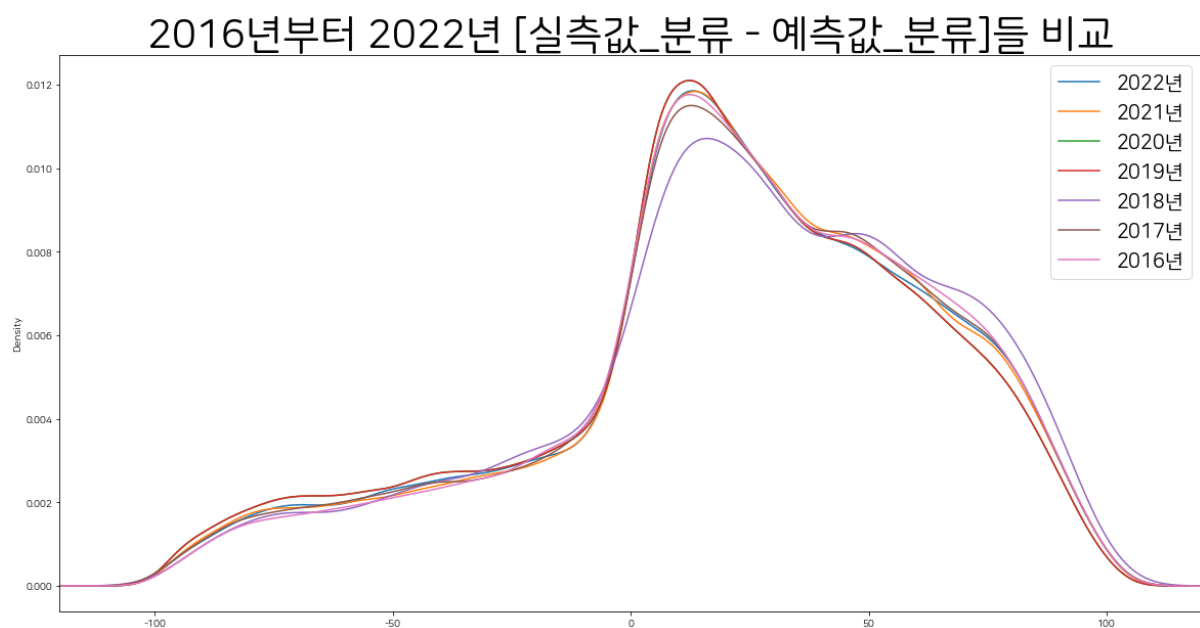


시각화 정리

- 2015년 데이터까지 훈련

	MAE	MSE	RMSE	R2
train	8.831563	139.023700	11.790831	0.800100
valid	10.501159	192.642091	13.879557	0.731511
2016.0	11.461044	230.745299	15.190303	0.656057
2017.0	12.132491	249.152161	15.784555	0.620196
2018.0	11.979109	245.145458	15.657122	0.614703
2019.0	11.690881	228.546152	15.117743	0.632315
2020.0	12.646618	263.326134	16.227327	0.546854
2021.0	13.222194	276.004199	16.613374	0.529696
2022.0	13.774859	292.180617	17.093292	0.512535

