Appendix C: Training and validation loss graphs for the embedding method and the evaluation model

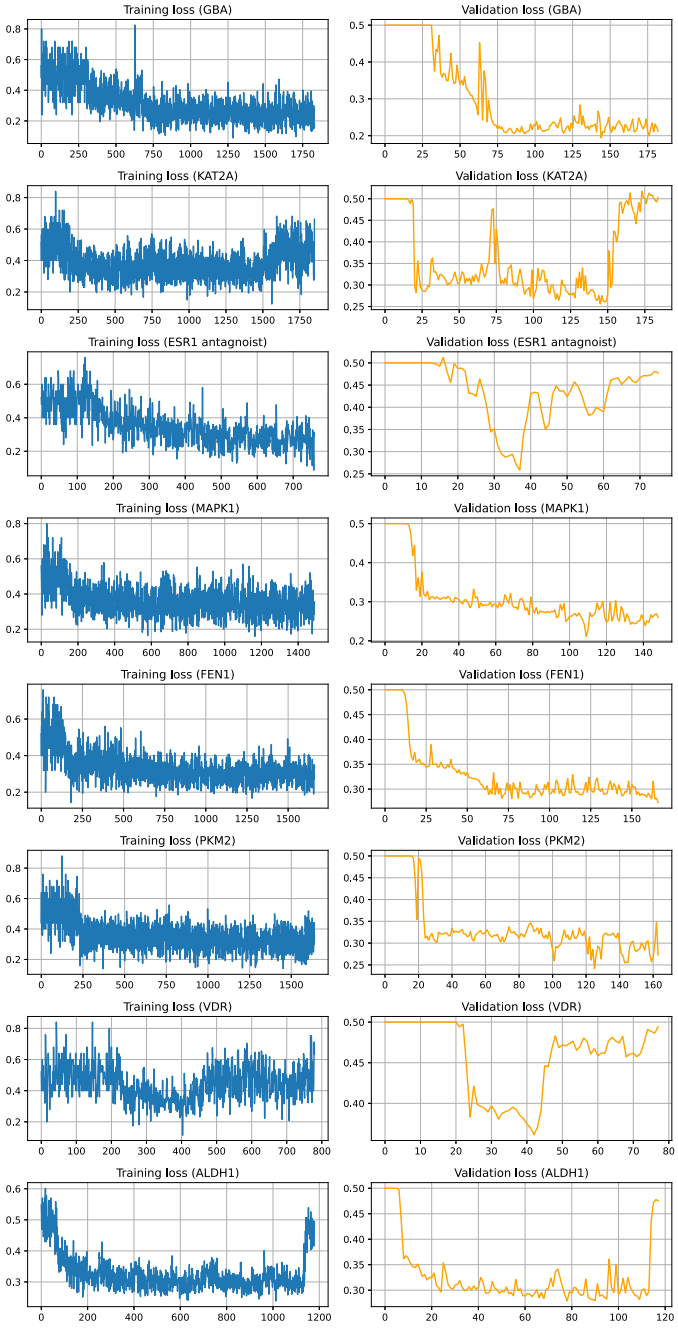

FIG. C.1. Training and validation loss graphs of NQE with the ZZ feature map (1:1 class ratio)

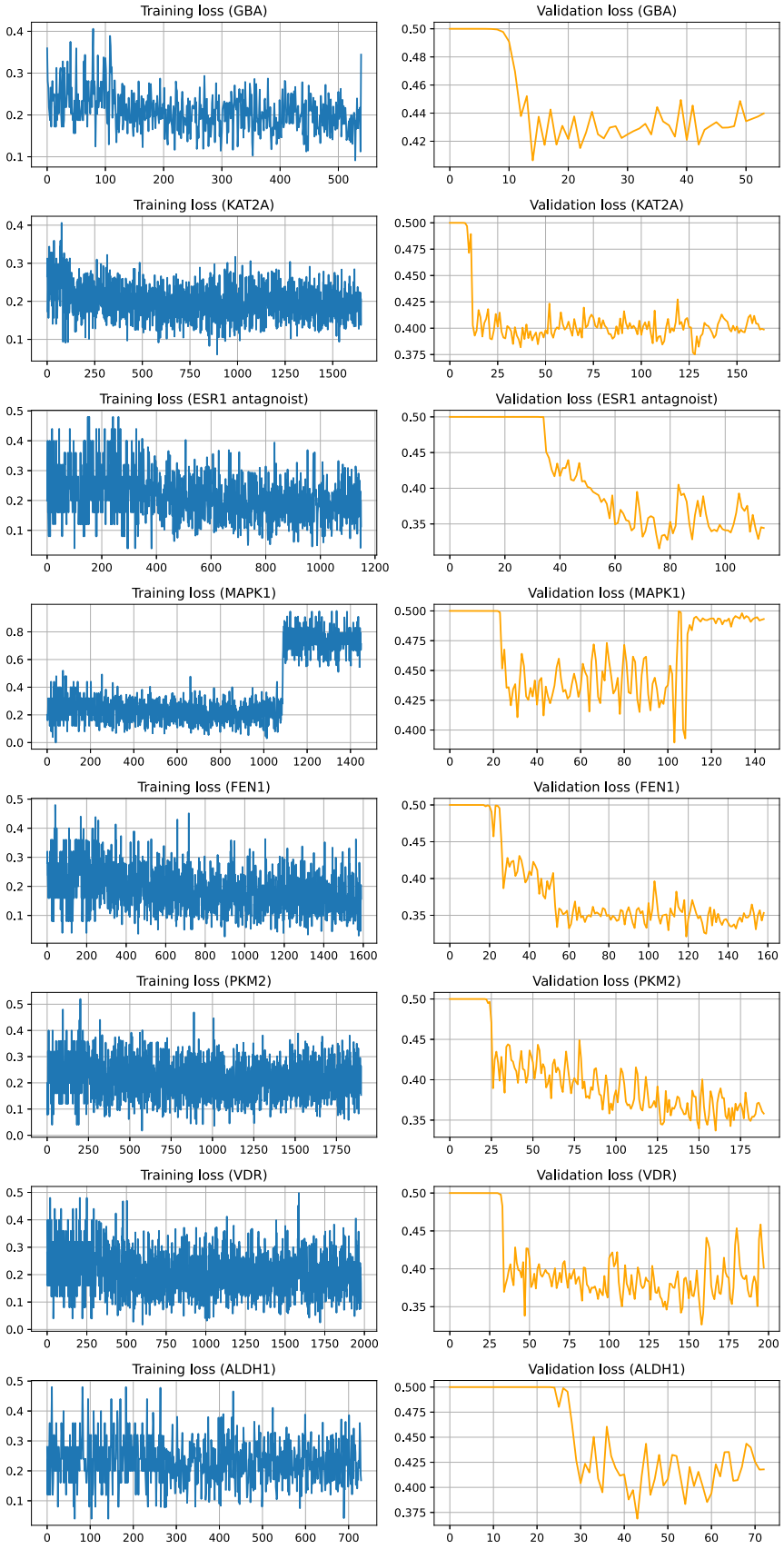

FIG. C.2. Training and validation loss graphs of NQE with the ZZ feature map (1:6 class ratio)

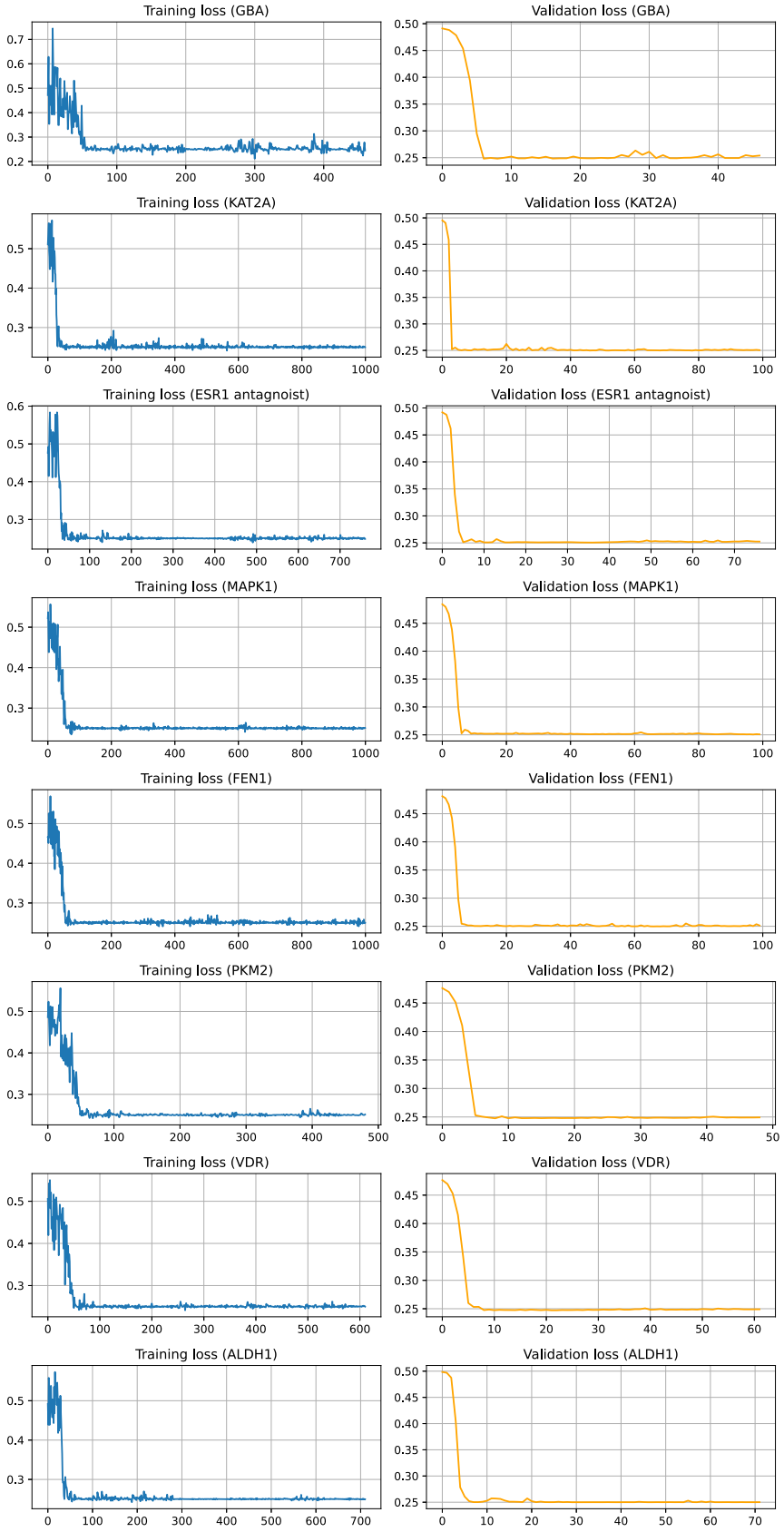

FIG. C.3. Training and validation loss graphs of NQE with the XYZ feature map (1:1 class ratio)

