SUMMARY

- The UEDGE code, is a two-dimensional edge plasma transport code, is applied to analyse the experimental edge plasma parameters of Aditya-U tokamak. The experimentally measured edge density and simulated results are in good agreement at some radial location.

- The plasma parameters such as plasma density and electron temperature are taken from the output of UEDGE simulation which are then used as inputs in DEGAS2 code to understand the neutral particle behaviour at edge.

- The line integrated value of H_α emissivity using DEGAS2 code is compared with the experimental H_α emissivity profile for Aditya-U tokamak and found that the simulated data matches well with the experimentally measured values.