

```
All: 31719    , ETG: 9723    , LTG: 21996
Result of ETG:
Prediction in test      set: R2: 0.9778    , MAE: 0.0594    , MSE: 0.0061    , R2: 0.9889
Prediction in training set: R2: 0.9799    , MAE: 0.0567    , MSE: 0.0055    , R2: 0.9899

Result of LTG:
Prediction in test      set: R2: 0.9619    , MAE: 0.0559    , MSE: 0.0052    , R2: 0.9810
Prediction in training set: R2: 0.9631    , MAE: 0.0549    , MSE: 0.0050    , R2: 0.9815

Result of TNG:
Prediction in test      set: R2: 0.9603    , MAE: 0.0648    , MSE: 0.0070    , R2: 0.9800
Prediction in training set: R2: 0.9627    , MAE: 0.0639    , MSE: 0.0067    , R2: 0.9813
```

Z=0.0

Soften radius=0.74

```
All: 33768    , ETG: 8927    , LTG: 24841
Result of ETG:
Prediction in test      set: R2: 0.9788    , MAE: 0.0583    , MSE: 0.0057    , R2: 0.9894
Prediction in training set: R2: 0.9793    , MAE: 0.0575    , MSE: 0.0056    , R2: 0.9897

Result of LTG:
Prediction in test      set: R2: 0.9630    , MAE: 0.0577    , MSE: 0.0056    , R2: 0.9815
Prediction in training set: R2: 0.9615    , MAE: 0.0575    , MSE: 0.0055    , R2: 0.9808

Result of TNG:
Prediction in test      set: R2: 0.9581    , MAE: 0.0677    , MSE: 0.0075    , R2: 0.9789
Prediction in training set: R2: 0.9590    , MAE: 0.0665    , MSE: 0.0073    , R2: 0.9794
```

Z=0.1

```
All: 19284 , ETG: 6937 , LTG: 12347
Result of ETG:
Prediction in test set: R2: 0.9858 , MAE: 0.0506 , MSE: 0.0045 , pho: 0.9930
Prediction in training set: R2: 0.9878 , MAE: 0.0479 , MSE: 0.0039 , pho: 0.9939

Result of LTG:
Prediction in test set: R2: 0.9706 , MAE: 0.0496 , MSE: 0.0040 , pho: 0.9852
Prediction in training set: R2: 0.9693 , MAE: 0.0502 , MSE: 0.0041 , pho: 0.9847

Result of TNG:
Prediction in test set: R2: 0.9704 , MAE: 0.0616 , MSE: 0.0063 , pho: 0.9852
Prediction in training set: R2: 0.9725 , MAE: 0.0580 , MSE: 0.0055 , pho: 0.9862
```

Z=0.0

Soften radius=1

```
All: 22018 , ETG: 6862 , LTG: 15156
Result of ETG:
Prediction in test set: R2: 0.9832 , MAE: 0.0523 , MSE: 0.0045 , pho: 0.9916
Prediction in training set: R2: 0.9864 , MAE: 0.0499 , MSE: 0.0043 , pho: 0.9932

Result of LTG:
Prediction in test set: R2: 0.9614 , MAE: 0.0566 , MSE: 0.0057 , pho: 0.9809
Prediction in training set: R2: 0.9672 , MAE: 0.0529 , MSE: 0.0046 , pho: 0.9836

Result of TNG:
Prediction in test set: R2: 0.9686 , MAE: 0.0605 , MSE: 0.0062 , pho: 0.9843
Prediction in training set: R2: 0.9704 , MAE: 0.0590 , MSE: 0.0057 , pho: 0.9852
```

Z=0.1

```
All: 58268 , ETG: 29803 , LTG: 28465
Result of ETG:
Prediction in test set: R2: 0.9820 , MAE: 0.0519 , MSE: 0.0045 , pho: 0.9910
Prediction in training set: R2: 0.9821 , MAE: 0.0511 , MSE: 0.0045 , pho: 0.9910

Result of LTG:
Prediction in test set: R2: 0.9104 , MAE: 0.0515 , MSE: 0.0043 , pho: 0.9544
Prediction in training set: R2: 0.9156 , MAE: 0.0508 , MSE: 0.0042 , pho: 0.9571

Result of TNG:
Prediction in test set: R2: 0.9717 , MAE: 0.0582 , MSE: 0.0055 , pho: 0.9857
Prediction in training set: R2: 0.9720 , MAE: 0.0569 , MSE: 0.0054 , pho: 0.9859
```

