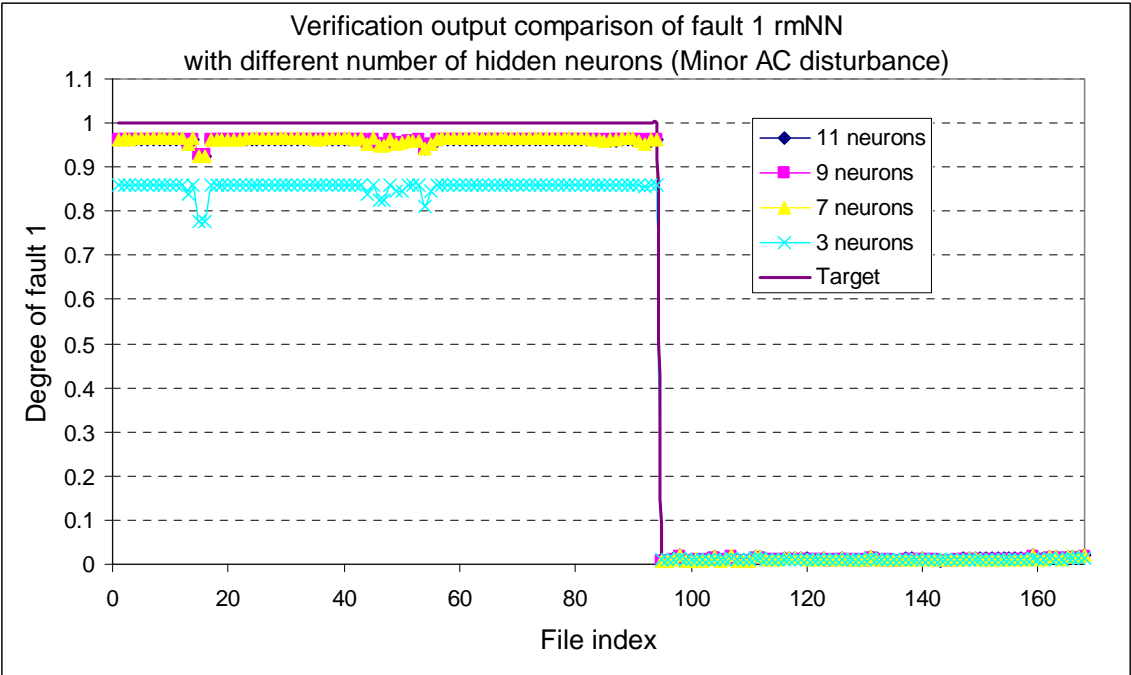
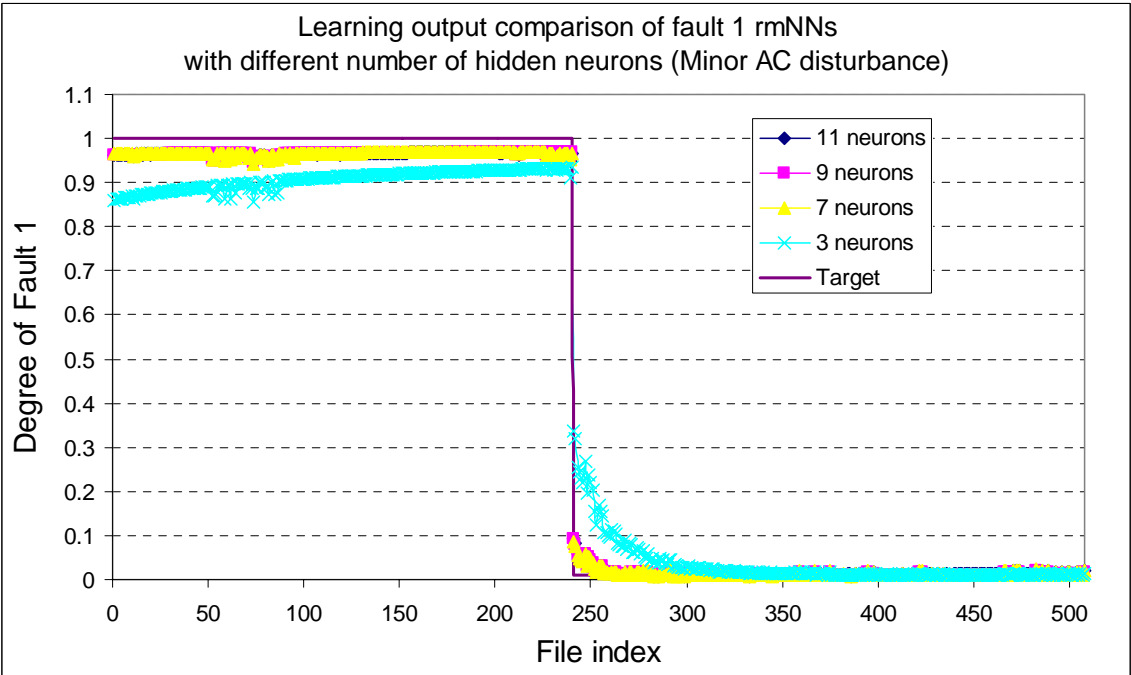
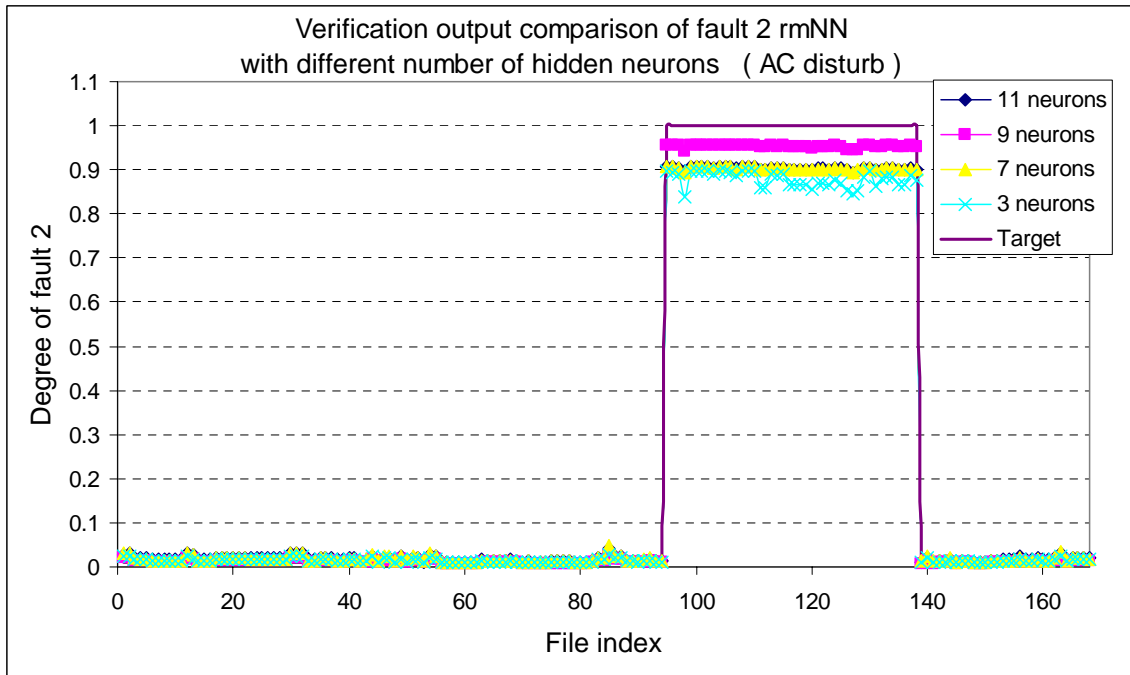
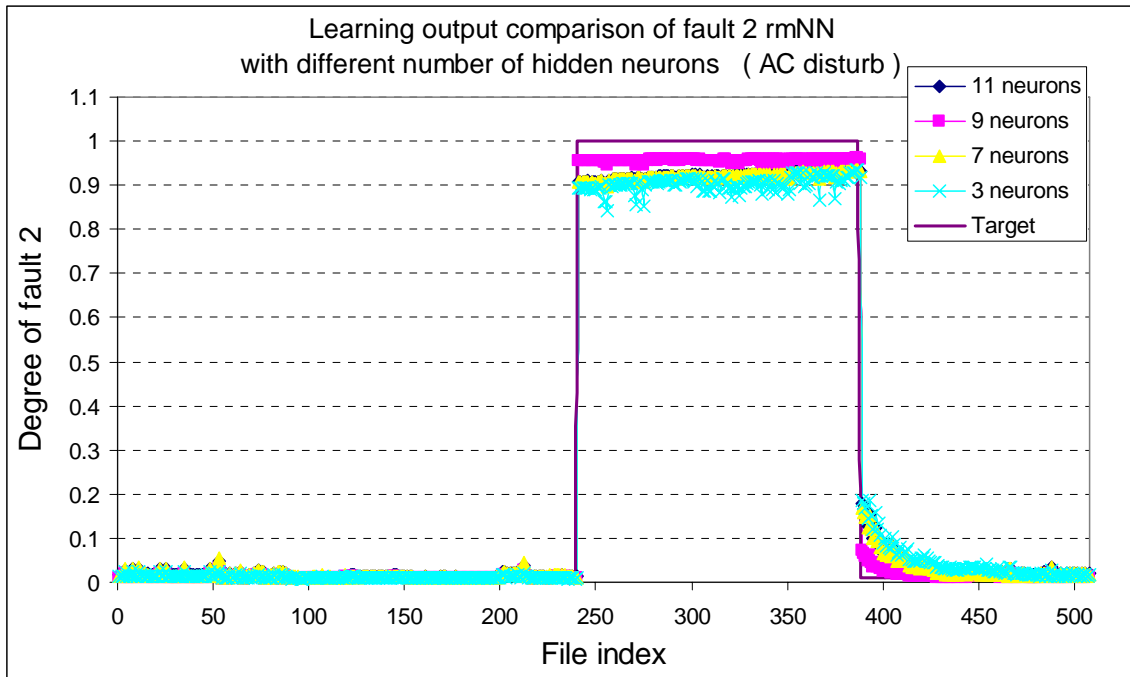


Appendix E – Performance comparison of rmNNs with different number of hidden neurons

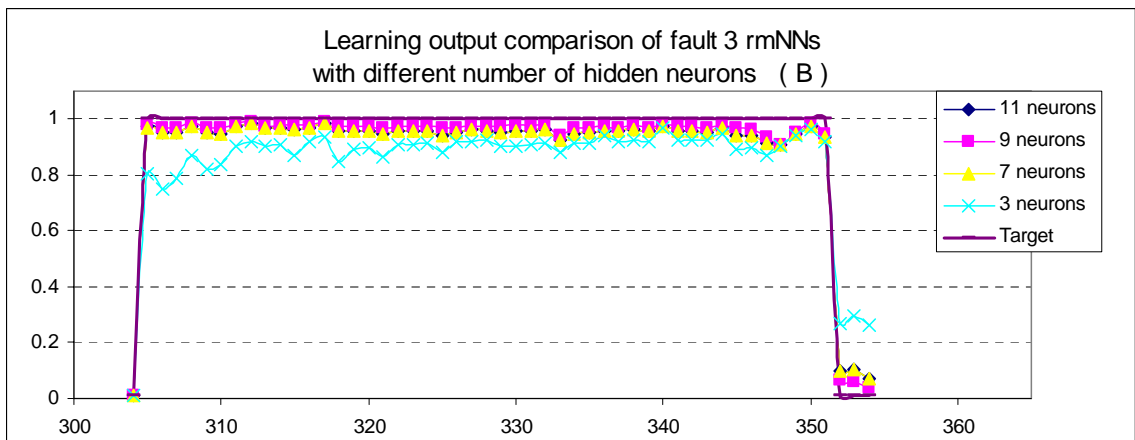
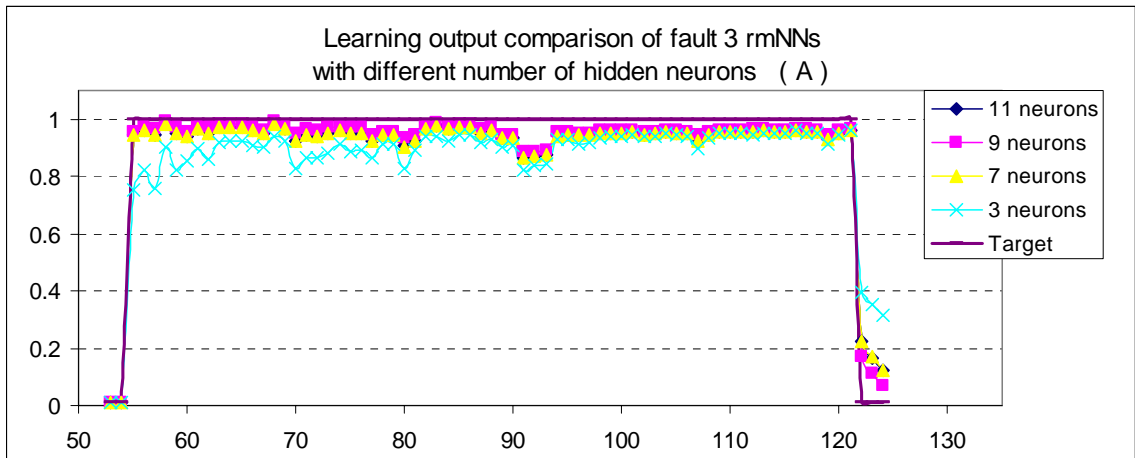
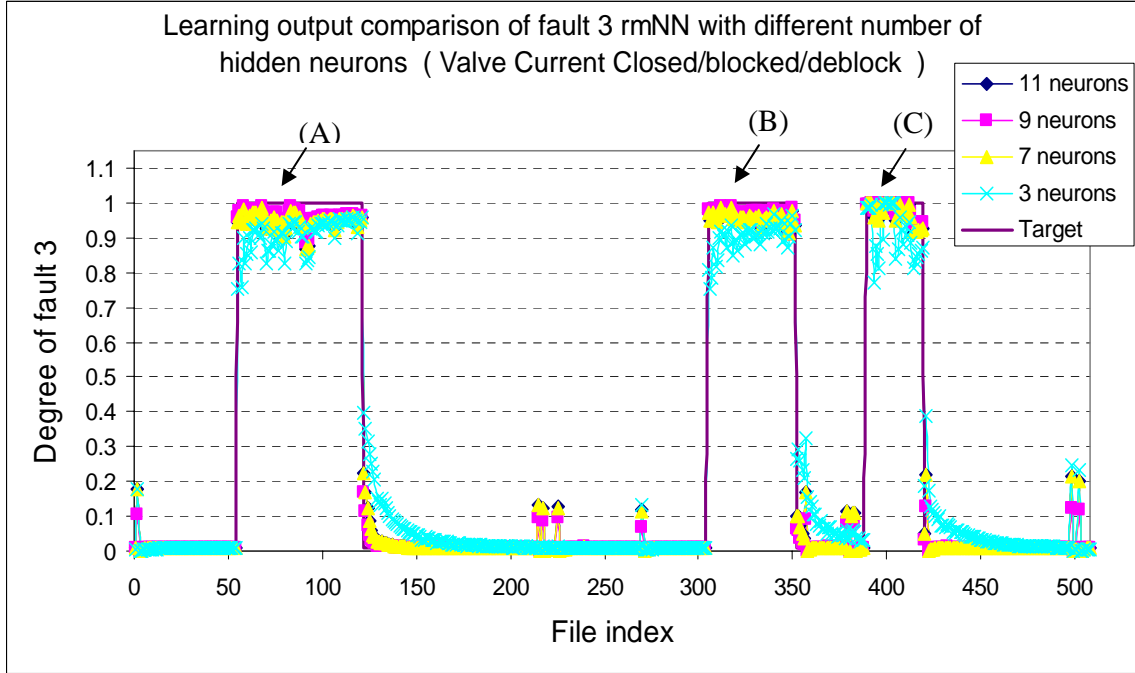
Fault 1 : Minor AC disturb

