Point Location

Slab Method

- Storage Cost

θ6-B-θ7

Junhui DENG

deng@tsinghua.edu.cn

❖ **Each vertex contributes only ☐1 vertical line to the decomposition**

   Therefore there are $\boxed{\mathcal{O}(n)}$ slabs

❖ **Each edge of the input subdivision**

   intersects a slab at most $\boxed{\text{once}}$

   Therefore

   - each slab is decomposed into

     $\boxed{\mathcal{O}(n)}$ trapezoids and

   - all slabs consist of $\boxed{\mathcal{O}(n^2)}$ trapezoids