● Target: 분류



실측값_분류 - 예측값_분류 > 0 이면, 실측값_분류가 큰 값이고, 예측값_분류가 작은 값

ex) 실측값_분류 = 100, 예측값_분류 = 0

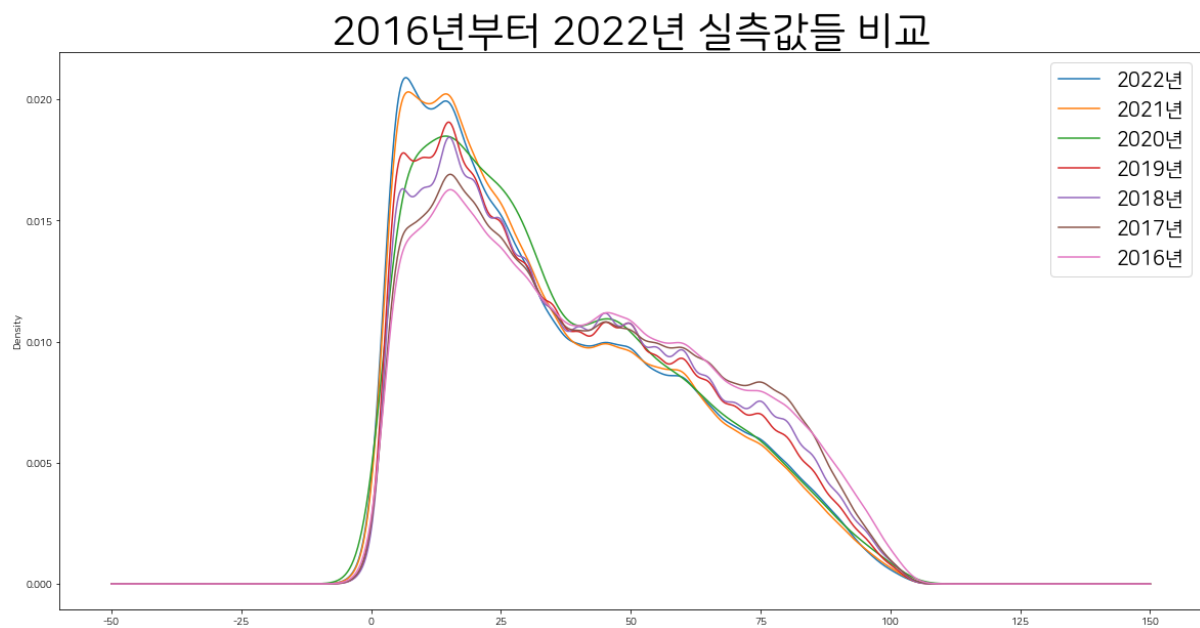
⇒ 실제로는 체지방률이 엄청 낮은데, 예측으로는 체지방률이 엄청 높을 것이라고 예측한 경우

⇒ 실측값_분류 - 예측값_분류 = 100

실측값_분류 = 0, 예측값_분류 = 100

⇒ 실제로는 체지방률이 엄청 높은데, 예측으로는 체지방률이 엄청 낮을 것이라고 예측한 경우

⇒ 실측값_분류 - 예측값_분류 = -100



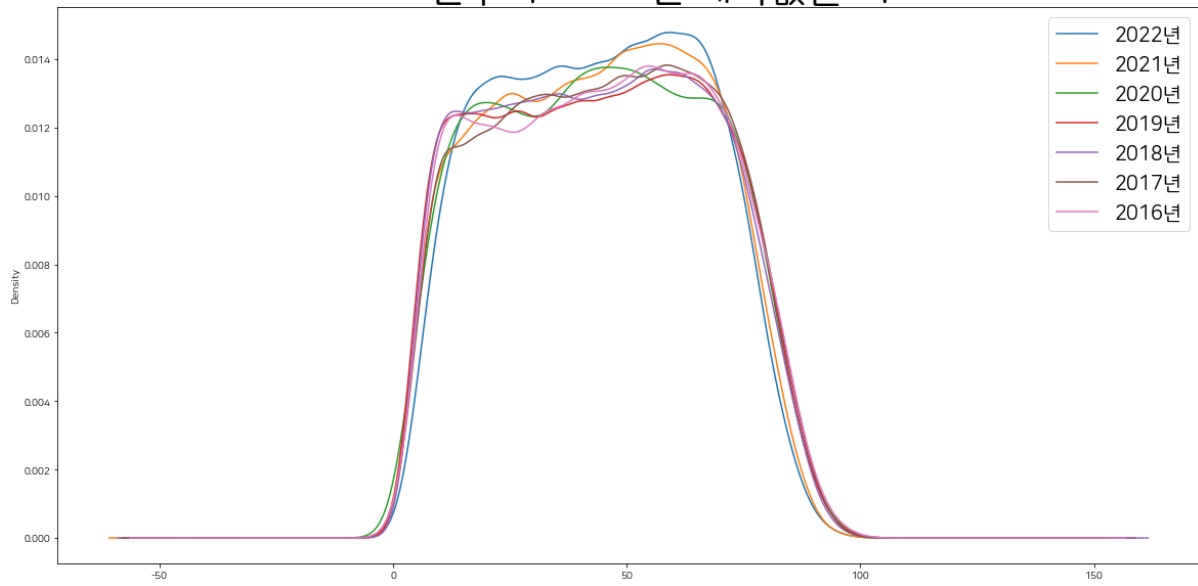
[실제]

0에 가까울수록 건강이 안 좋음 (2022 > 2021 > 2019 > 2018 > 2020 > 2017 > 2016)

100에 가까울수록 매우 건강 (2016 > 2017 > 2018 > 2019 > 2020 > 2021 > 2022)