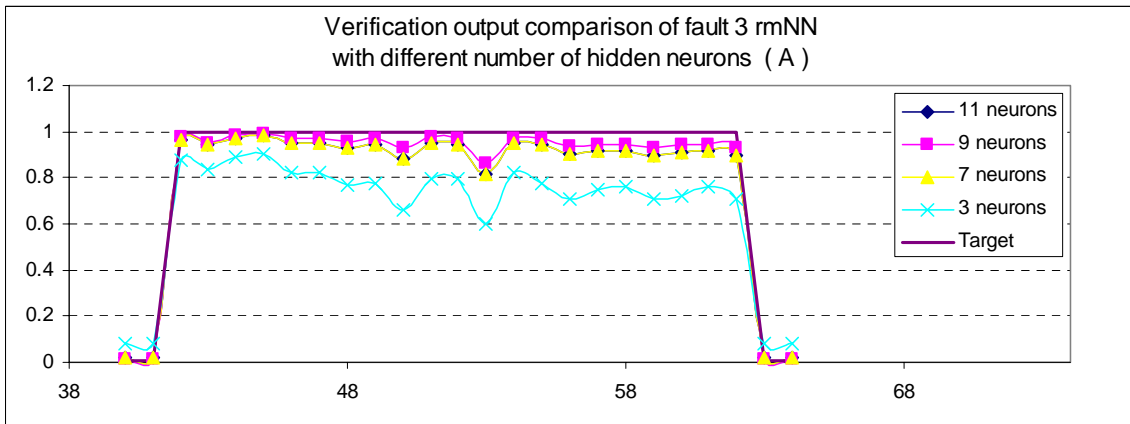
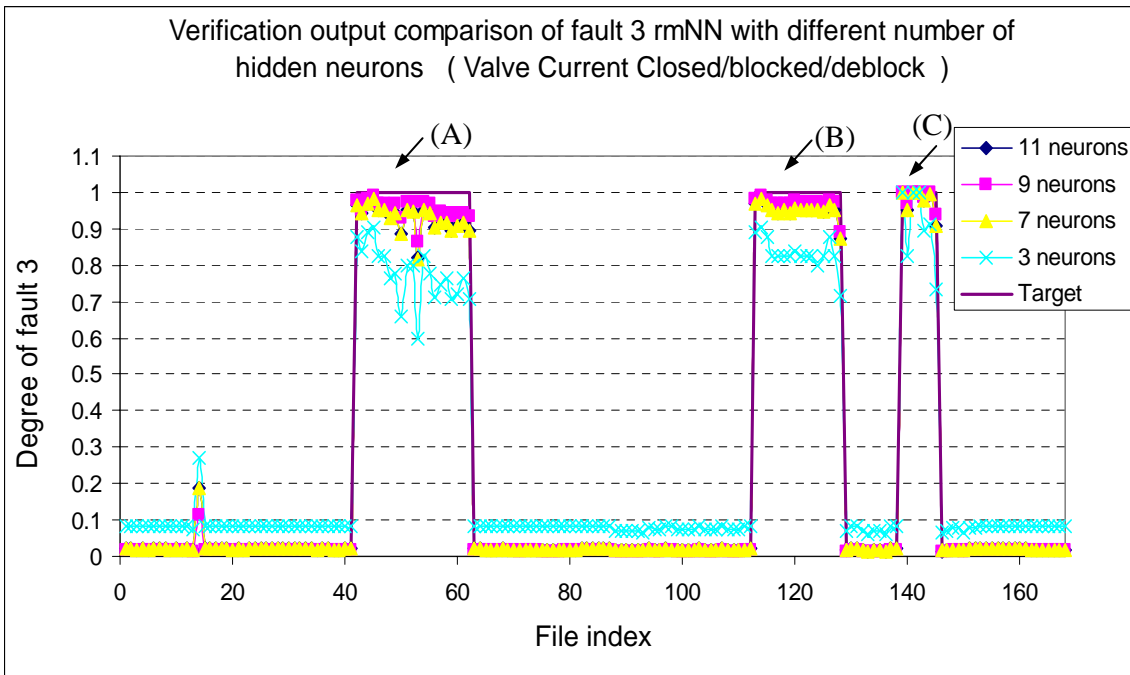
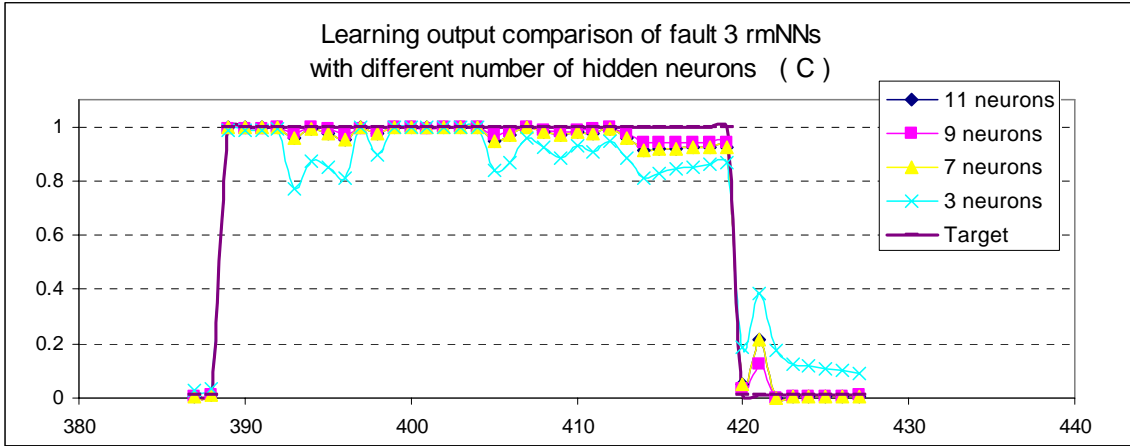


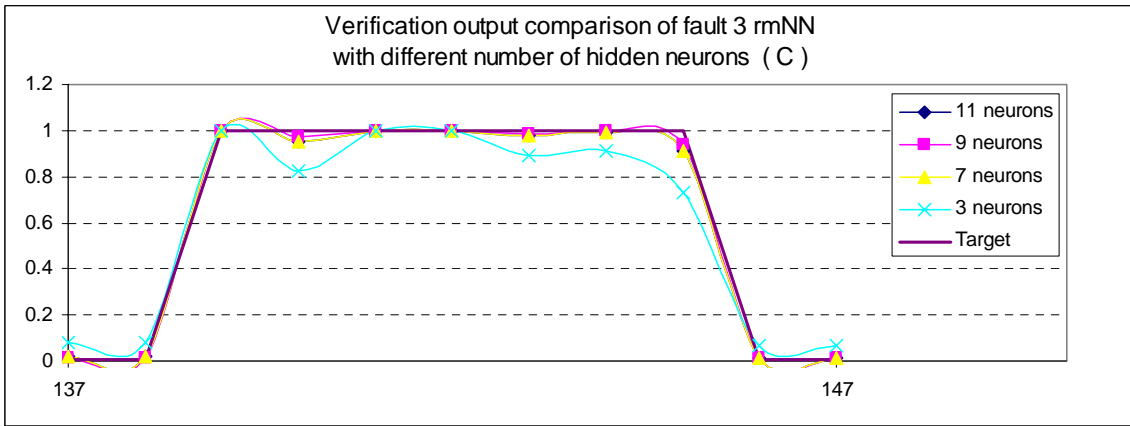
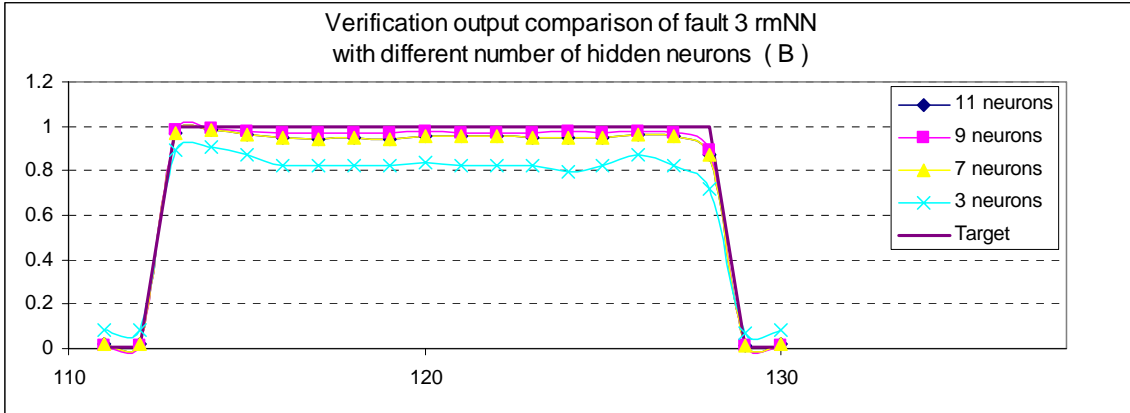
Fault 2 : AC Disturb



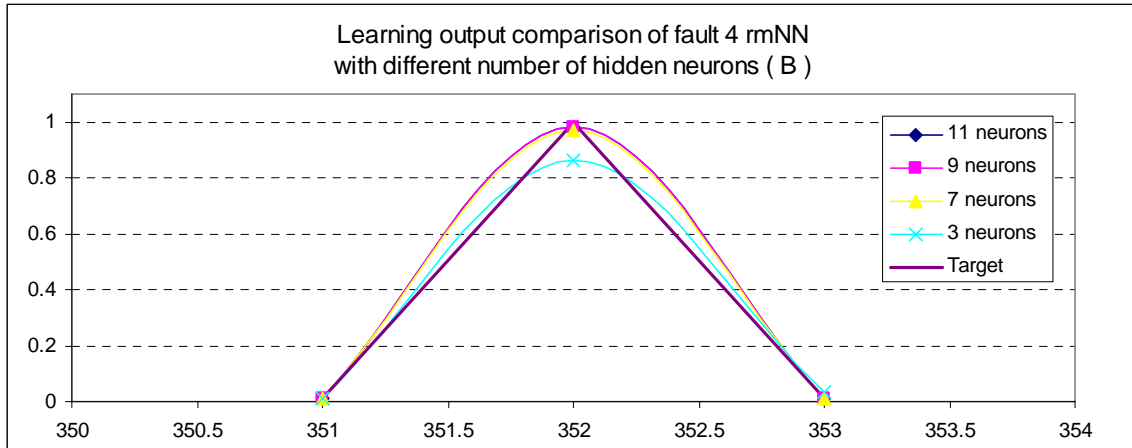
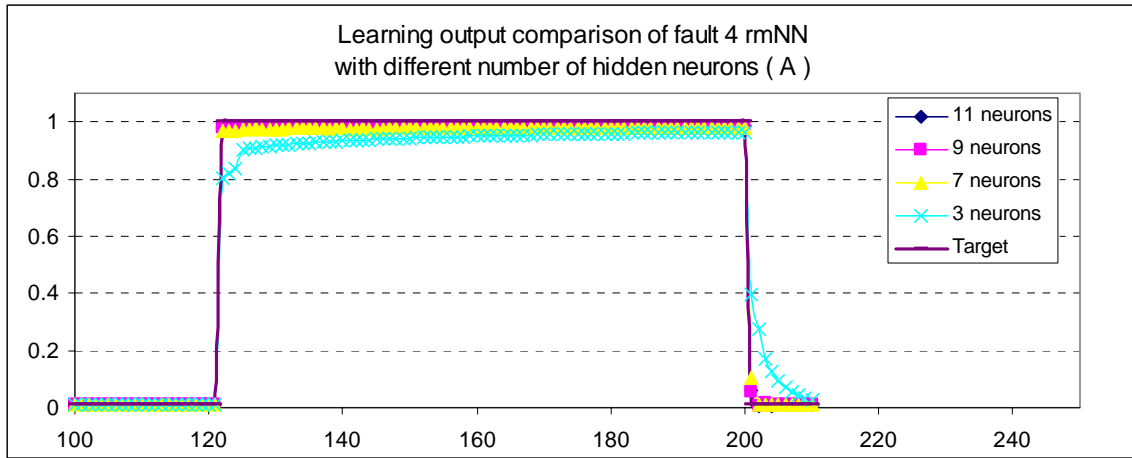
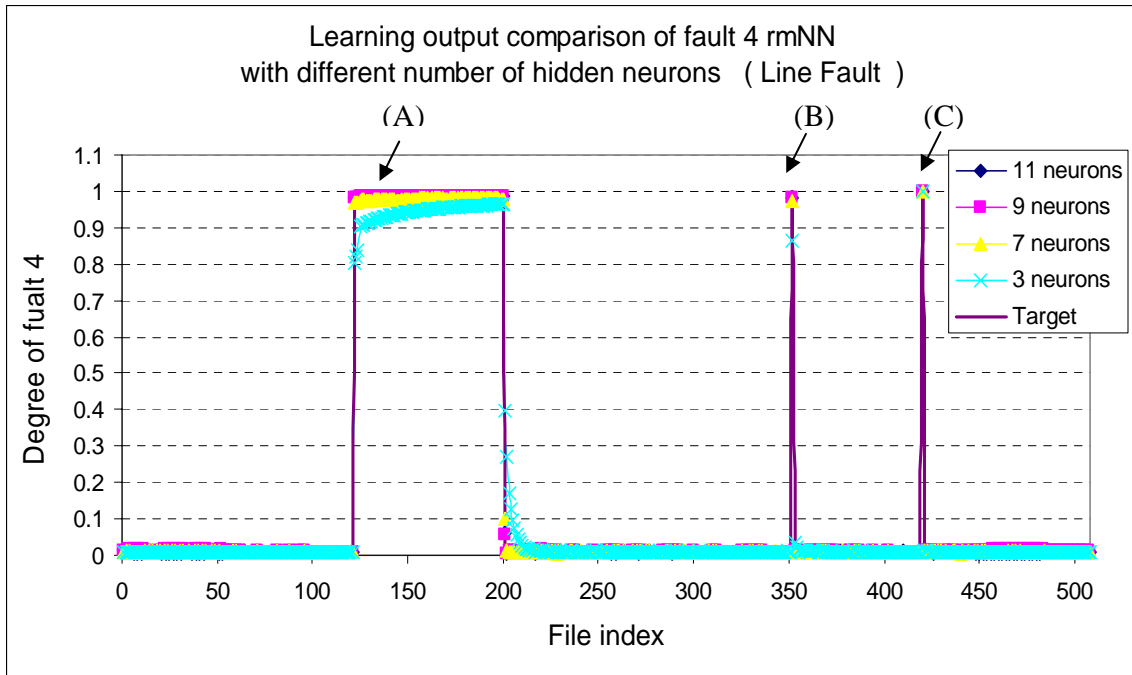
Fault 3 : Valve Current Closed/blocked/deblock

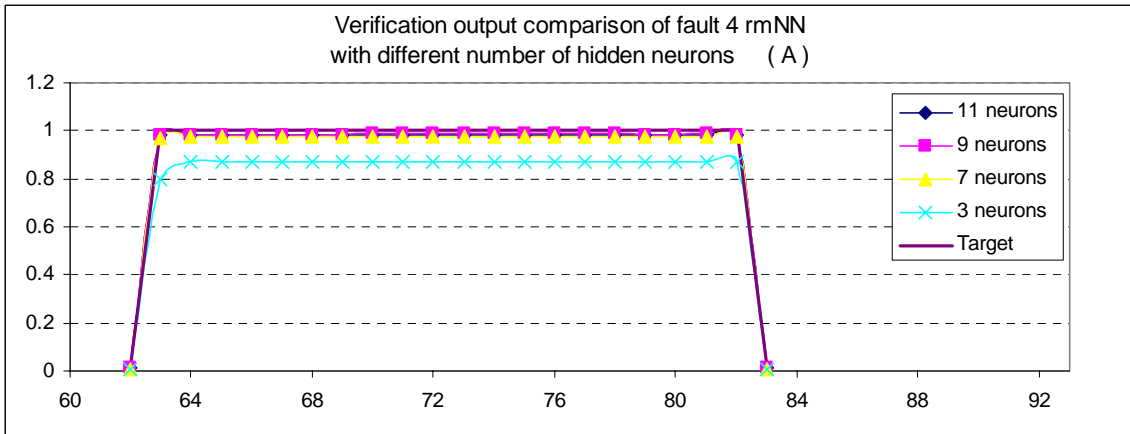
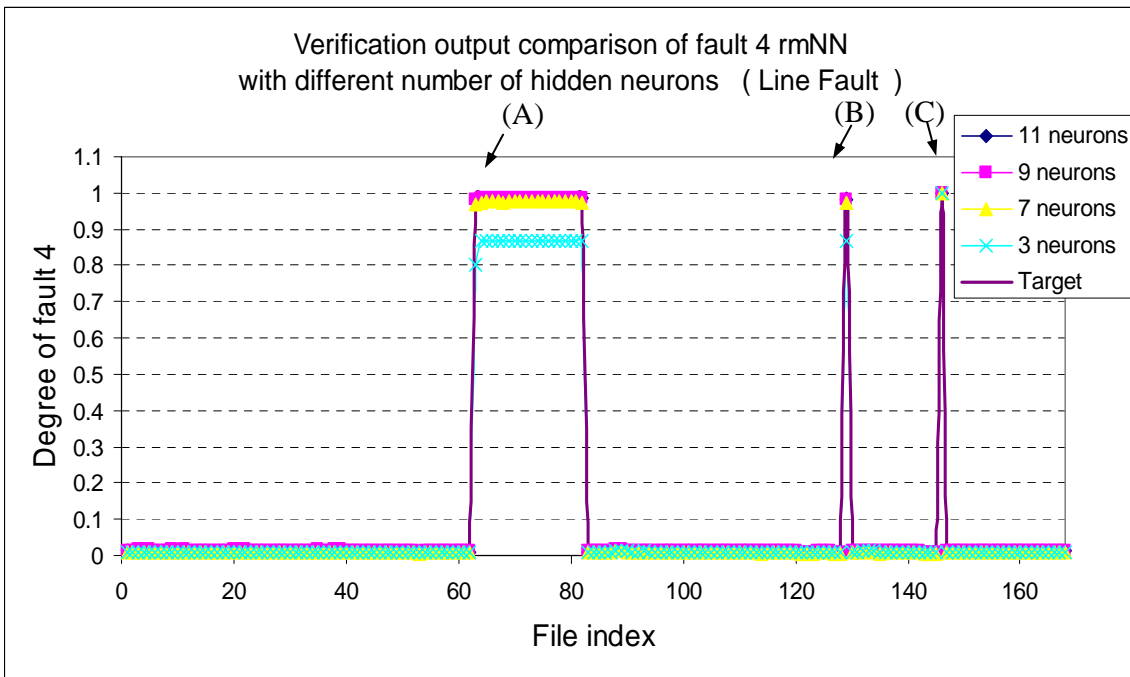
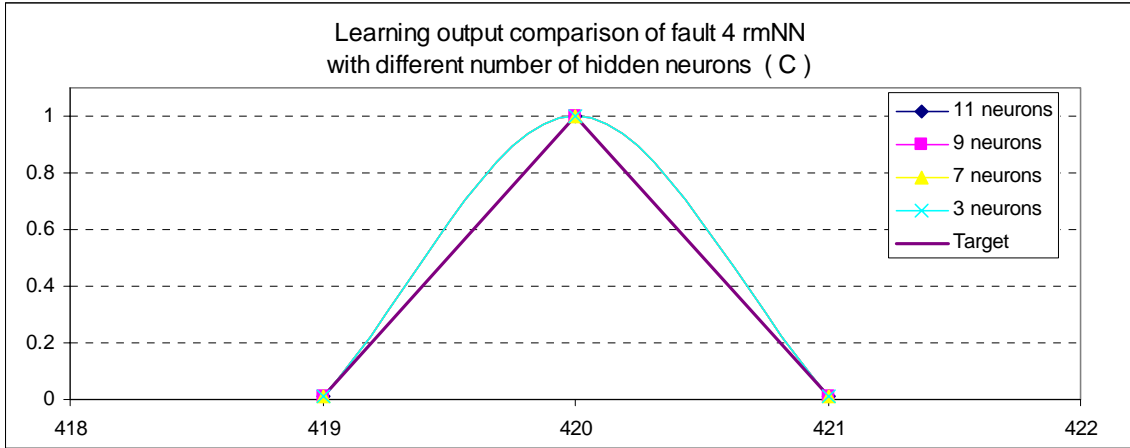


