-0.125
-0.150
-0.175
-0.225
-0.250
-0.275
0 20 40 60 80 100

 ${\rm FIG.}\ 1:\ {\rm Plot}\ {\rm of}\ {\rm log-probability}\ {\rm vs}\ {\rm iterations}\ {\rm for}\ {\rm output}$

train /home/sourya/kaldi/egs/tamil_telugu_proj/s5_r3/telugu_exp/chain_cleaned_1d/tdnn1d_sp/valid /home/sourya/kaldi/egs/tamil_telugu_proj/s5_r3/telugu_exp/chain_cleaned_1d/tdnn1d_sp/

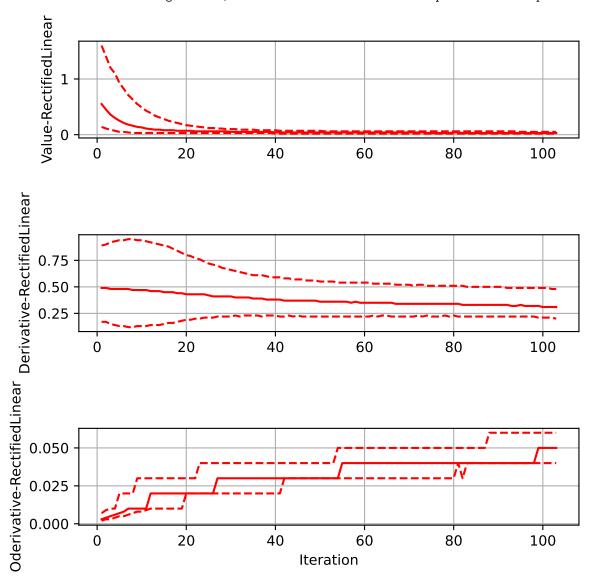
-1.5
-2.0
-3.0
-3.5
0
20
40
60
80
100

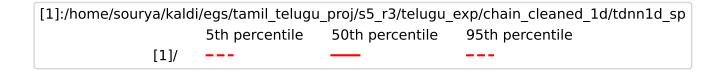
Iteration

FIG. 2: Plot of log-probability vs iterations for output-xent

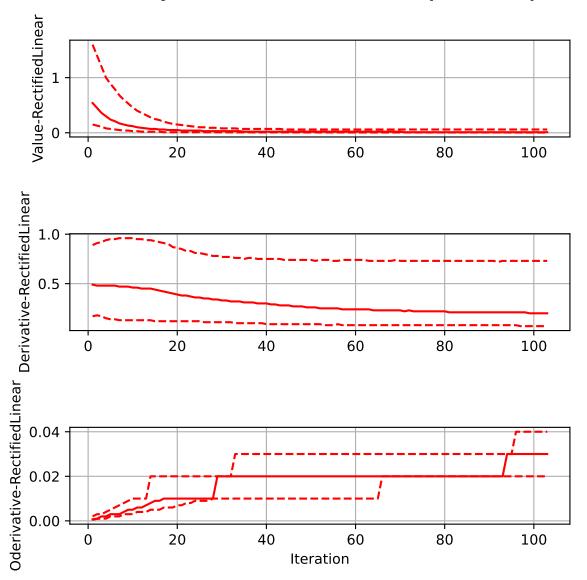
train /home/sourya/kaldi/egs/tamil_telugu_proj/s5_r3/telugu_exp/chain_cleaned_1d/tdnn1d_sp/valid /home/sourya/kaldi/egs/tamil_telugu_proj/s5_r3/telugu_exp/chain_cleaned_1d/tdnn1d_sp/

 ${\rm FIG.~3:~Per\text{-}dimension~average\text{-}(value,~derivative)~and~rms\text{-}oderivative~percentiles~for~prefinal\text{-}chain.relu}$





 ${
m FIG.~4:~Per-dimension~average-(value,~derivative)}$ and ${
m rms-oderivative~percentiles~for~prefinal-xent.relu}$



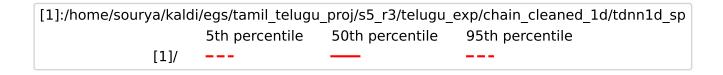
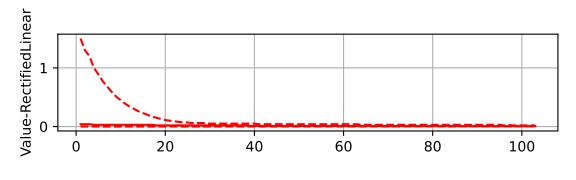
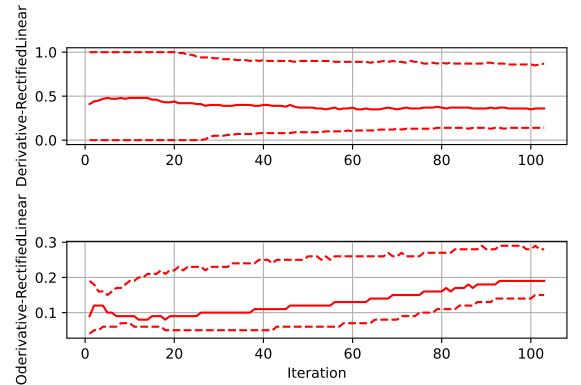