→ 2015년도로 2016~2022년을 예측했기 때문에 훈련 년도와 가까울수록 예측을 잘하는 듯

2016년부터 2022년 예측값들 비교

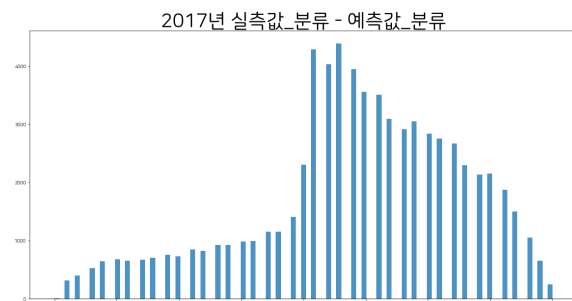
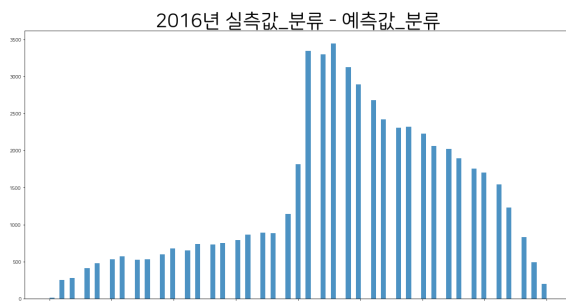


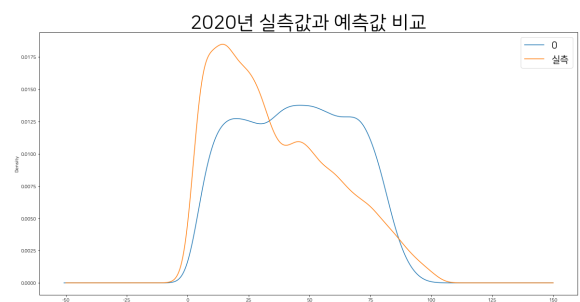
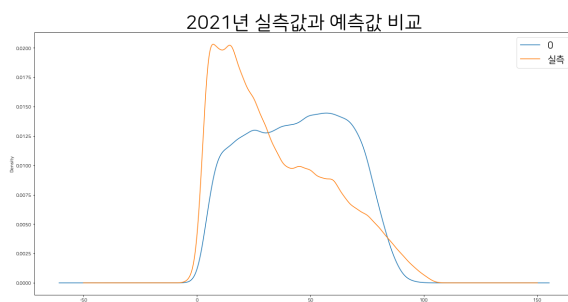
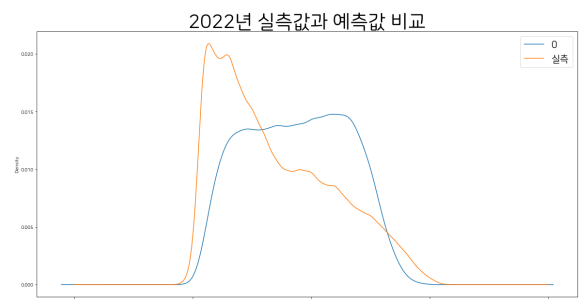
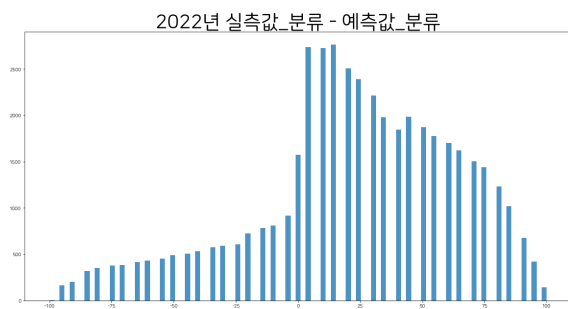
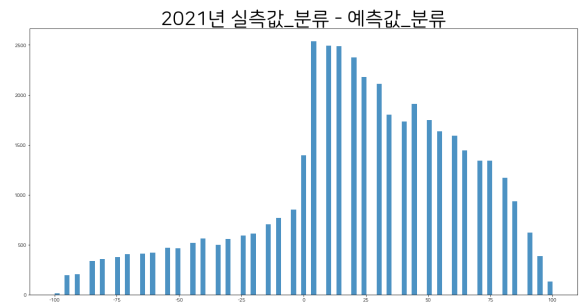
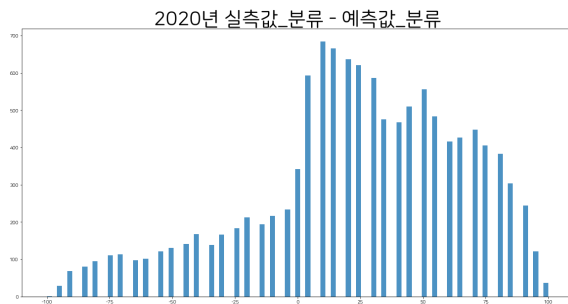
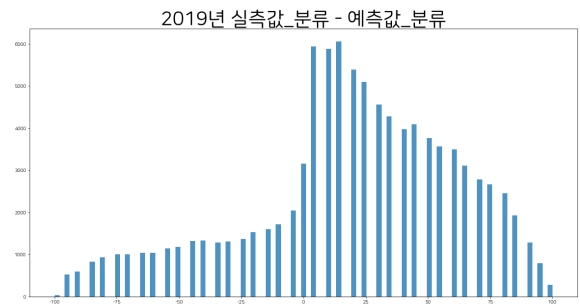
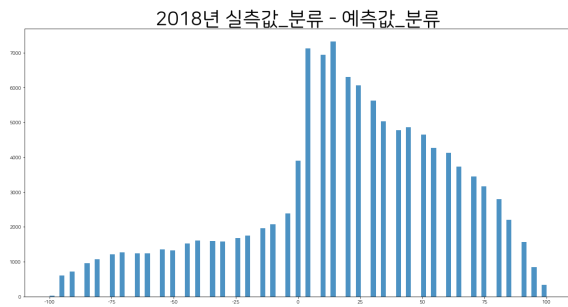
[예측]

