-0.12-0.14-0.16-0.22 -0.24 -0.26 10 30 70 40 Ó 20 50 60 80 Iteration

FIG. 1: Plot of log-probability vs iterations for output

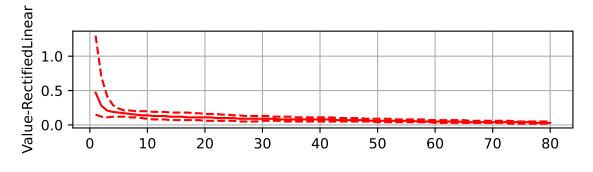
train /home/sourya/kaldi/egs/tamil\_telugu\_proj/s5\_r3/telugu\_exp/chain\_cleaned\_1d/tdnn1d\_sp/valid /home/sourya/kaldi/egs/tamil\_telugu\_proj/s5\_r3/telugu\_exp/chain\_cleaned\_1d/tdnn1d\_sp/

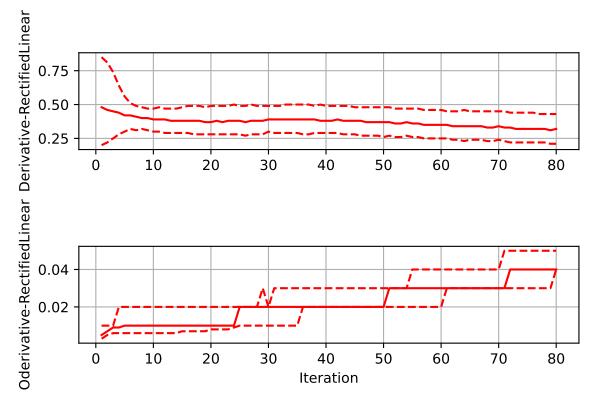
-1.6-1.8-2.0 log-probability **-**2.2 -2.4-2.610 20 30 40 70 0 50 60 80 Iteration

 ${\rm FIG.}\ 2:\ {\rm Plot}\ {\rm of}\ {\rm log-probability}\ {\rm vs}\ {\rm iterations}\ {\rm for}\ {\rm output-xent}$ 

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/

FIG. 3: Per-dimension average-(value, derivative) and rms-oderivative percentiles for prefinal-chain.relu





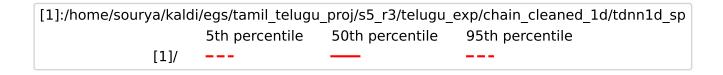
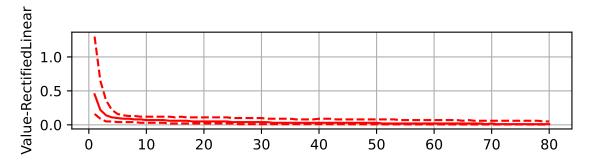
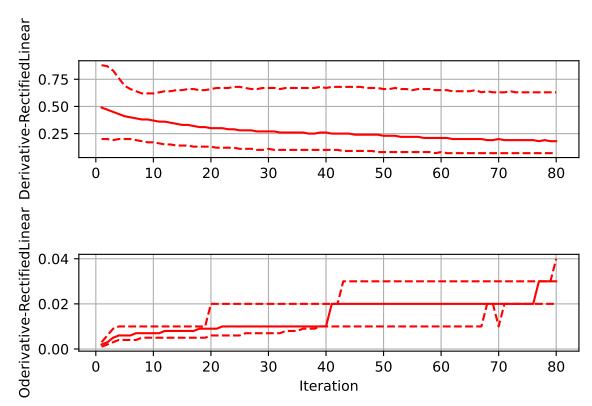


FIG. 4: Per-dimension average-(value, derivative) and rms-oderivative percentiles for prefinal-xent.relu





