A particular kind of weak solutions for a 2D active scalar equation (e.g. Euler, surface quasi-geostrophic, ...) are the so called patches, i.e., solutions for which the scalar is a step function taking one value inside a moving region and another in the complement. The evolution of such distribution is completely determined by the evolution of the boundary, allowing the problem to be treated as a non-local one dimensional equation for the contour. In this talk we will discuss the existence and regularity of uniformly rotating solutions for the vortex patch and generalized surface quasi-geostrophic (gSQG) patch equation. We will also outline the proof for the smooth (non patch) SQG case. Joint work with Angel Castro and Diego Cordoba.