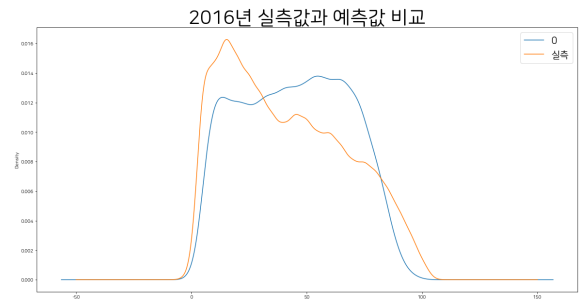
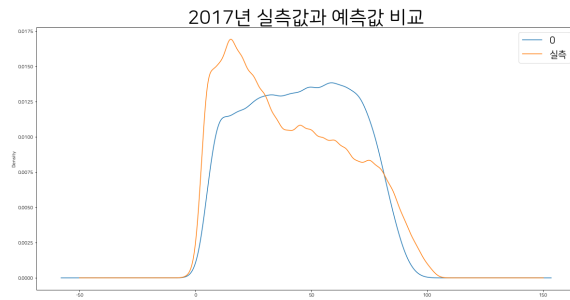
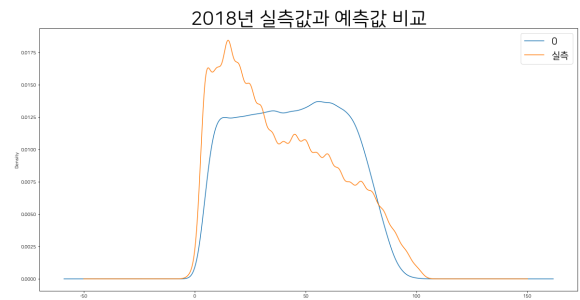
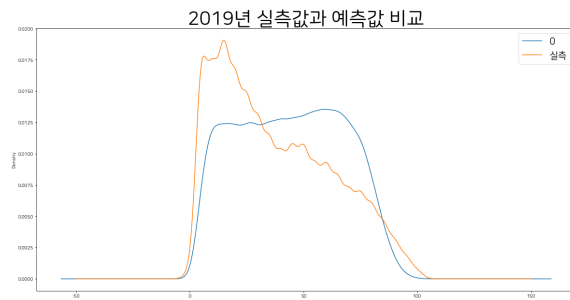
0에 가까울수록 건강이 안 좋음 (2022> 2021> 2019> 2018> 2020> 2017> 2016)

100에 가까울수록 매우 건강 (2016> 2017> 2018> 2019> 2020> 2021> 2022)

2022년이 제일 건강하지 않음.