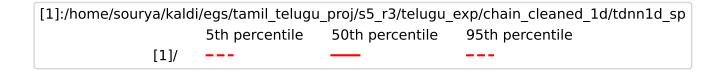
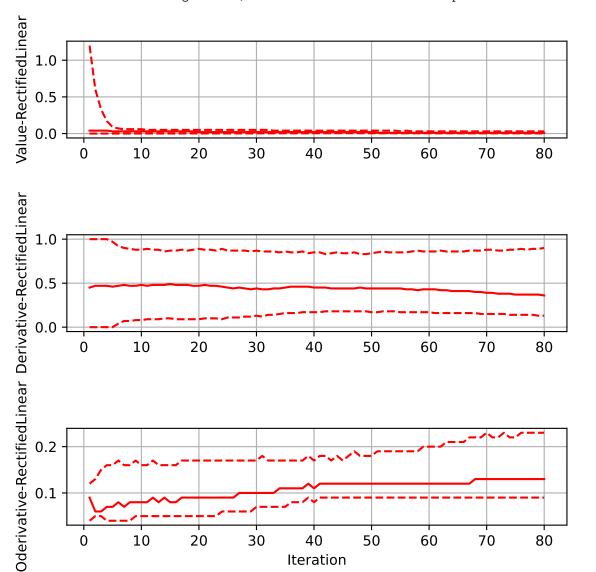
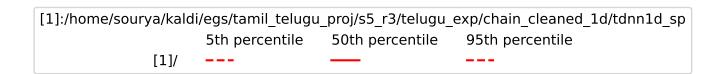


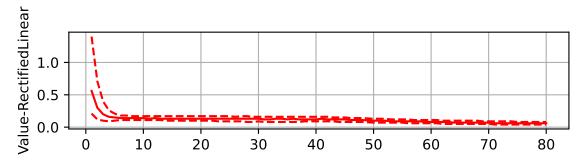
FIG. 5: Per-dimension average-(value, derivative) and rms-oderivative percentiles for tdnn1.relu

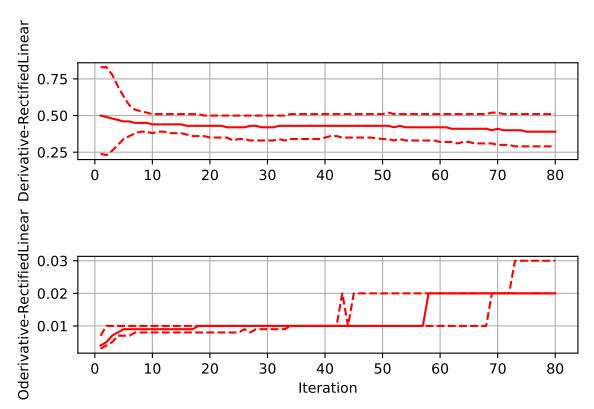




Iteration

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





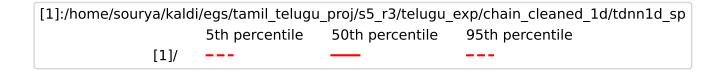
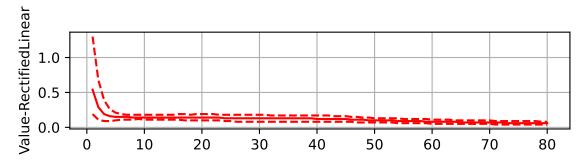
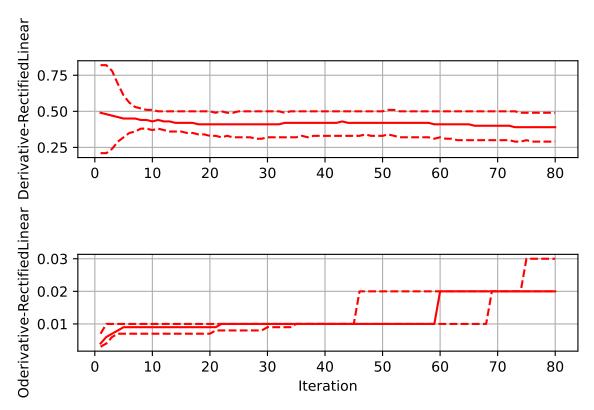
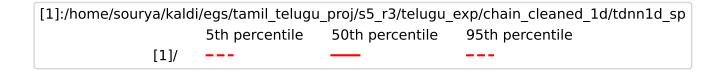


