

## es-hist-partition<sup>0,22</sup>

$\forall ds:x:\text{Id} \text{ fp} \rightarrow \text{Type}, da:k:\text{Knd} \text{ fp} \rightarrow \text{Type}, es:\text{ES}, i:\text{Id}, e_1, e_2:\{e:\text{E} \mid \text{loc}(e) = i\}, e:\text{E}.$   
 $(\forall x:\text{Id}. \text{vartype}(i;x) \subseteq \rho \text{ } ds(x)?\text{Top})$   
 $\Rightarrow (\forall e:\text{E}. \text{loc}(e) = i \Rightarrow \text{valtype}(e) \subseteq \rho \text{ } da(\text{kind}(e))? \text{Top})$   
 $\Rightarrow (e_1 < \text{loc } e)$   
 $\Rightarrow e \leq e_2$   
 $\Rightarrow \text{es-hist}\{i:l\}(es;e_1;e_2)$   
 $=$   
 $(\text{es-hist}\{i:l\}(es;e_1;\text{pred}(e)) @ \text{es-hist}\{i:l\}(es;e;e_2))$   
 $\in \text{event-info}(ds;da) \text{ List}$