Table 1: Detection results on the `test` split of nuScenes. "TTA" means test-time augmentation.

Model	Ref	mAP	NDS
CBGS [79]	arXiv 2019	52.8	63.3
CenterPoint [69]	CVPR 2021	58.0	65.5
HotSpotNet [5]	ECCV 2020	59.3	66.0
Object DGCNN [55]	NeurIPS 2021	58.7	66.1
AFDetV2 [23]	AAAI 2022	62.4	68.5
Focals Conv [9]	CVPR 2022	63.8	70.0
TransFusion-L [1]	CVPR 2022	65.5	70.2
LargeKernel3D [10]	CVPR 2023	65.3	70.5
SphereFormer [66]	CVPR 2023	65.5	70.7
LidarMultiNet [66]	AAAI 2023	67.0	71.6
MDRNet-TTA [24]	arXiv 2022	67.2	72.0
LargeKernel3D-TTA [10]	CVPR 2023	68.8	72.8
FocalFormer3D-TTA [11]	ICCV 2023	70.5	73.9
LiDARFormer		68.9	72.4
LiDARFormer-TTA		**71.5**	**74.3**

Table 2: Segmentation results on the `test` split of nuScenes.

Model	Ref	mIoU
PolarNet [74]	CVPR 2020	69.8
PolarStream [6]	NeurIPS 2021	73.4
JS3C-Net [62]	AAAI 2021	73.6
Cylinder3D [81]	CVPR 2021	77.2
AMVNet [33]	arXiv 2020	77.3
SPVNAS [48]	ECCV 2020	77.4
Cylinder3D++ [81]	CVPR 2021	77.9
AF2S3Net [13]	CVPR 2021	78.3
GASN [67]	ECCV 2022	80.4
SPVCNN++ [48]	ECCV 2020	81.1
LidarMultiNet [66]	AAAI 2023	81.4
LiDARFormer		81.0
LiDARFormer-TTA		**81.5**

Table 3: Results on the `val` split of nuScenes. *: Reported by [81].

Model	mIoU	mAP	NDS
RangeNet++ [38]	65.5*	-	-
PolarNet [74]	71.0*	-	-
SalsaNext [15]	72.2*	-	-
AMVNet [33]	77.2	-	-
Cylinder3D [81]	76.1	-	-
RPVNet [60]	77.6	-	-
SphereFormer [26]	78.4		
CBGS [79]	-	51.4	62.6
CenterPoint [69]	-	57.4	65.2
TransFusion-L [1]	-	60.0	66.8
BEVFusion-L [34]	-	64.7	69.3
LidarMultiNet [66]	82.0	63.8	69.5
LiDARFormer seg only	81.7	-	-
LiDARFormer	**82.7**	**66.6**	**70.8**

Table 4: Detection L2 mAPH results on the `test` split of WOD. "L" and "CL" denote LiDAR-only and camera & LiDAR fusion methods. Second best results are underlined.

Model	Ref	Modal	Frame	Veh.	Ped.	Cyc.	Mean
M3DETR [21]	WACV 2022	L	1	70.0	52.0	63.8	61.9
PV-RCNN++ [45]	arXiv 2022	L	1	73.5	69.0	68.2	70.2
CenterPoint++ [69]	CVPR 2021	L	3	75.1	72.4	71.0	72.8
SST_3f [17]	CVPR 2022	L	3	72.7	73.5	72.2	72.8
AFDetV2 [23]	AAAI 2022	L	2	73.9	72.4	73.0	73.1
DeepFusion [31]	CVPR 2022	CL	5	75.7	76.4	74.5	75.5
MPPNet [7]	ECCV 2022	L	16	76.9	75.9	74.2	75.7
CenterFormer [78]	ECCV 2022	L	16	**78.3**	**77.4**	73.2	<u>76.3</u>
BEVFusion [34]	ICRA 2023	CL	3	<u>77.5</u>	76.4	**75.1**	<u>76.3</u>
LiDARFormer		L	3	<u>77.5</u>	<u>77.2</u>	<u>74.6</u>	**76.4**

Table 5: Results on `val` split of WOD. *: From our reproduction.

Model	Ref	Frame	mIoU	L2 mAPH
PolarNet [74]	CVPR 2020	1	61.6*	-
Cylinder3D [81]	CVPR 2021	1	66.6*	-
SphereFormer [26]	CVPR 2023	-	69.9	-
PV-RCNN++ [45]	IJCV 2022	1	-	68.6
AFDetV2-Lite [23]	AAAI 2022	1	-	68.8
CenterPoint++ [69]	CVPR 2021	3	-	71.6
FlatFormer [35]	CVPR 2023	3	-	72.0
SST [17]	CVPR 2022	3	-	72.4
DSVT [52]	CVPR 2023	3	-	75.5
CenterFormer [78]	ECCV 2022	8	-	73.7
MPPNet [7]	ECCV 2022	16	-	74.9
LidarMultiNet [66]	AAAI 2023	3	71.9	75.2
LiDARFormer seg only	-	3	71.3	-
LiDARFormer	-	3	**72.2**	**76.2**