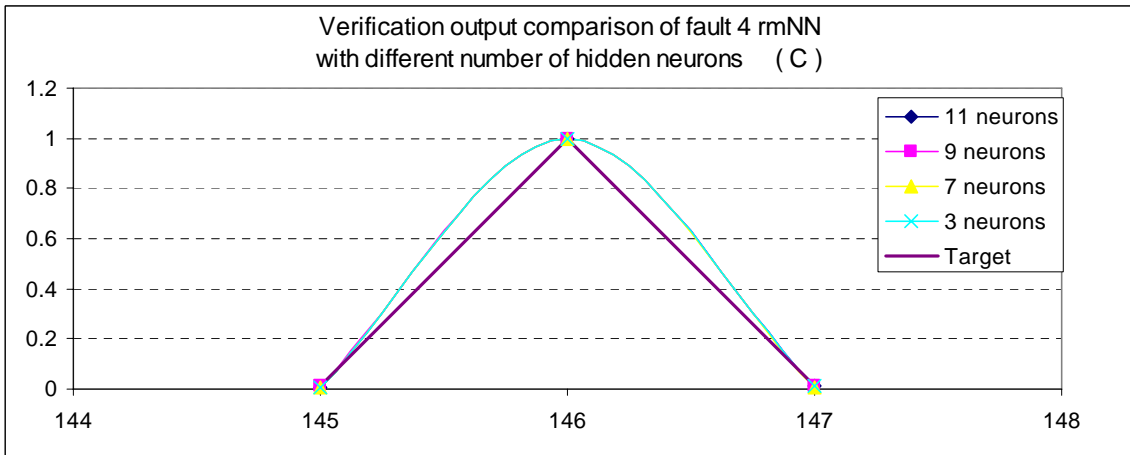
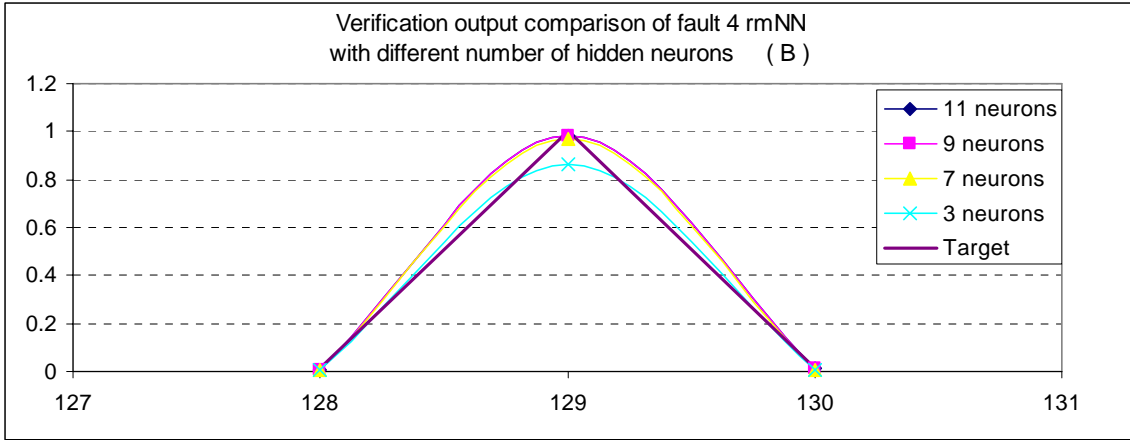




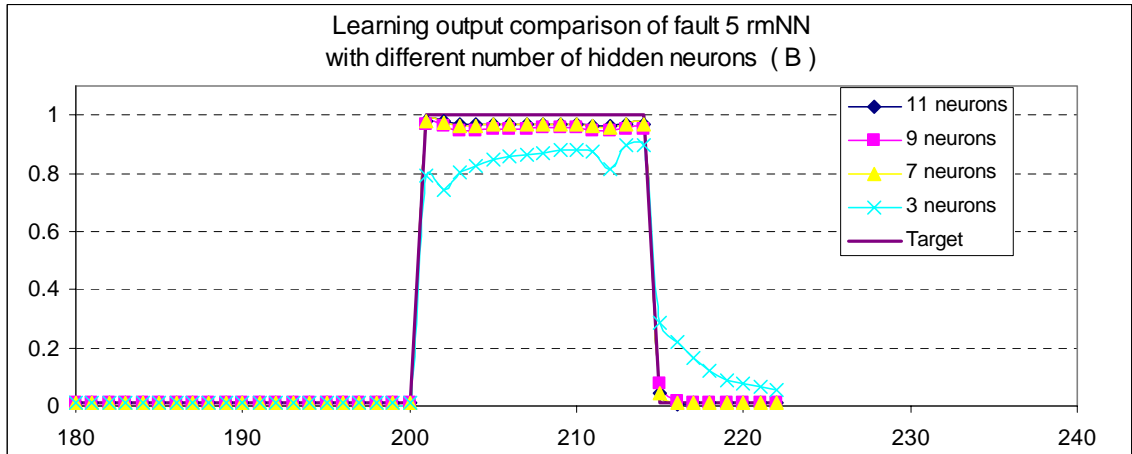
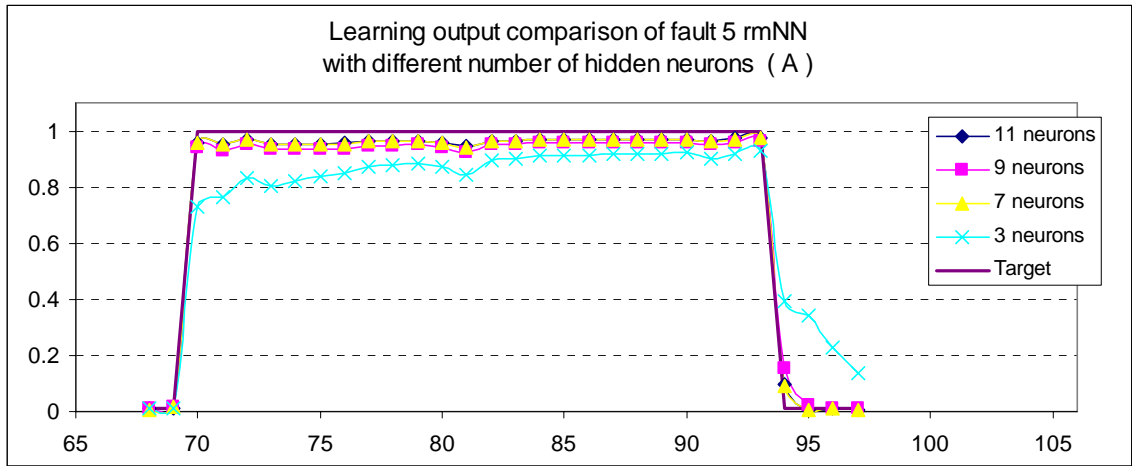
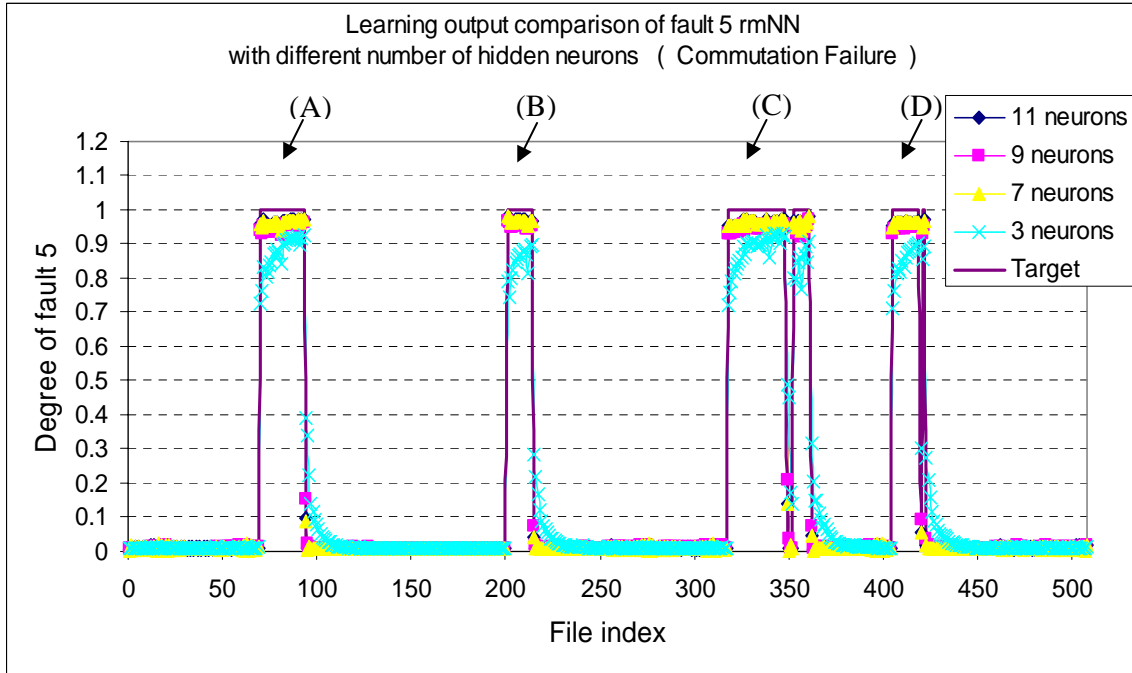
Fault 4 : Line Fault

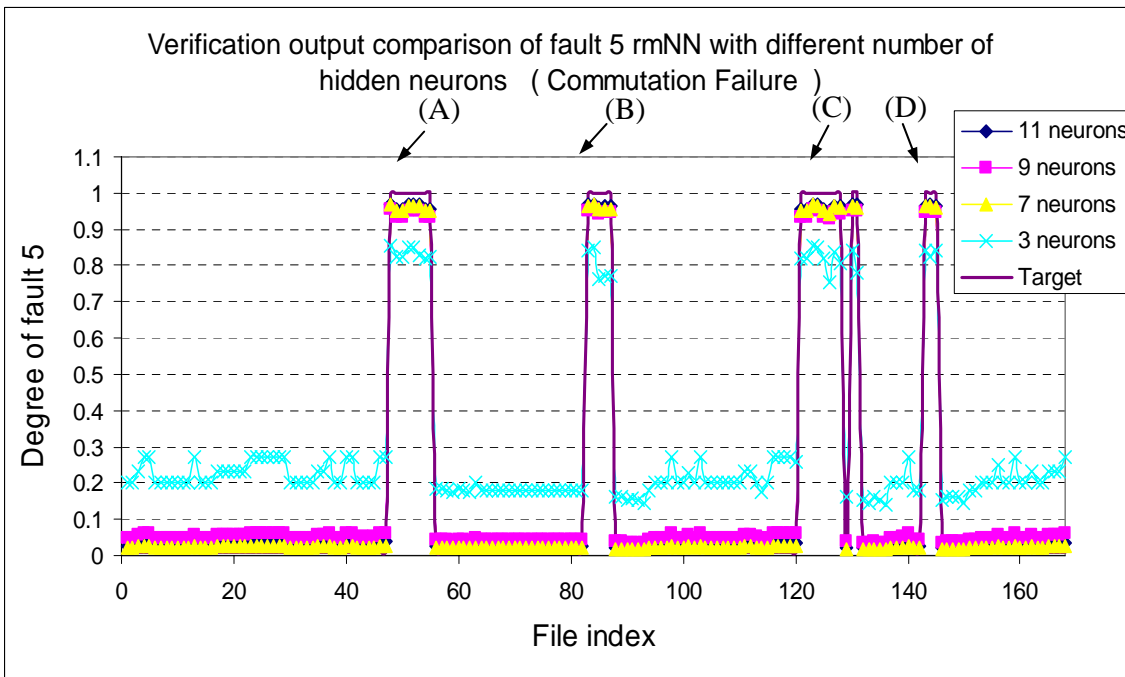
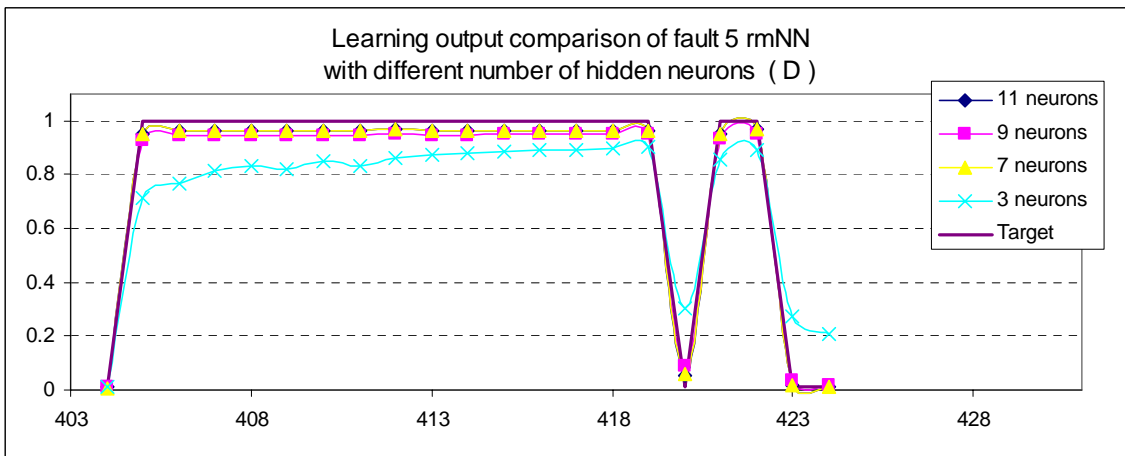
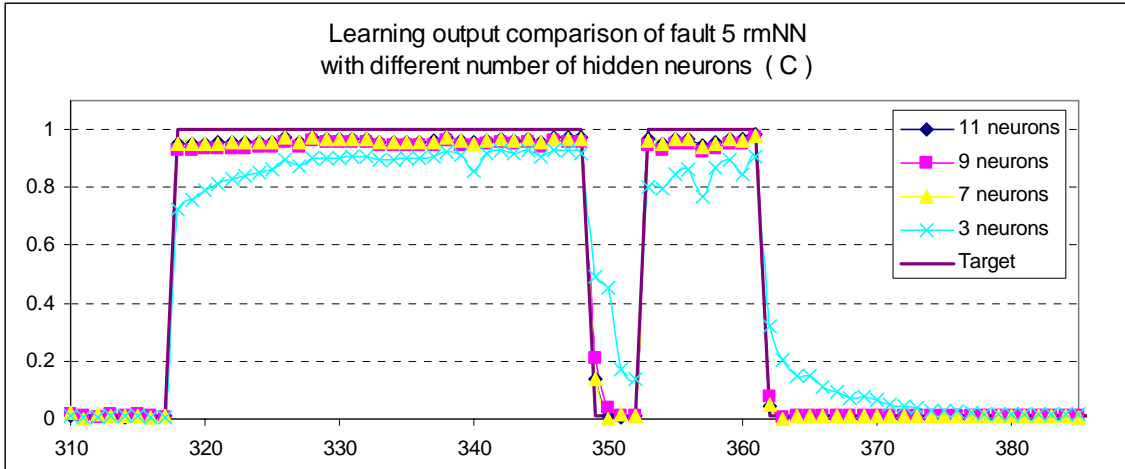


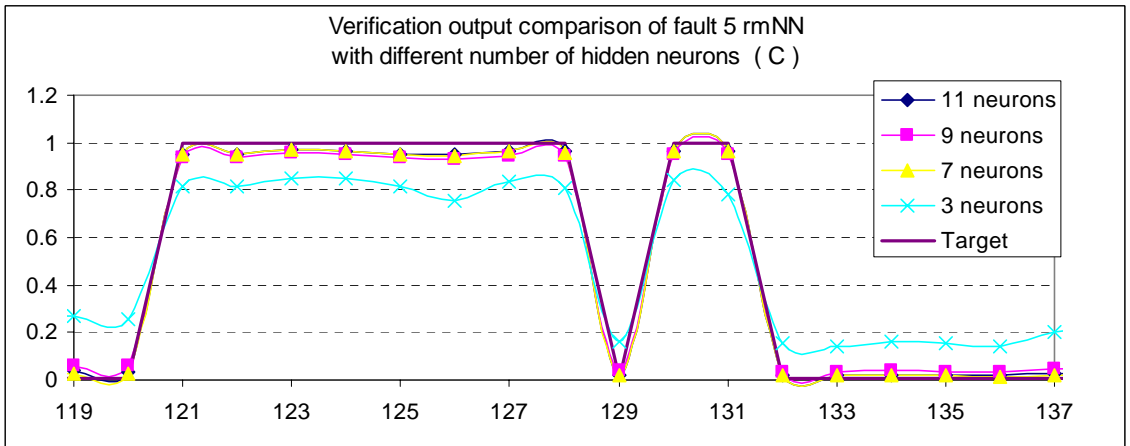
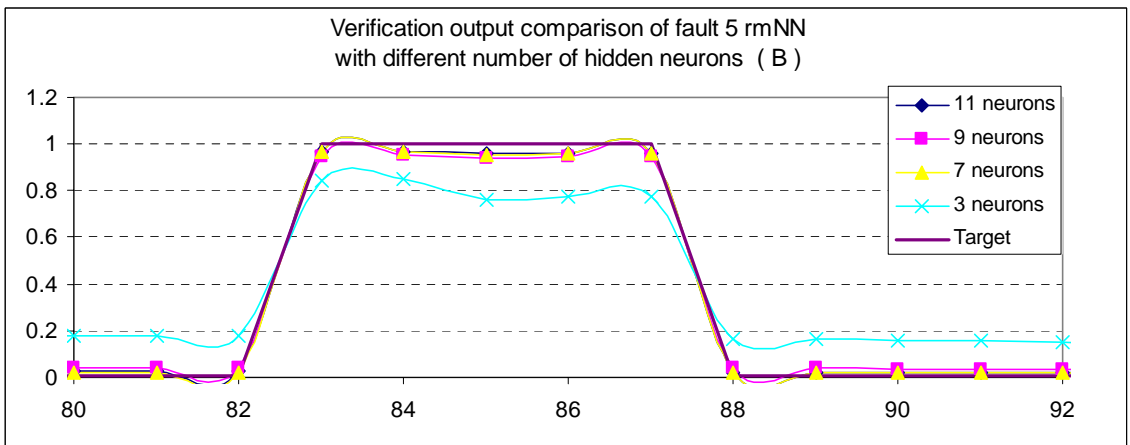
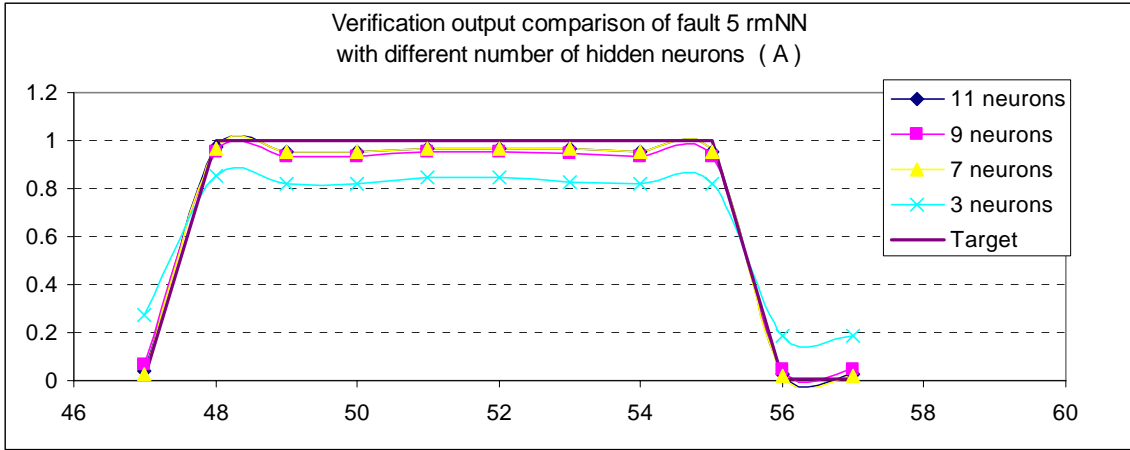