FIG. 5: Per-dimension average-(value, derivative) and rms-oderivative percentiles for tdnn1.relu





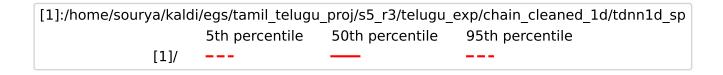
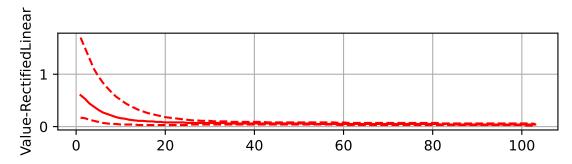
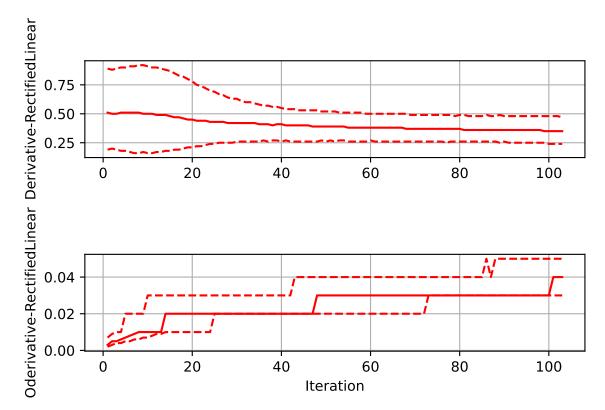
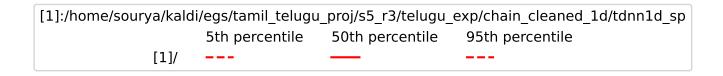


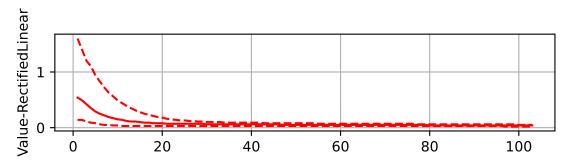
FIG. 6: Per-dimension average-(value, derivative) and rms-oderivative percentiles for tdnnf10.relu

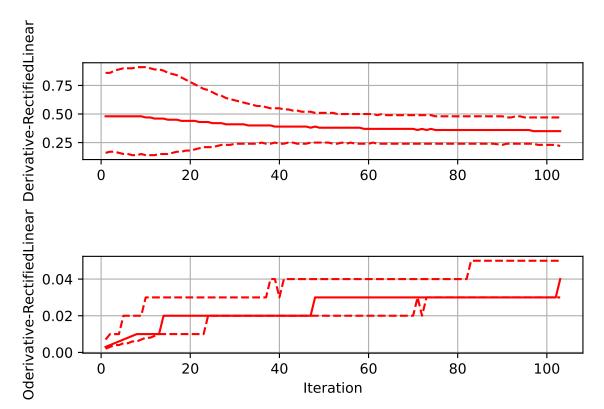






 ${\rm FIG.~7:~Per-dimension~average-(value,~derivative)~and~rms-oderivative~percentiles~for~tdnnf11.relu}$





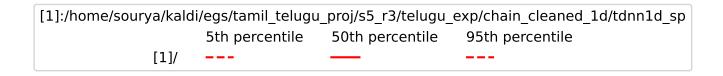
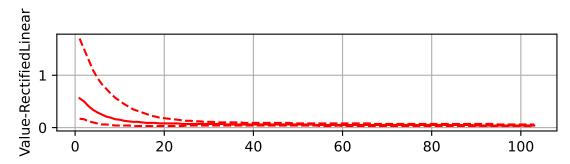
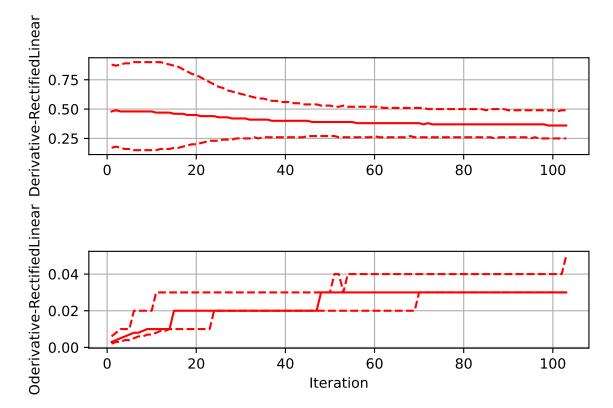
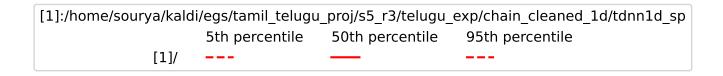