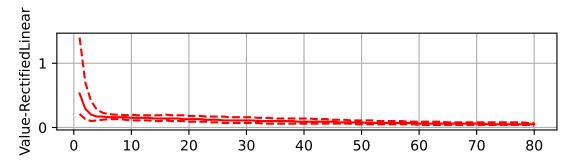
FIG. 7: Per-dimension average-(value, derivative) and rms-oderivative percentiles for tdnnf11.relu

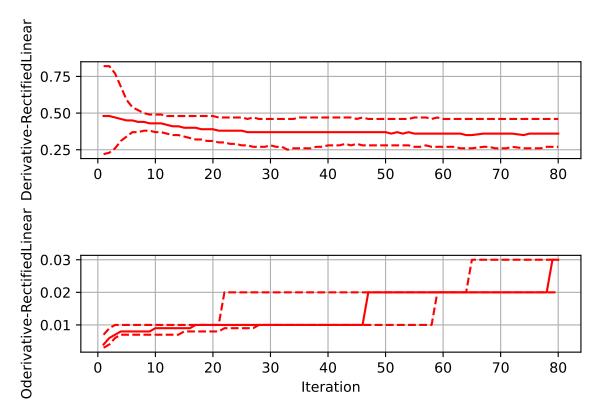


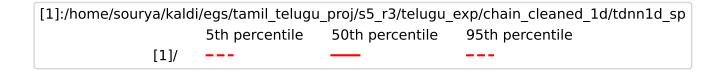




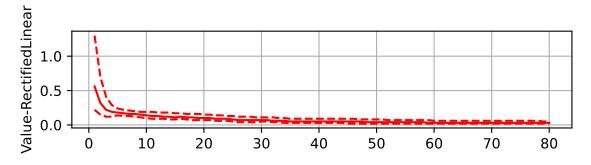
 ${\rm FIG.~8:~Per-dimension~average-(value,~derivative)~and~rms-oderivative~percentiles~for~tdnnf12.relu}$ 

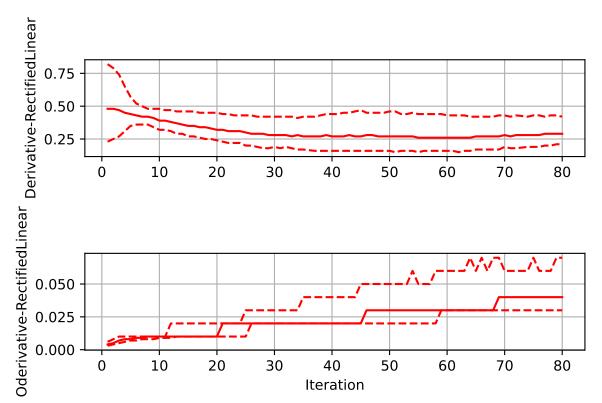


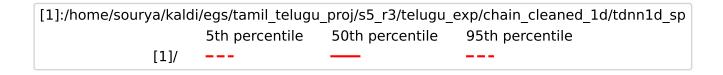




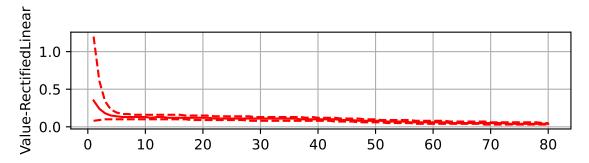
 ${\rm FIG.~9:~Per-dimension~average-(value,~derivative)~and~rms-oderivative~percentiles~for~tdnnf13.relu}$ 

