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Data:  $T, \epsilon_1, \dots, \epsilon_n, M'$  /* global variables */
Result: the skypatterns in  $T$ 
 $\mathcal{S} \leftarrow \emptyset$  /* global variable */
mine( $\emptyset, \dots, \emptyset, D_1, \dots, D_n$ )
return  $\mathcal{S}$ 

Function mine( $L, U$ ):
  if  $\forall P \in \mathcal{S}$ ,
     $\exists m' \in M' \mid m'(P, P) < m'(L, U) \vee \forall m' \in M', m'(P, P) \leq m'(L, U)$ 
  then
    if  $L = U$  then
       $\mathcal{S} \leftarrow \{P \in \mathcal{S} \mid L_M P\} \cup \{L\}$ 
    else
      choose  $e \in \cup_{i=1}^n U_i \setminus L_i$ 
      /* Let  $k$  the index of the dimension  $e$  is chosen in */
      mine( $L_1, \dots, L_k \cup \{e\}, \dots, L_n, U'_1, \dots, U'_n$ )
      /* where  $\forall i \in \{1, \dots, n\}$ ,  $U'_i$  is defined as in tree */
      mine( $L_1, \dots, L_n, U_1, \dots, U_k \setminus \{e\}, \dots, U_n$ )
    end
  end

```