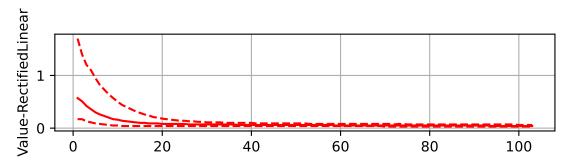
FIG. 8: Per-dimension average-(value, derivative) and rms-oderivative percentiles for tdnnf12.relu

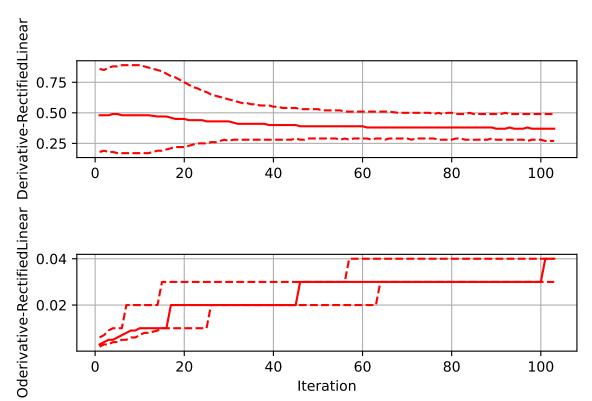


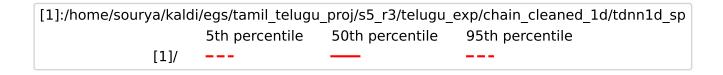




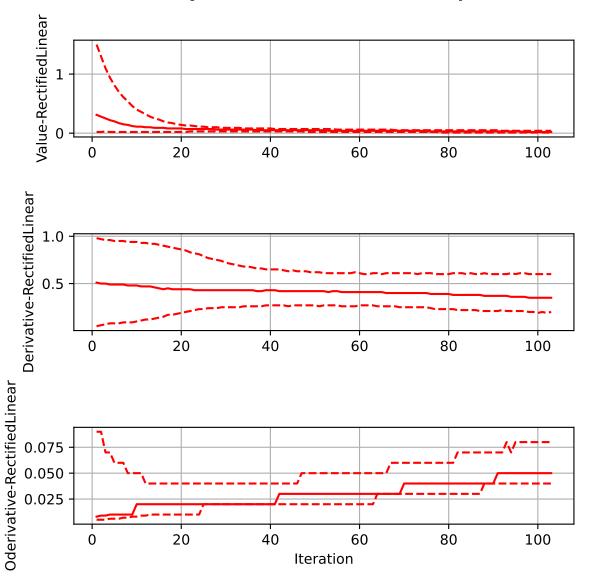
 ${\rm FIG.~9:~Per-dimension~average-(value,~derivative)~and~rms-oderivative~percentiles~for~tdnnf13.relu}$

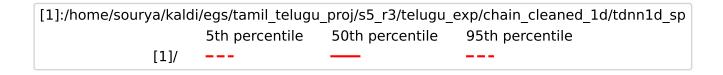




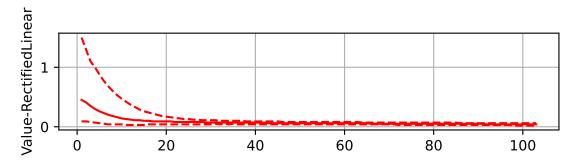


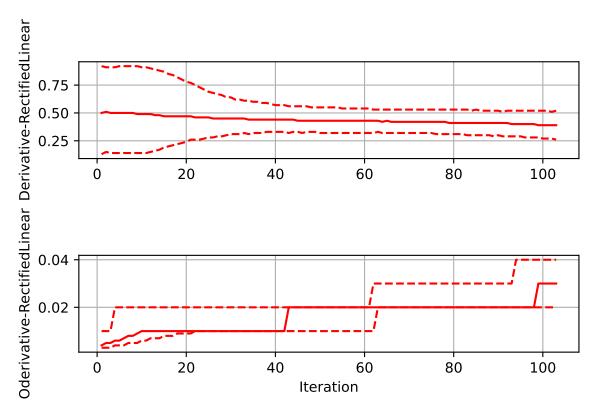
 $FIG.\ 10:\ Per-dimension\ average-(value,\ derivative)\ and\ rms-oderivative\ percentiles\ for\ tdnnf2.relu$