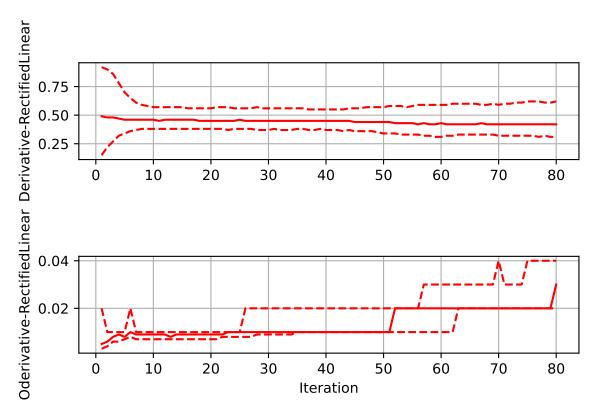


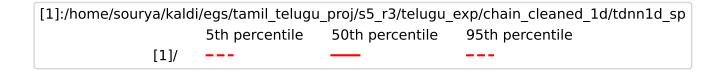




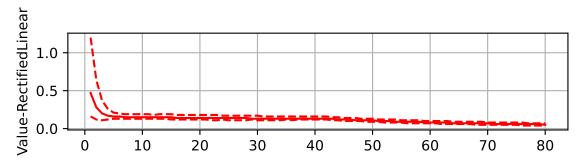
 $FIG.\ 10:\ Per-dimension\ average-(value,\ derivative)\ and\ rms-oderivative\ percentiles\ for\ tdnnf2.relu$ 

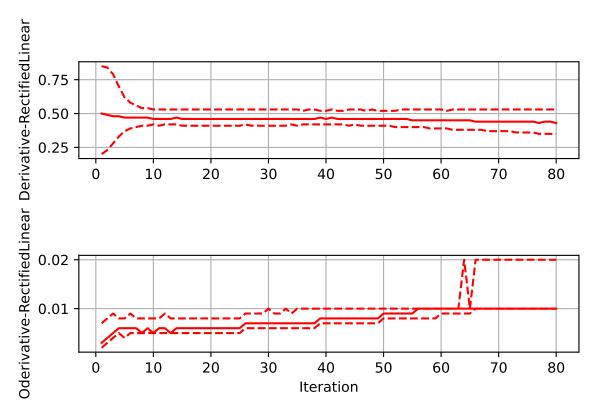


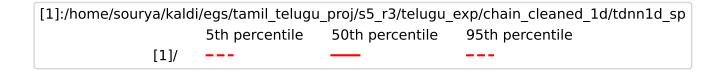




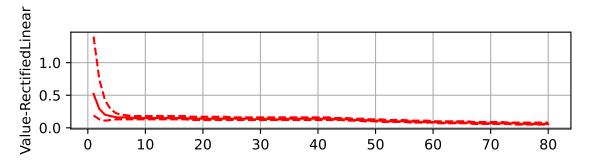
 ${\rm FIG.~11:~Per-dimension~average-(value,~derivative)~and~rms-oderivative~percentiles~for~tdnnf3.relu}$ 

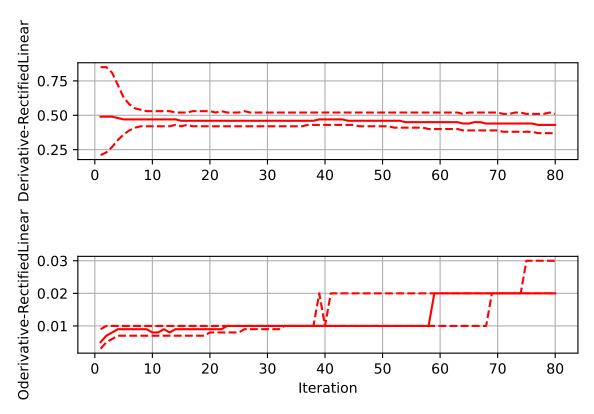


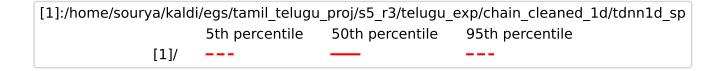




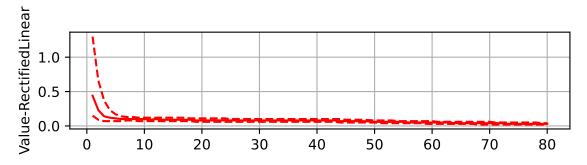
 $FIG.\ 12:\ Per-dimension\ average-(value,\ derivative)\ and\ rms-oderivative\ percentiles\ for\ tdnnf4.relu$ 

