$r_{leo1}$  is the radius of LEO-1 [Km] (Earth to EROS(433))  $i = \{0,2\}$  $r_{leo2}$  is the radius of LEO-2 [Km] (EROS(433) to Earth) S.t. $160 \le \begin{bmatrix} r_{leo1} & r_{leo2} \end{bmatrix}^T \le 2000$  $|v_{i+2} - v_{i+1}| = \Delta V$  is the characteristic velocity [Km/s]  $i = \{0,2\}$  $108 < \partial t_0 < 1000$  $\partial t_0$  time taken to complete Earth to EROS(433) transit [days]  $92 < \partial t_1 < 1000$  $\partial t_1$  time taken to complete EROS(433) to Earth  $0 \le \begin{bmatrix} i_1 & i_2 \end{bmatrix}^T \le \pi$ transit [days]  $i_1$  inclination of LEO-1 [rads]

 $\mu_{leo2}$  true anomaly of LEO-2 [rads]

$$0 \leq \begin{bmatrix} i_1 & i_2 \end{bmatrix} \leq \pi$$
 transi 
$$0 \leq \begin{bmatrix} \mu_{leo1} & \mu_{leo2} \end{bmatrix}^T \leq 2\pi$$
 transi 
$$i_1 \text{ inclination of LEO-1 [rads]}$$
 
$$i_2 \text{ inclination of LEO-2 [rads]}$$
 
$$\mu_{leo1} \text{ true anomaly of LEO-1 [rads]}$$

 $\sum |v_{i+2} - v_{i+1}| > 0$ 

 $i = \{0, 2\}$ 

 $Min \sum_{i=1}^{n} |v_{i+2} - v_{i+1}|$ 

$$\begin{bmatrix} \mu_{leo1} & \mu_{leo2} \end{bmatrix}^T \le 2\pi$$