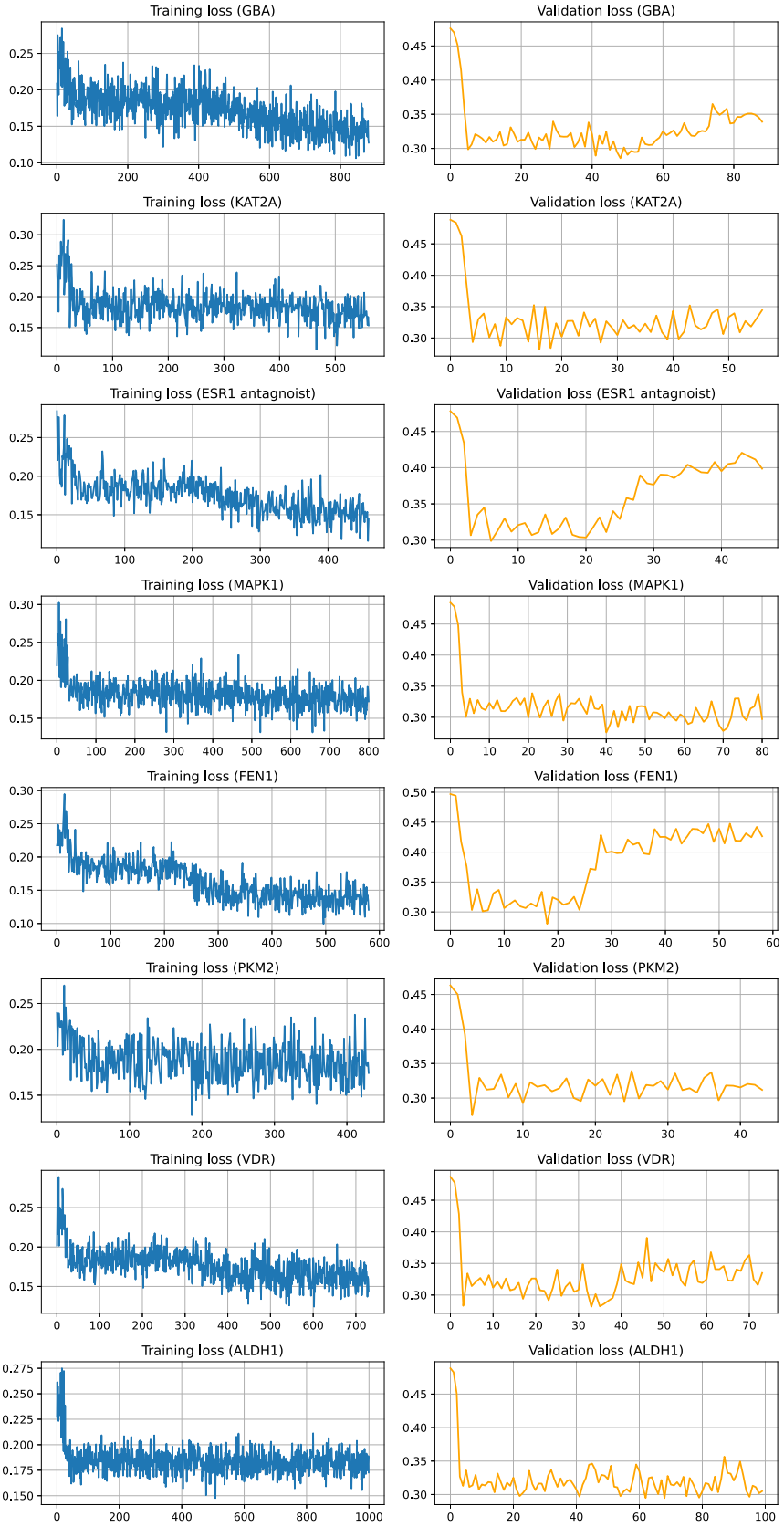

FIG. C.4. Training and validation loss graphs of NQE with the XYZ feature map (1:6 class ratio)

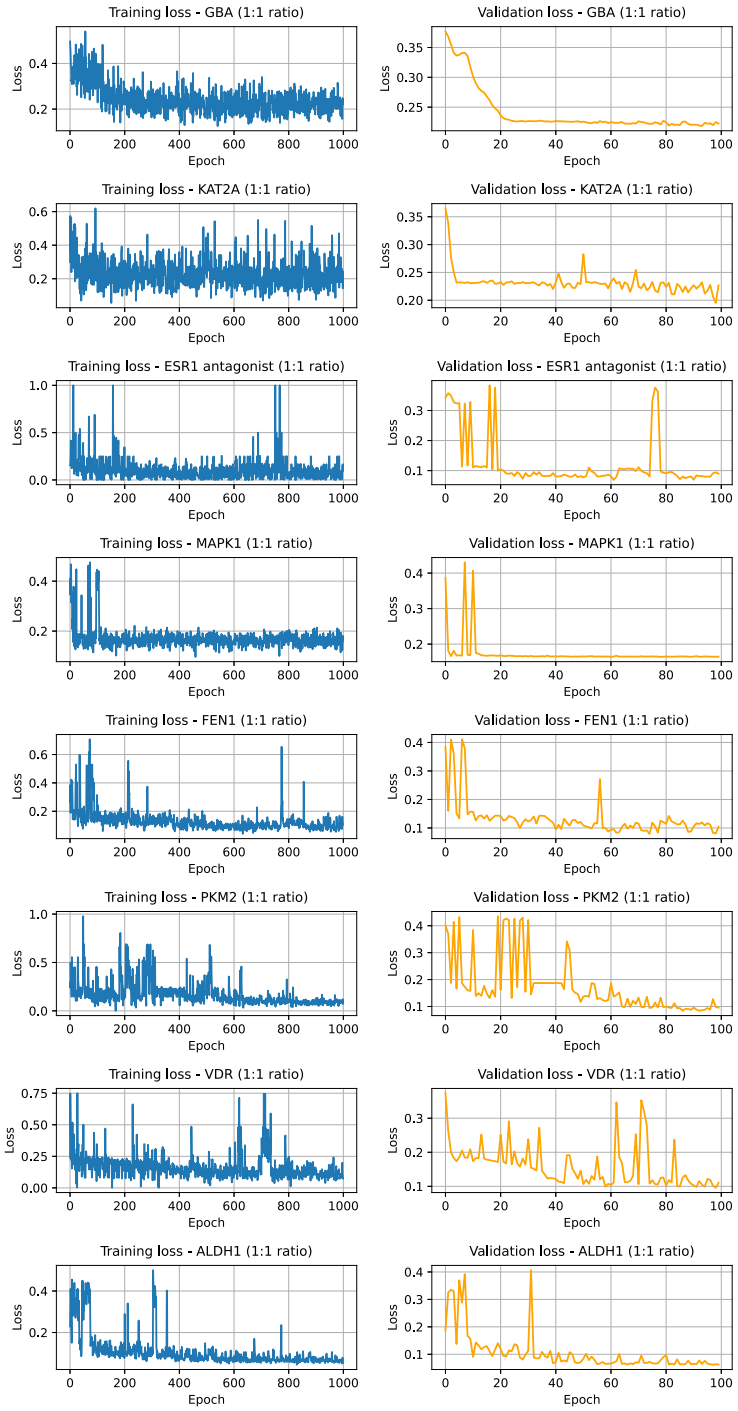

FIG. C.5. Training and validation loss graphs of RBF (with the classical neural network) with 1:1 class ratio (the classical counterpart of the NQE with the ZZ feature map)