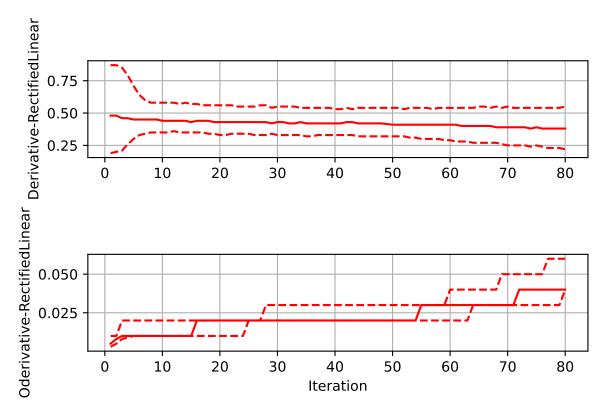


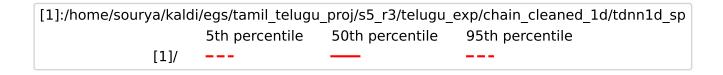




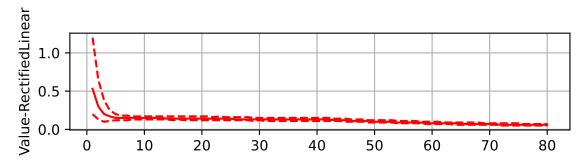
 ${
m FIG.~13:~Per-dimension~average-(value,~derivative)}$  and  ${
m rms-oderivative~percentiles~for~tdnnf5.relu}$ 

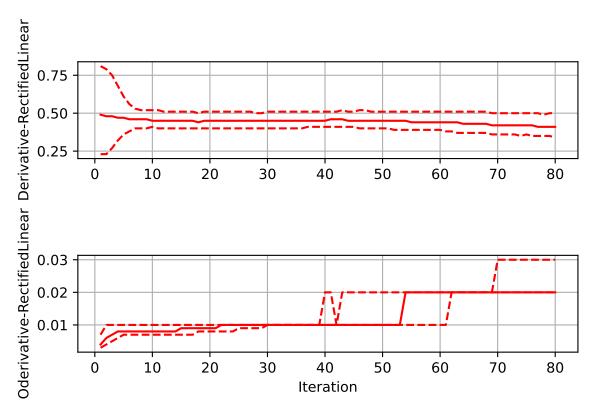


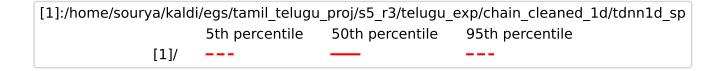




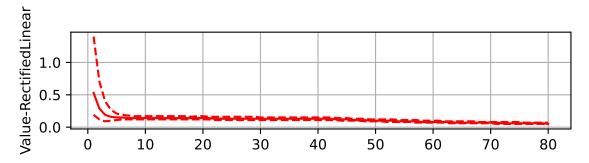
 $FIG.\ 14:\ Per-dimension\ average-(value,\ derivative)\ and\ rms-oderivative\ percentiles\ for\ tdnnf6.relu$ 

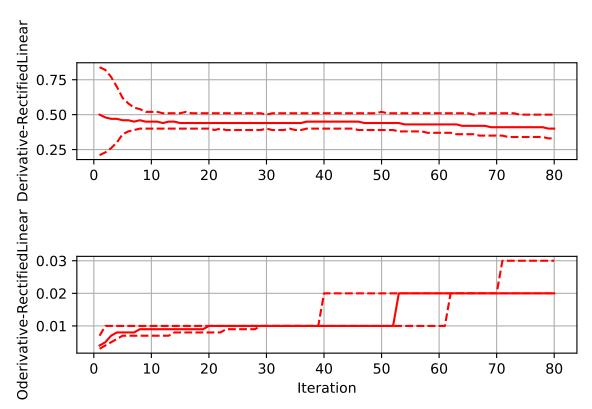


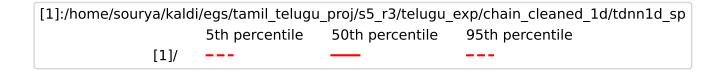




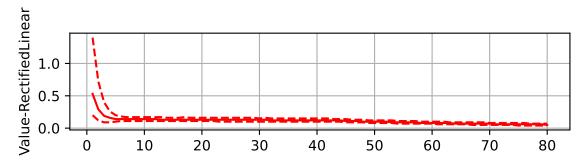
 $FIG.\ 15:\ \texttt{Per-dimension}\ average-(\texttt{value},\ \texttt{derivative})\ \texttt{and}\ \texttt{rms-oderivative}\ \texttt{percentiles}\ \texttt{for}\ \texttt{tdnnf7.relu}$ 

