Broadcast stage(end_node_id 21): date_dim,10000FileScan->Filter->Project->BroadcastExchange Broadcast stage(end_node_id 15): item, 10000FileScan->Filter->Project->BroadcastExchange First stage (end node id 7): File Scan store sales, 12173.9FileScan->Filter->BroadcastHashJoin->Project->BroadcastHashJoin->Project->BroadcastHashJoin->Project->HashAggregate->ExchangeHashpartitioning NormalStage (end node id 5): length of beginNodesToChains is 1 [1,0,0,1,0,0,0,0]Chain 0 is : HashAggregate(keys=[i_manufact_id#15, d_qoy#57], functions=[sum(ss_sales_price#37)]) HashAggregate->ExchangeHashpartitioning NormalStage (end node id 0): length of beginNodesToChains is 1 [1,0,1,0,1,0,1,0] Chain 0 is: Sort [i manufact id#15 ASC NULLS FIRST], false, 0 Sort->Empty->Filter->Project->TakeOrderedAndProject

Broadcast stage(end_node_id 25): store,10000FileScan->Filter->BroadcastExchange