Criterion='MSE', 30s

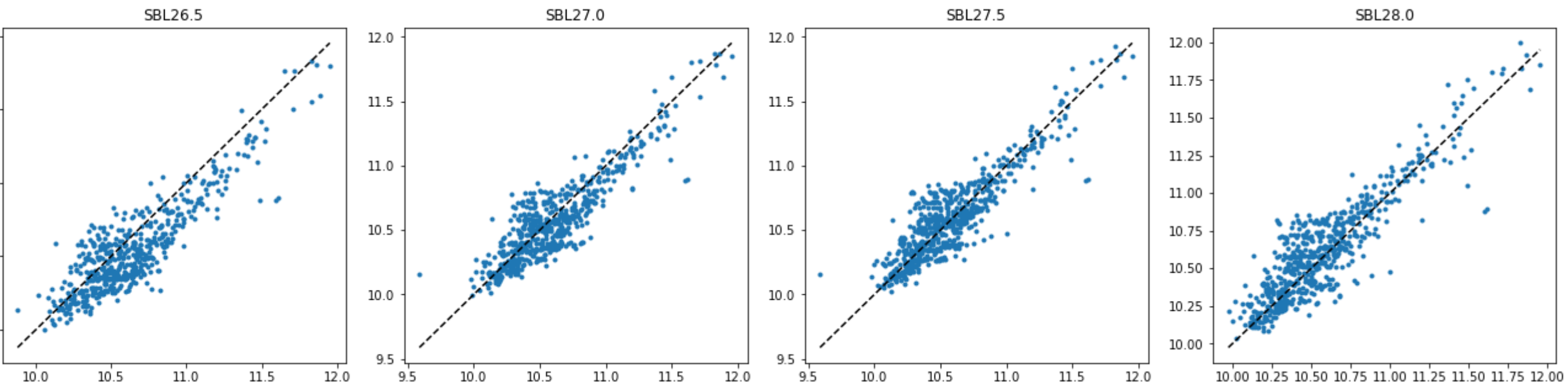
TNG300 redshift=0

```
All: 58268 , ETG: 29803 , LTG: 28465
Result of ETG:
Prediction in test set: R2: 0.9815 , MAE: 0.0507 , MSE: 0.0046 , pho: 0.9909
Prediction in training set: R2: 0.9810 , MAE: 0.0499 , MSE: 0.0048 , pho: 0.9906

Result of LTG:
Prediction in test set: R2: 0.9136 , MAE: 0.0500 , MSE: 0.0042 , pho: 0.9562
Prediction in training set: R2: 0.9147 , MAE: 0.0500 , MSE: 0.0042 , pho: 0.9571

Result of TNG:
Prediction in test set: R2: 0.9712 , MAE: 0.0576 , MSE: 0.0056 , pho: 0.9856
Prediction in training set: R2: 0.9712 , MAE: 0.0562 , MSE: 0.0055 , pho: 0.9856
```

