Emb.	Method	BLEU1	METEOR	ROUGE	CIDEr
Tag	AtM	22.4	8.6	22.5	20.8
Tag	$_{ m HM}$	24.4	10.8	24.3	55.0
Tag	AM	24.4	10.6	23.9	49.4
Tag	$_{ m JM}$	22.2	10.5	22.8	50.1
PlaceCNN	AtM	24.4	10.3	24.0	51.8
PlaceCNN	$_{ m HM}$	24.0	10.4	24.3	49.8
PlaceCNN	AM	24.1	10.6	24.3	51.5
PlaceCNN	$_{ m JM}$	25.7	10.8	24.5	56.1
Diff. Img	AtM	20.5	8.5	24.4	19.2
Diff. Img	$_{ m HM}$	23.6	8.6	22.3	22.0
Diff. Img	AM	20.6	8.5	24.4	19.2
Diff. Img	$_{ m JM}$	30.4	11.7	22.3	22.8
MDN	AtM	22.4	8.8	24.6	22.4
MDN	$_{ m HM}$	26.6	12.8	30.1	31.4
MDN	AM	29.6	15.4	32.8	41.6
MDN (Ours)	$_{ m JM}$	36.0	23.4	41.8	50.7