

**w-pred-null**<sup>0,22</sup>

$\forall w:\text{World}, e:\text{E}. \neg\text{first}(e) \Rightarrow (\forall t:\mathbb{N}. \text{time}(\text{pred}(e))+1 \leq t \Rightarrow t < \text{time}(e) \Rightarrow \text{isnull}(\text{a}(\text{loc}(e);t)))$