

a. Post-mission disposal altitude

The minimum post-mission disposal altitude above the geostationary-Earth orbit is calculated as follows; (using the IADC formula)

$$235 \text{ km} + (1000 \cdot C_R \cdot A/M) = 277.7 \text{ km}$$

$C_R = 1.0$  APSTAR-VI Solar radiation pressure coefficient

$A = 87 \text{ m}^2$  APSTAR-VI area based on deployed on-station configuration

$M = 1915 \text{ kg}$  APSTAR-VI dry mass

b. Fuel budget for post-mission disposal

The amount of fuel reserved for the post-mission orbital raising is shown in the table below.

Disposal altitude: GEO + 280 Km

Required Delta V: 10.2 m/s

Required fuel (reserved): 7.5 kg