Criterion='MAE', 20min



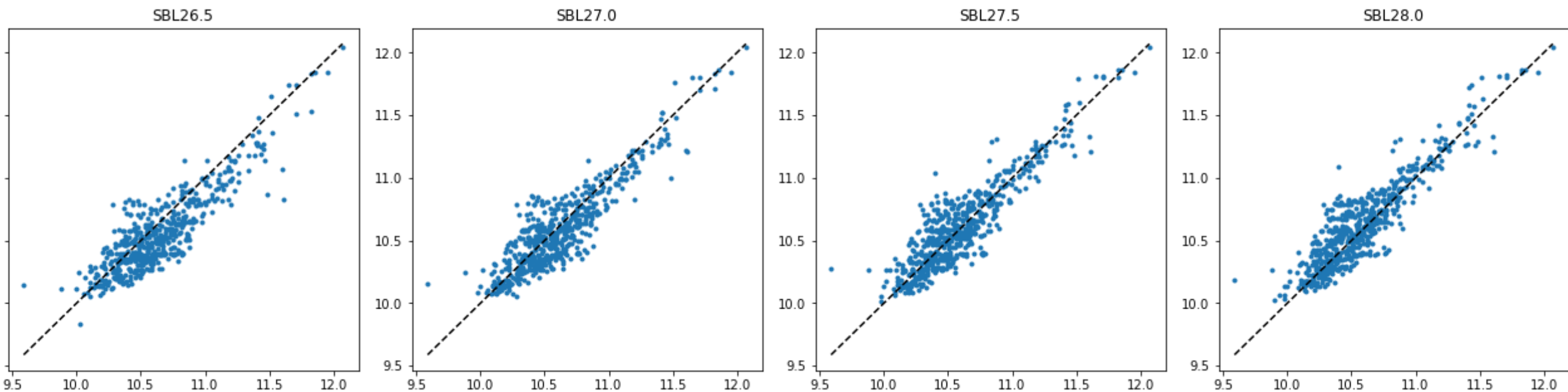
Proj=0

MAE: 0.1534, MSE: 0.0346, R2: 0.7063

MAE: 0.1253, MSE: 0.0261, R2: 0.7806

MAE: 0.1166, MSE: 0.0242, R2: 0.7938

MAE: 0.1212, MSE: 0.0260, R2: 0.7725



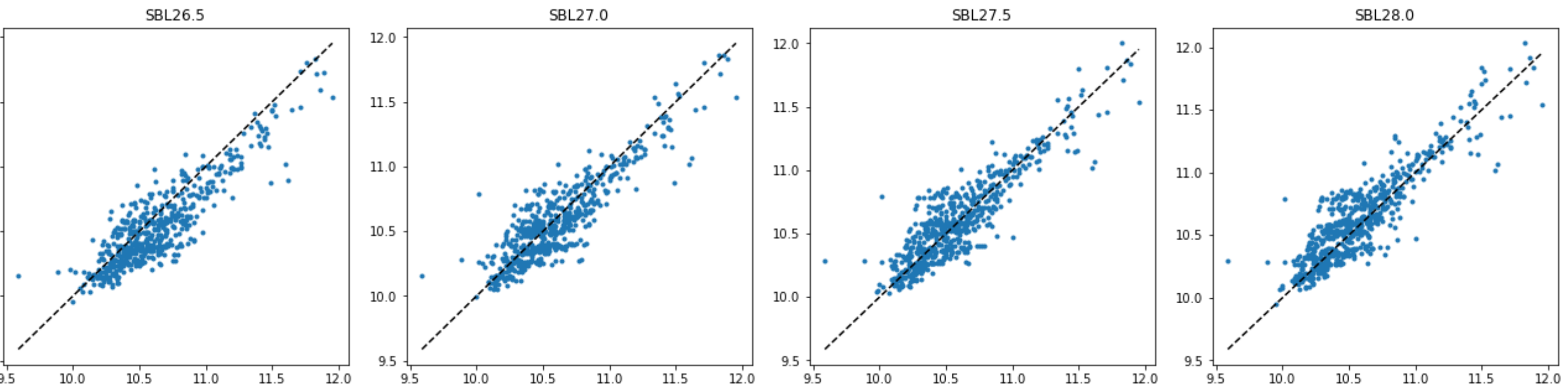
Proj=1

MAE: 0.1508, MSE: 0.0346, R2: 0.7087

MAE: 0.1225, MSE: 0.0247, R2: 0.7919

MAE: 0.1169, MSE: 0.0237, R2: 0.7986

MAE: 0.1188, MSE: 0.0251, R2: 0.7859



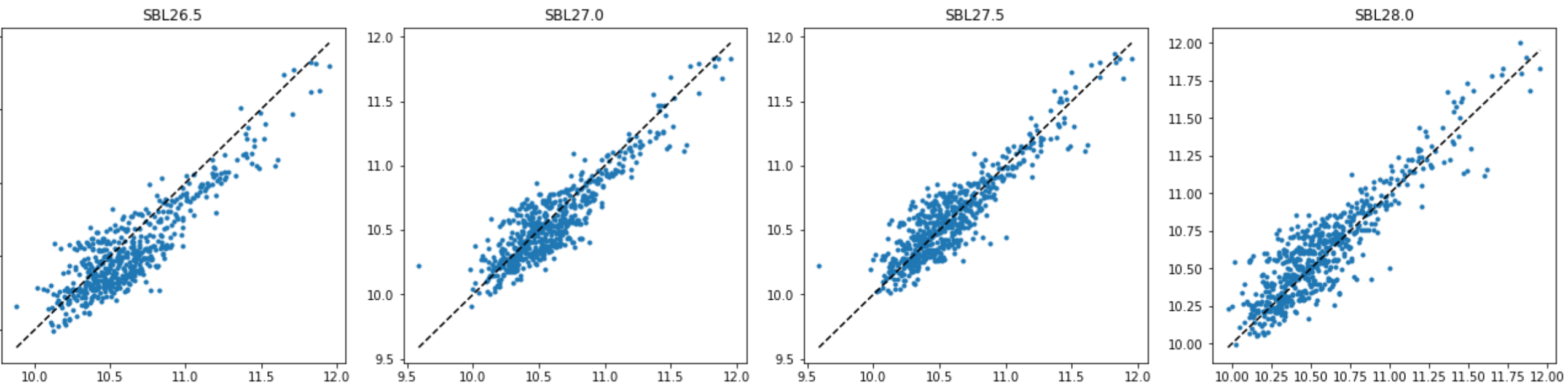
Proj=2

MAE: 0.1528, MSE: 0.0355, R2: 0.7114

