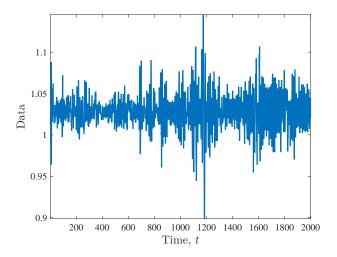


Рис. 63: Accelerometry time series from HASC project Target time series HASC1174

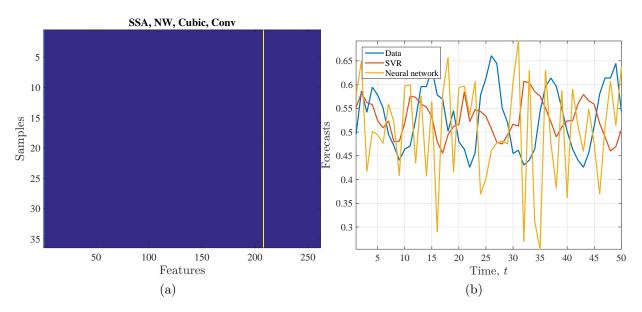


Рис. 64: (a) Feature generation results for HASC1174. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1174. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

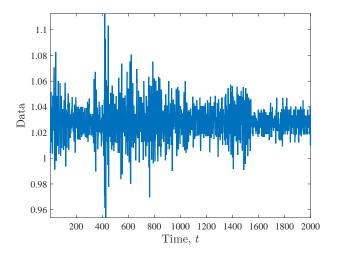


Рис. 65: Accelerometry time series from HASC project Target time series HASC1175

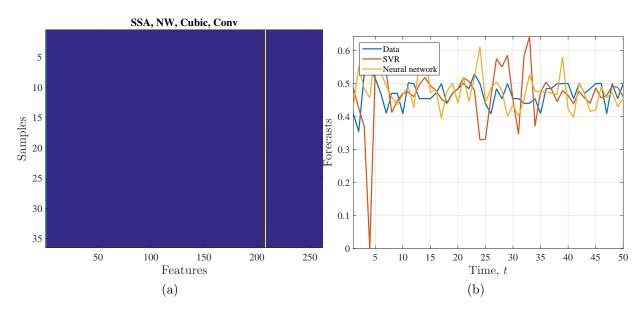


Рис. 66: (a) Feature generation results for HASC1175. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1175. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

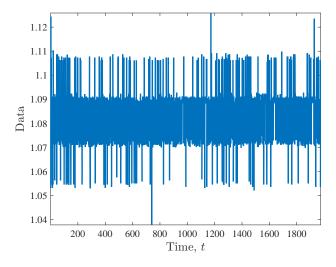


Рис. 67: Accelerometry time series from HASC project Target time series HASC1176

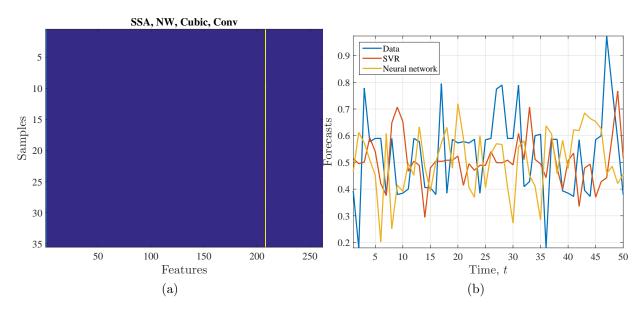


Рис. 68: (a) Feature generation results for HASC1176. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1176. SVR, Neural network Error exceeds 1000 for the following models: VAR.The forecasts for VAR are not displayed.

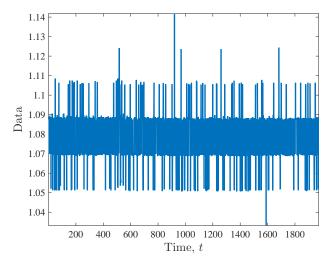


Рис. 69: Accelerometry time series from HASC project Target time series HASC1177

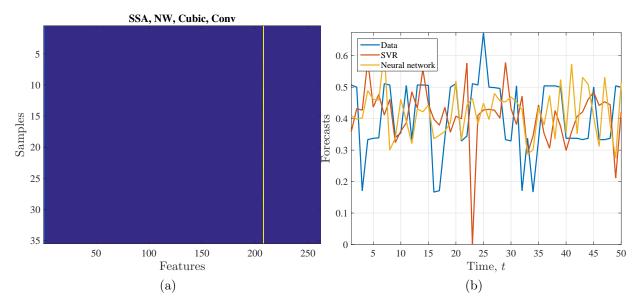


Рис. 70: (a) Feature generation results for HASC1177. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1177. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

