







#### write\_range

```
do_PN_histo_addr <= '1';  
histo_addr_next <= to_unsigned(HISTO_BRAM_UPPER_LIMIT - 1,  
PNL_BRAM_ADDR_SIZE_NB);  
PNL_BRAM_we <= "1";  
PNL_BRAM_din <= {PNL_BRAM_DBITS_WIDTH_NB-1 downto  
HISTO_MAX_RANGE_NB => '0'} & dist_range;
```