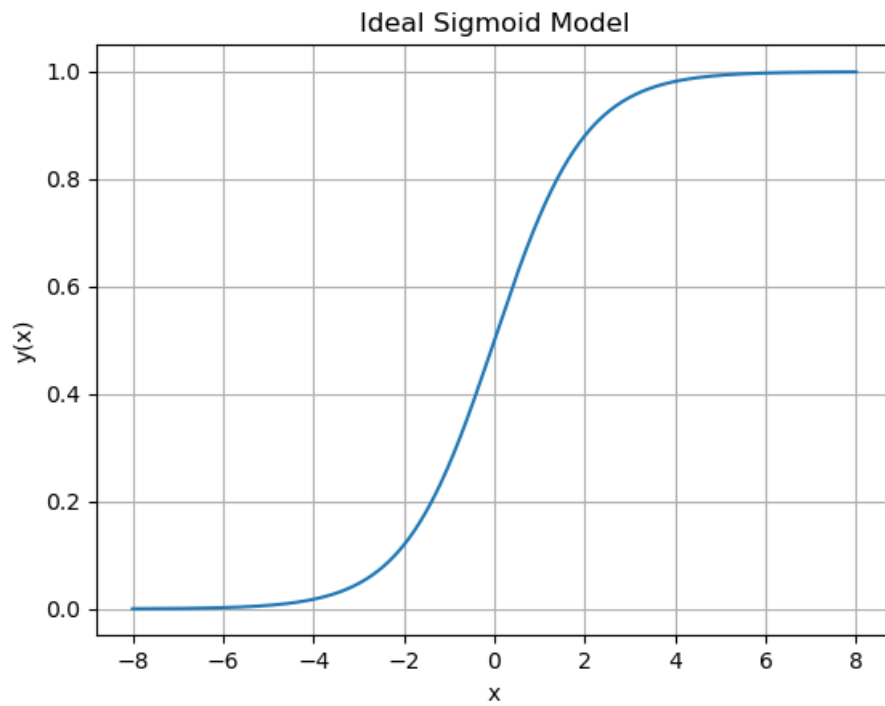
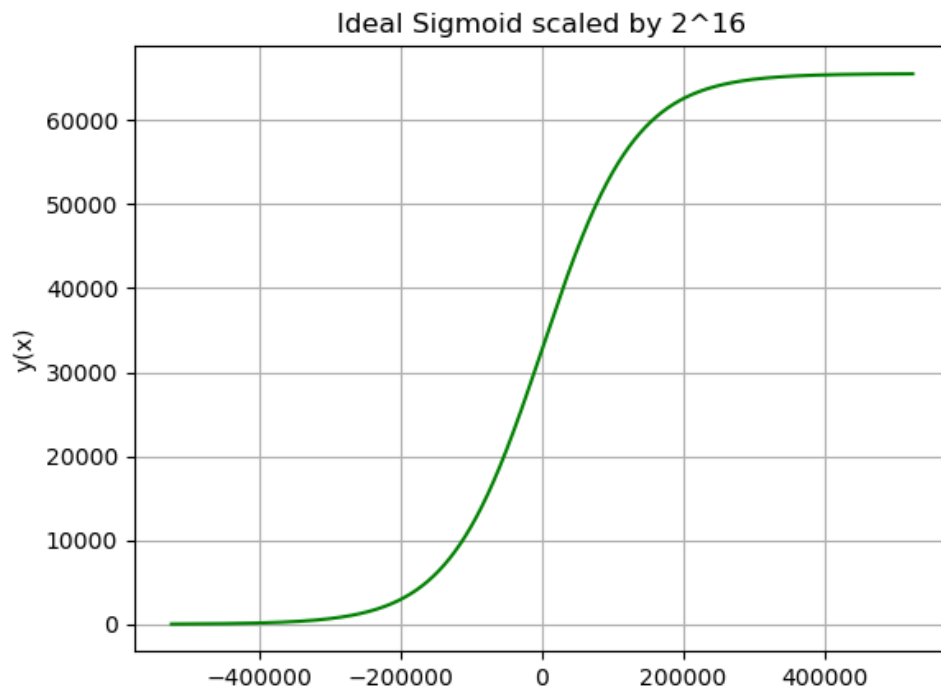