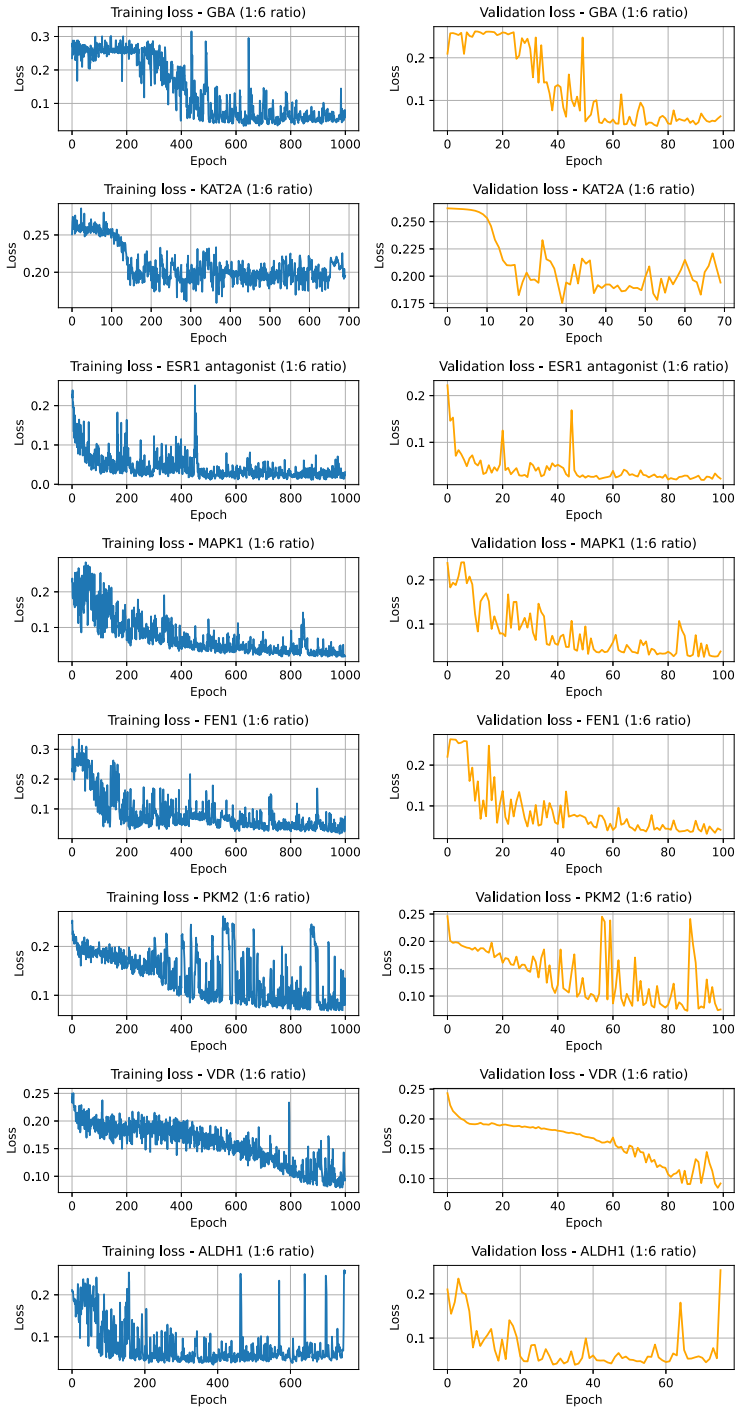

FIG. C.6. Training and validation loss graphs of RBF (with the classical neural network) with 1:6 class ratio (the classical counterpart of the NQE with the ZZ feature map)

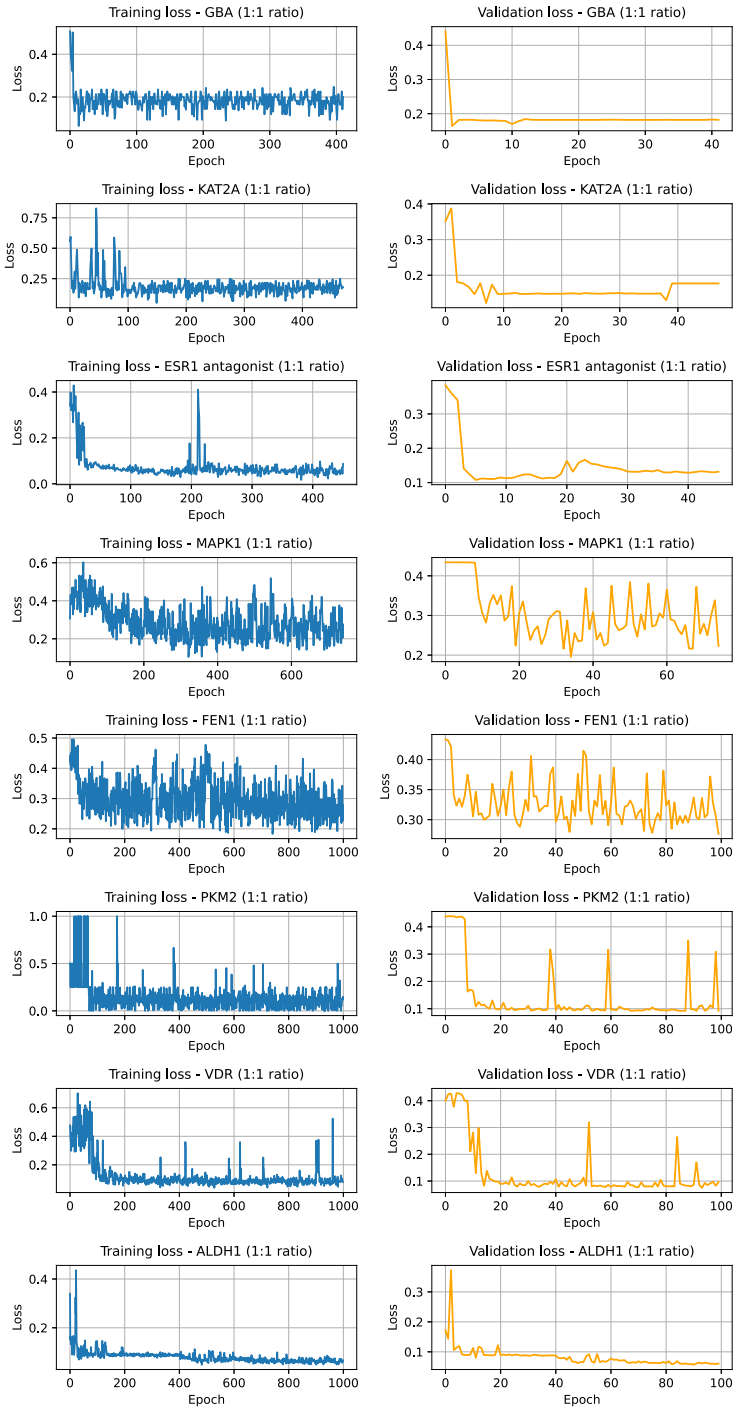

FIG. C.7. Training and validation loss graphs of RBF (with the classical neural network) with 1:1 class ratio (the classical counterpart of the NQE with the XYZ feature map)

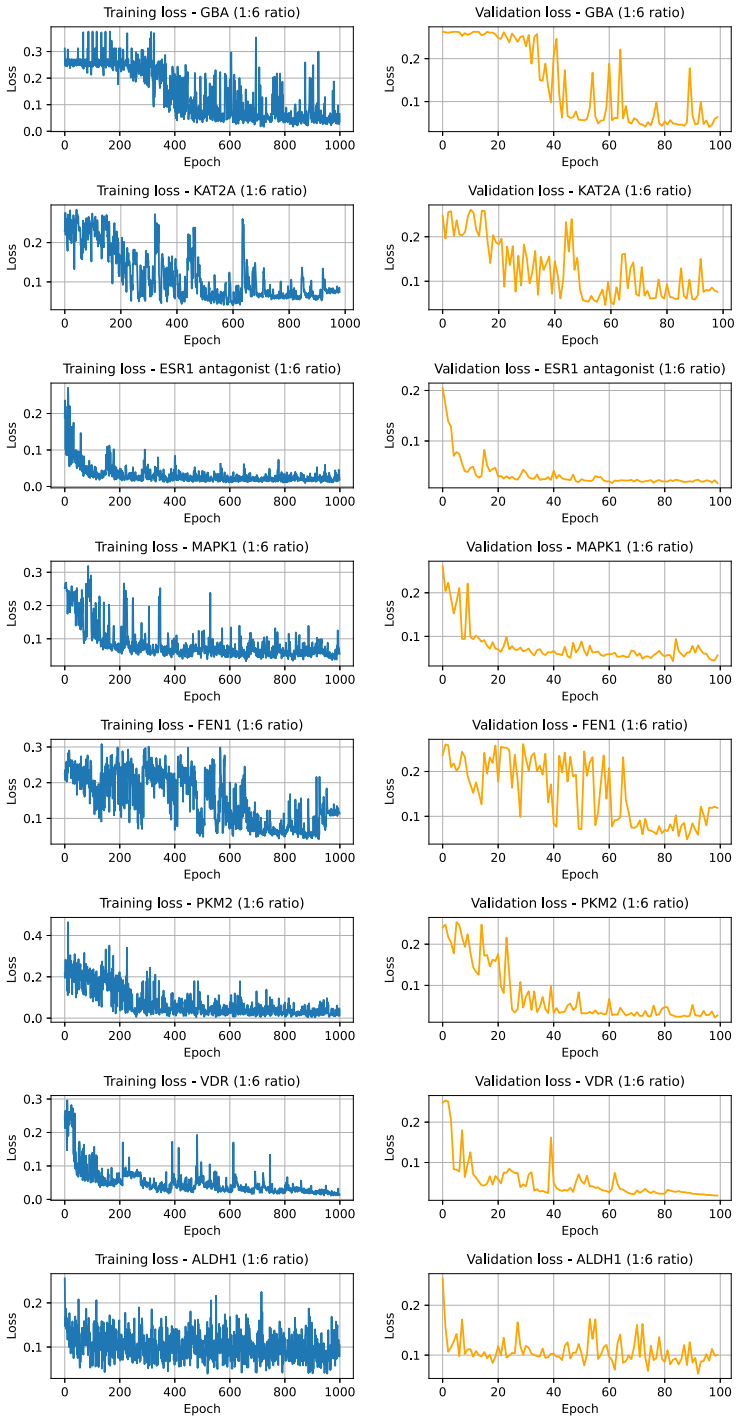

FIG. C.8. Training and validation loss graphs of RBF (with the classical neural network) with 1:6 class ratio (the classical counterpart of the NQE with the XYZ feature map)