MAE: 0.1263, MSE: 0.0266, R2: 0.7778

MAE: 0.1222, MSE: 0.0263, R2: 0.7761

MAE: 0.1282, MSE: 0.0293, R2: 0.7515



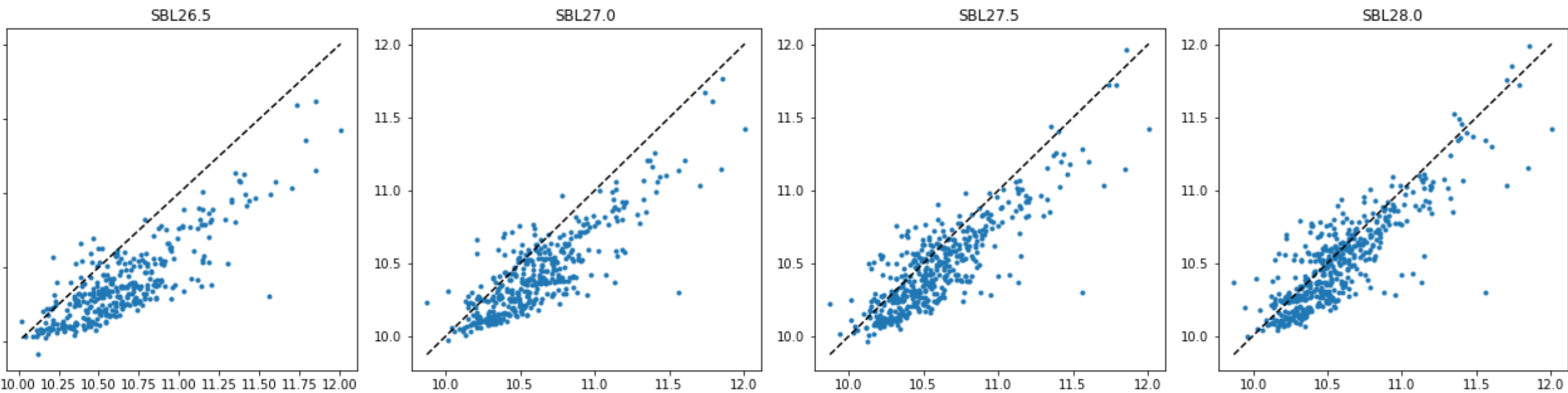
Proj=0, training stellar mass >10

MAE: 0.1518, MSE: 0.0330, R2: 0.7195

MAE: 0.1236, MSE: 0.0245, R2: 0.7940

MAE: 0.1157, MSE: 0.0227, R2: 0.8059

MAE: 0.1215, MSE: 0.0247, R2: 0.7838



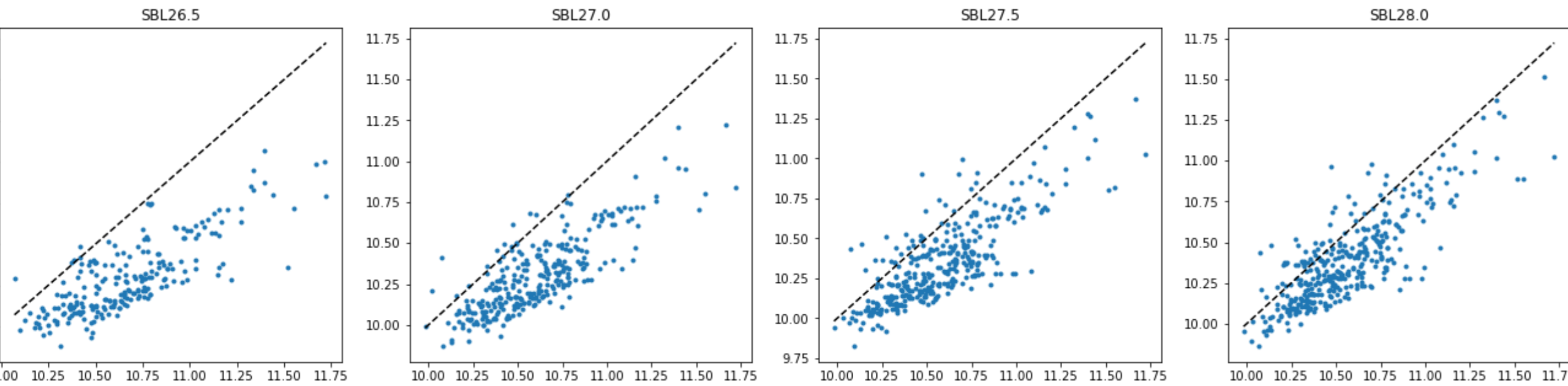
Proj=0, training stellar mass >10
Z=0.3

MAE: 0.2769, MSE: 0.1058, R2: 0.1176

MAE: 0.2143, MSE: 0.0687, R2: 0.4110