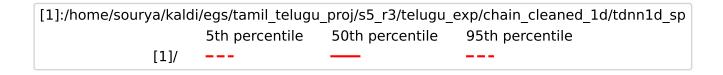




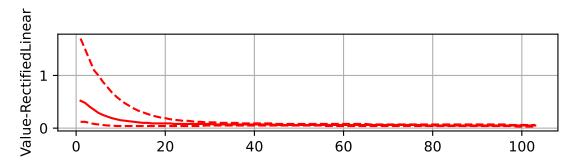
 ${\rm FIG.~11:~Per-dimension~average-(value,~derivative)~and~rms-oderivative~percentiles~for~tdnnf3.relu}$

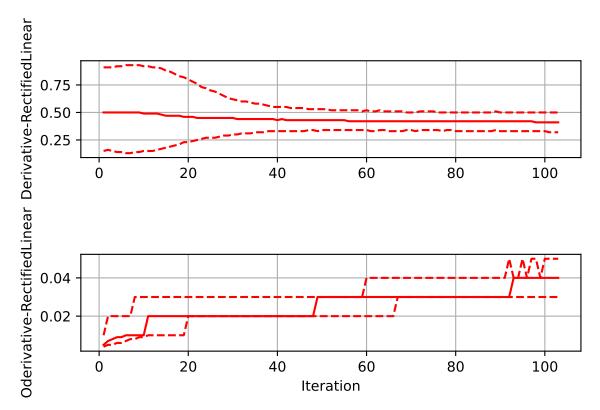


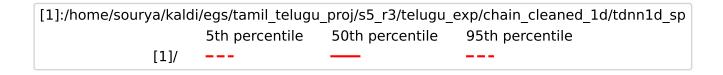




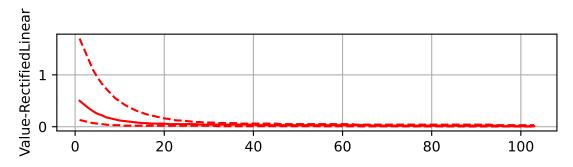
 $FIG.\ 12:\ Per-dimension\ average-(value,\ derivative)\ and\ rms-oderivative\ percentiles\ for\ tdnnf4.relu$

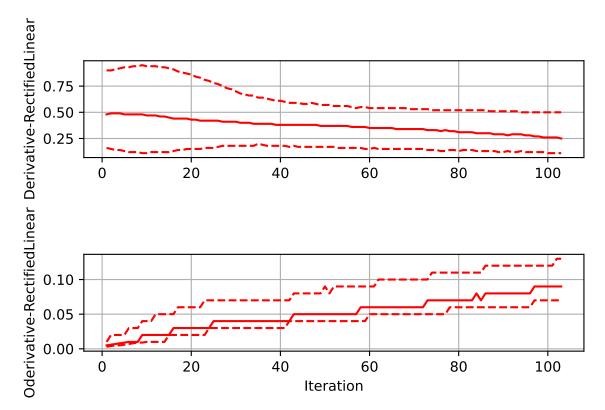






 ${
m FIG.~13:~Per-dimension~average-(value,~derivative)}$ and ${
m rms-oderivative~percentiles~for~tdnnf5.relu}$





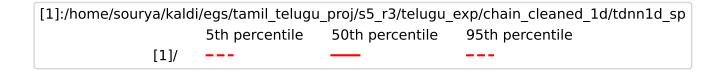
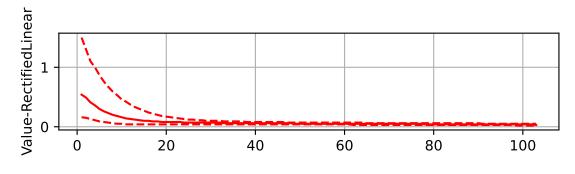
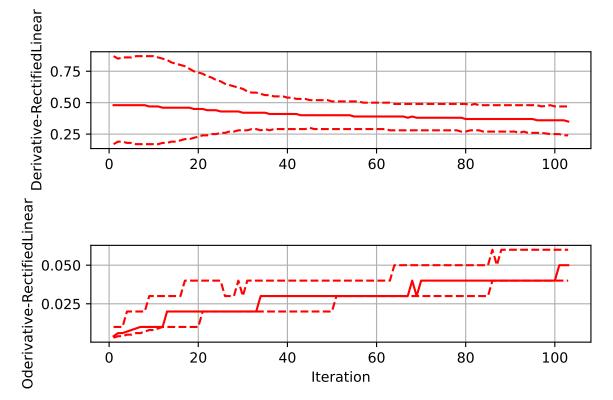
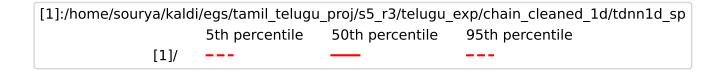