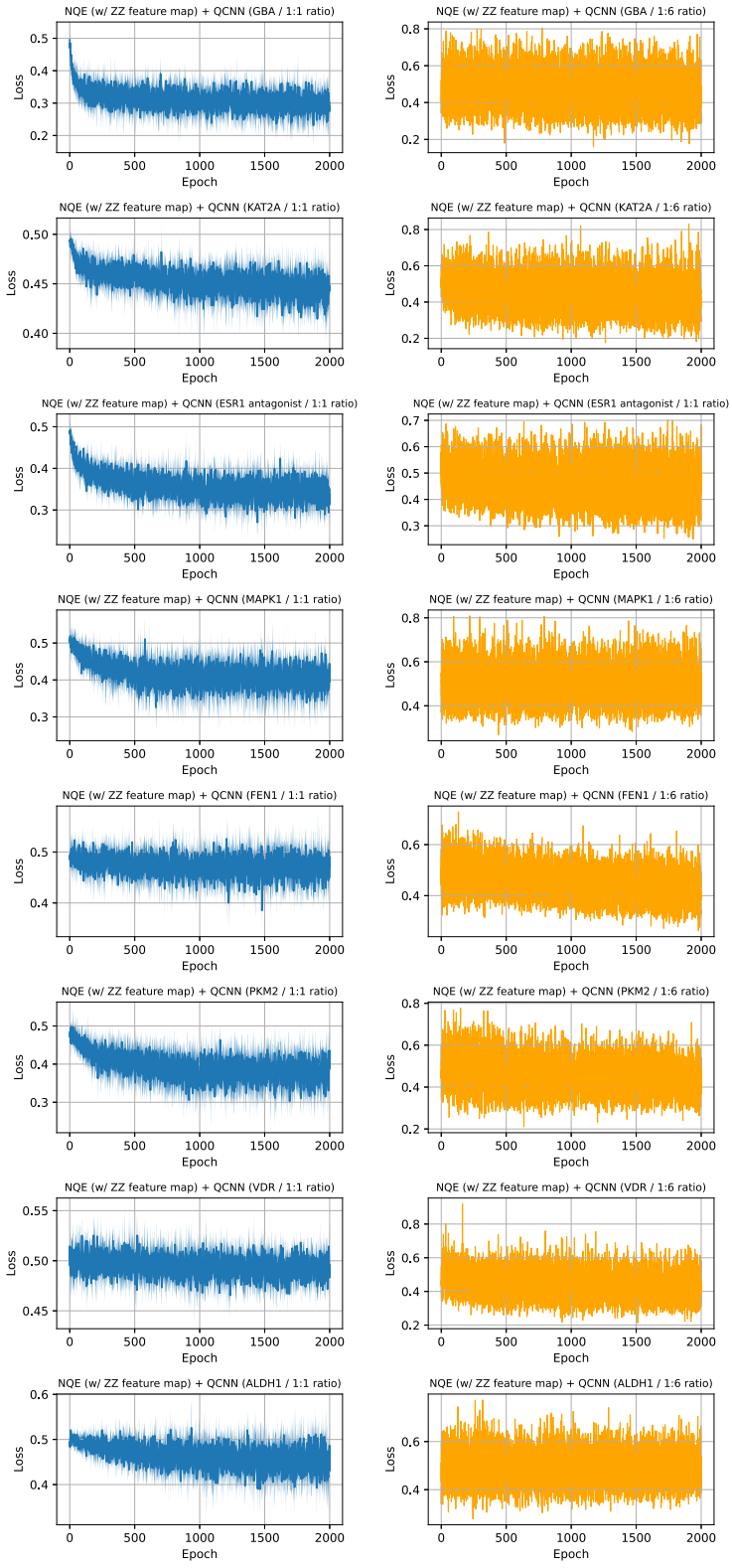

FIG. C.9. Training loss graphs of the QCNN with NQE (ZZ feature map)

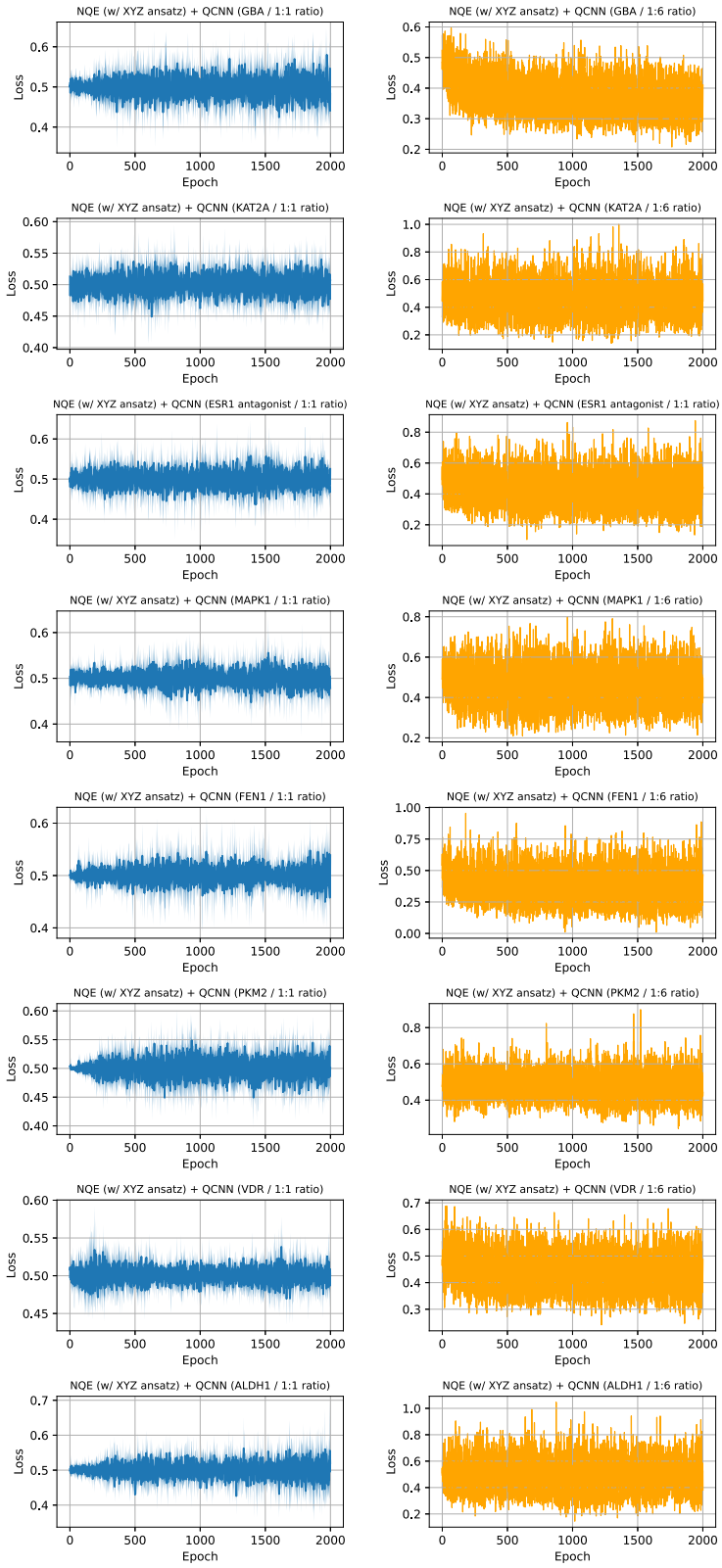

FIG. C.10. Training loss graphs of the QCNN with NQE (XYZ feature map)

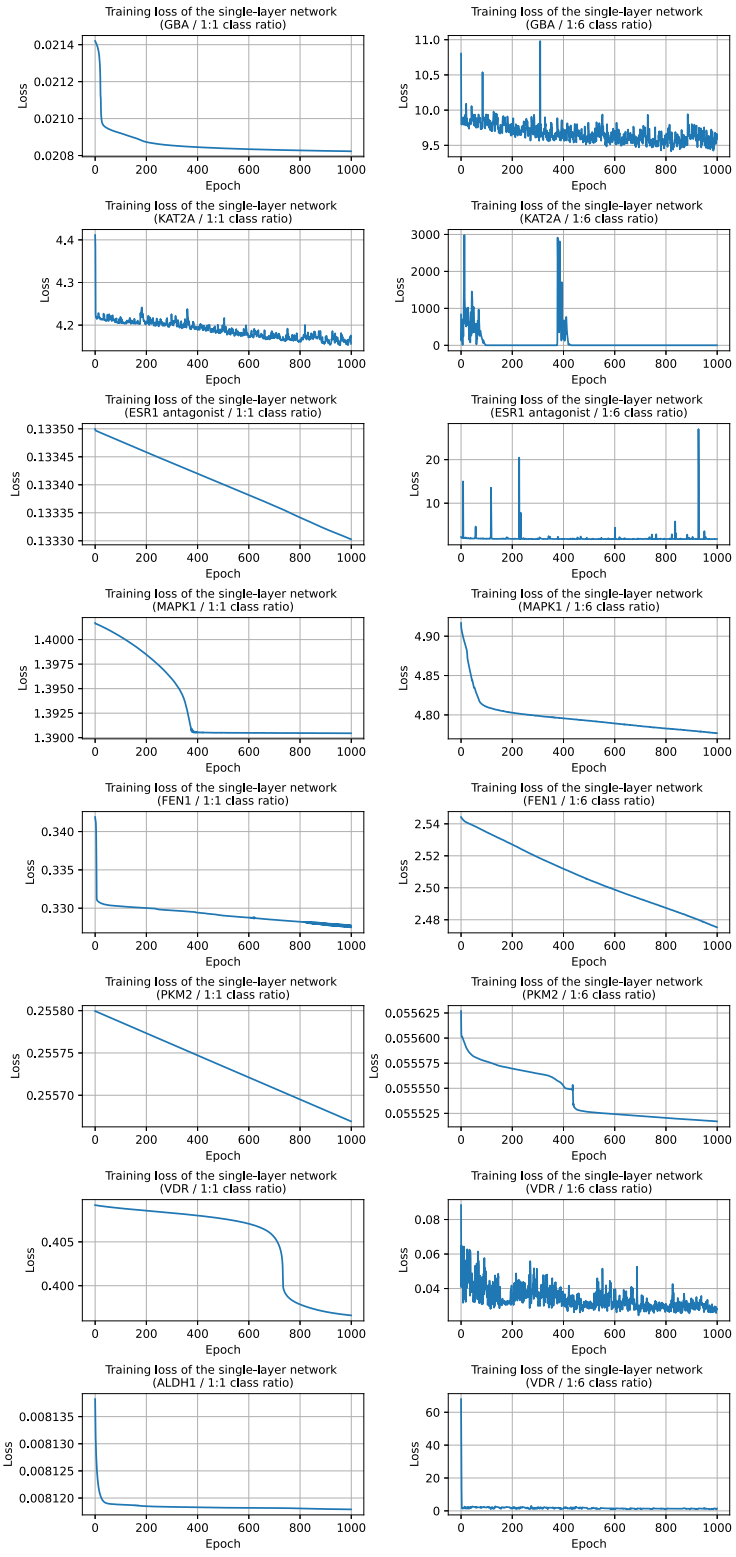

FIG. C.11. Training loss graphs of the single-layer network for the classical embedding condition (the classical counterpart of NQE with the ZZ feature map and the QCNN)