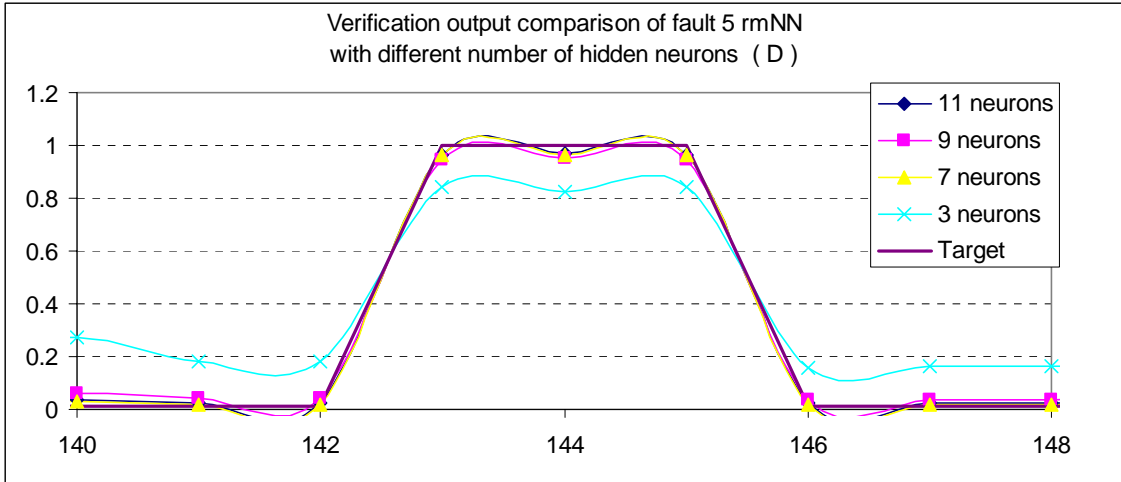


Fault 5 : Commutation Failure

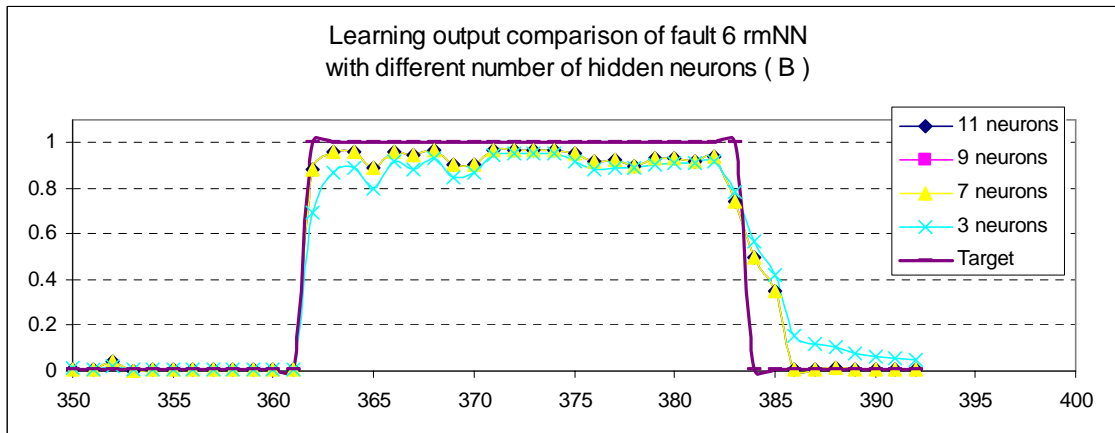
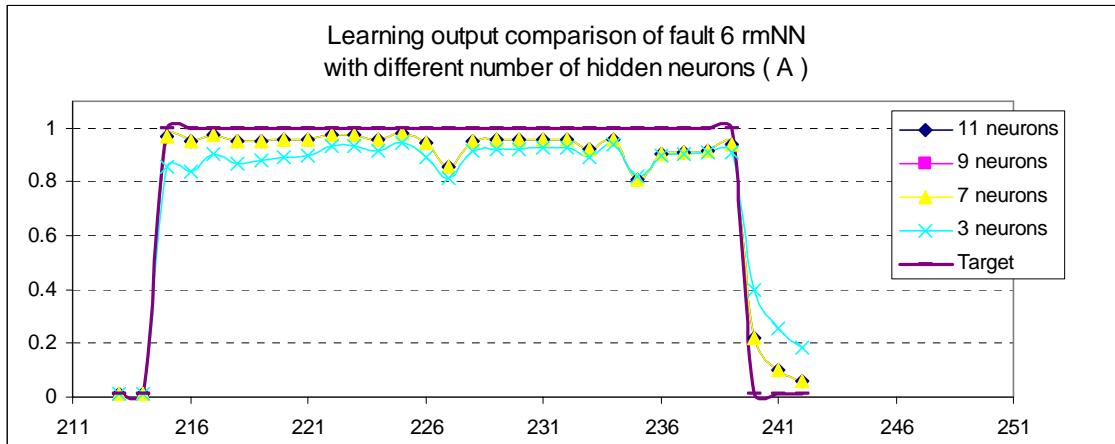
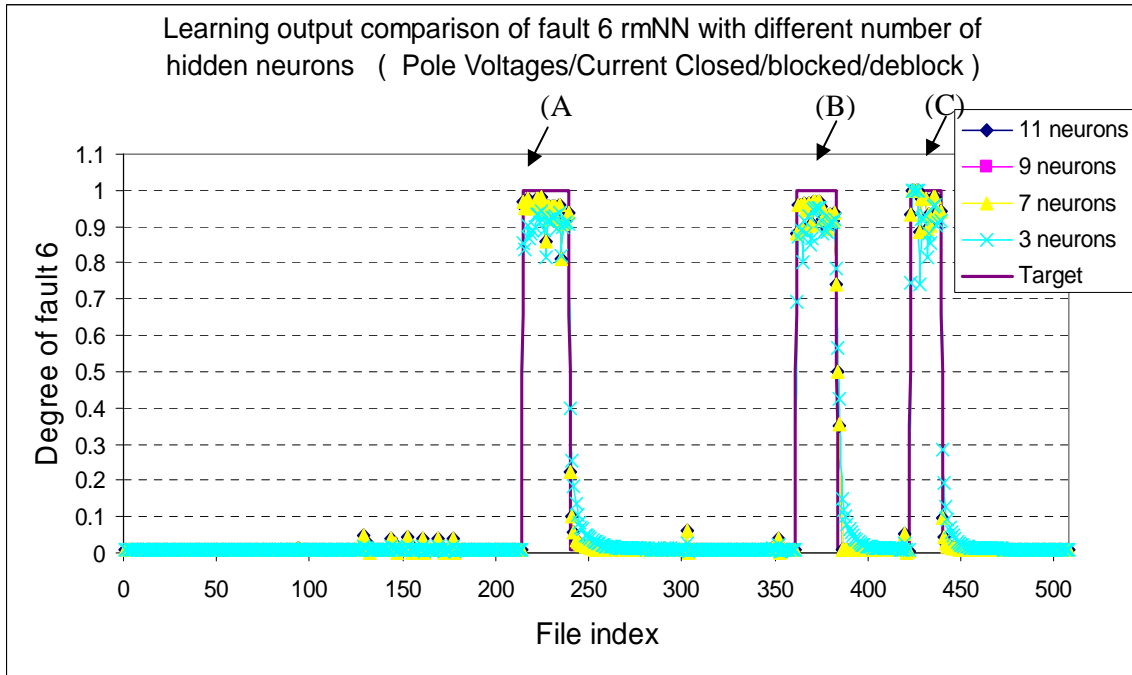


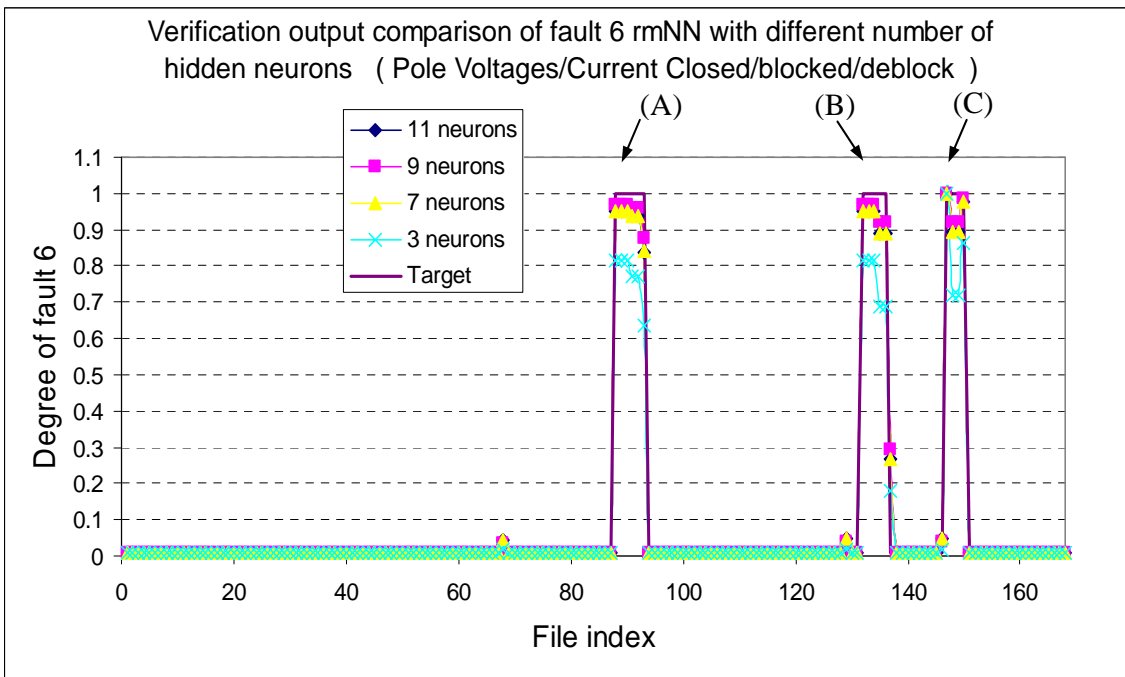
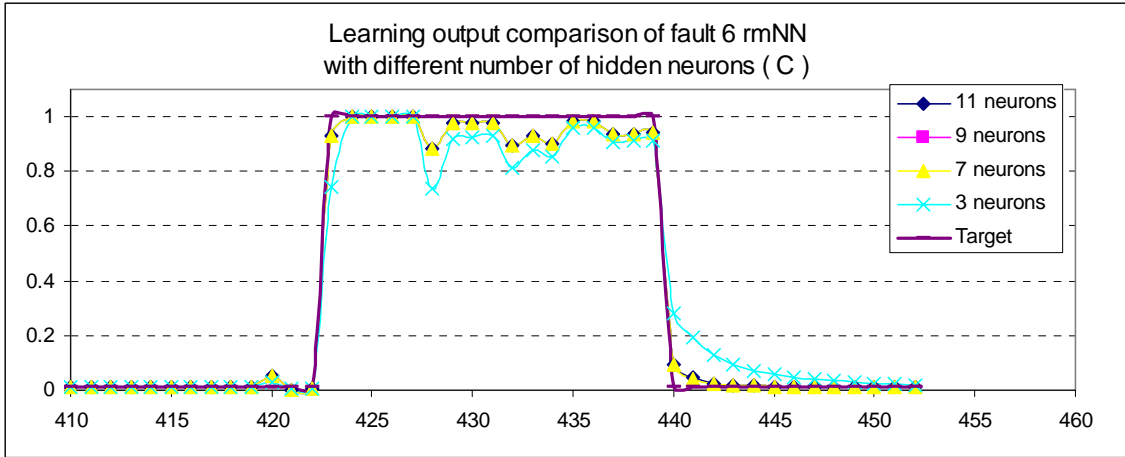


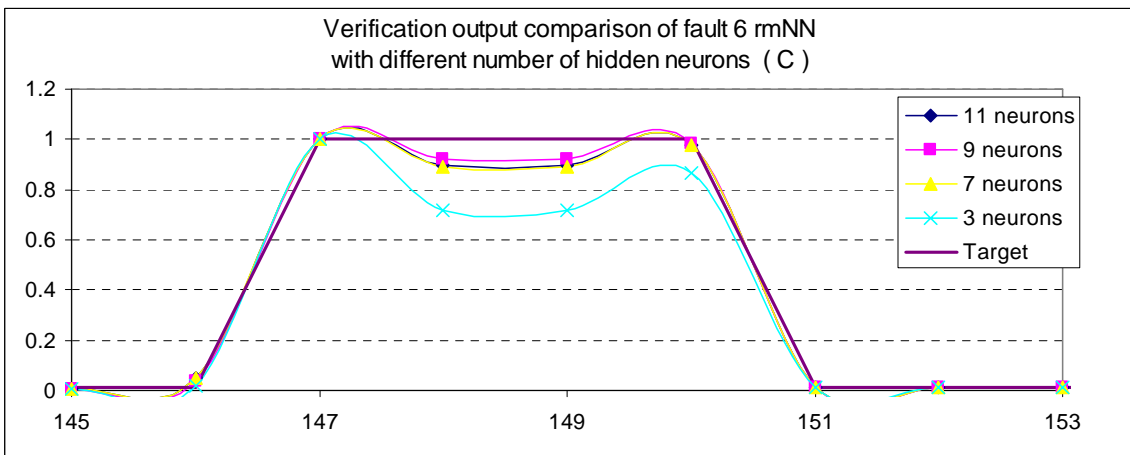
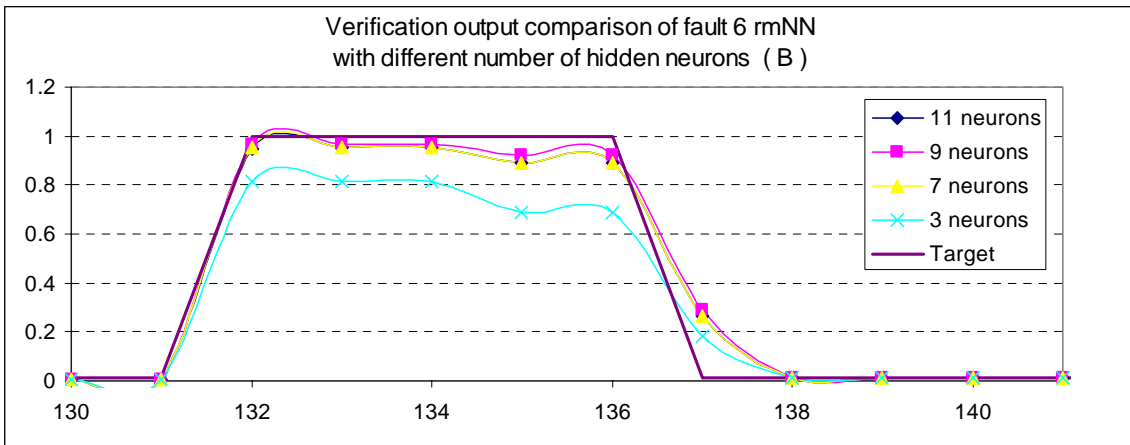
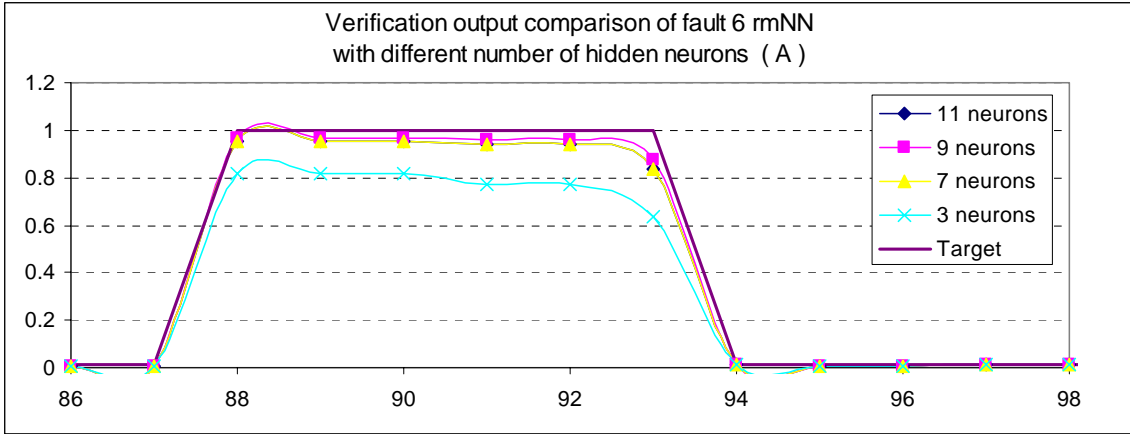