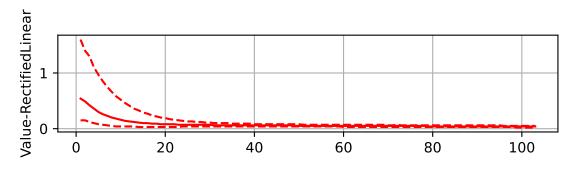
FIG. 14: Per-dimension average-(value, derivative) and rms-oderivative percentiles for tdnnf6.relu

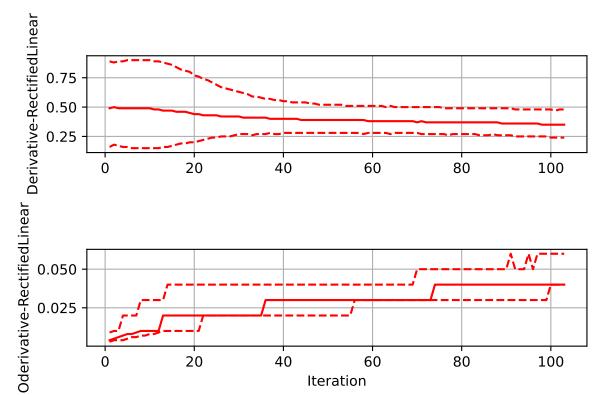


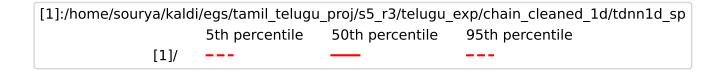




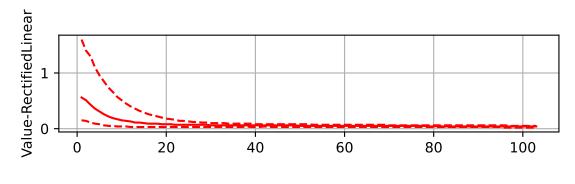
 $FIG.\ 15:\ \texttt{Per-dimension}\ average-(\texttt{value},\ \texttt{derivative})\ \texttt{and}\ \texttt{rms-oderivative}\ \texttt{percentiles}\ \texttt{for}\ \texttt{tdnnf7.relu}$

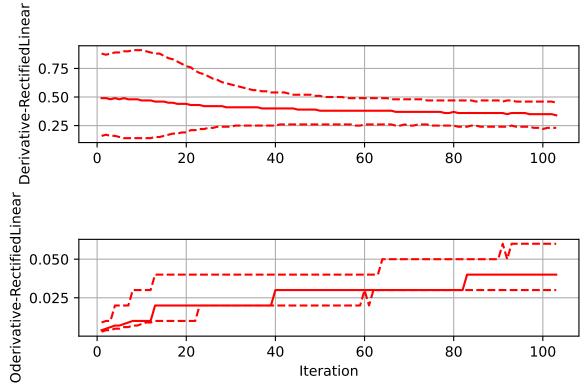






 $FIG.\ 16:\ Per-dimension\ average-(value,\ derivative)\ and\ rms-oderivative\ percentiles\ for\ tdnnf8.relu$





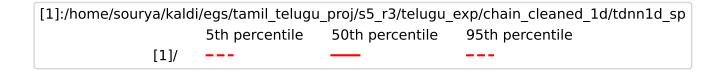
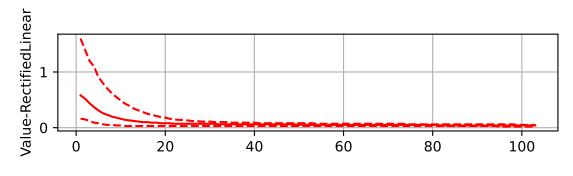
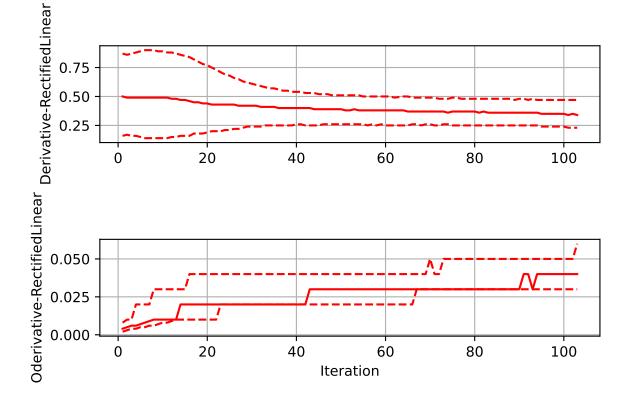
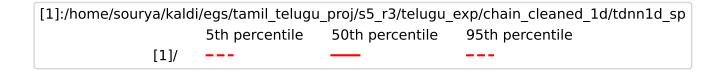