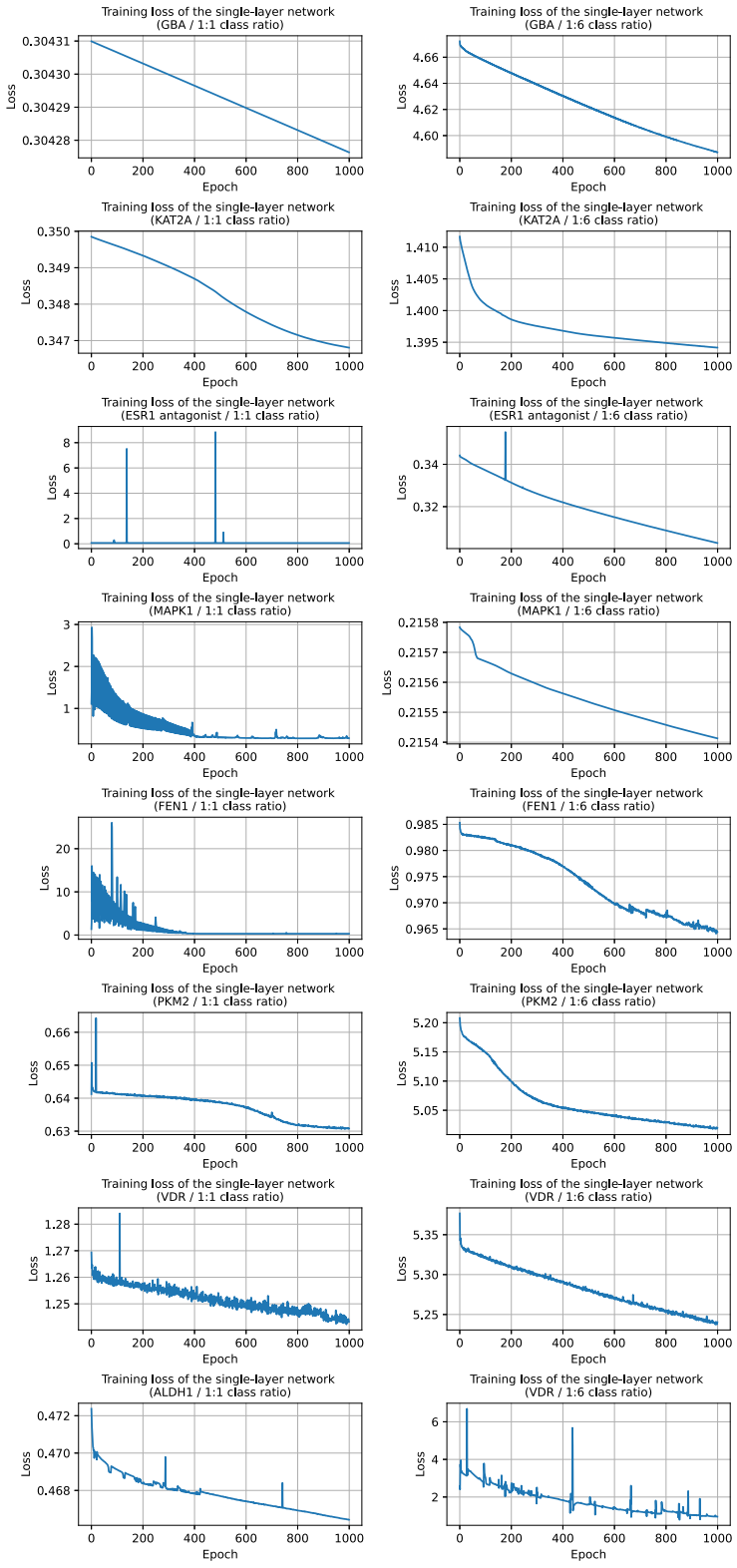

FIG. C.12. Training loss graphs of the single-layer network for the classical embedding condition (the classical counterpart of NQE with the XYZ feature map and the QCNN)

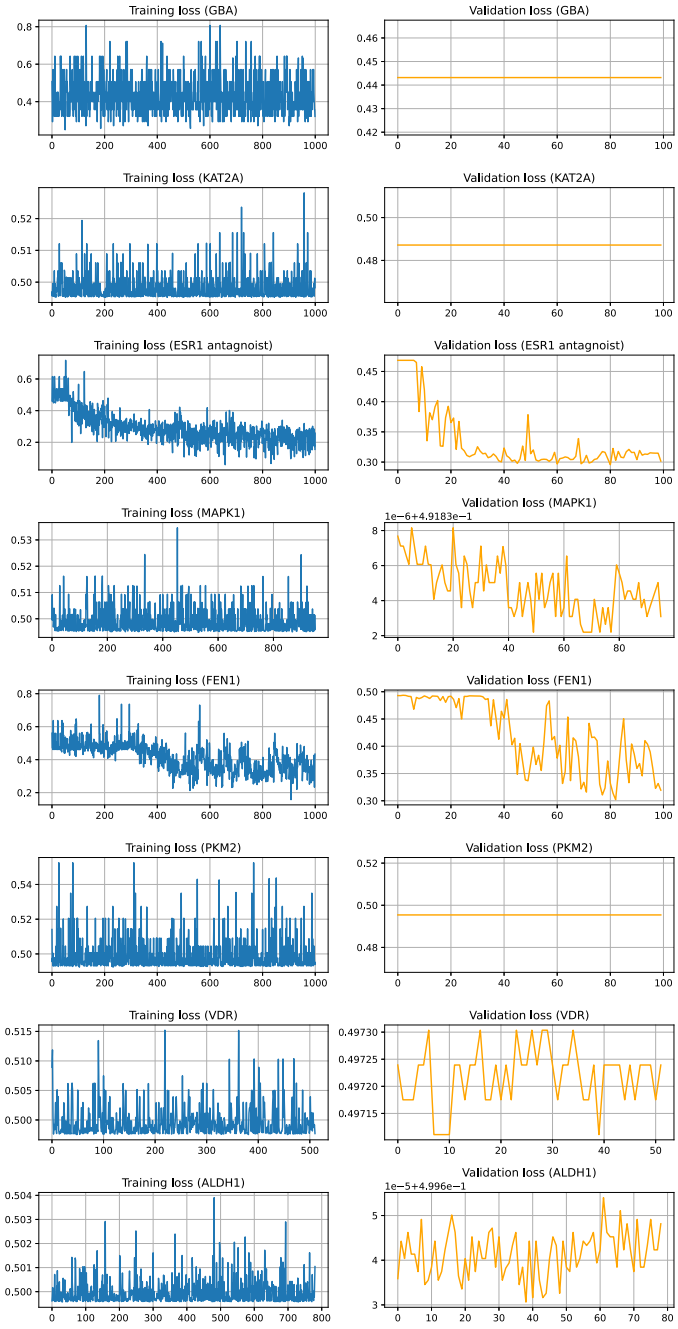

FIG. C.13. Training and validation loss graphs of the quantum-pretrained 1 (with the pretrained classical neural network from the ZZ feature map NQE / 1:1 class ratio)

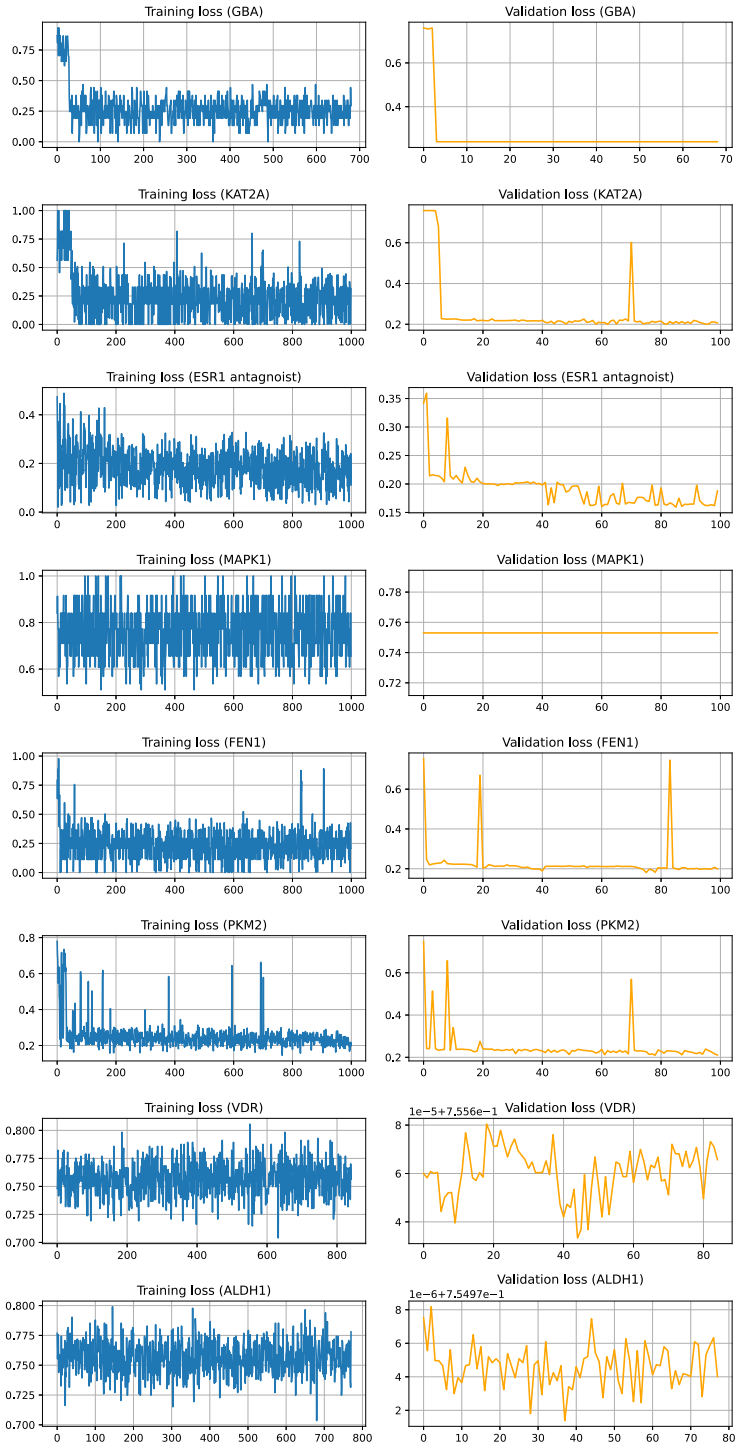

FIG. C.14. Training and validation loss graphs of the quantum-pretrained 1 (with the pretrained classical neural network from the ZZ feature map NQE / 1:6 class ratio)