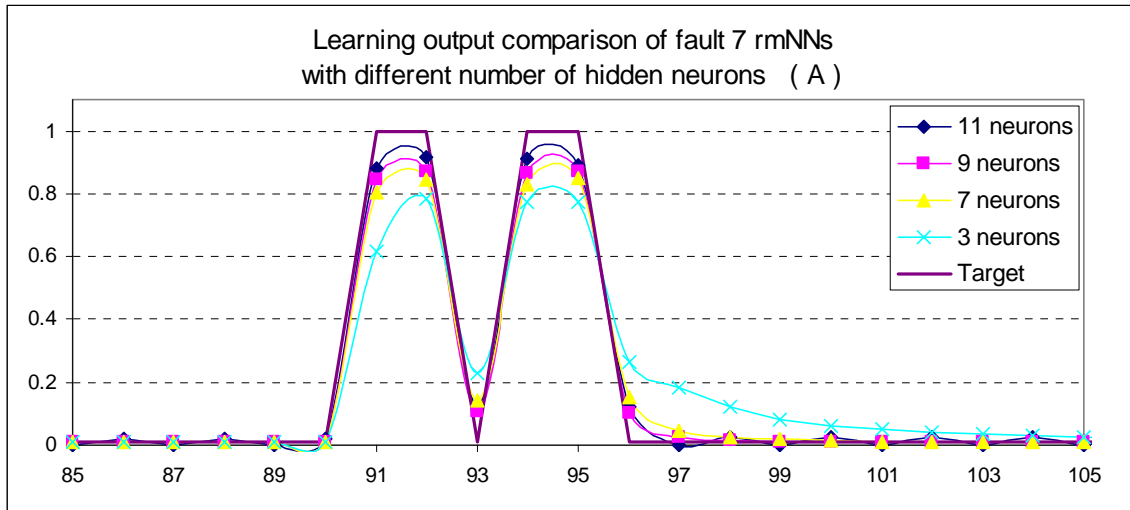
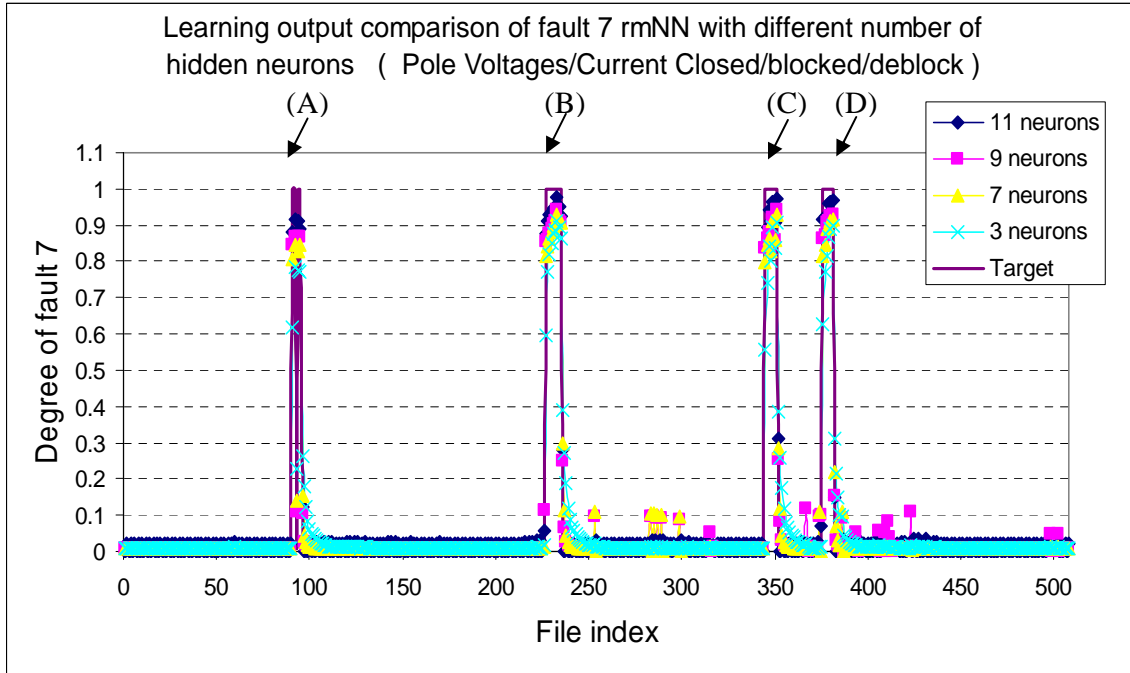
Fault 6 : Pole Voltages/Current Closed/blocked/deblock

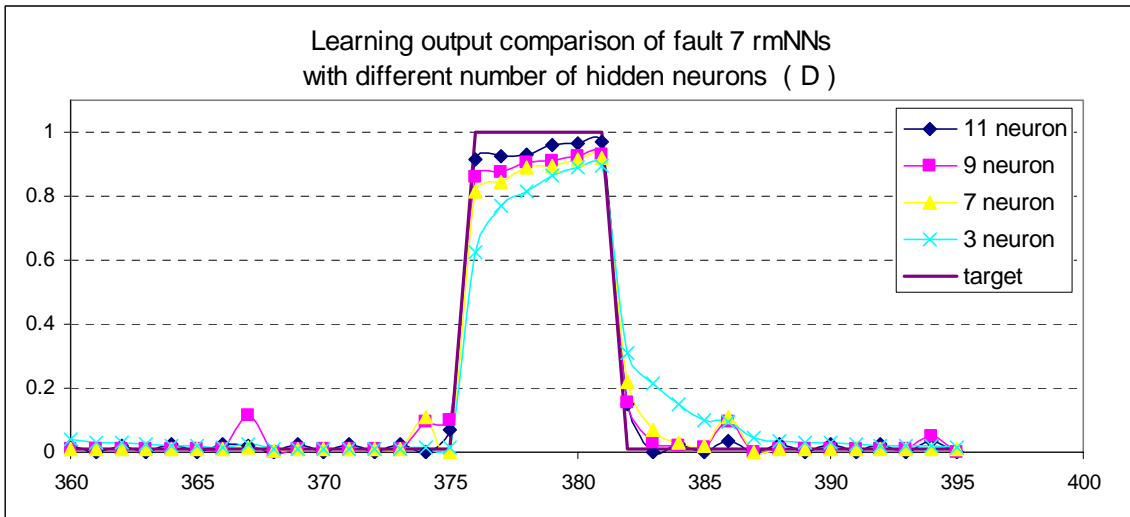
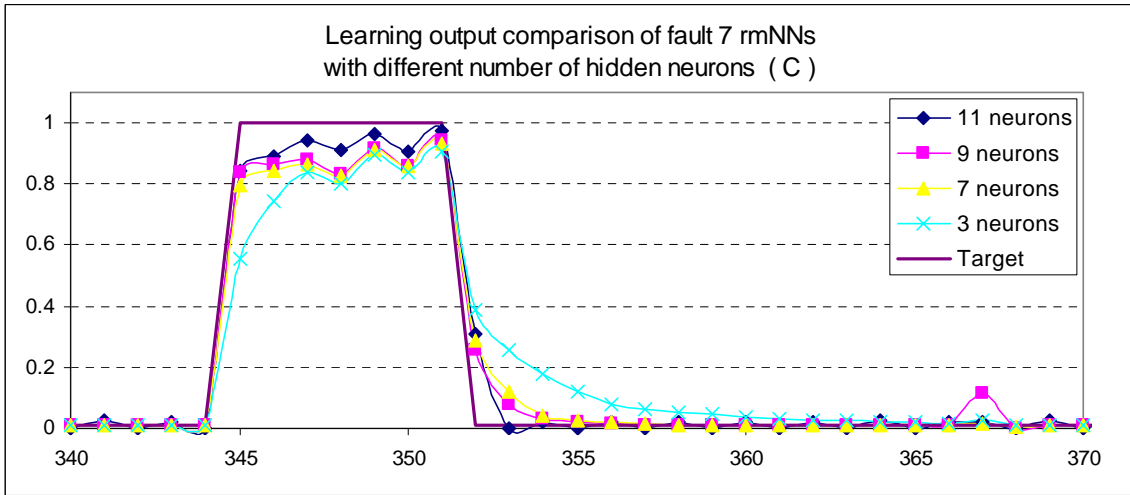
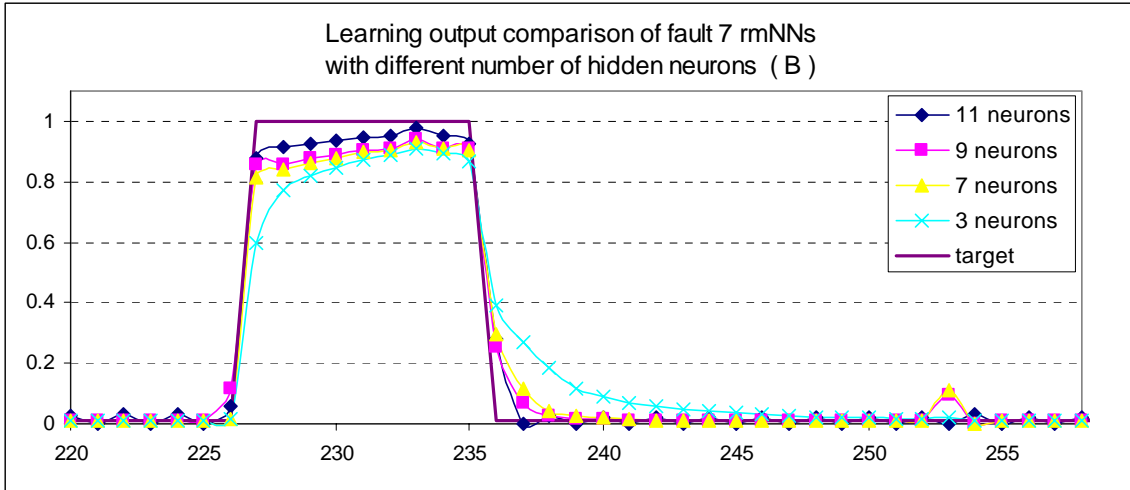


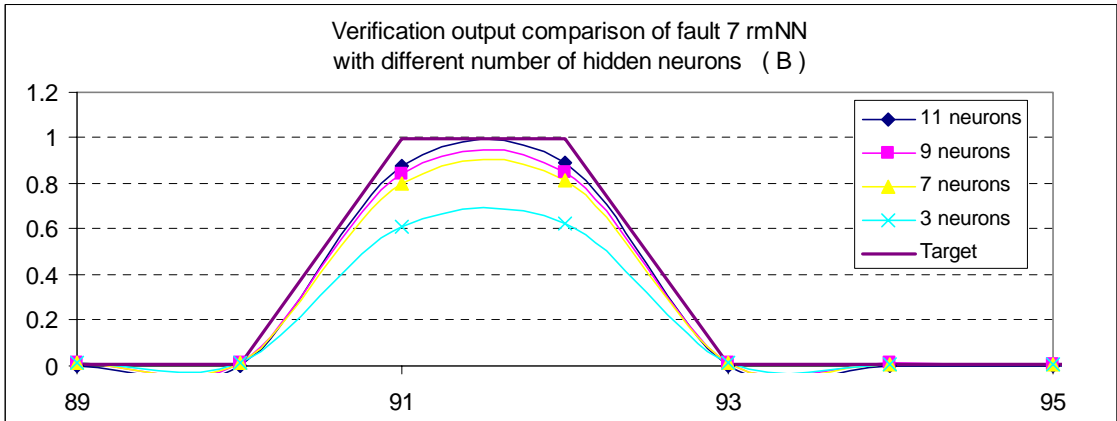
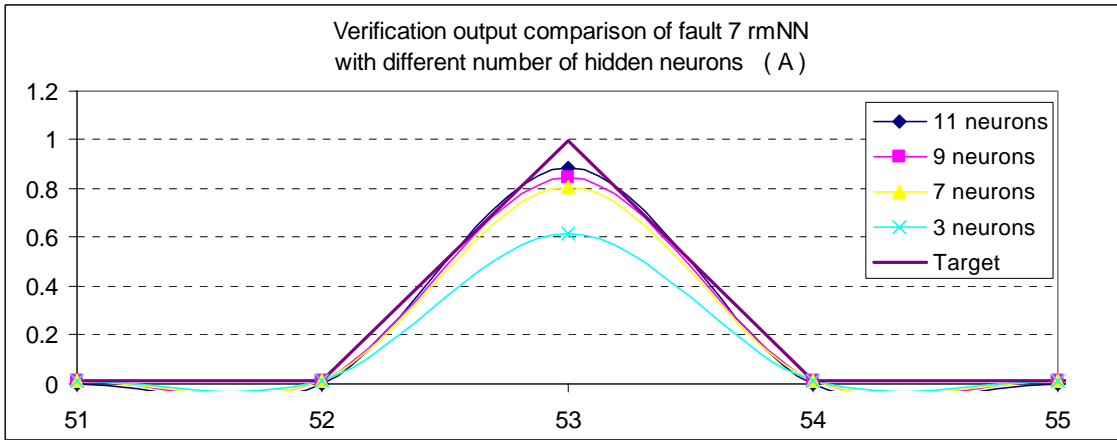
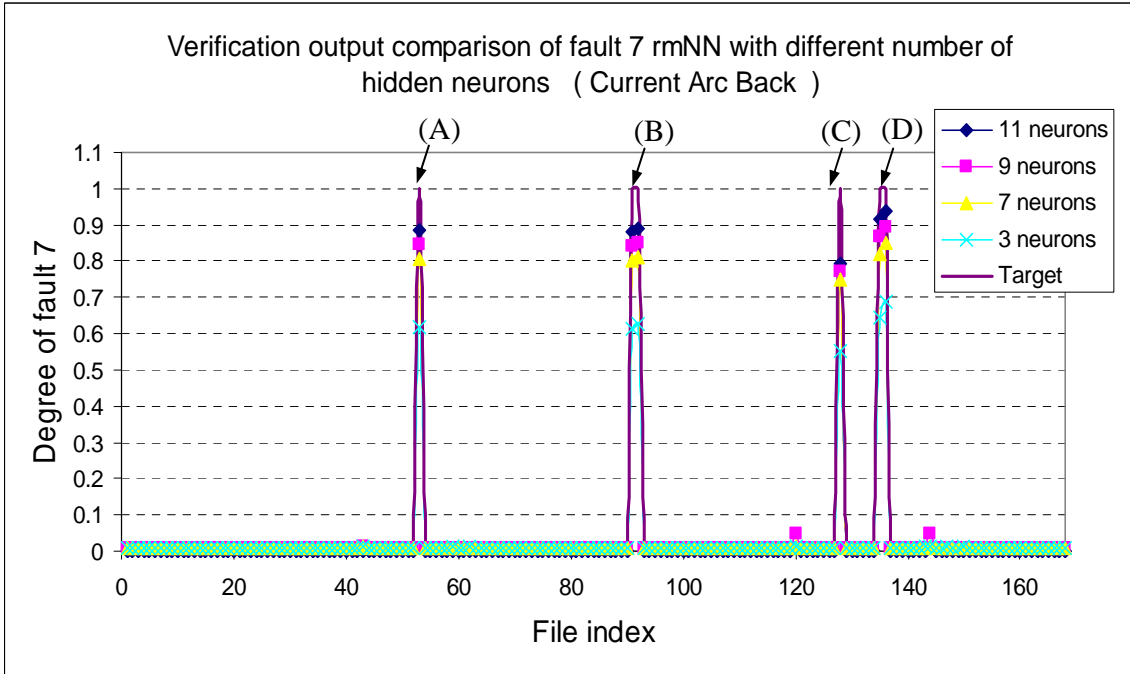


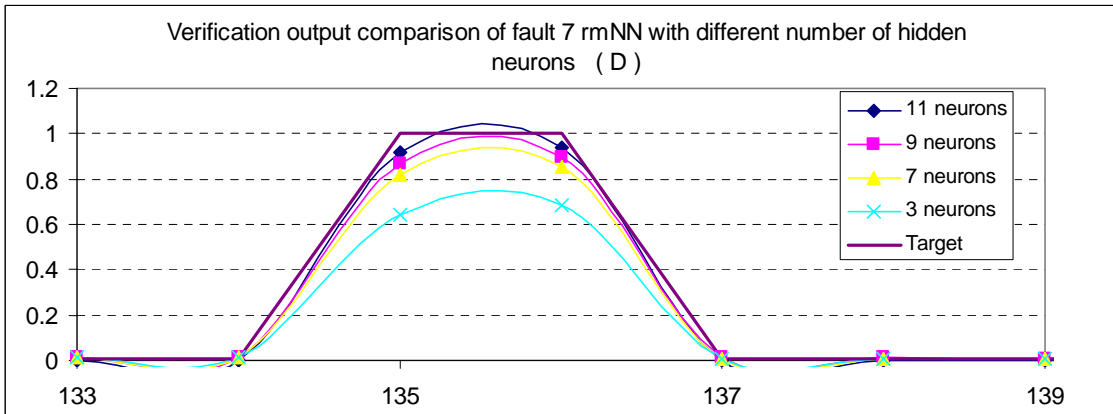
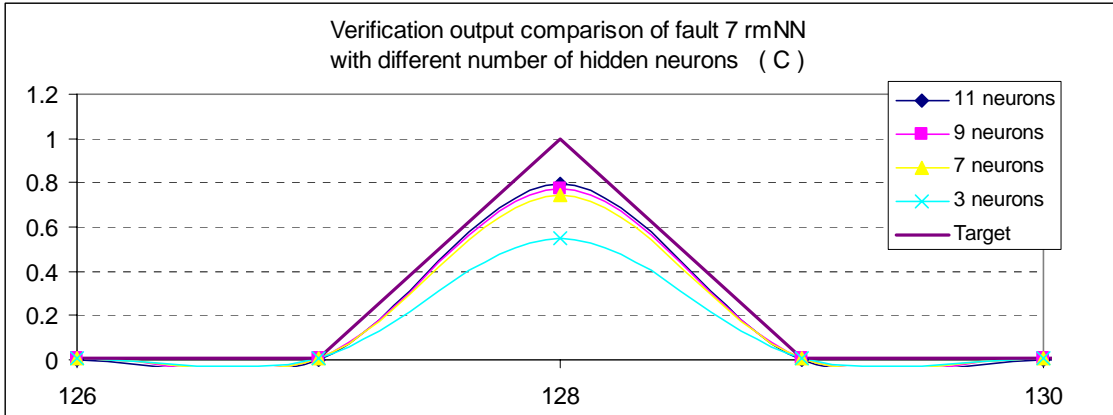