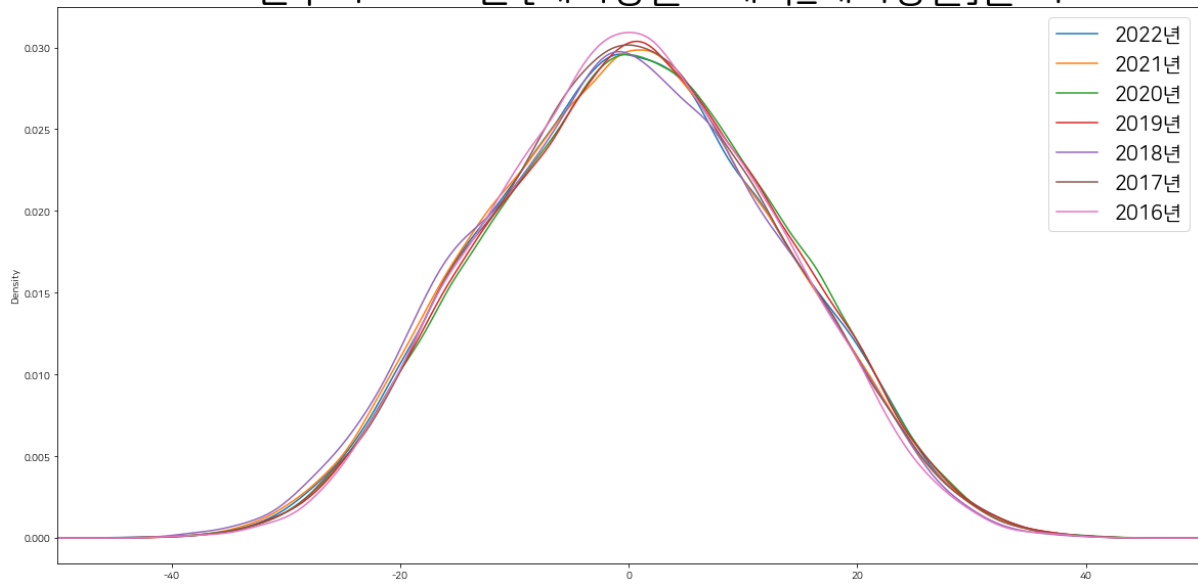




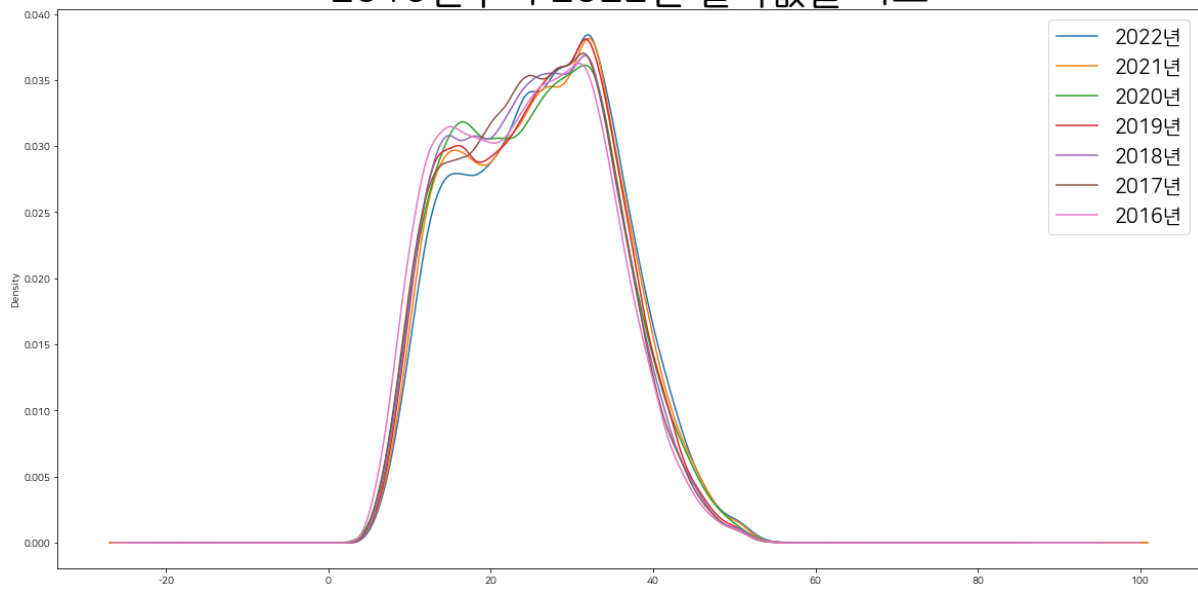
● Target: 체지방율

	MAE	MSE	RMSE	R2
train	2.345369	9.384955	3.063487	0.894606
valid	2.833790	13.837541	3.719885	0.849715
2016.0	3.041089	15.964641	3.995578	0.822988
2017.0	3.179791	16.749118	4.092569	0.807426
2018.0	3.207243	17.001303	4.123264	0.806173
2019.0	3.145394	15.993939	3.999242	0.821268
2020.0	3.277561	17.173468	4.144088	0.812642
2021.0	3.559525	19.689120	4.437242	0.785491
2022.0	3.805531	22.097433	4.700791	0.756600