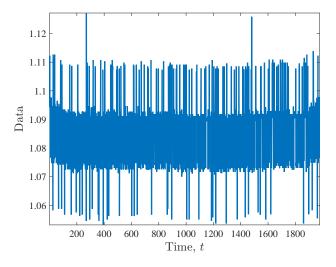


Рис. 71: Accelerometry time series from HASC project Target time series HASC1178

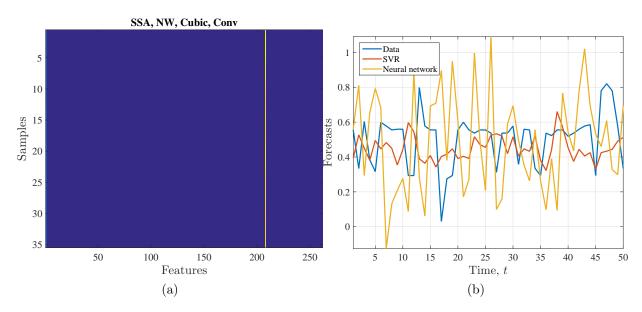


Рис. 72: (a) Feature generation results for HASC1178. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1178. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

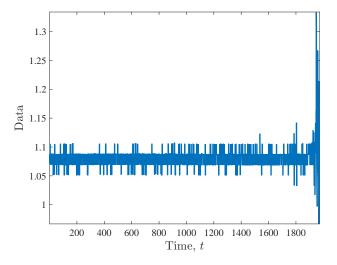


Рис. 73: Accelerometry time series from HASC project Target time series HASC1179

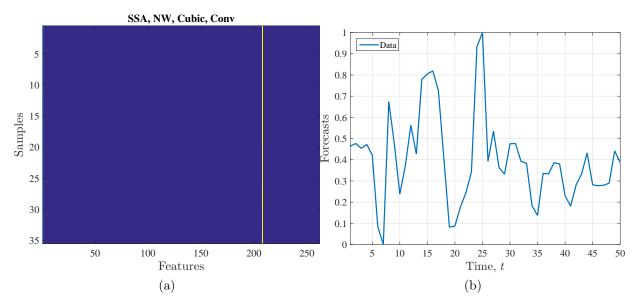


Рис. 74: (a) Feature generation results for HASC1179. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1179. Error exceeds 1000 for the following models: VAR, SVR, Neural network. The forecasts for VAR, SVR, Neural network are not displayed.

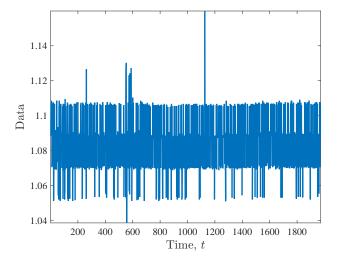


Рис. 75: Accelerometry time series from HASC project Target time series HASC1180

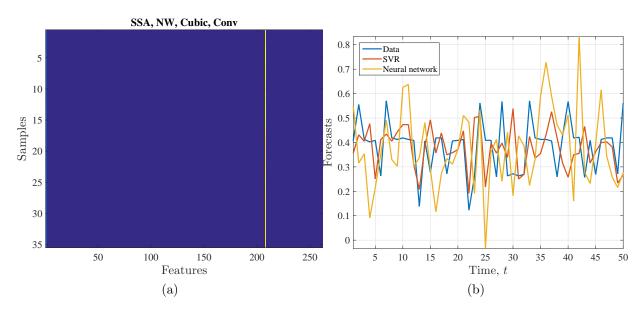


Рис. 76: (a) Feature generation results for HASC1180. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1180. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

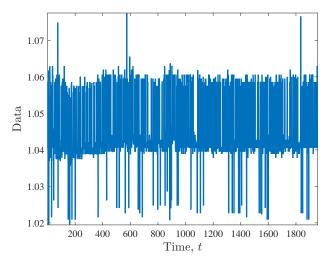


Рис. 77: Accelerometry time series from HASC project Target time series HASC1181

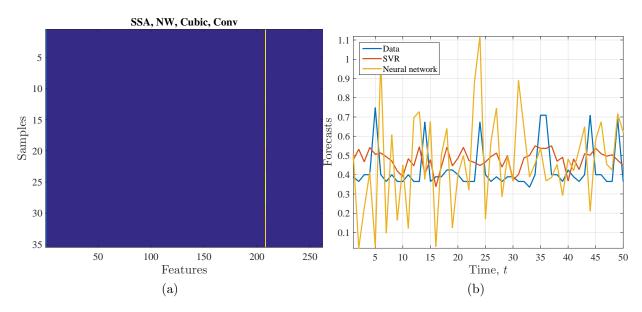


Рис. 78: (a) Feature generation results for HASC1181. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1181. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