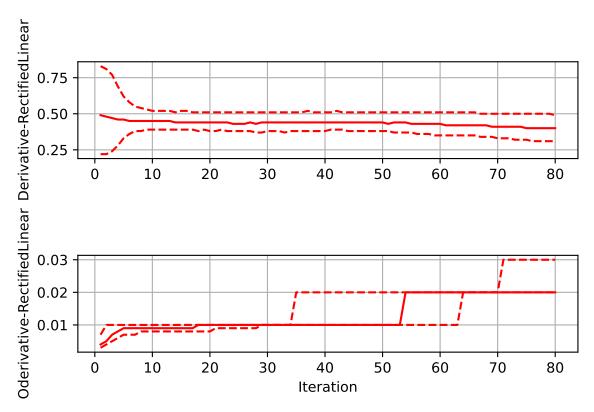






 $FIG.\ 16:\ Per-dimension\ average-(value,\ derivative)\ and\ rms-oderivative\ percentiles\ for\ tdnnf8.relu$ 





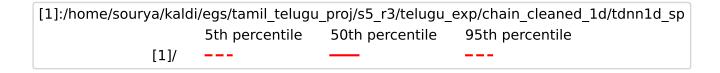
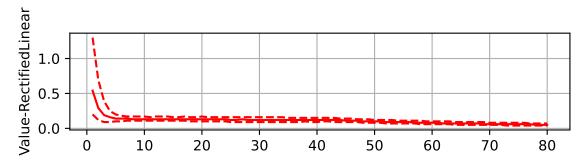
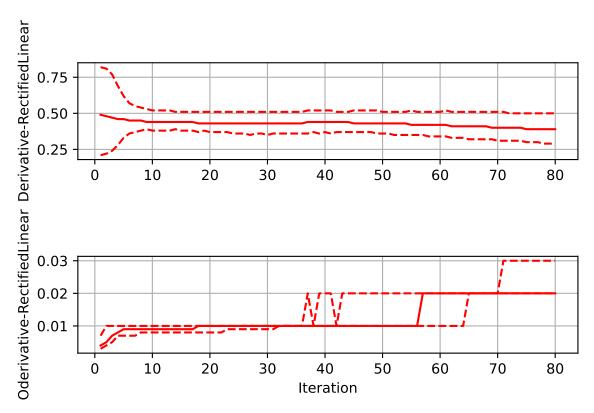
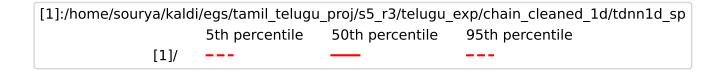


FIG. 17: Per-dimension average-(value, derivative) and rms-oderivative percentiles for tdnnf9.relu

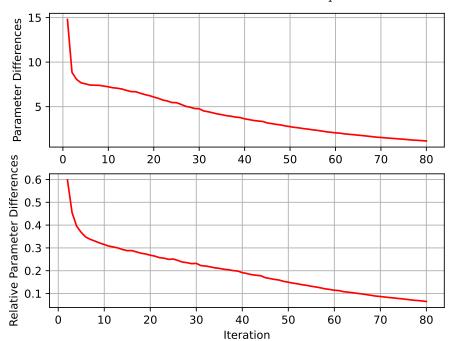






Relative Parameter Differences Parameter Differences 0.3 0.2 0.1 Ö Iteration

FIG. 18: Parameter differences at output-xent.affine



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

Relative Parameter Differences Parameter Differences 0.6 0.5 0.4 0.3 Ó Iteration

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

Parameter Differences Relative Parameter Differences 0.5 0.4 0.3 0.2 Ó Iteration

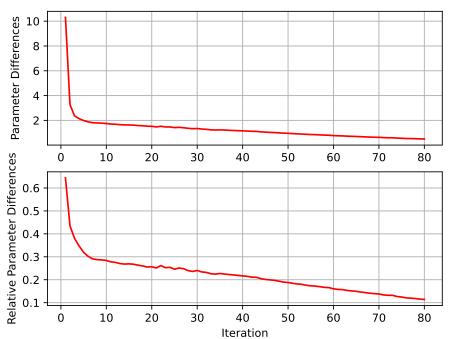
 ${
m FIG.~21:}$  Parameter differences at prefinal-chain.linear