Fault 7 : Current Arc Back

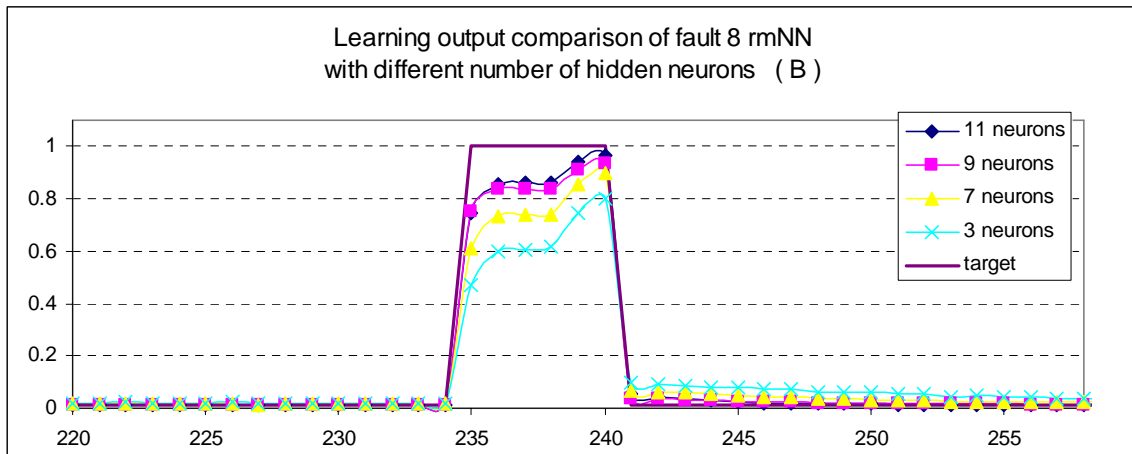
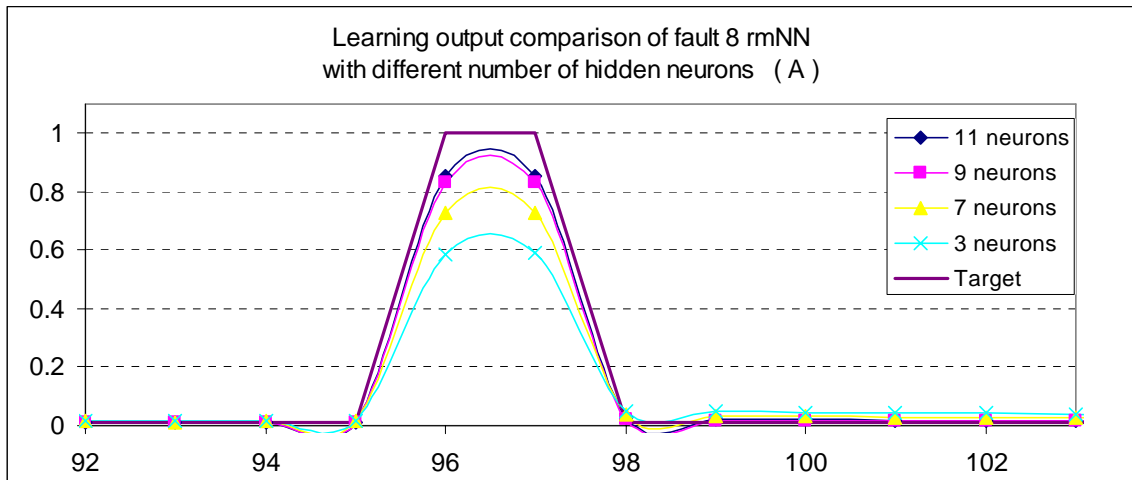
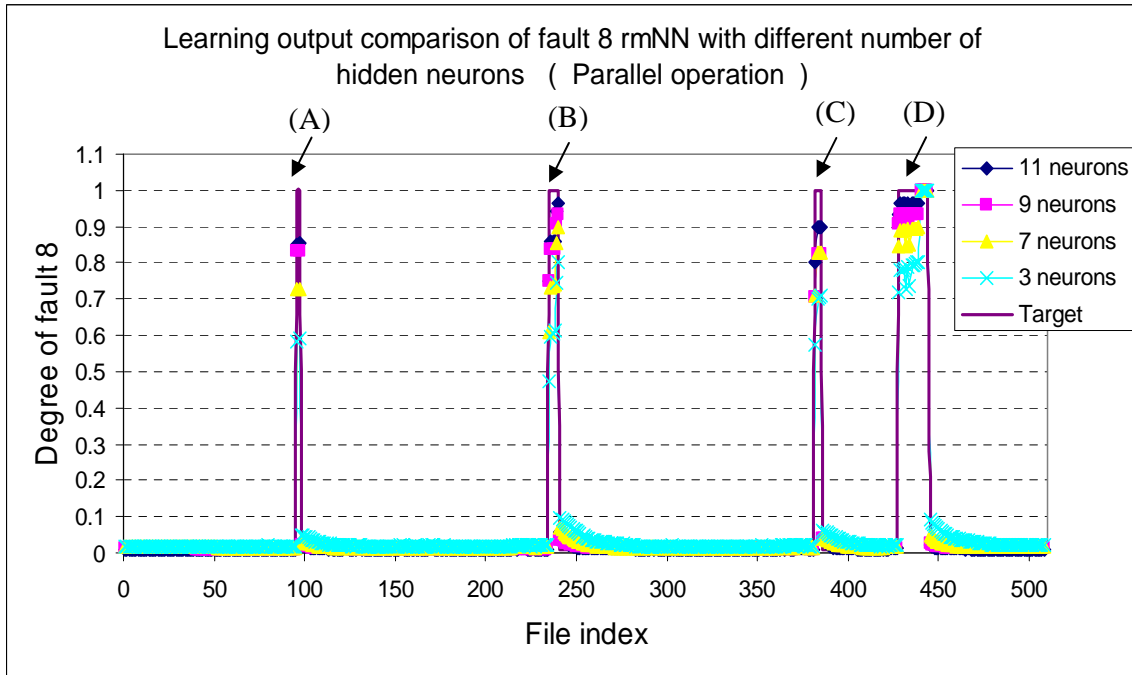


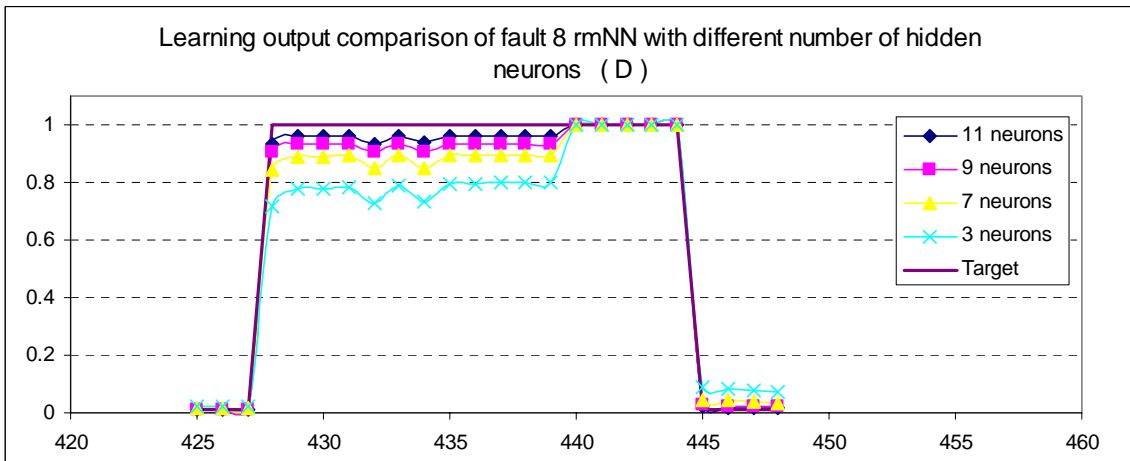
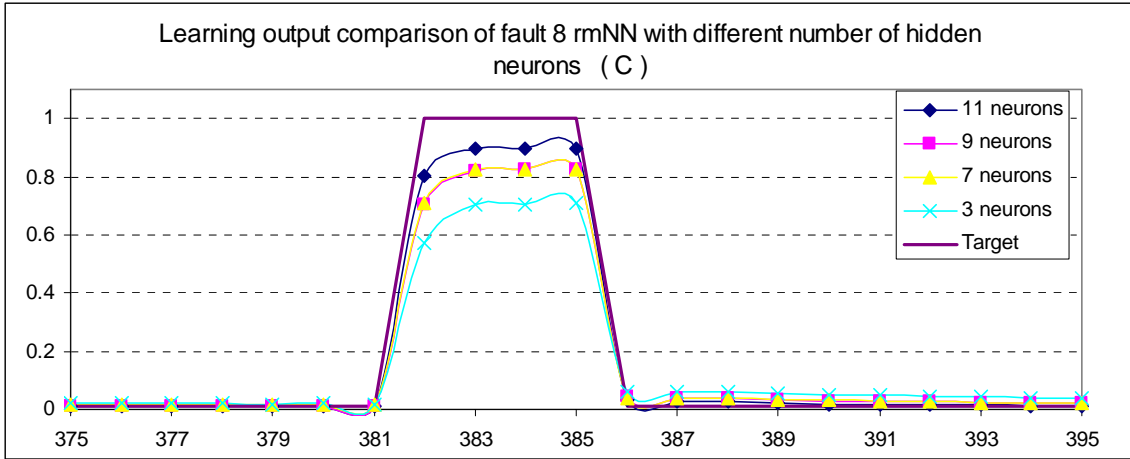


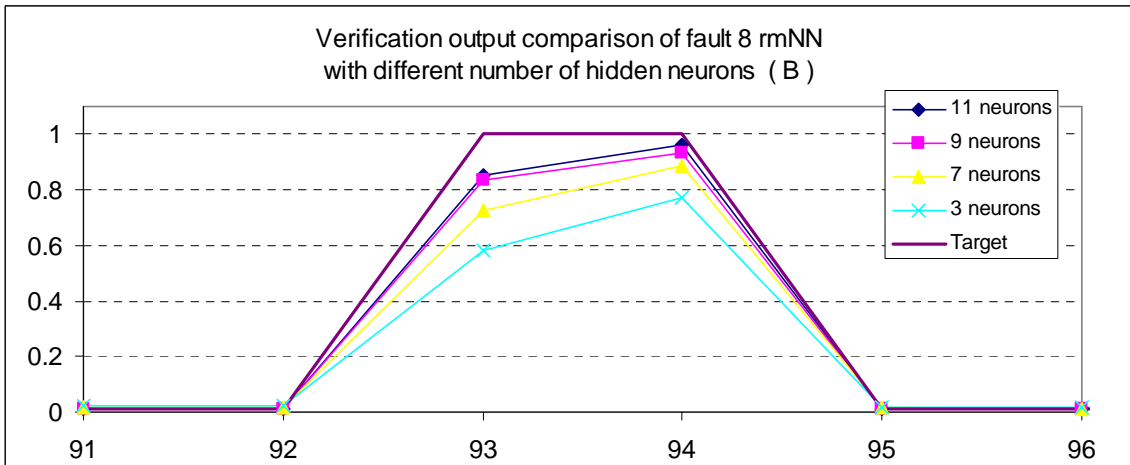
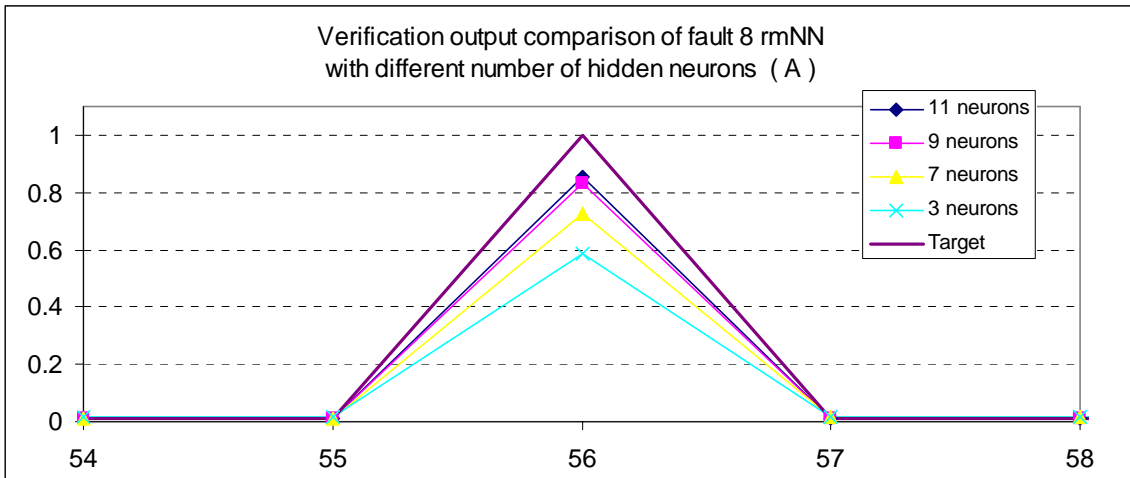
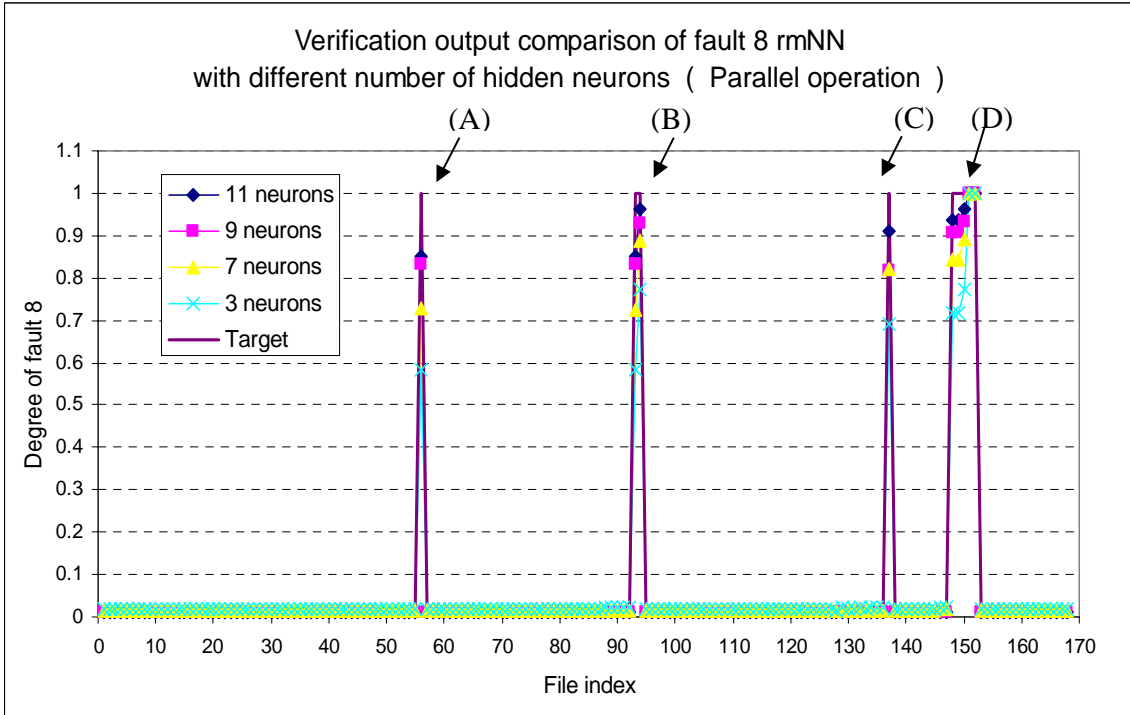


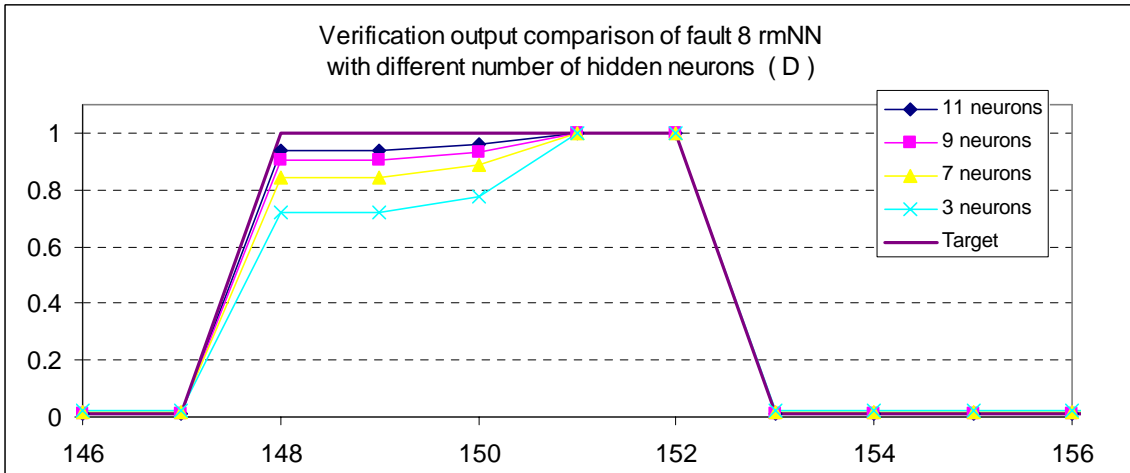
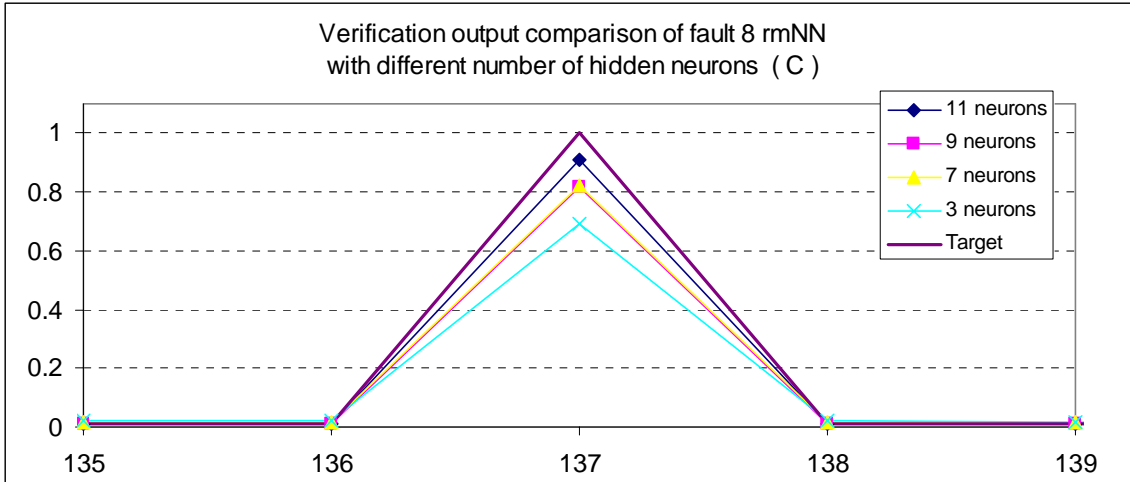