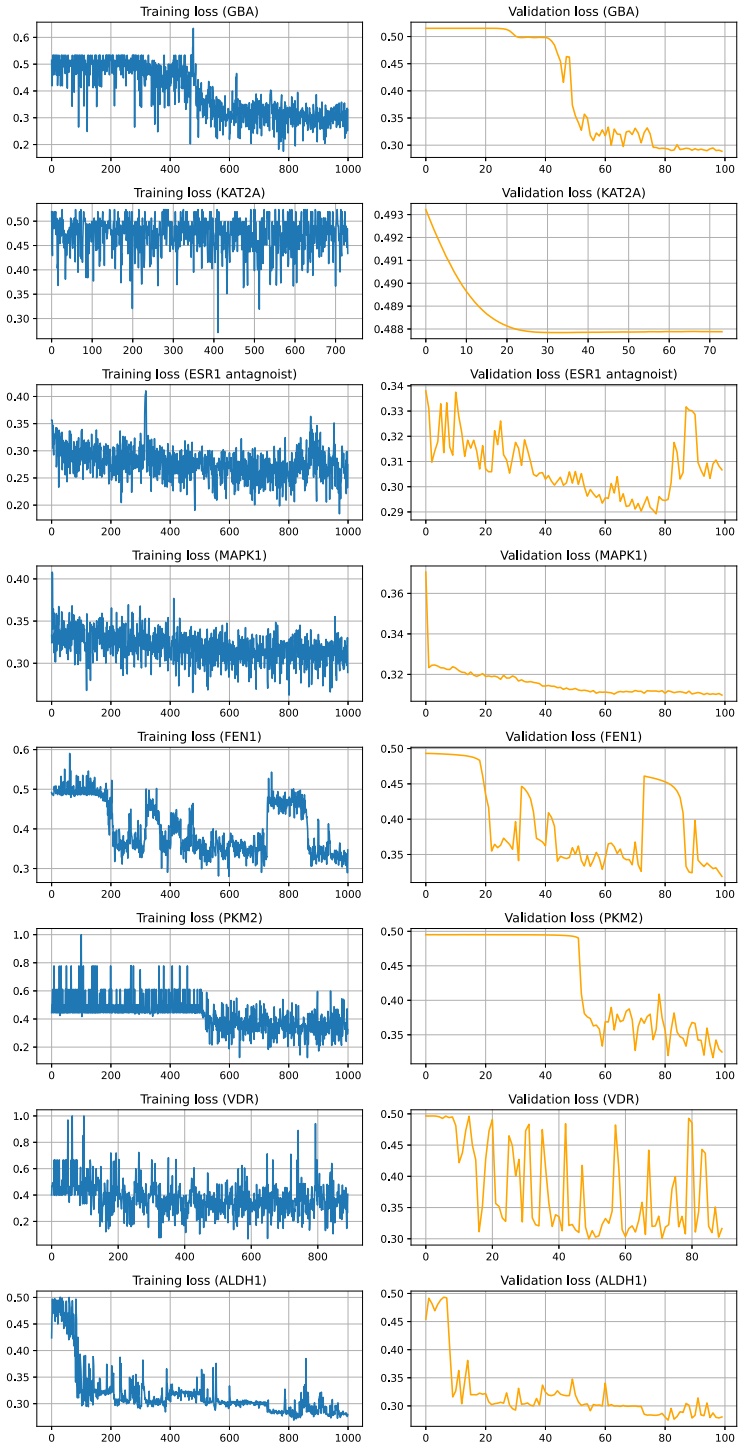

FIG. C.15. Training and validation loss graphs of the quantum-pretrained 1 (with the pretrained classical neural network from the XYZ feature map NQE / 1:1 class ratio)

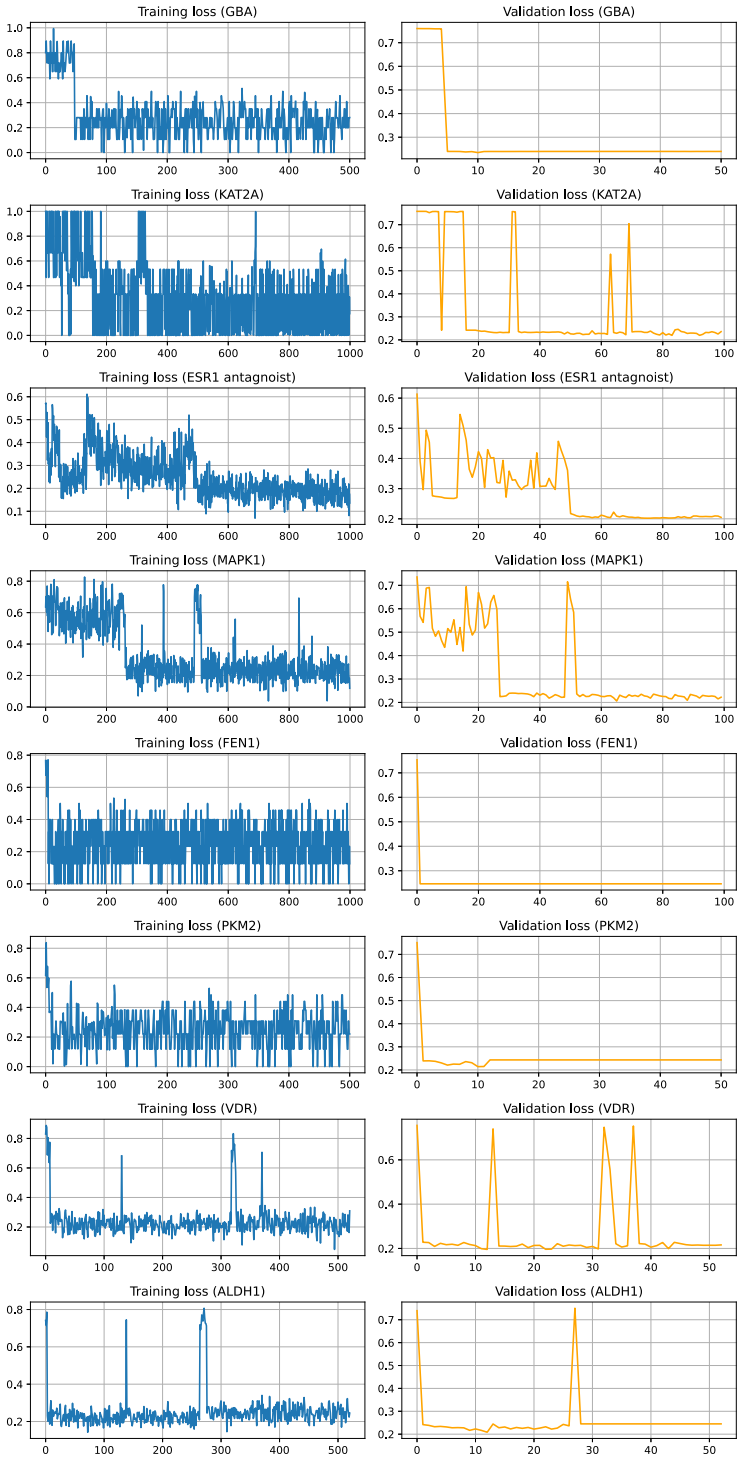

FIG. C.16. Training and validation loss graphs of the quantum-pretrained 1 (with the pretrained classical neural network from the XYZ feature map NQE / 1:6 class ratio)

