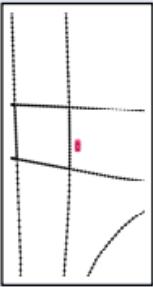
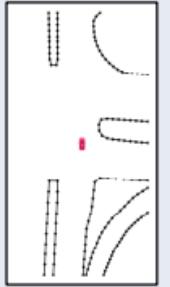
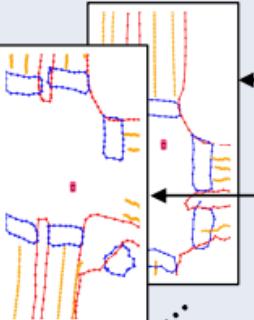
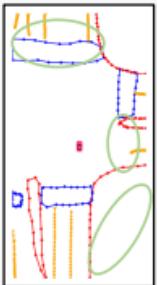
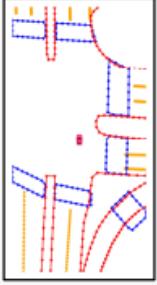
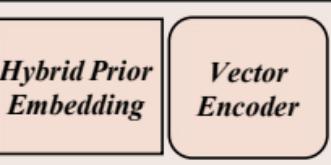
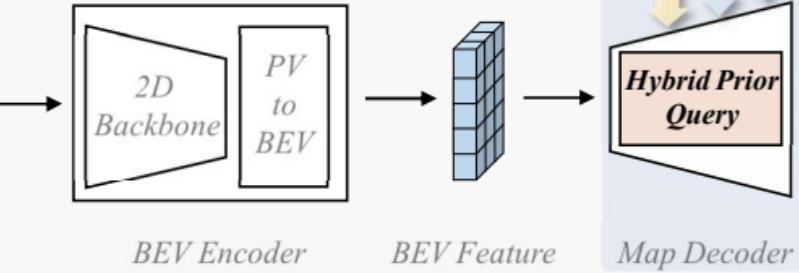


**SD Map****Offline HD Map****Online Local Maps**

History in Sunny ☀

**With Local Prior****w/o Prior****With HD Prior****GT****Unified Vector Encoder****Vectorized Prior Maps**

$Vector_i: (x_1^1, y_1^1, vx_1^1, vy_1^1, c_1), (x_1^2, y_1^2, vx_1^2, vy_1^2, c_1) \dots$   
 $Vector_2: (x_2^1, y_2^1, vx_2^1, vy_2^1, c_2), (x_2^2, y_2^2, vx_2^2, vy_2^2, c_2) \dots$   
 $\dots$

**Current On-board Sensors in Rainy** ⚡**BEV Encoder****BEV Feature****Map Decoder****Online Local Map Prior****Offline HD Map Prior****SD Map Prior**