FIG. 17: Per-dimension average-(value, derivative) and rms-oderivative percentiles for tdnnf9.relu







 ${\rm FIG.}\ 18:$ Parameter differences at output-xent.affine

Parameter Differences 4 2 80 Relative Parameter Differences 20 40 60 100 0 0.5 0.4 0.3 0.2 0.1 100 20 80 ò 40 60 Iteration

 ${\rm FIG.}\ 19:$ Parameter differences at output.affine

Parameter Differences Relative Parameter Differences 0.25 0.20 0.15 Ö Iteration

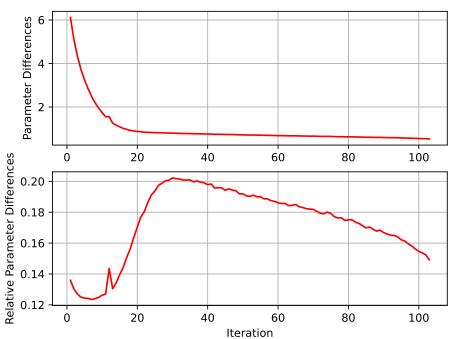
 ${\rm FIG.}\ 20:\ {\tt Parameter}\ {\tt differences}\ {\tt at\ prefinal-chain.affine}$

Parameter Differences 3 2 60 100 Relative Parameter Differences 20 40 80 Ó 0.30 0.25 0.20 0.15 20 100 40 60 80 Ö Iteration

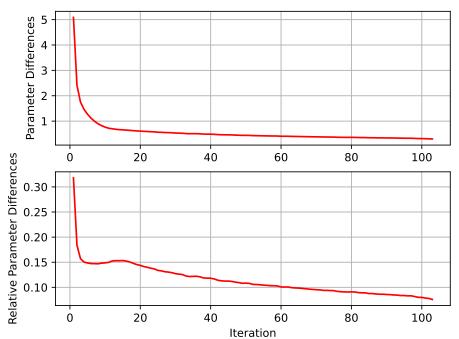
 ${
m FIG.~21:}$ Parameter differences at prefinal-chain.linear

Parameter Differences 100 Relative Parameter Differences 20 40 60 80 0 0.30 0.25 0.20 20 100 ò 40 60 80 Iteration

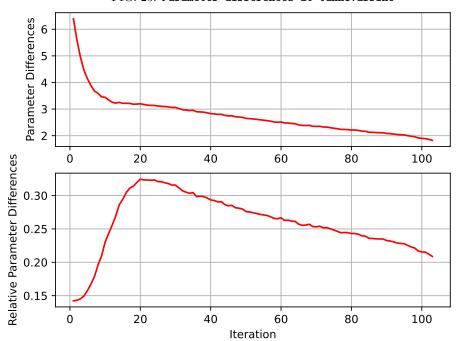
FIG. 22: Parameter differences at prefinal-1



 ${\rm FIG.}\ 23:$ Parameter differences at prefinal-xent.affine



 $FIG.\ 24\hbox{: Parameter differences at prefinal-xent.linear}$



 ${
m FIG.}\ 25:$ Parameter differences at tdnn1.affine

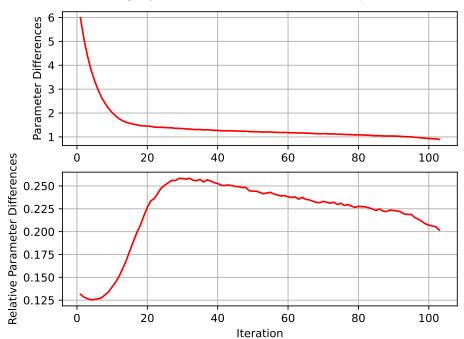
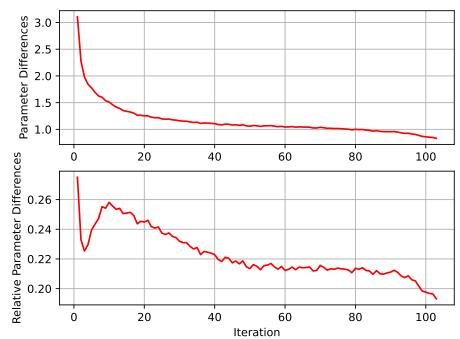
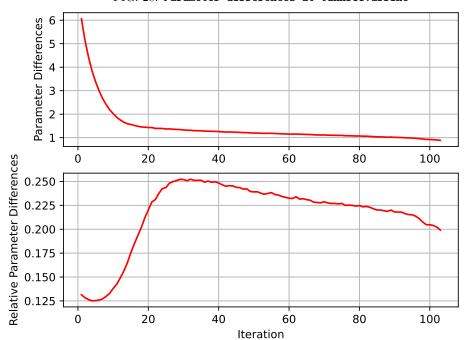