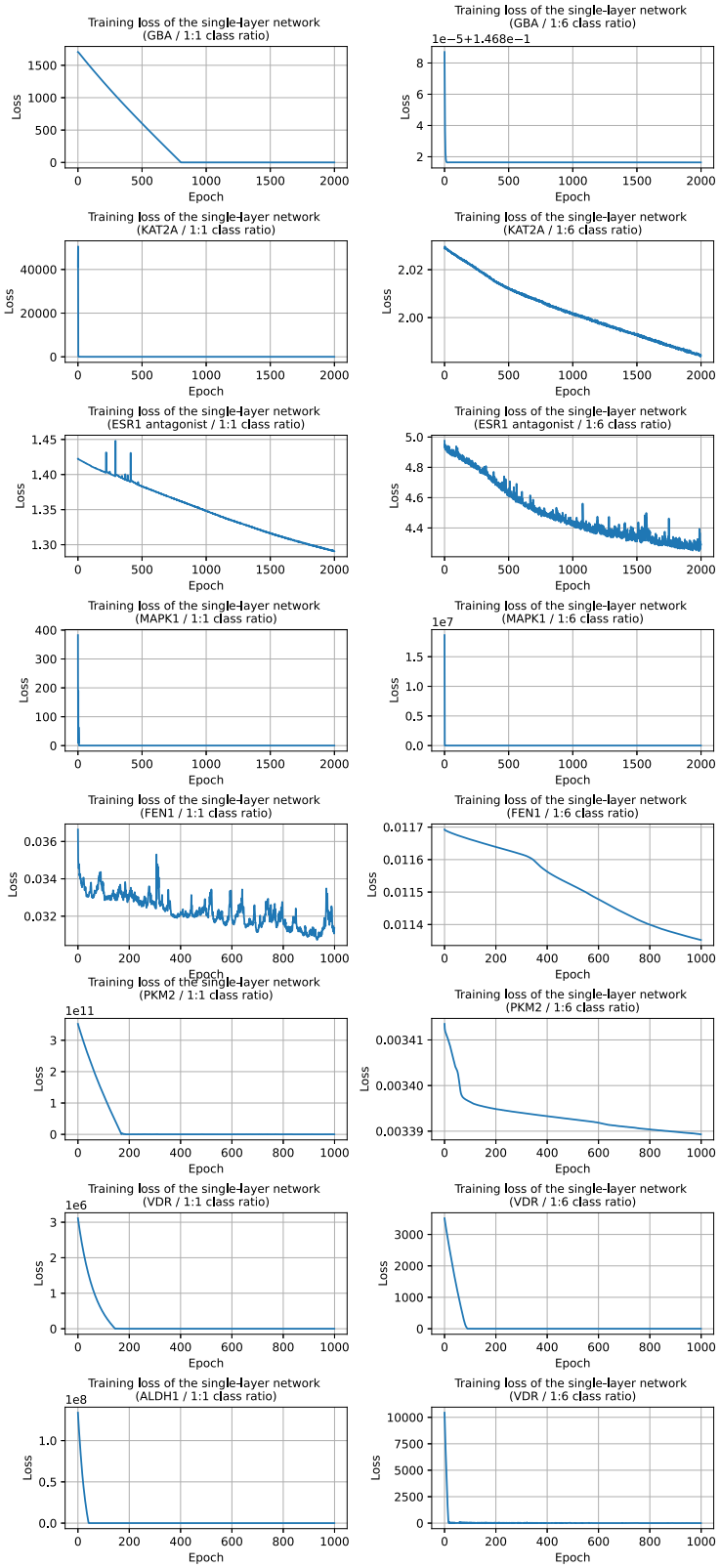

FIG. C.17. Training loss graphs of the single-layer network for the quantum-pretrained 1 (with the pretrained classical neural network from the ZZ feature map NQE)

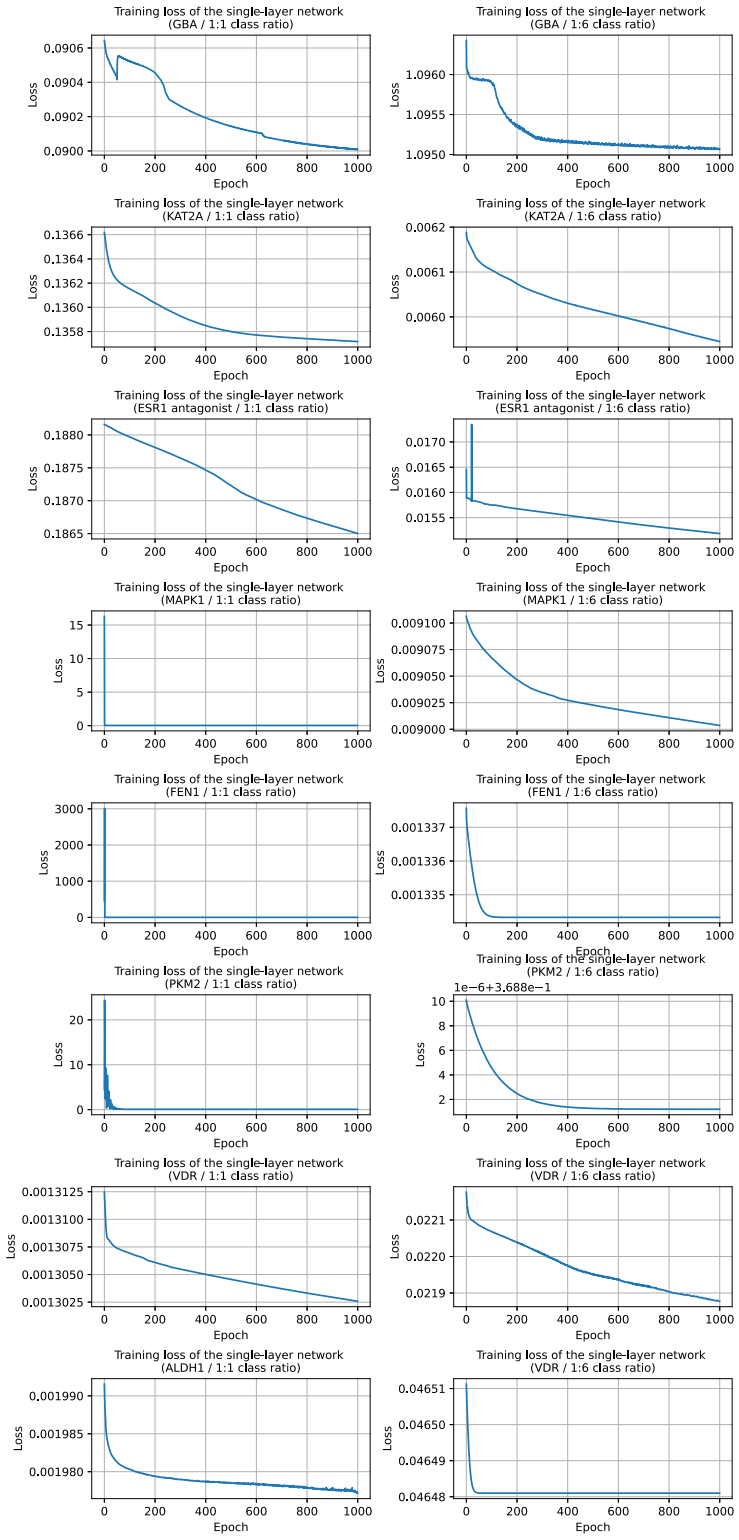

FIG. C.18. Training loss graphs of the single-layer network for the quantum-pretrained 1 (with the pretrained classical neural network from the XYZ feature map NQE)

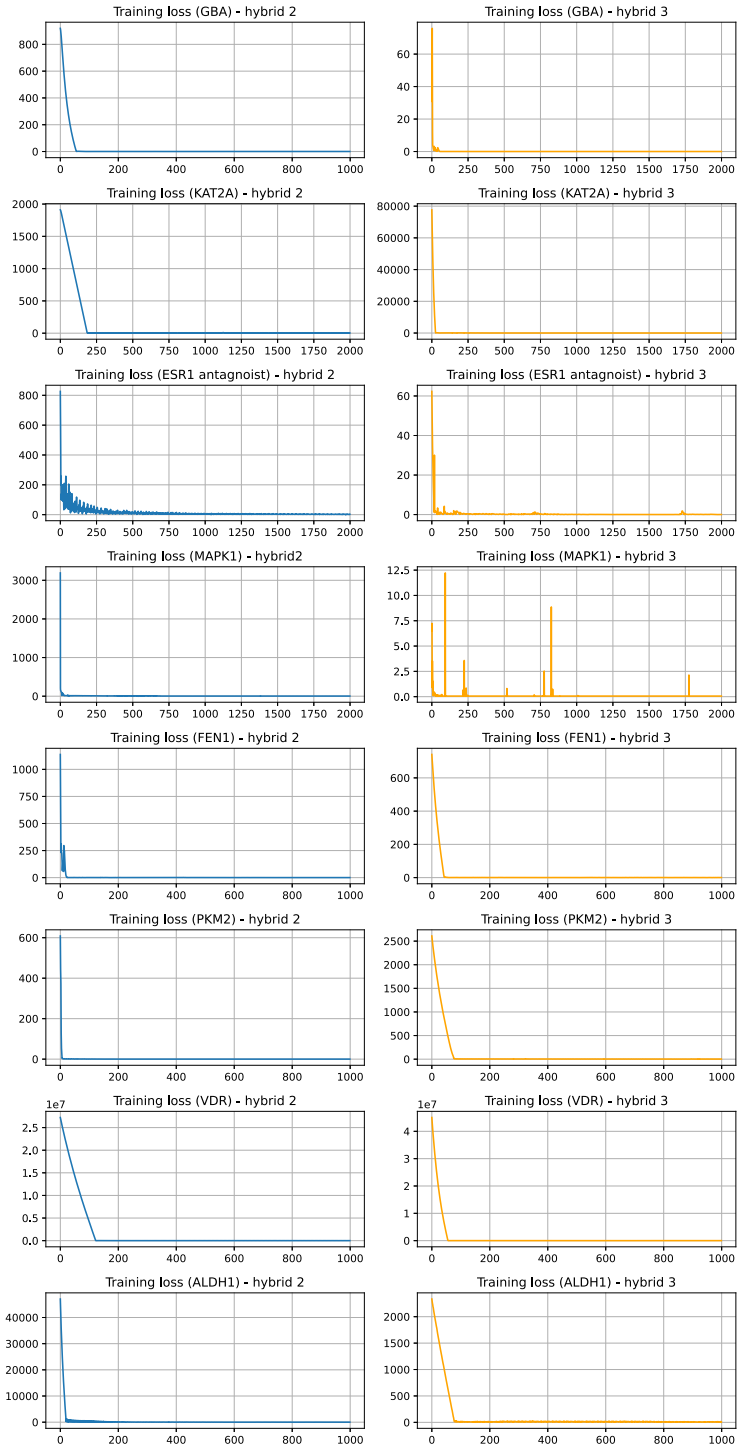

FIG. C.19. Training loss graphs of the quantum-pretrained 2 and 3 (with the pretrained classical neural network from the ZZ feature map NQE / 1:1 class ratio)