MAE: 0.1717, MSE: 0.0484, R2: 0.5860

MAE: 0.1448, MSE: 0.0388, R2: 0.6619



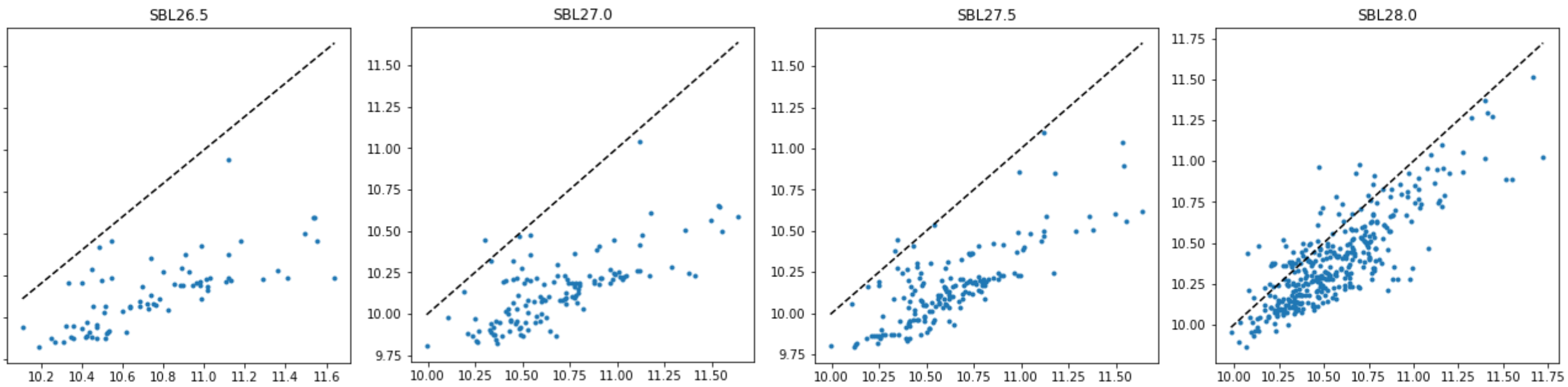
Proj=0, training stellar mass >10
Z=0.5

MAE: 0.3801, MSE: 0.1802, R2: -0.7848

MAE: 0.3077, MSE: 0.1202, R2: -0.3592

MAE: 0.2484, MSE: 0.0828, R2: 0.0709

MAE: 0.2008, MSE: 0.0579, R2: 0.3405



Proj=0, training stellar mass >10
Z=1.0

MAE: 0.6132, MSE: 0.4402, R2: -2.4586

MAE: 0.5488, MSE: 0.3527, R2: -2.2861

MAE: 0.4691, MSE: 0.2552, R2: -1.7535

MAE: 0.2008, MSE: 0.0579, R2: 0.3405