FIG. 26: Parameter differences at tdnnf10.affine



 ${
m FIG.}\ 27:$ Parameter differences at tdnnf10.linear



 ${\rm FIG.~28:}$ Parameter differences at tdnnf11.affine

3.0 2.5 2.5 0 20 40 60 80 100 Separate 1.0 0.24 0.22 0.20

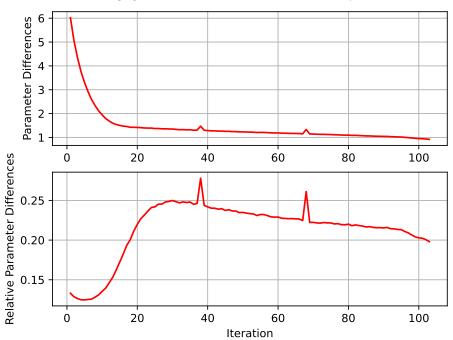
FIG. 29: Parameter differences at tdnnf11.linear

Parameter Differences 1 C C C P C P Relative Barameter Differences 0.250 0.200 0.175 0.150 0.125 0.250 -Ó Iteration

 ${\rm FIG.~30:}$ Parameter differences at tdnnf12.affine

Relative Parameter Differences Parameter Differences 3.0 2.5 2.0 1.5 1.0 0 20 40 60 80 100 0.28 0.26 0.24 0.22 0.20 0.18 100 20 40 80 Ó 60 Iteration

FIG. 31: Parameter differences at tdnnf12.linear



 ${\rm FIG.~32:}$ Parameter differences at tdnnf13.affine

Relative Parameter Differences Parameter Differences 3.0 2.5 2.0 1.5 1.0 20 0 40 60 80 100 0.28 0.26 0.24 0.22 0.20 0.18 20 100 40 80 Ó 60 Iteration

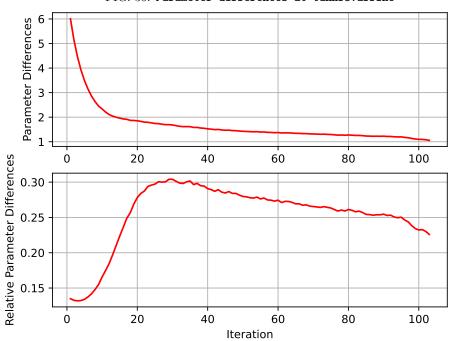
FIG. 33: Parameter differences at tdnnf13.linear

Parameter Differences 1 Relative Parameter Differences 20 100 0 40 60 80 0.30 0.25 0.20 0.15 20 40 80 Ó 60 100 Iteration

FIG. 34: Parameter differences at tdnnf2.affine

Parameter Differences Relative Parameter Differences 20 100 0 40 60 80 0.40 0.35 0.30 0.25 Ö 20 40 80 100 60 Iteration

 ${\rm FIG.~35:}$ Parameter differences at tdnnf2.linear



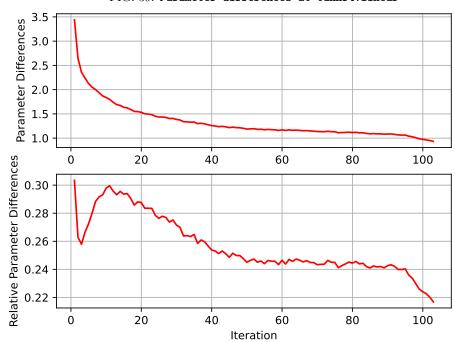
 ${\rm FIG.~36:}$ Parameter differences at tdnnf3.affine

Parameter Differences 3 2 Relative Parameter Differences 20 40 100 0 60 80 0.325 0.300 0.275 0.250 0.225 20 Ö 80 100 40 60 Iteration

