按照均值方差标准化后的实验记录

1.

模型配置：

Depth = 7

N\_estimators (num) = 200

损失函数: exponential

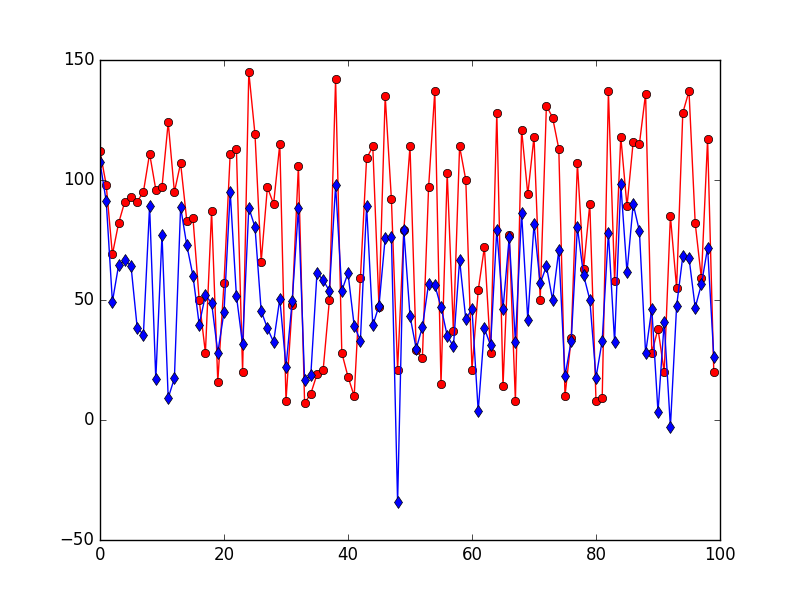
数据配置：

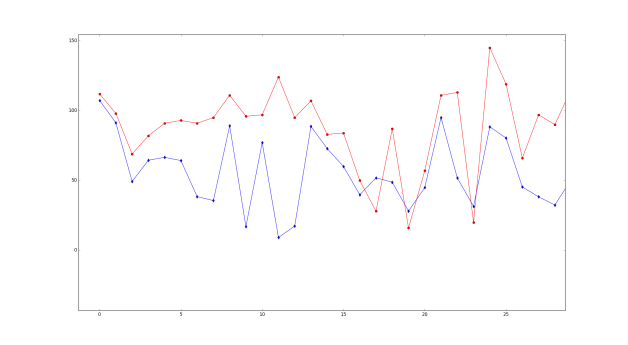
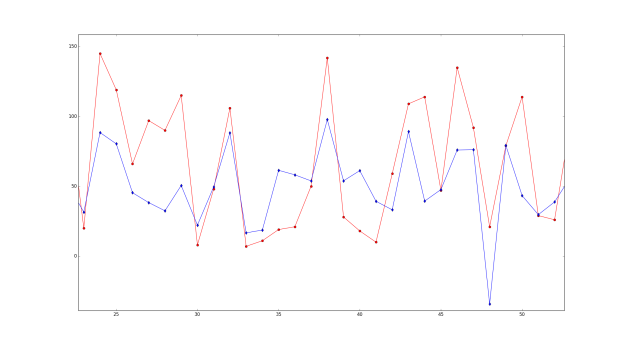
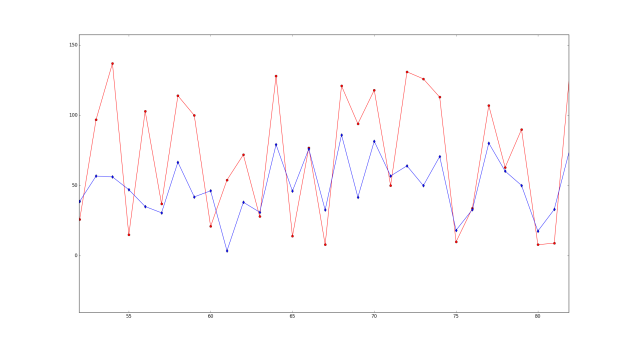
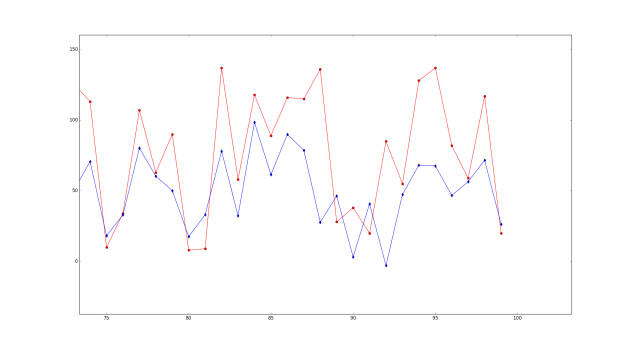
14个特征上直接进行, 测试集用cycle层面预测, 然后转换为unit层面，转换方式为直接平均.