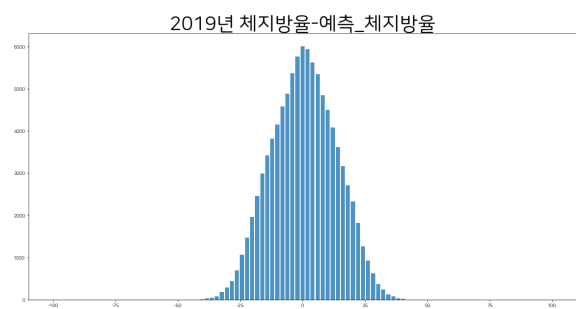
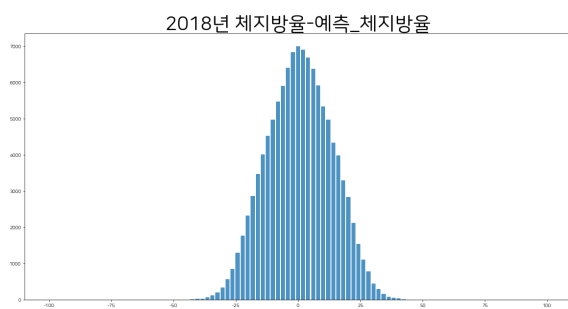
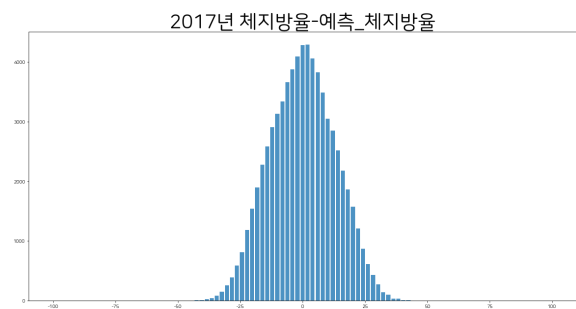
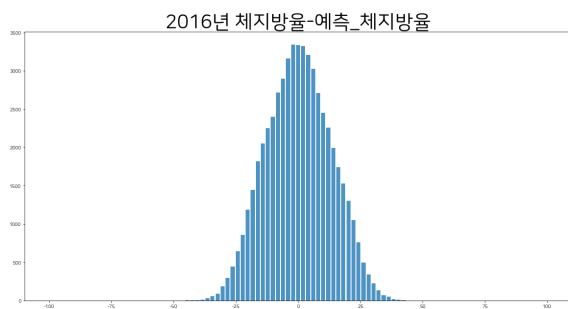
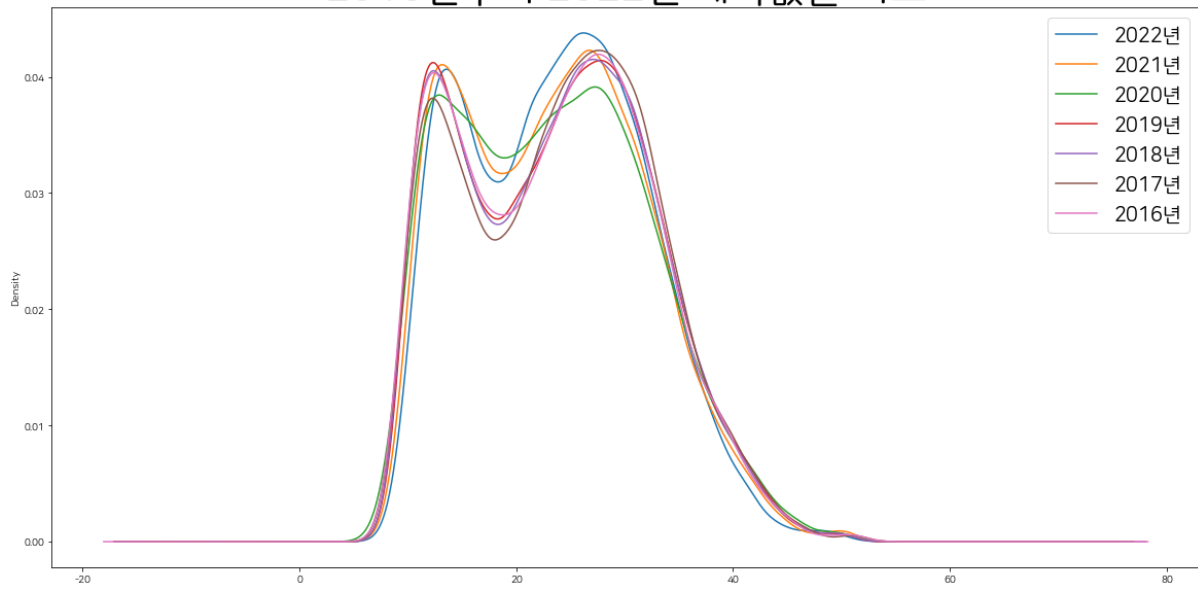
2016년부터 2022년 [체지방율 - 예측_체지방율]들 비교