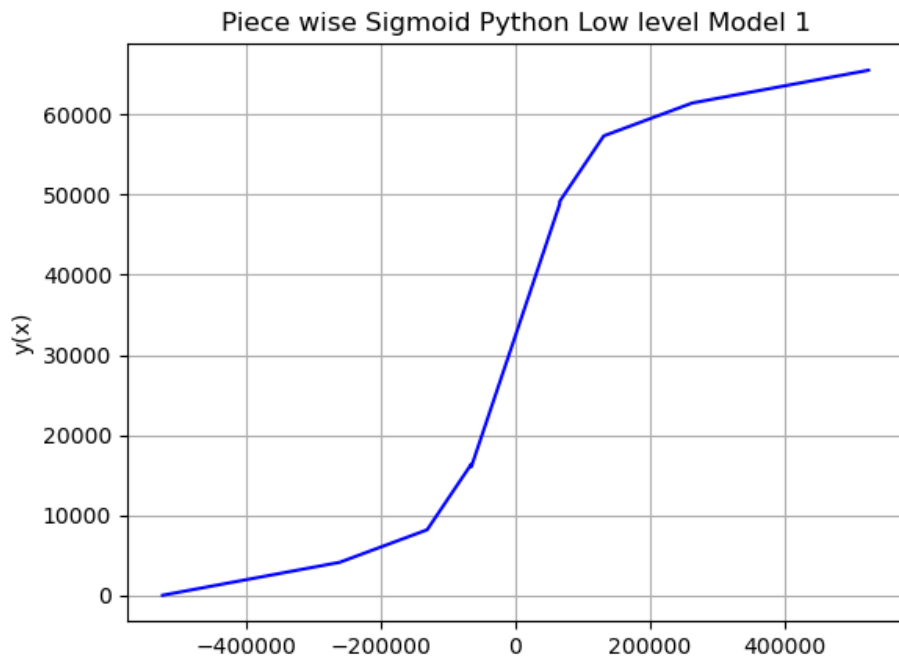
Results



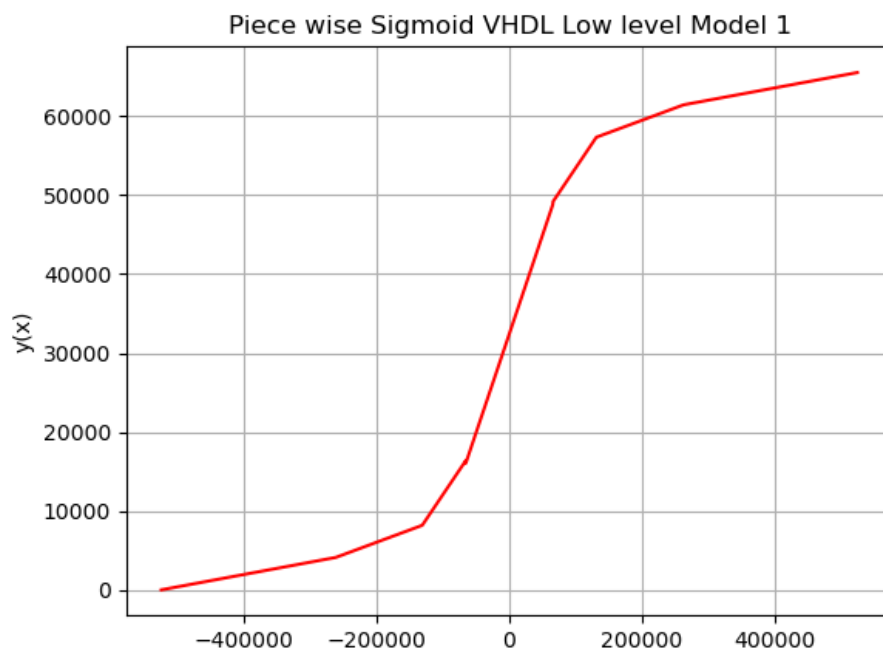
Ideal sigmoid made using high level Python functions