20631 20631 13096 100

(165.54009938878824, 16554.009938878822)

(4.181233021532802, 33.427424733986165, 0.63169052069917275, 0.09191733614299608, 0.43944675904708064)

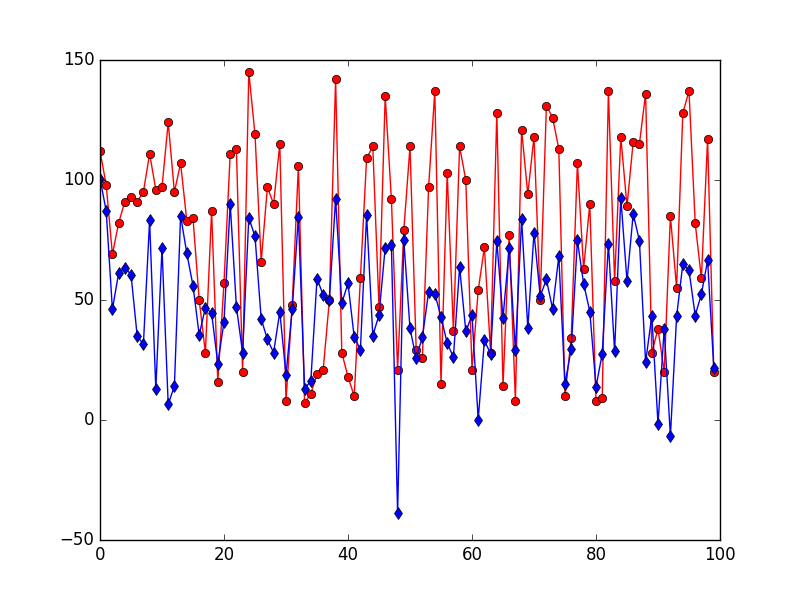




2. 在上面的实验中将损失函数改为square，其他条件相同

(213.53151324695224, 21353.151324695224)

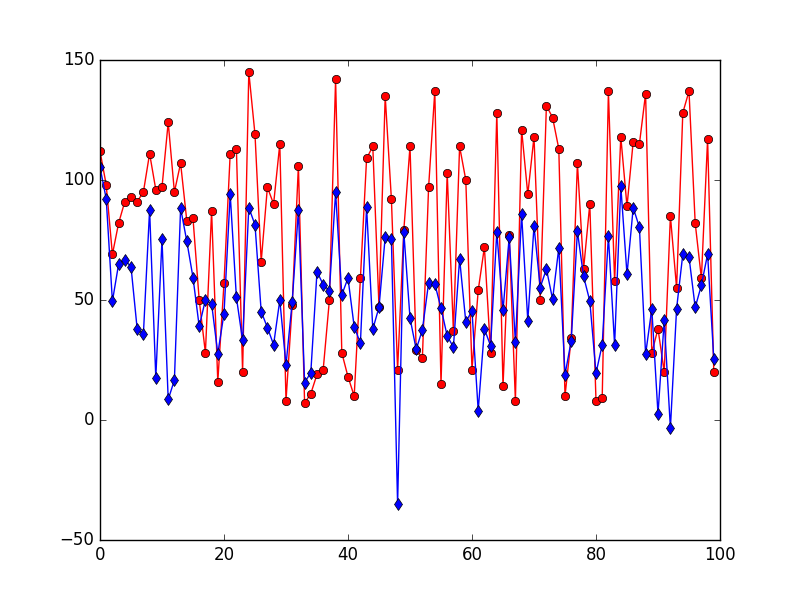
(4.426121561988511, 35.465013124543063, 0.60260480994209331, 0.08327593772644104, 0.44034301169428958)



3. 将损失函数更换为linear,其他条件保持相同

(171.34550313505372, 17134.550313505373)

(4.203527196086077, 33.631345081669267, 0.63137294313494052, 0.09116065036140979, 0.43865048332533385)



4 . 参数搜索[50,65]×[3,11]

损失: exponential

[(50, 3), (50, 4), (50, 5), (50, 6), (50, 7), (50, 8), (50, 9), (50, 10), (50, 11), (55, 3), (55, 4), (55, 5), (55, 6), (55, 7), (55, 8), (55, 9), (55, 10), (55, 11), (60, 3), (60, 4), (60, 5), (60, 6), (60, 7), (60, 8), (60, 9), (60, 10), (60, 11), (65, 3), (65, 4), (65, 5), (65, 6), (65, 7), (65, 8), (65, 9), (65, 10), (65, 11)]