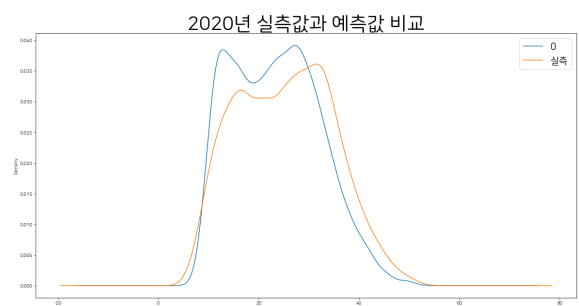
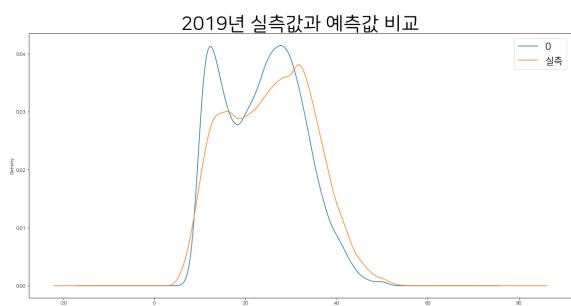
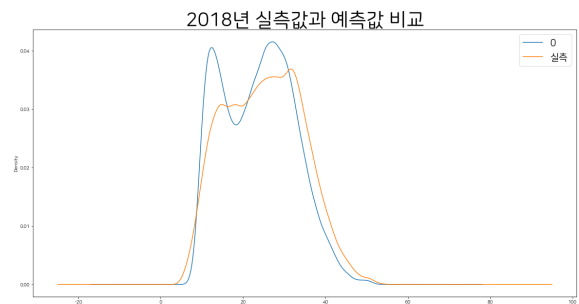
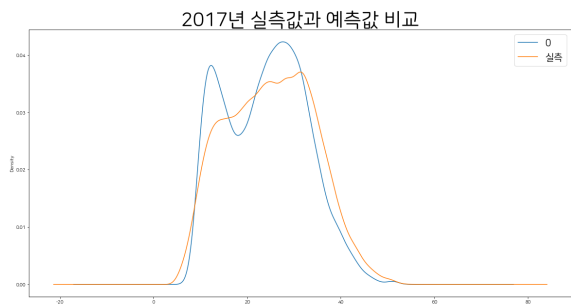
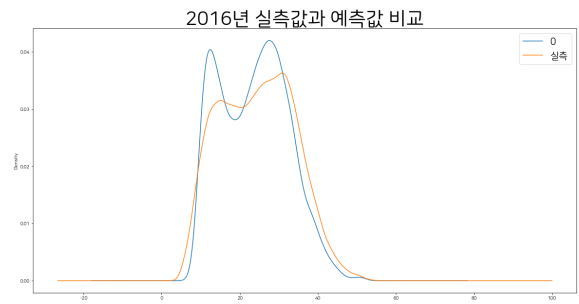
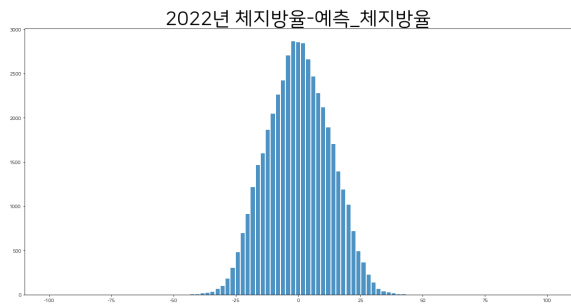
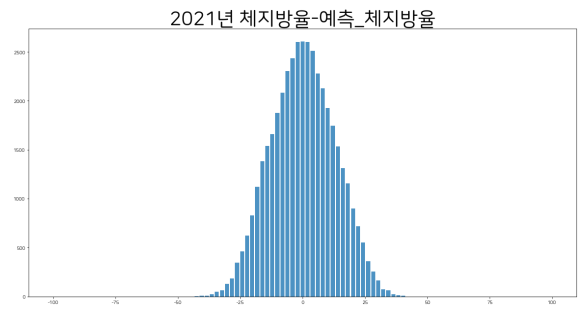
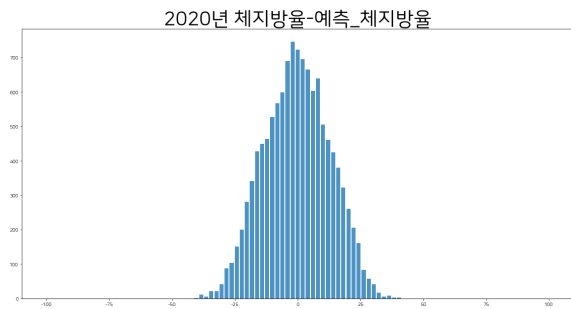