Relative Parameter Differences Parameter Differences 0.6 0.5 0.4 0.3 0.2 Iteration 

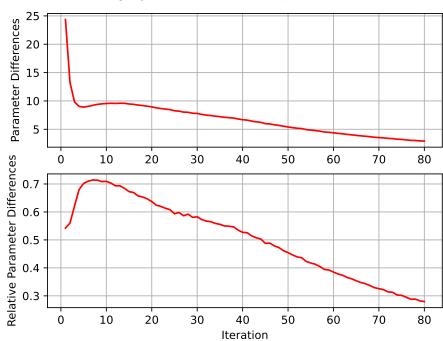
FIG. 22: Parameter differences at prefinal-1

Ö Iteration

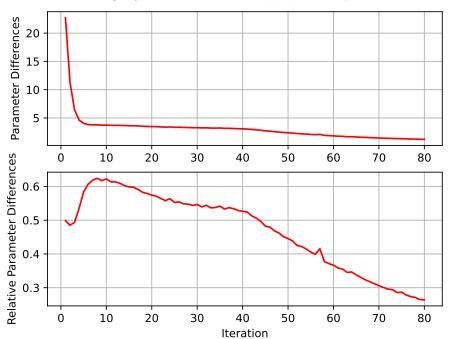
 ${\rm FIG.}\ 23:$  Parameter differences at prefinal-xent.affine



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



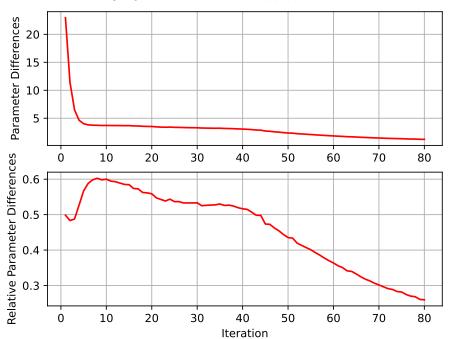
 ${\rm FIG.}\ 25:$  Parameter differences at tdnn1.affine



 ${\rm FIG.}\ 26:$  Parameter differences at tdnnf10.affine

Parameter Differences Relative Parameter Differences 0.6 0.5 0.4 0.3 0.2 Ó Iteration

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



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

Parameter Differences Relative Parameter Differences 0.6 0.5 0.4 0.3 0.2 Ó Iteration

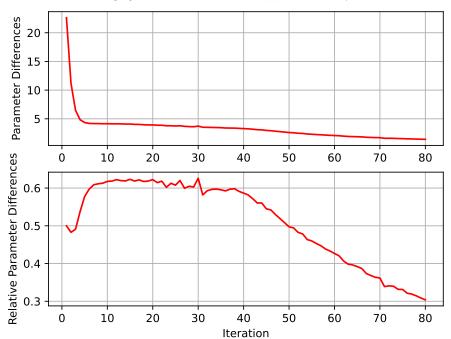
 ${
m FIG.}\ 29$ : Parameter differences at tdnnf11.linear

Relative Parameter Differences Parameter Differences 0.6 0.5 0.4 0.3 Ó Iteration

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

Parameter Differences Relative Parameter Differences 0.6 0.5 0.4 0.3 0.2 Ó Iteration

FIG. 31: Parameter differences at tdnnf12.linear



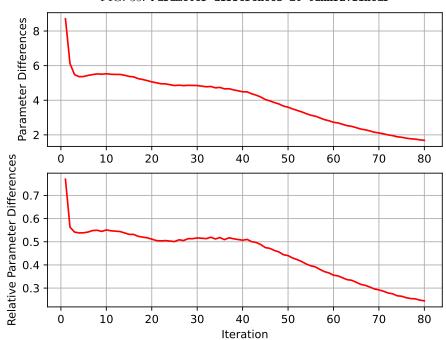
 ${\rm FIG.~32:}$  Parameter differences at tdnnf13.affine