Fault 8 : Parallel operation

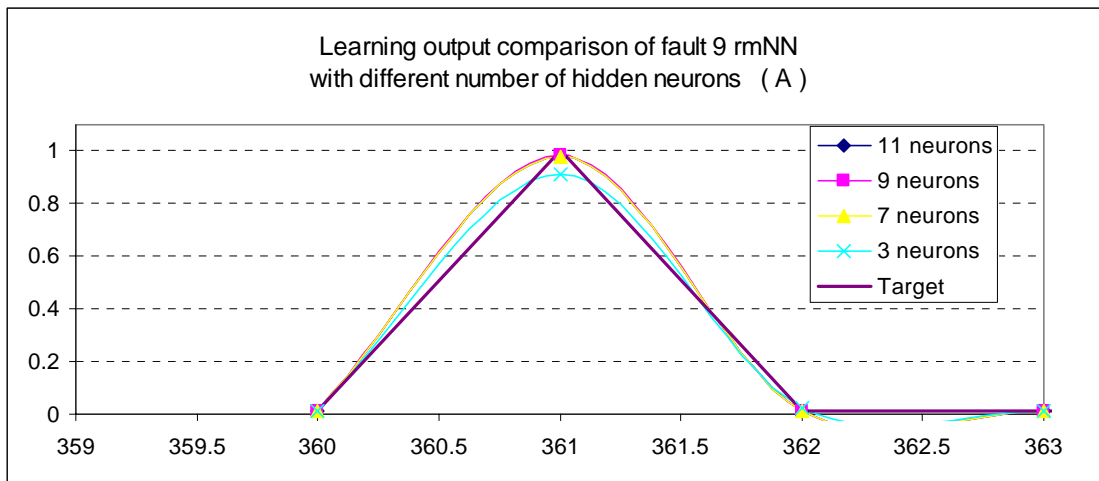
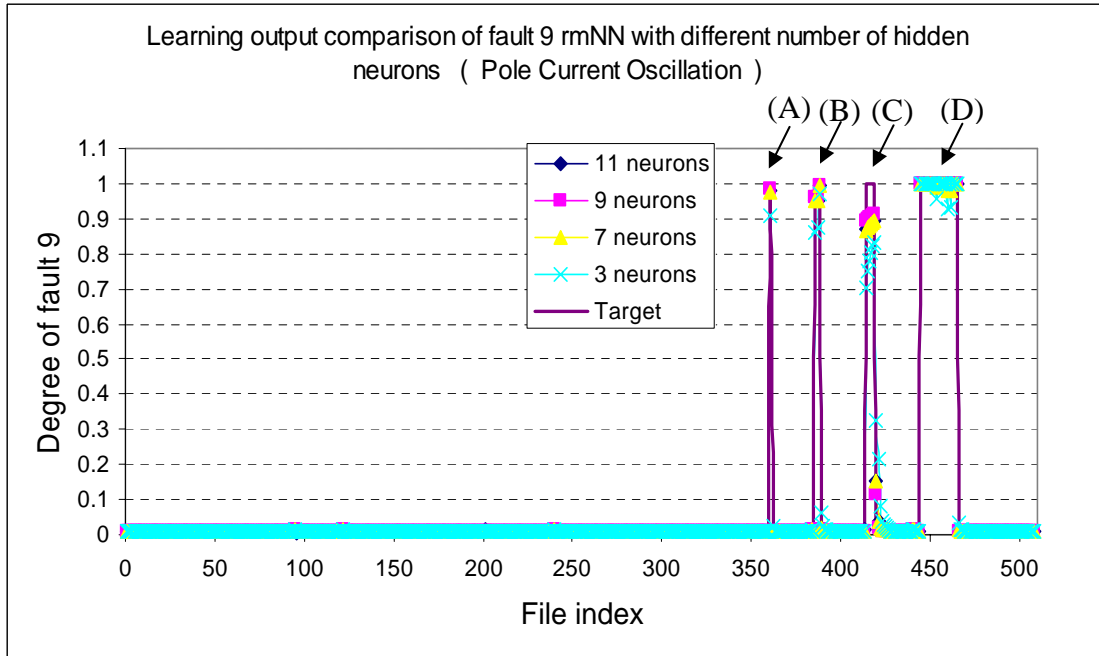


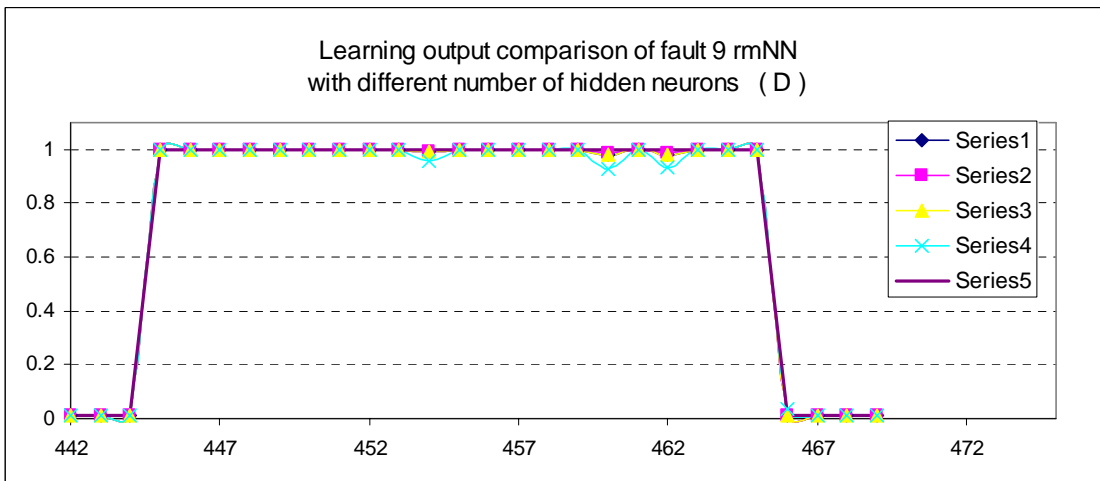
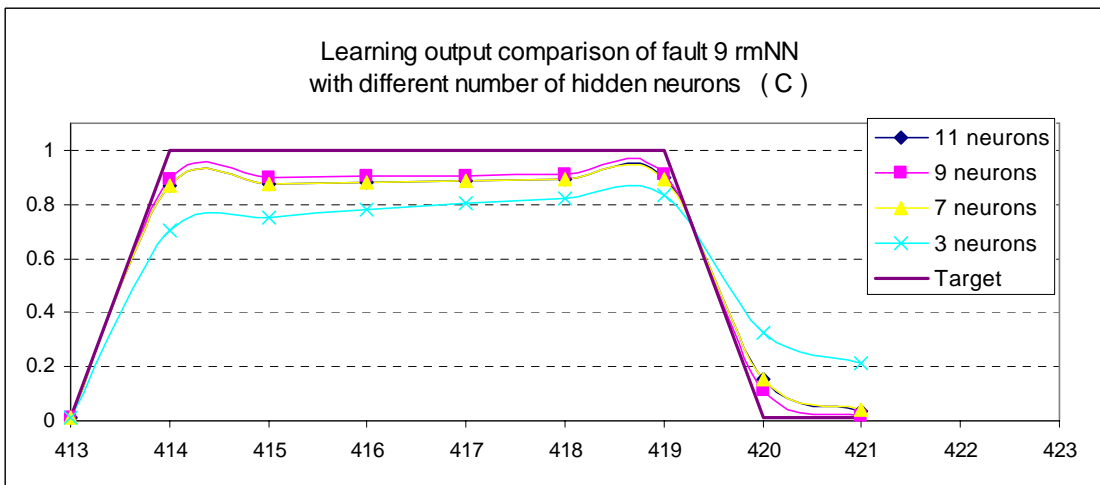
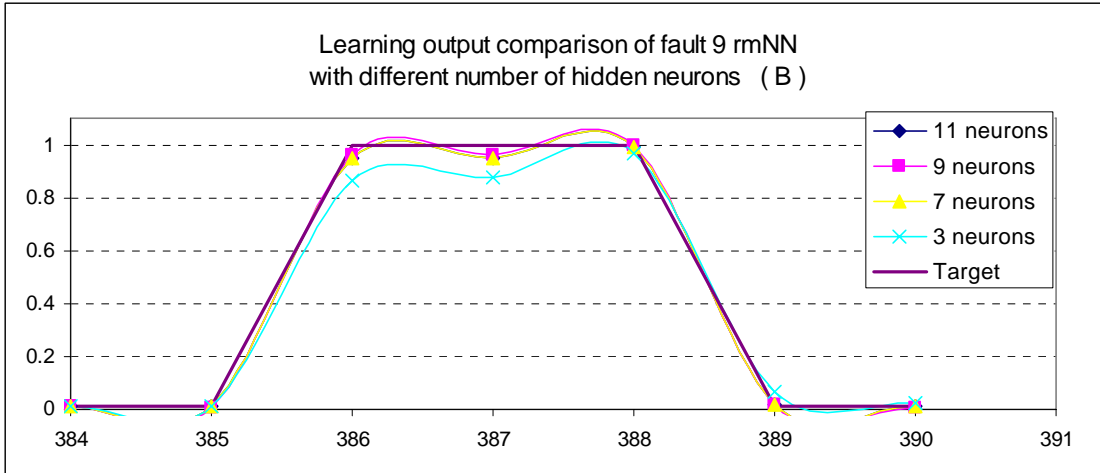


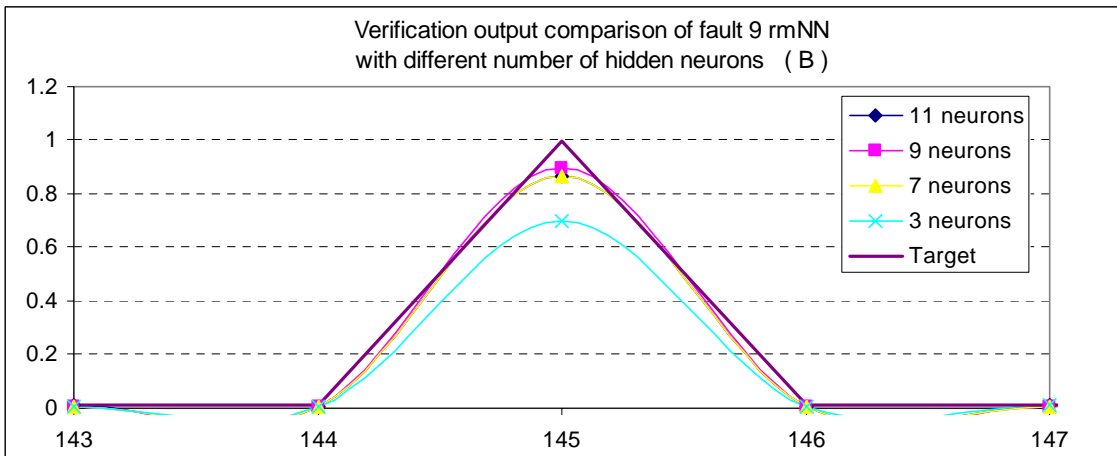
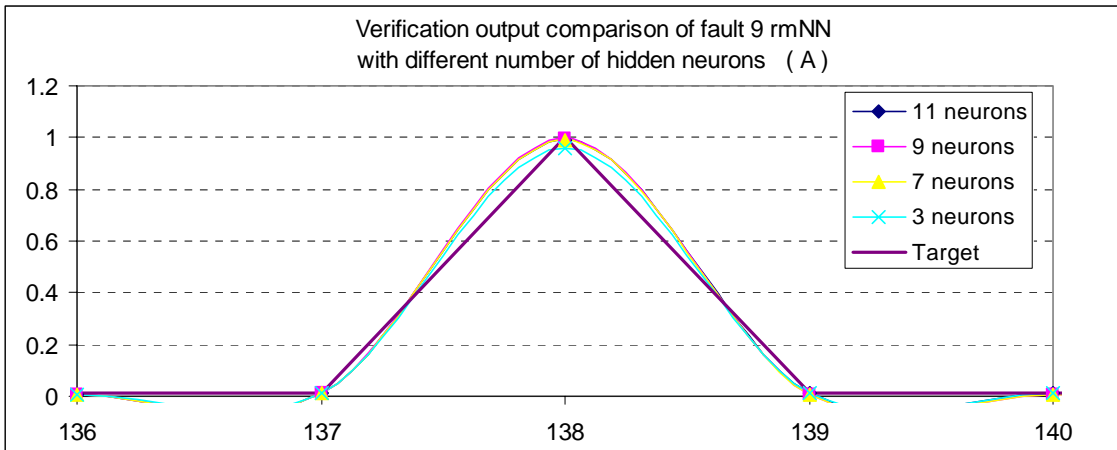
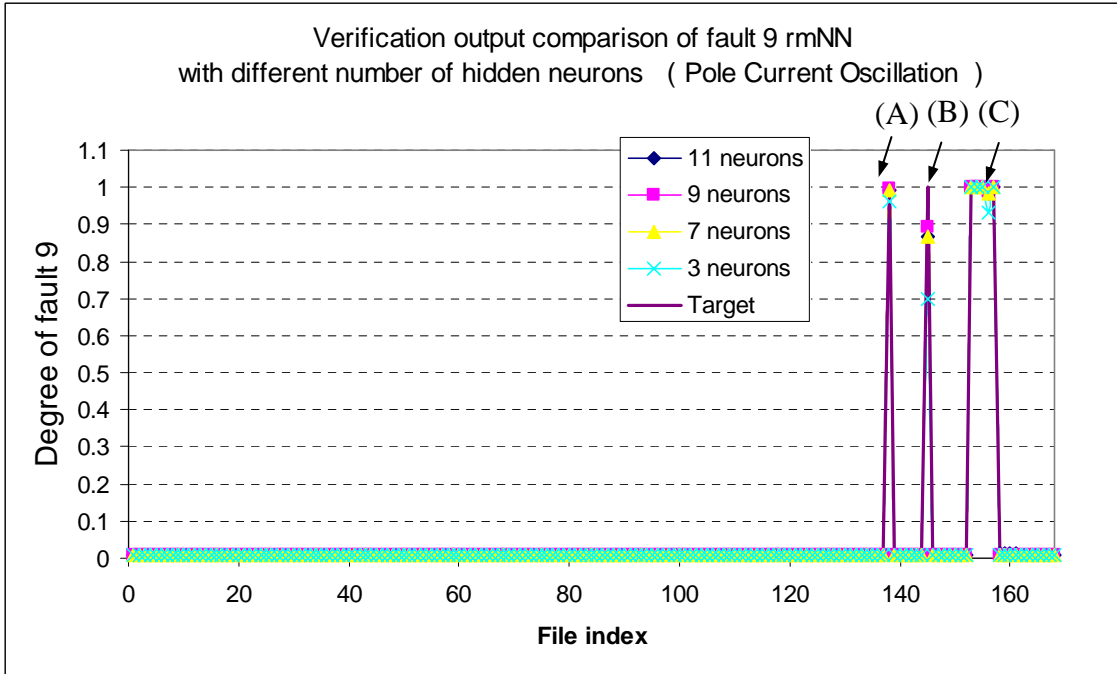


