# Mission operation: number of visits

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1. Position of a star depends upon:

- **5** parameters (cordinates at t=0, proper motion, parallaxe)
- + one planet => + **7** parameters ($\mathbf{M_{pl}}$, **a**, **i**, **e**, 3 **angles**)
- + **p** planets => + **7 p** "

total n = 5 + 7 p e.g. p = 3, n= 26

2. N visits => 2 N data ($X_i$ + $Y_i$)

=> required: **2 N ≥ 6 + 7 p** , e.g. p = 3, N ≥ 14

p = 5, N ≥ 20

3. Which is best: **N = 25, 50, or 100** (with lower S/N) ??

- empirical rule from RV : 2 N = 4 x nb of free parameters
- but at constant total time, N ↗ => **fuel consumption ↗**

- Probably needs **simulations**