Parameter Differences Relative Parameter Differences 0.6 0.5 0.4 0.3 Ó Iteration

FIG. 33: Parameter differences at tdnnf13.linear

Relative Parameter Differences Parameter Differences 0.7 0.6 0.5 0.4 0.3 Ó Iteration

 ${\rm FIG.~34:}$  Parameter differences at tdnnf2.affine



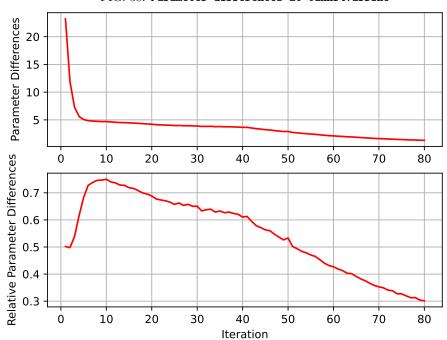
 ${\rm FIG.~35:}$  Parameter differences at tdnnf2.linear

Relative Parameter Differences Parameter Differences 0.7 0.6 0.5 0.4 0.3 Ó Iteration

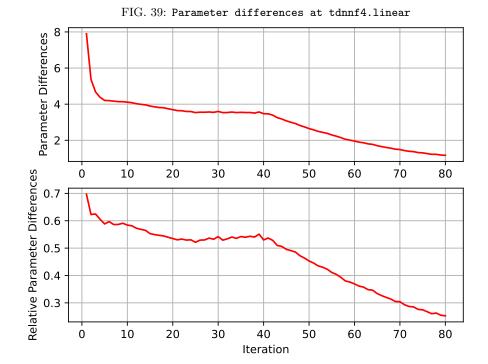
 ${\rm FIG.~36:}$  Parameter differences at tdnnf3.affine

Parameter Differences Relative Parameter Differences 0.7 0.6 0.5 0.4 0.3 Ó Iteration

 ${\rm FIG.~37:}$  Parameter differences at tdnnf3.linear



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



Relative Parameter Differences Parameter Differences 0 -0.7 0.6 0.5 0.4 0.3 Ó Iteration

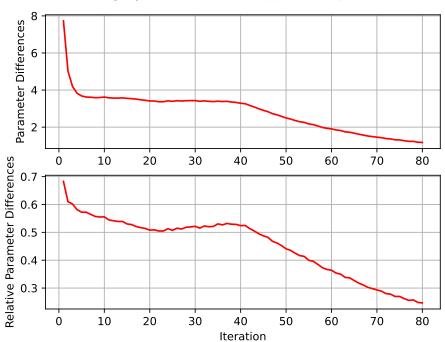
 ${\rm FIG.~40:}$  Parameter differences at tdnnf5.affine

Parameter Differences Relative Parameter Differences 0.6 0.5 0.4 0.3 Ó Iteration

 ${\rm FIG.~41:}$  Parameter differences at tdnnf5.linear

Relative Parameter Differences Parameter Differences 0.7 0.6 0.5 0.4 0.3 Ó Iteration

 ${\rm FIG.~42:}$  Parameter differences at tdnnf6.affine



 ${\rm FIG.~43:}$  Parameter differences at tdnnf6.linear

Relative Parameter Differences Parameter Differences 0.6 0.5 0.4 0.3 Ó Iteration

 ${\rm FIG.~44:}$  Parameter differences at tdnnf7.affine

Parameter Differences Relative Parameter Differences 0.6 0.5 0.4 0.3 Ó Iteration

 ${\rm FIG.~45:}$  Parameter differences at tdnnf7.linear

Relative Parameter Differences Parameter Differences 0.6 0.5 0.4 0.3 Ó Iteration

 ${\rm FIG.~46:}$  Parameter differences at tdnnf8.affine

Parameter Differences Relative Parameter Differences 0.6 0.5 0.4 0.3 Ó Iteration

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

Relative Parameter Differences Parameter Differences 0.6 0.5 0.4 0.3 Ó Iteration

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

Parameter Differences Relative Parameter Differences 0.6 0.5 0.4 0.3 Ó Iteration

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