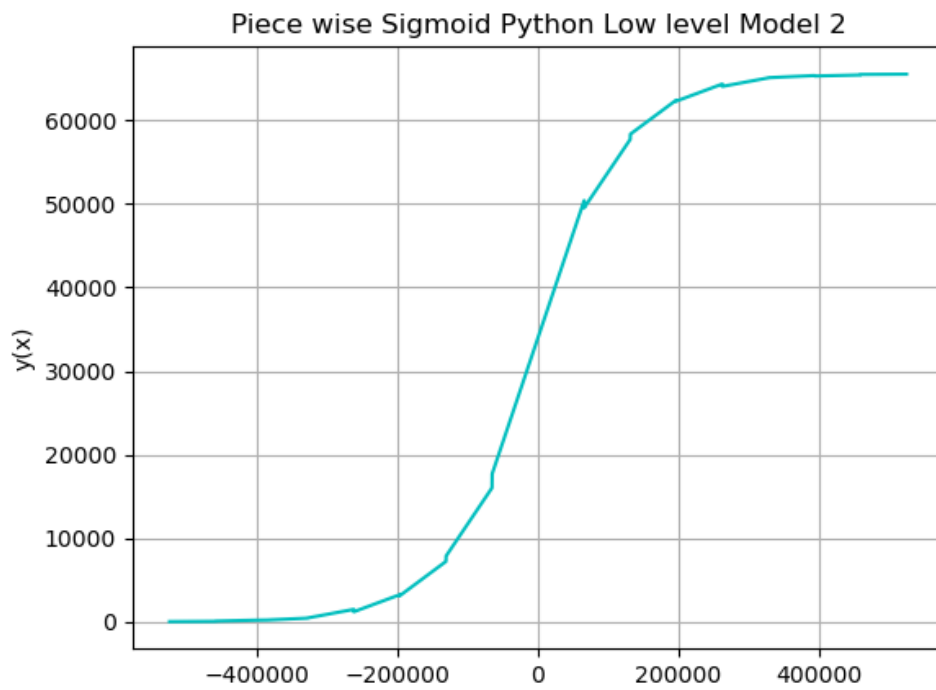
Ideal sigmoid made using high level Python functions scaled by 2^{16} to convert all values to integers.



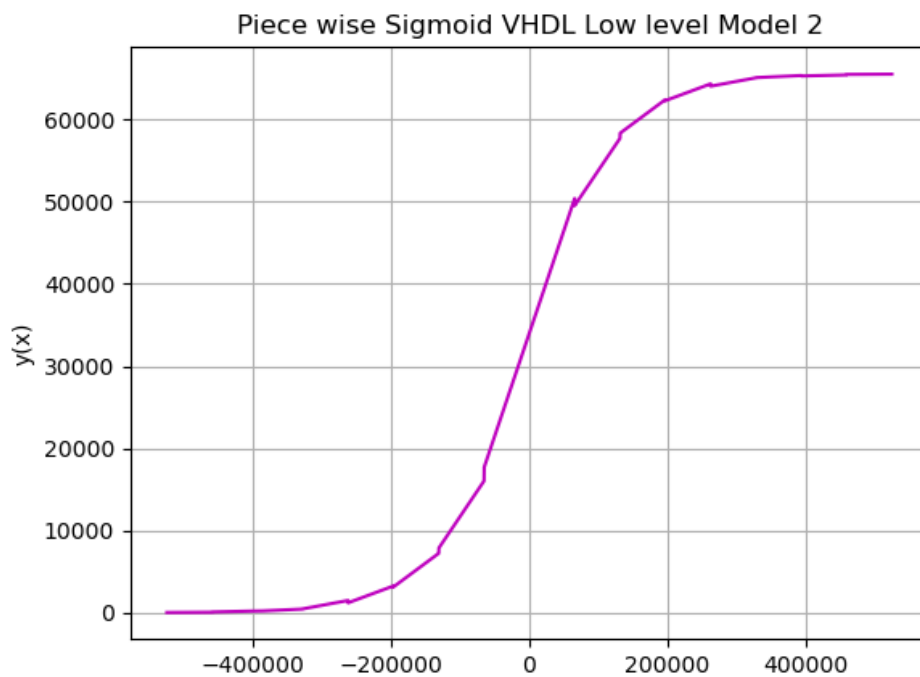
Peicewise function as produced by research paper also scaled this model was made using pure python meaning no libraries where used in its production