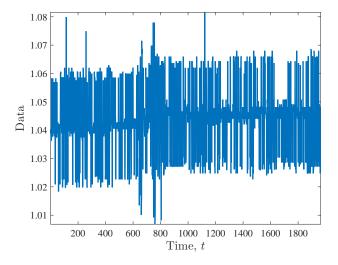


Рис. 79: Accelerometry time series from HASC project Target time series HASC1182

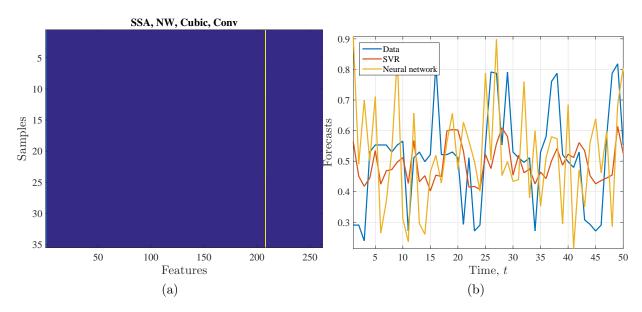


Рис. 80: (a) Feature generation results for HASC1182. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1182. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

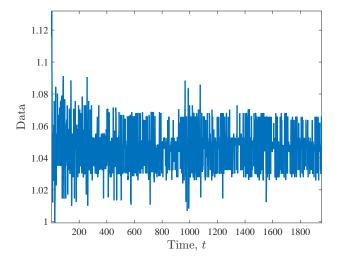


Рис. 81: Accelerometry time series from HASC project Target time series HASC1183

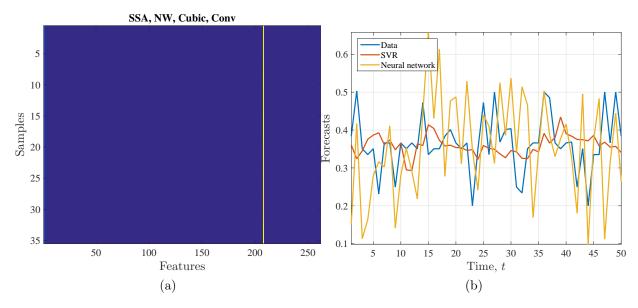


Рис. 82: (a) Feature generation results for HASC1183. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1183. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.

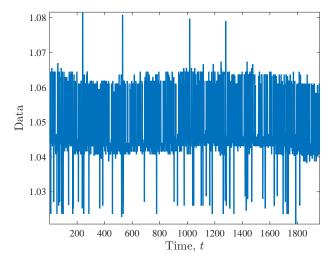


Рис. 83: Accelerometry time series from HASC project Target time series HASC1184

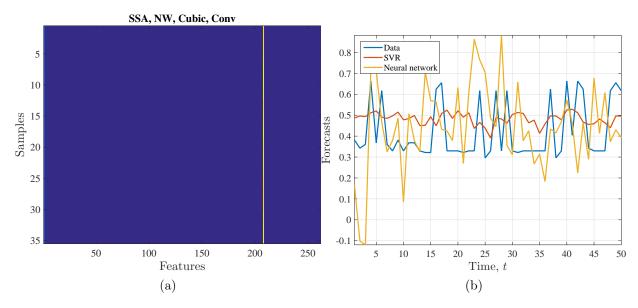
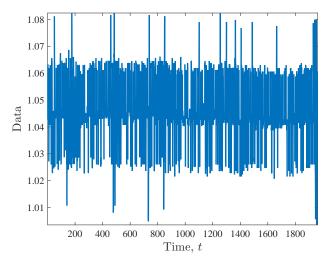


Рис. 84: (a) Feature generation results for HASC1184. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1184. SVR, Neural network Error exceeds 1000 for the following models: VAR. The forecasts for VAR are not displayed.



Puc. 85: Accelerometry time series from HASC project Target time series HASC1185

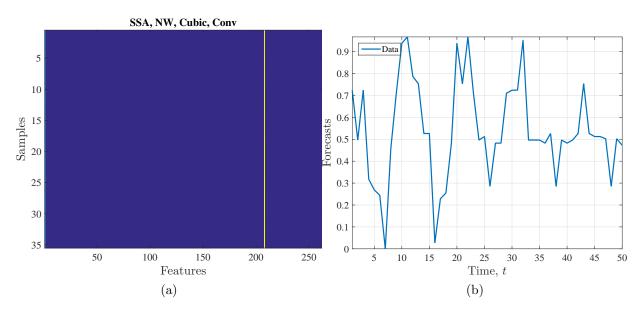


Рис. 86: (a) Feature generation results for HASC1185. SSA, NW, Cubic, Conv (b) Forecasting results for HASC1185. Error exceeds 1000 for the following models: VAR, SVR, Neural network. The forecasts for VAR, SVR, Neural network are not displayed.