

The transfer orbit parameters are thereby predicted to be:

r_{pt}	= 6978 km	= a_w
r_{at}	= 7385 km	= a_f
a_t	= 7181.5 km	= $(r_{at} + r_{pt})/2$
e_t	= 0.0283	= $(r_{at} - r_{pt})/(r_{at} + r_{pt})$
i_t	= 99.52	= i_f
T_t	= 6057 sec	= $2\pi(a_t^3/\mu)^{1/2}$
θ_t	= 180°	
ω_t	= -174.72°	= $5.28^\circ - 180^\circ$
t_t	= 3028.5 sec	= $T_t/2$

The relations between the three orbits are illustrated schematically below.