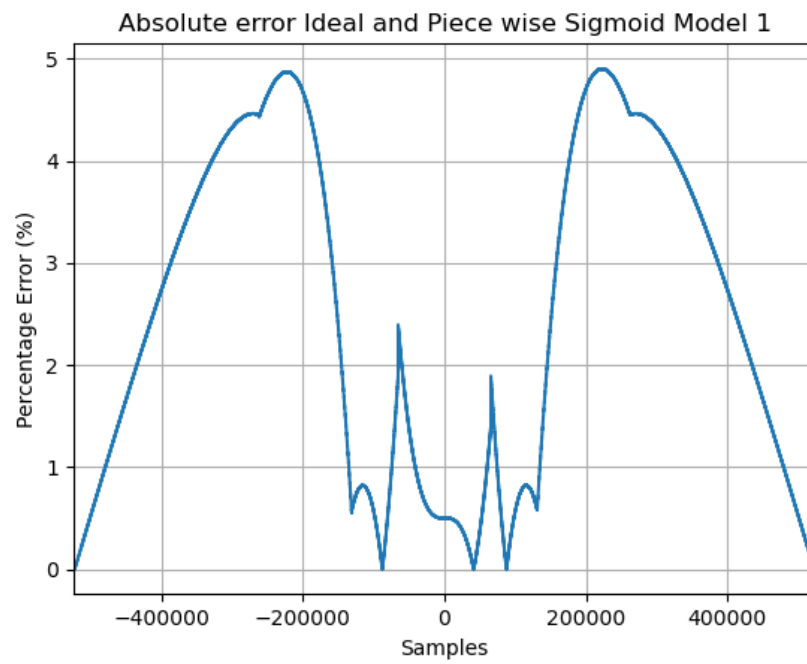
The model implemented in Vhdl to compare to the python model.



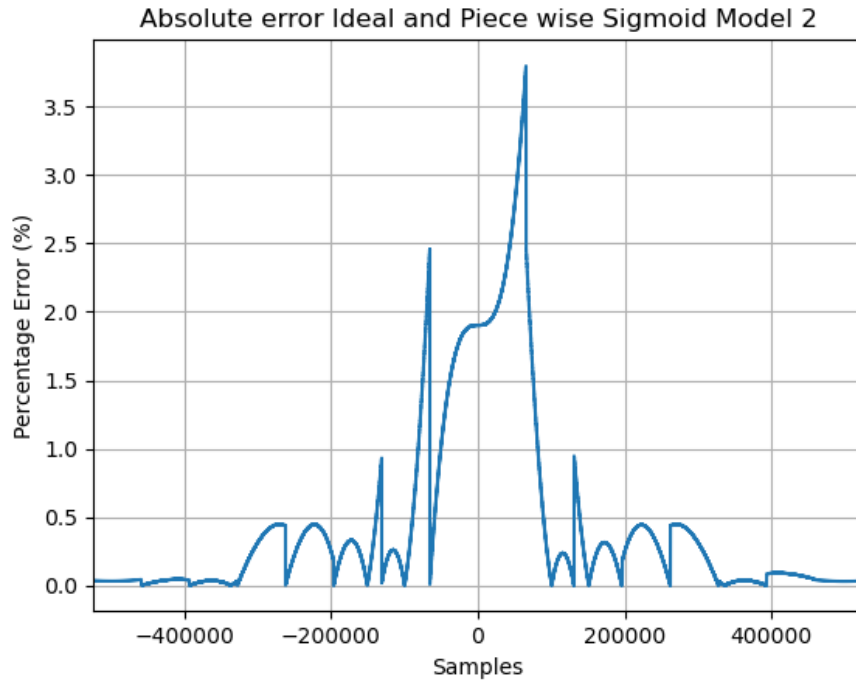
Improved low level model the piecewise function were increased from 7 to 15 doing this will reduce the error between ideal sigmoid and modelled sigmoid



Improved model implement in vhdl from the data saved from vhdl.



Error between model one and ideal sigmoid. The maximum error was found to be 4.856%



Error between model two (improved model) and ideal sigmoid. The maximum error was found to be 3.285%