Braginskii’s plasma fluid model can generate unphysical plasma flow profiles.

AIP model (anisotropic ion pressures are incorporated in the plasma fluid model) can simulate the supersonic flow smoothly even in highly anisotropic ion temperature plasmas.

Shock front is also observed in the AIP model by the neutral effect.

Therefore, the AIP model is beneficial to simulate the performance of advanced divertors like a super-X divertor.