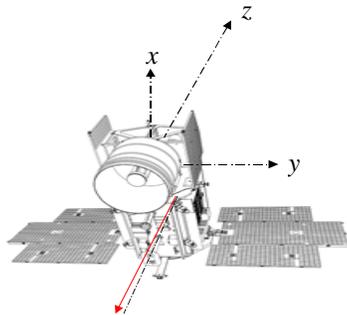
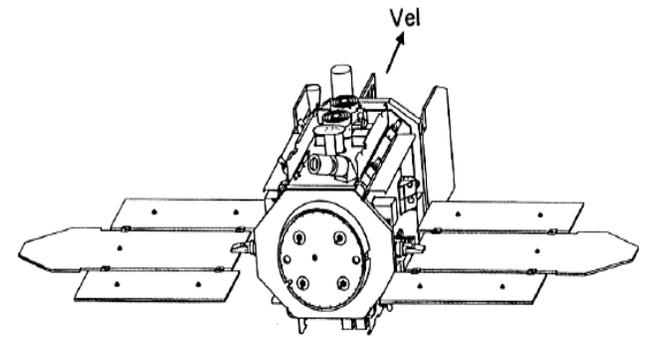


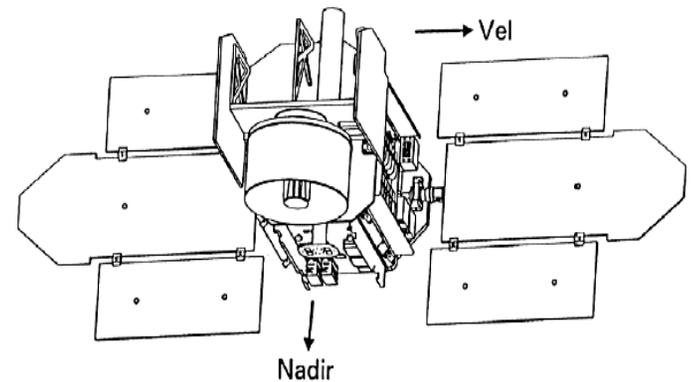
The ICESat/GLAS spacecraft operates in two attitude modes depending on the angular distance between the orbit plane and the Sun (β' angle). As shown in Figure 1, for low- β' periods, such as that immediately following launch, the so-called "airplane-mode" is in use, with the solar panels perpendicular to the orbit plane. When the β' angle exceeds 32 degrees, however a yaw maneuver places the satellite in the "sailboat-mode", with the axis of solar panels now in the orbit plane.



GLAS Coordinate System (GCS) summary.
Direction of laser pointing shown in red.



a) "airplane mode" for low β'



b) "sailboat mode" for high β'

Figure 1. ICESat/GLAS Operational Attitudes