

A satellite (140) for operation in orbit around the earth comprises an ADCS (131, figure 1) configured for mechanically steering the satellite in the azimuth direction to prolong a dwell time (1105), during which a selected target is visible from the satellite, as the satellite orbits over the target. A processor at the ground station may be configured to process raw SAR data from any of the satellites described here. The raw SAR data may be processed in a number of ways to provide image information including but not limited to forming multilook images, compiling video sequences and colour coding images.