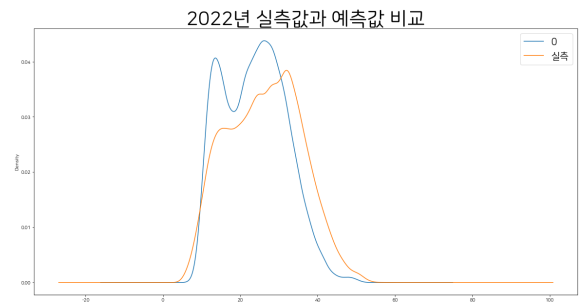
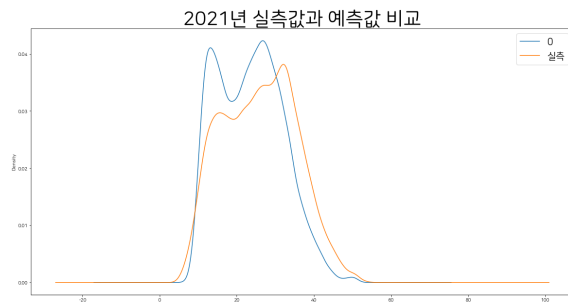
2016년부터 2022년 실측값들 비교



2016년부터 2022년 예측값들 비교

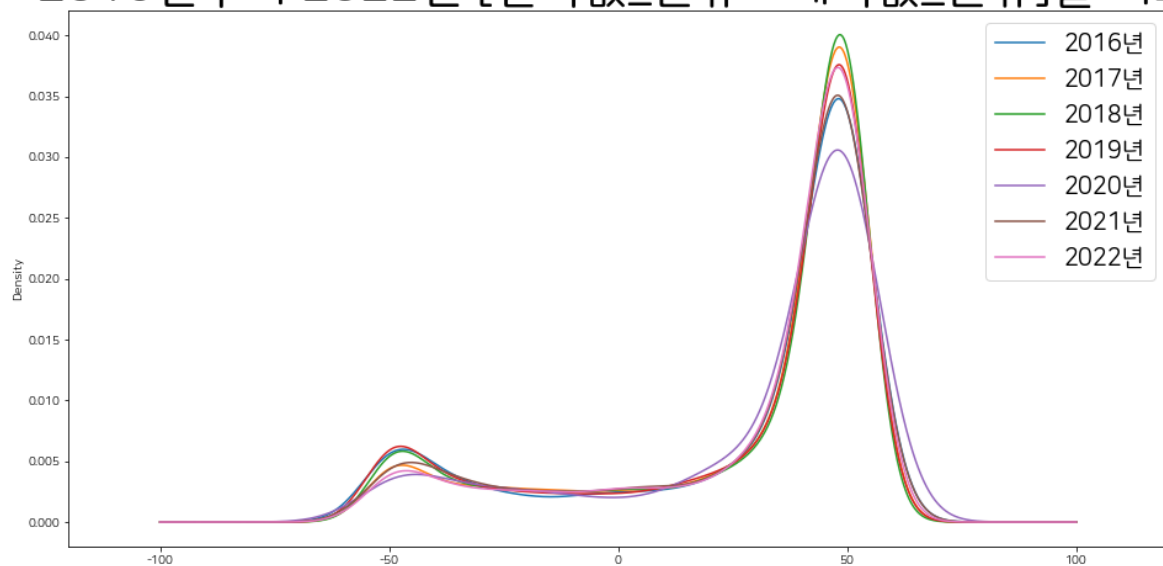






- 특정 값(여기서는 50)에 대한 분류차이의 연도별 그래프
- `(temp[['분류차이']].loc[temp['분류'] == 50))['분류차이']`

2016년부터 2022년 [실측값_분류 - 예측값_분류]들 비교



- 2015 ~ 2019년도 훈련 모델을 바탕으로 실제 분류값과 예측된 분류값의 차이 비교 가능

	MAE	MSE	RMSE	R2
train	2.630803	11.890364	3.448241	0.865862
valid	2.683767	12.450026	3.528459	0.860952
2020.0	2.808874	13.058647	3.613675	0.857534
2021.0	3.053127	14.955285	3.867206	0.837065
2022.0	3.256290	16.812319	4.100283	0.814815

→ 코로나 이후 예측 결과가 가장 좋음.