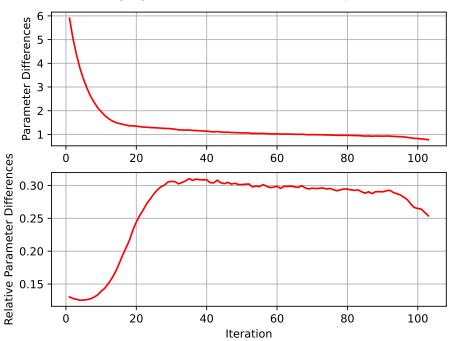
FIG. 37: Parameter differences at tdnnf3.linear

Parameter Differences 1 20 Relative Parameter Differences 40 100 0 60 80 0.30 0.25 0.20 0.15 20 80 Ó 40 60 100 Iteration

 ${\rm FIG.~38:}$ Parameter differences at tdnnf4.affine



 ${\rm FIG.~39:}$ Parameter differences at tdnnf4.linear



 ${\rm FIG.~40:}$ Parameter differences at tdnnf5.affine

3.0 2.5 2.5 0.20 0.30 0.28 0.24 0.24 0.24 0.22 0 20 40 60 80 100 Iteration

FIG. 41: Parameter differences at tdnnf5.linear

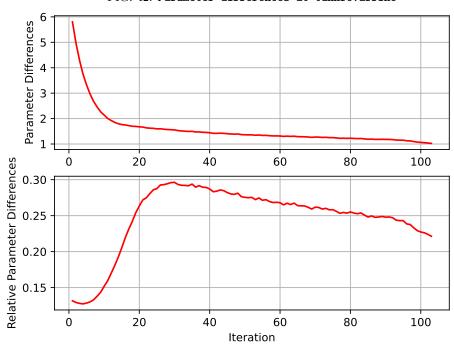


FIG. 42: Parameter differences at tdnnf6.affine

Relative Parameter Differences Parameter Differences 3.0 2.5 2.0 1.5 1.0 20 40 100 0 60 80 0.30 0.28 0.26 0.24 0.22 20 100 40 80 Ó 60 Iteration

FIG. 43: Parameter differences at tdnnf6.linear

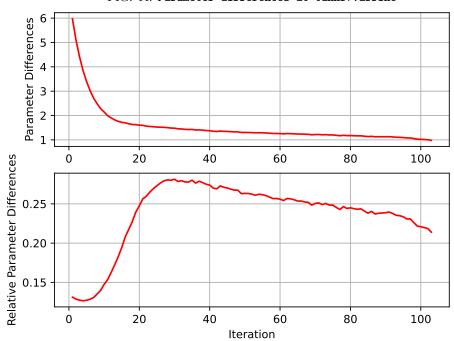


FIG. 44: Parameter differences at tdnnf7.affine

Relative Parameter Differences Parameter Differences 3.0 2.5 2.0 1.5 1.0 20 40 100 0 60 80 0.28 0.26 0.24 0.22 20 40 80 Ó 60 100 Iteration

FIG. 45: Parameter differences at tdnnf7.linear

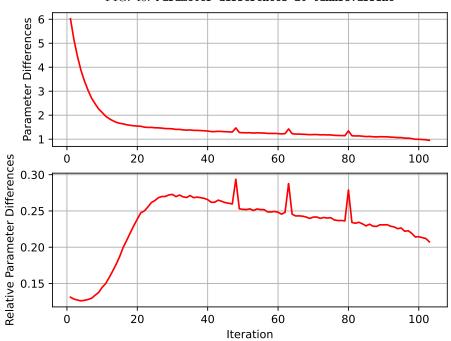
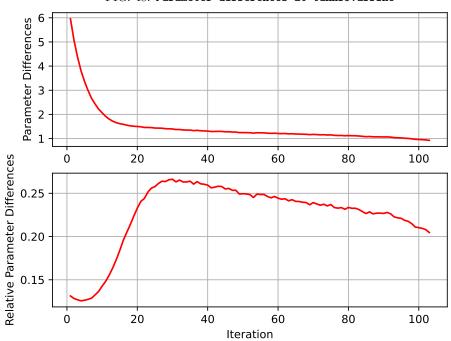


FIG. 46: Parameter differences at tdnnf8.affine

Relative Parameter Differences Parameter Differences 3.0 2.5 2.0 1.5 1.0 20 40 100 0 60 80 0.26 0.24 0.22 20 Ö 40 80 60 100 Iteration

 ${
m FIG.~47}:$ Parameter differences at tdnnf8.linear



 ${\rm FIG.~48:}$ Parameter differences at tdnnf9.affine

Relative Parameter Differences Parameter Differences 3.0 2.5 2.0 1.5 1.0 20 100 0 40 60 80 0.26 0.24 0.22 0.20 20 100 40 80 Ó 60 Iteration

 ${\rm FIG.}\ 49$: Parameter differences at tdnnf9.linear