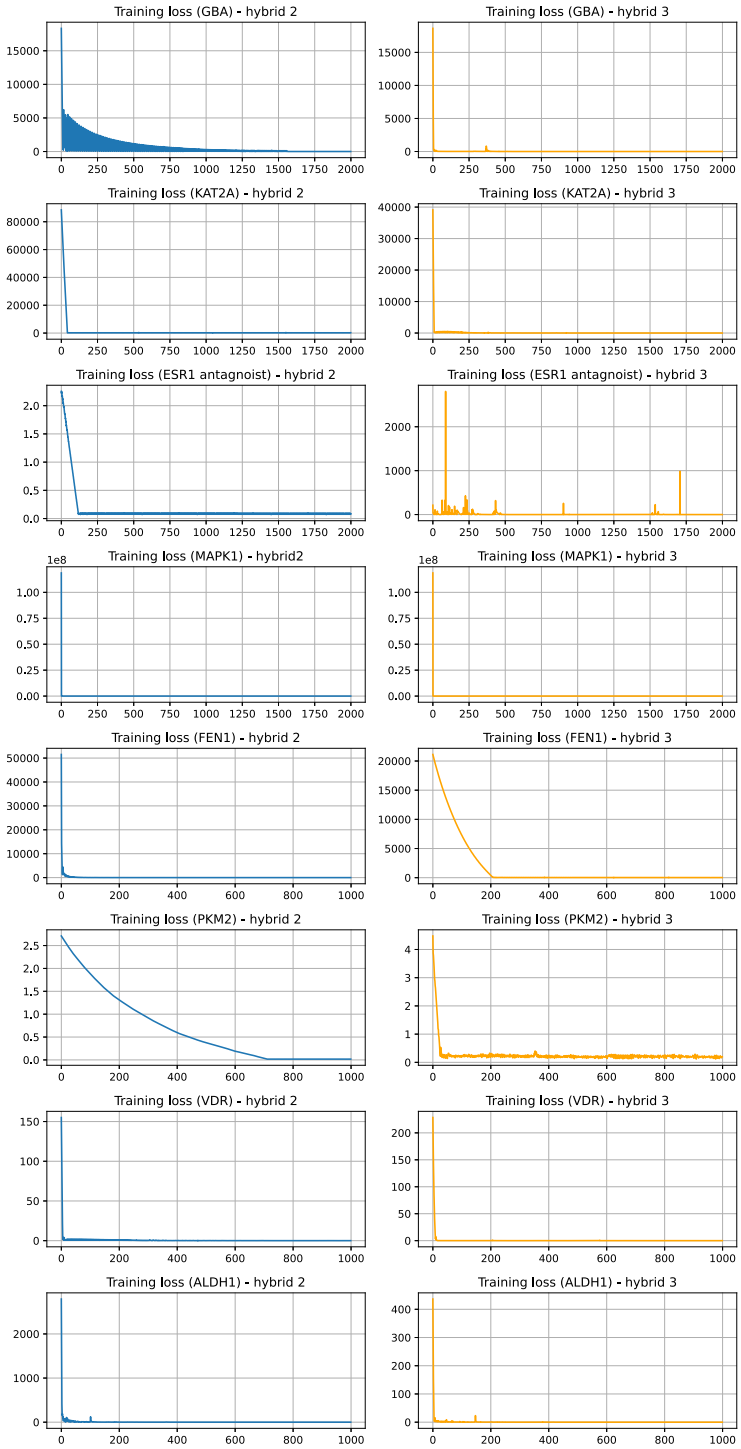

FIG. C.20. Training loss graphs of the quantum-pretrained 2 and 3 (with the pretrained classical neural network from the ZZ feature map NQE / 1:6 class ratio)

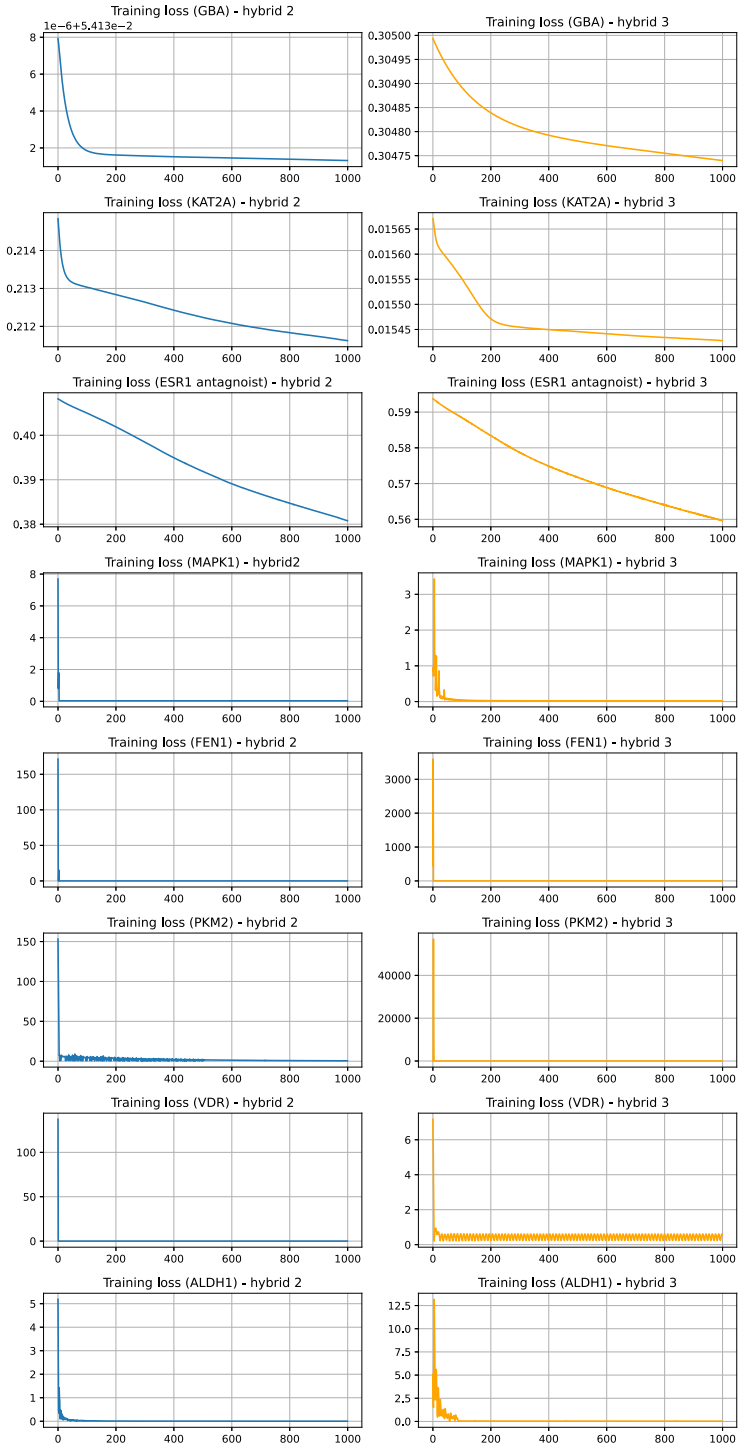

FIG. C.21. Training loss graphs of the quantum-pretrained 2 and 3 (with the pretrained classical neural network from the XYZ feature map NQE / 1:1 class ratio)

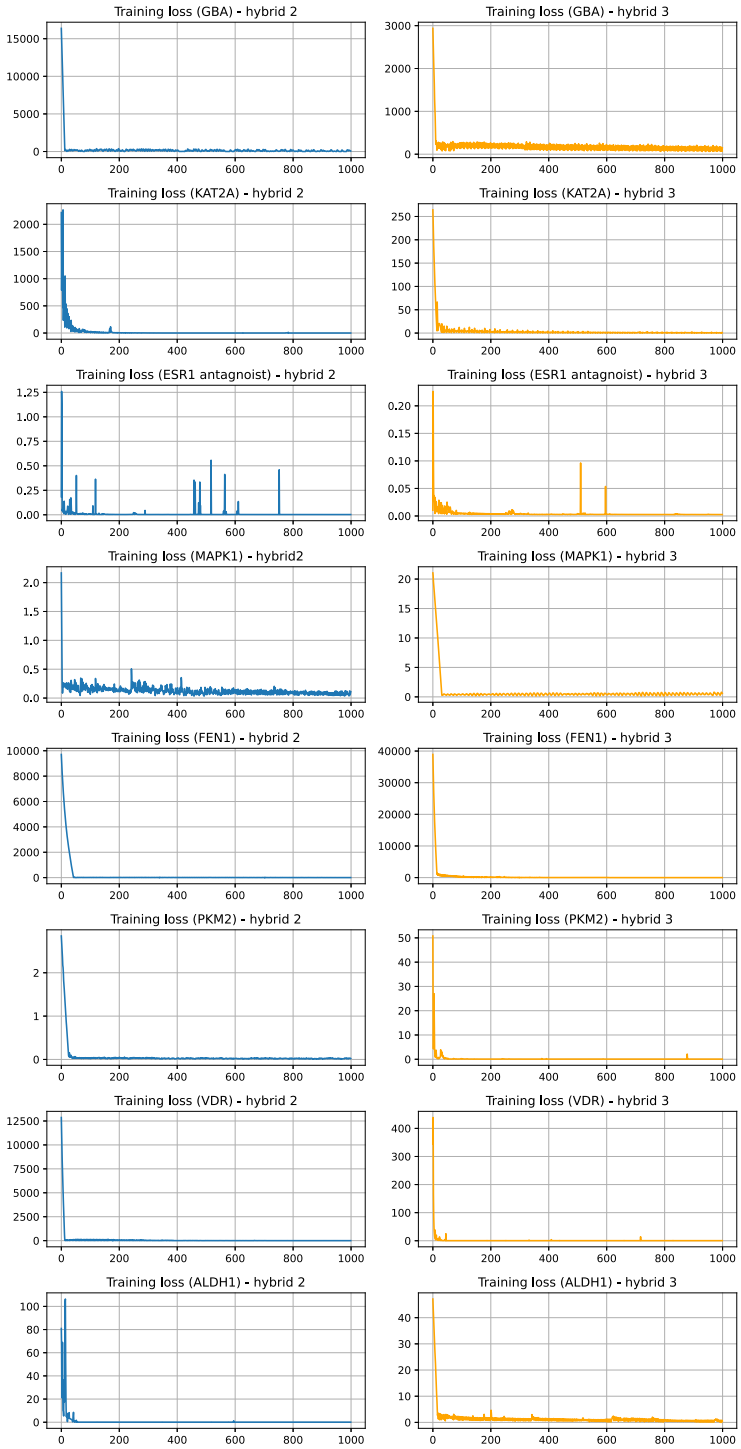

FIG. C.22. Training loss graphs of the quantum-pretrained 2 and 3 (with the pretrained classical neural network from the XYZ feature map NQE / 1:6 class ratio)