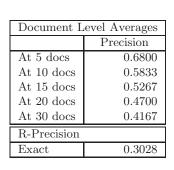
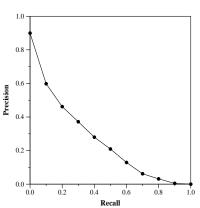
## Run Description

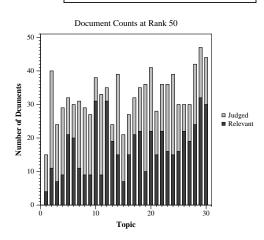
An unsupervised reciprocal rank fusion (Cormack et al., 2009) of 5 runs: - bag-of-words queries - sequential dependence queries - bag-of-words questions - sequential dependence questions - a weighted combination of queries and question n-grams extracted using universal sentence encoders (Cer et al., 2018)

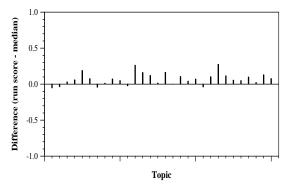
Summary Statistics	S
Run ID	UP-rrf5rnd1
Topic type	automatic
Contributed to judgment sets?	yes

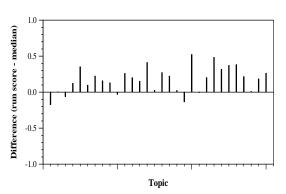
Overall measures	
Number of topics	30
Total number retrieved	26118
Total relevant	2352
Total relevant retrieved	1510
MAP	0.2470
Mean Bpref	0.3983
Mean NDCG@10	0.5316





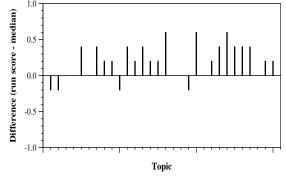






Per-topic difference from median bpref for all Round 1 runs

Per-topic difference from median NDCG@10 for all Round 1 runs



Per-topic difference from median P@5 for all Round 1 runs