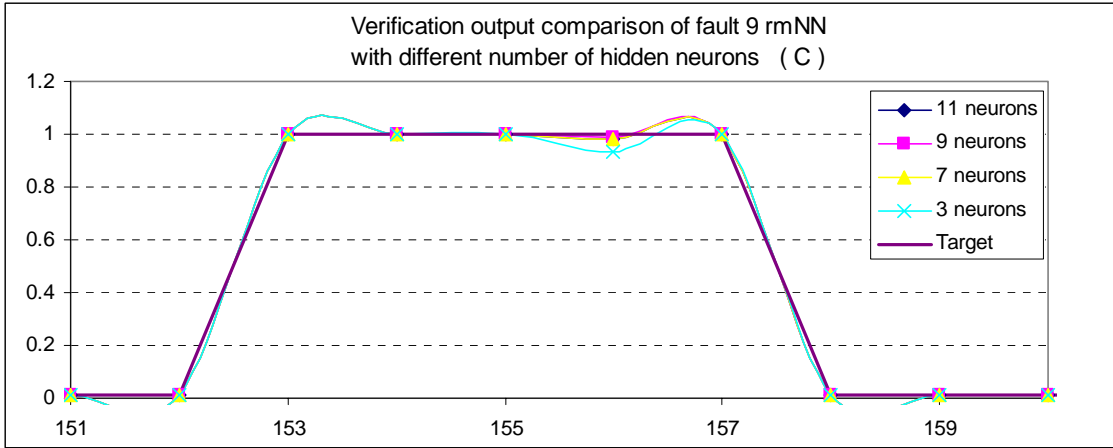


Fault 9 : Pole Current Oscillation

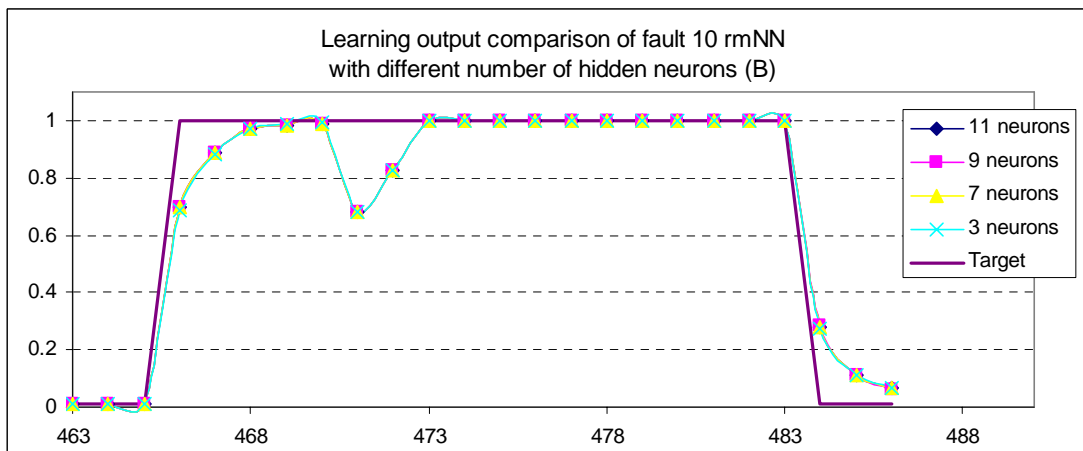
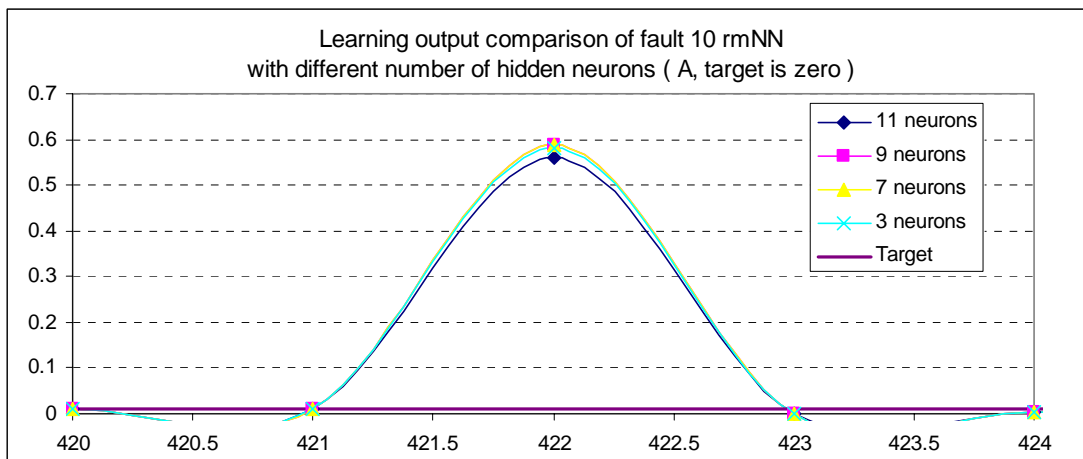
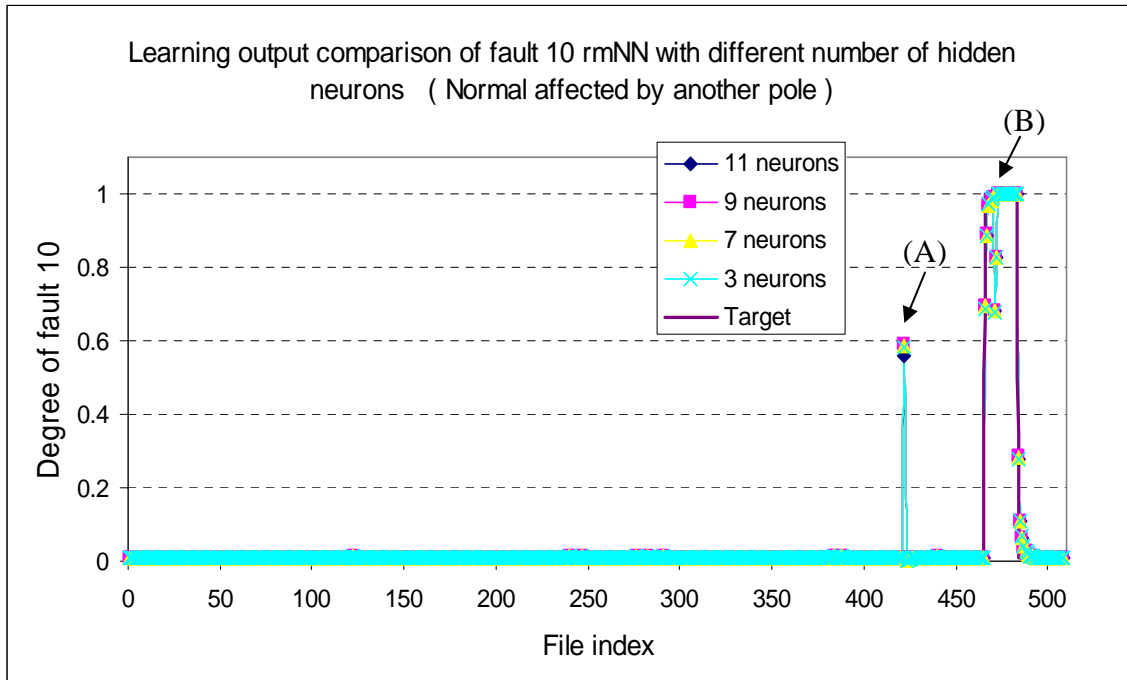


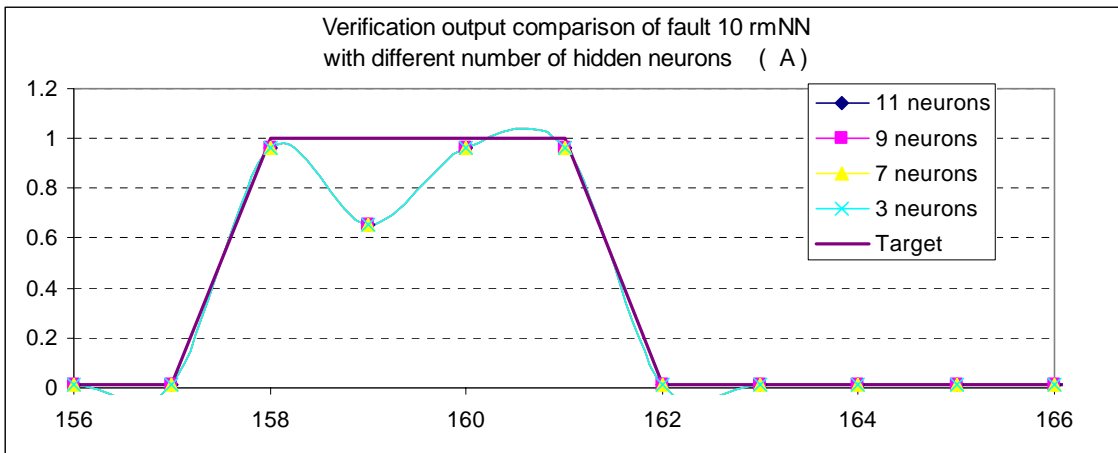
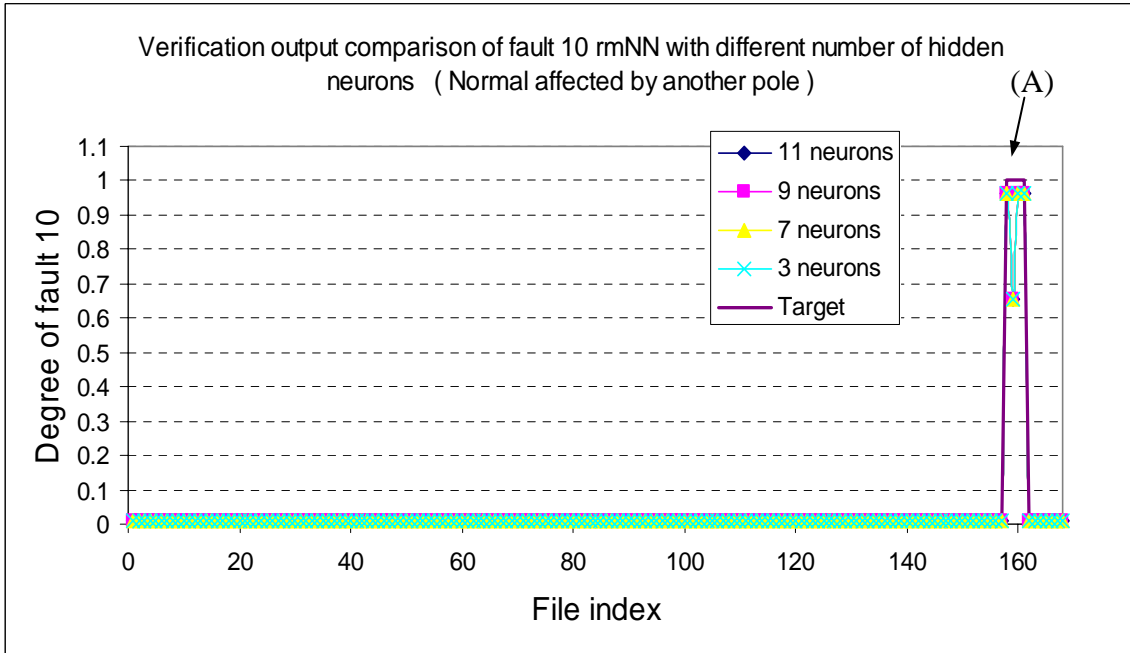




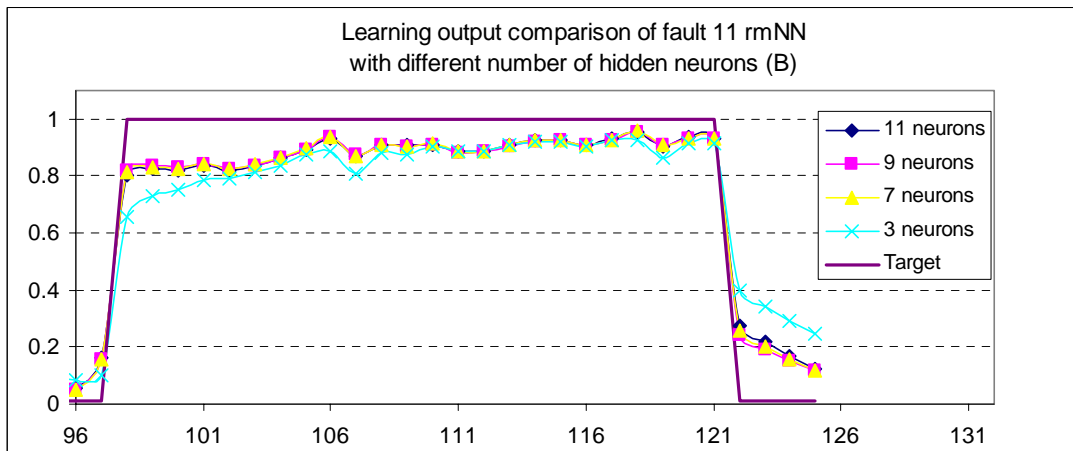
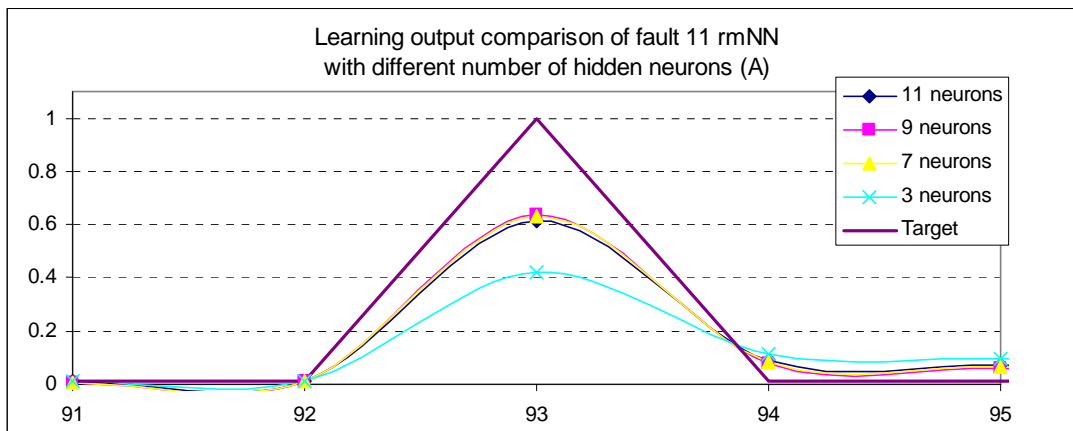
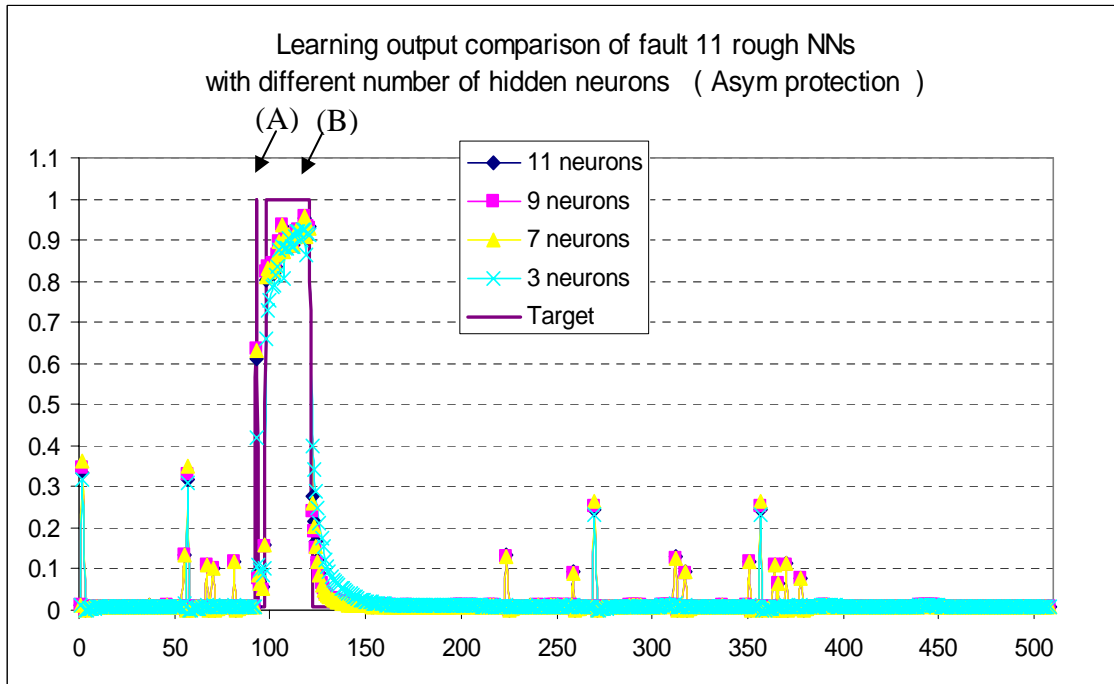


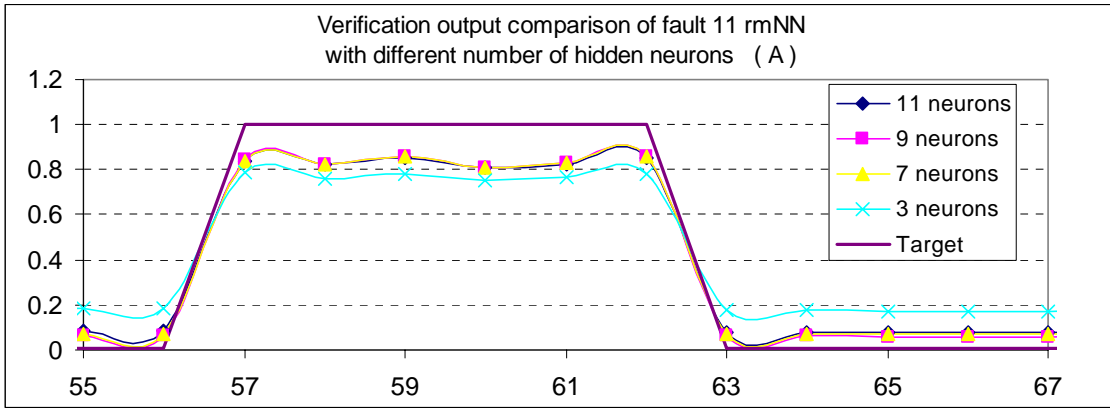
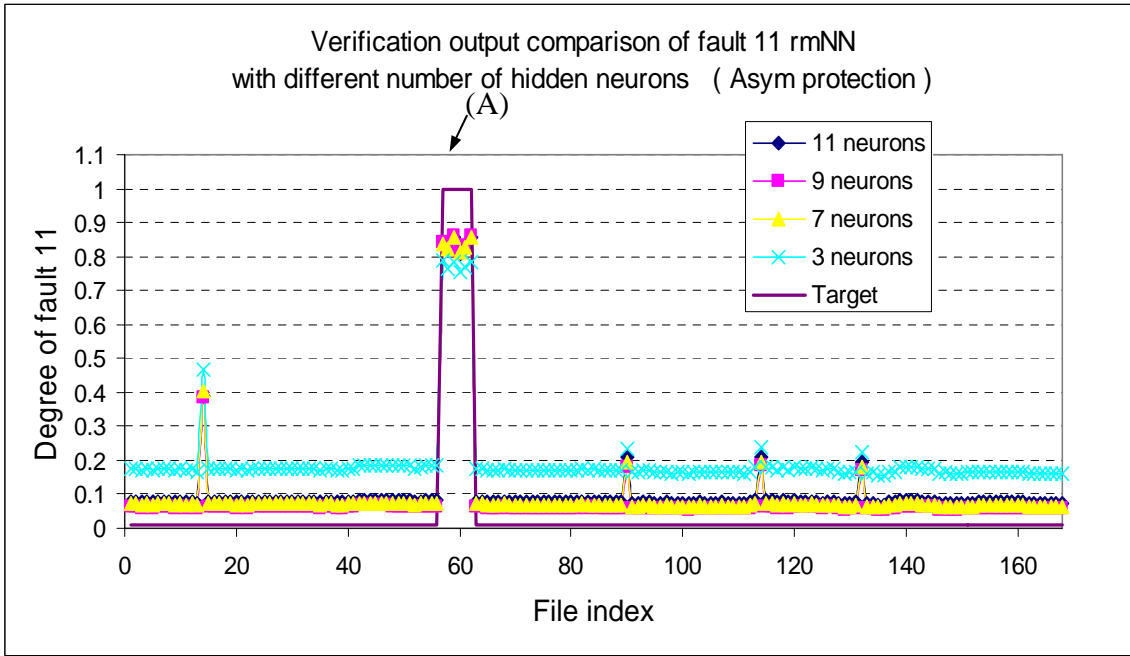
Fault 10 : Normal affected by another pole





Fault 11 : Asym protection





Fault 12 : Disturbance on DC voltage

