from frame prop R^*-n & R-$\leq$

$R^*(s_2, s) \Rightarrow \boxed{n(i_1) = n_2(i_1)}, \boxed{i_2 \leq_2 i_1}$

$R(s_1, s_2), \boxed{i_2 \leq_2 i_1} \Rightarrow \boxed{i_2 \leq_1 i_1}$

from acyclicity

$\boxed{i_1 <_1 i_1} \Rightarrow i_1 = \text{null}$

$R(s_1, s_2) \Rightarrow \boxed{i_2 = n_1(i_1)}$

$R(s_1, s_2), i_1 = \text{null} \Rightarrow \cdots\cdots$

$R(s_0, s_1), R(s_1, s_2) \Rightarrow \boxed{n_2(i_1) = i_0}$

$R(s_0, s_1), R(s_1, s_2), R^*(s_2, s) \Rightarrow \boxed{n(i_1) = i_0}$