[[3.6153137504153428, 29.582311900848321, 0.82860737938267048, 0.14184895513595755, 0.45864836429290934], [3.659524055814681, 29.833849931071196, 0.77283402094444409, 0.12818088190985227, 0.44417737156119308], [3.872322705896681, 30.848685443931966, 0.6578920927633698, 0.10090099113761948, 0.42391330235099445], [4.199554605010423, 33.336301393450825, 0.61222358377459984, 0.08789157915284561, 0.4302933456945589], [4.437014053426992, 35.331705384202046, 0.58431364703467281, 0.08025819962950892, 0.42971294128641269], [4.640719902382825, 37.136993705134664, 0.56955216325753522, 0.07589769423701051, 0.4298883120984196], [4.776259018816422, 38.318996644713522, 0.56530105017043519, 0.07310206336646091, 0.42814514238390511], [4.976366878843455, 40.203890653076961, 0.57840016482710033, 0.07267213441095696, 0.43544030670688449], [5.138167881496899, 41.704675171630406, 0.59200682646423541, 0.0728242798284929, 0.44252660440927283], [3.5872535216142984, 29.335944295455175, 0.8312064874617523, 0.14284116359272805, 0.45463871096178765], [3.635399666941171, 29.678920713410047, 0.78509639877695203, 0.13118802159106724, 0.44578363195054982], [3.8589613347944125, 30.875620193440696, 0.67368699323246728, 0.10412250877914284, 0.42995451770060356], [4.14004995938109, 32.923205753458291, 0.62478857885851158, 0.090970405750186, 0.43242768410751442], [4.378804093256326, 34.858808791354392, 0.58865341314078845, 0.08164707807492803, 0.42864411671597547], [4.603784953619185, 36.794081882857249, 0.56857618127907572, 0.07609542037154157, 0.4274287720868466], [4.743491244019439, 38.022495442593311, 0.56390464027879261, 0.07322448558343912, 0.42641281253119123], [4.950567514783832, 39.973243657329142, 0.57664256550278559, 0.07265626887878181, 0.43343194622276182], [5.100702891677996, 41.350776526939136, 0.58812204660443346, 0.07261782298905621, 0.43991210239008727], [3.5755268045859427, 29.354963824476862, 0.8551218725935672, 0.14852252890248635, 0.45909530845962343], [3.6004541315936796, 29.396894450247117, 0.78995600957018008, 0.13261986914248397, 0.4418697594295411], [3.844519567477493, 30.859466272744953, 0.68667270478735887, 0.10692581158784932, 0.43376200979538437], [4.112834844980623, 32.83223680062175, 0.63785957720765529, 0.09349740481240473, 0.43625473919855273], [4.359323813130263, 34.697518946454323, 0.59387540568119568, 0.08310901683984355, 0.43110272067471433], [4.567569001805782, 36.504629284106059, 0.57040572072453255, 0.07671927747578955, 0.42598578930825015], [4.718404636610327, 37.791190001208662, 0.56375152692962227, 0.07341614378933835, 0.42463309715974618], [4.911538143149224, 39.596977041218139, 0.57473592790788819, 0.07280276959273675, 0.43197346233164435], [5.066299537673172, 41.021388241589349, 0.58561296798902407, 0.07263606896854564, 0.43746001784402677], [3.5540734583373457, 29.199774159481009, 0.86409449264383253, 0.15075075936133228, 0.45696910813045155], [3.6103507775547694, 29.446704850440252, 0.79358810790990475, 0.13354659051677034, 0.44583069352934002], [3.8240657030233796, 30.861960217812555, 0.70734659755508678, 0.11135837296824205, 0.43950312345846998], [4.087476128095651, 32.665675418748258, 0.64252240150351314, 0.09491980508466659, 0.43646495519588091], [4.3387229658261335, 34.525603936660325, 0.59381142956010458, 0.08322288016750429, 0.4291488000182121], [4.545996042933381, 36.351526404945851, 0.57314160584395324, 0.07737238998195797, 0.42559727671127157], [4.720423109781489, 37.808389889464621, 0.56358346328243558, 0.07352226788782418, 0.42525882359425471], [4.881778659899395, 39.333192114204941, 0.57286980696049905, 0.07282475158121643, 0.43017078927175856], [5.038245899959614, 40.739511692204985, 0.58207602393876101, 0.07250023821295787, 0.43621123384799232]]

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1. **[70,95]\*[3,11]**

[(70, 3), (70, 4), (70, 5), (70, 6), (70, 7), (70, 8), (70, 9), (70, 10), (70, 11), (75, 3), (75, 4), (75, 5), (75, 6), (75, 7), (75, 8), (75, 9), (75, 10), (75, 11), (80, 3), (80, 4), (80, 5), (80, 6), (80, 7), (80, 8), (80, 9), (80, 10), (80, 11), (85, 3), (85, 4), (85, 5), (85, 6), (85, 7), (85, 8), (85, 9), (85, 10), (85, 11), (90, 3), (90, 4), (90, 5), (90, 6), (90, 7), (90, 8), (90, 9), (90, 10), (90, 11), (95, 3), (95, 4), (95, 5), (95, 6), (95, 7), (95, 8), (95, 9), (95, 10), (95, 11)]

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1. **[100,120]\*[3,10]**

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**7. [120,147]\*[4,6]**

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1. **[150,250]\*[4,5]**

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