“ A Ptolemaic approach for improving the conjunction analysis pipeline ”

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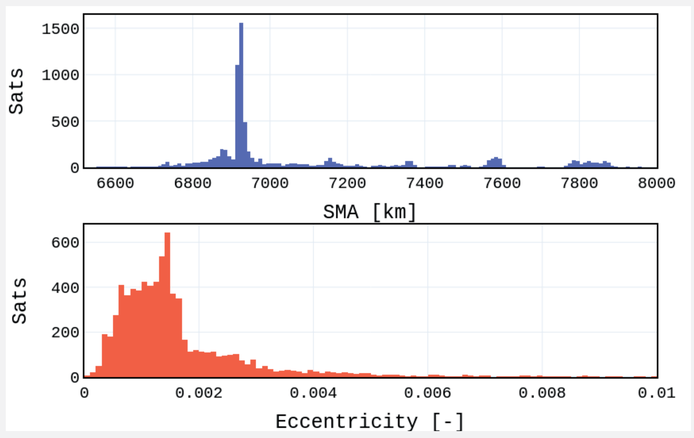
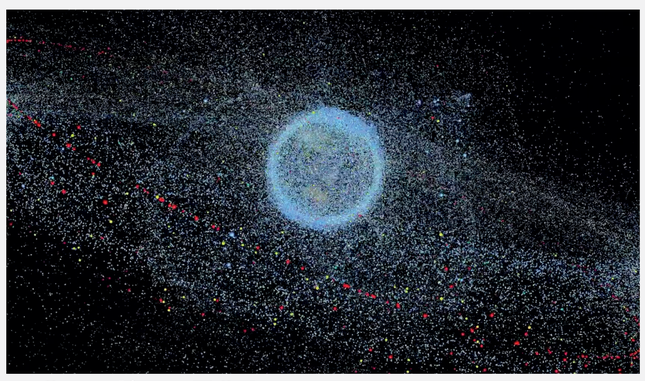
AIKO
INFINITE WAYS TO AUTONOMY

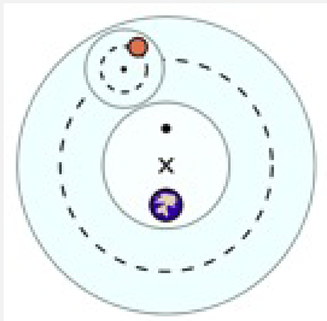
1. The current situation

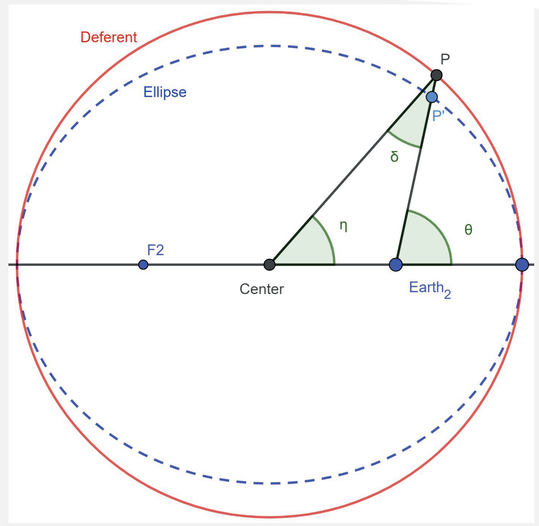




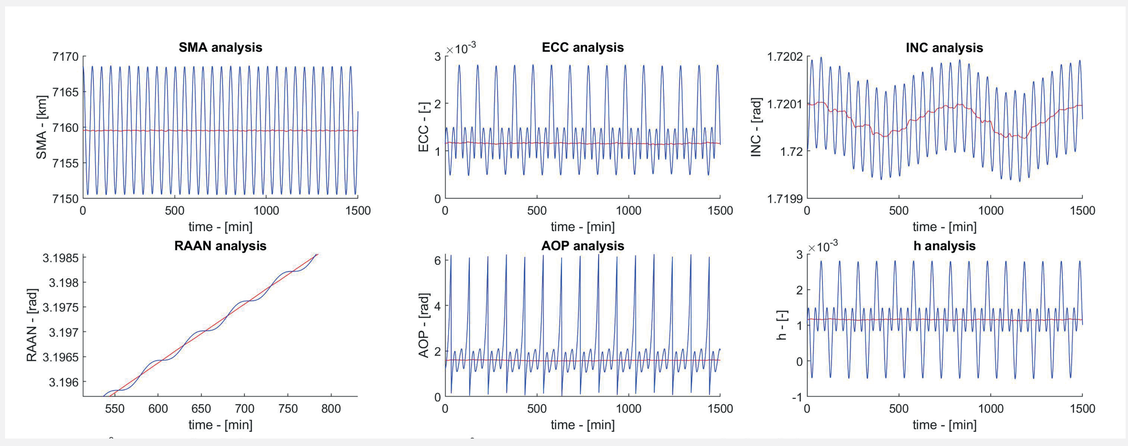
Credits: ESA

2. The deferent model





3. The method



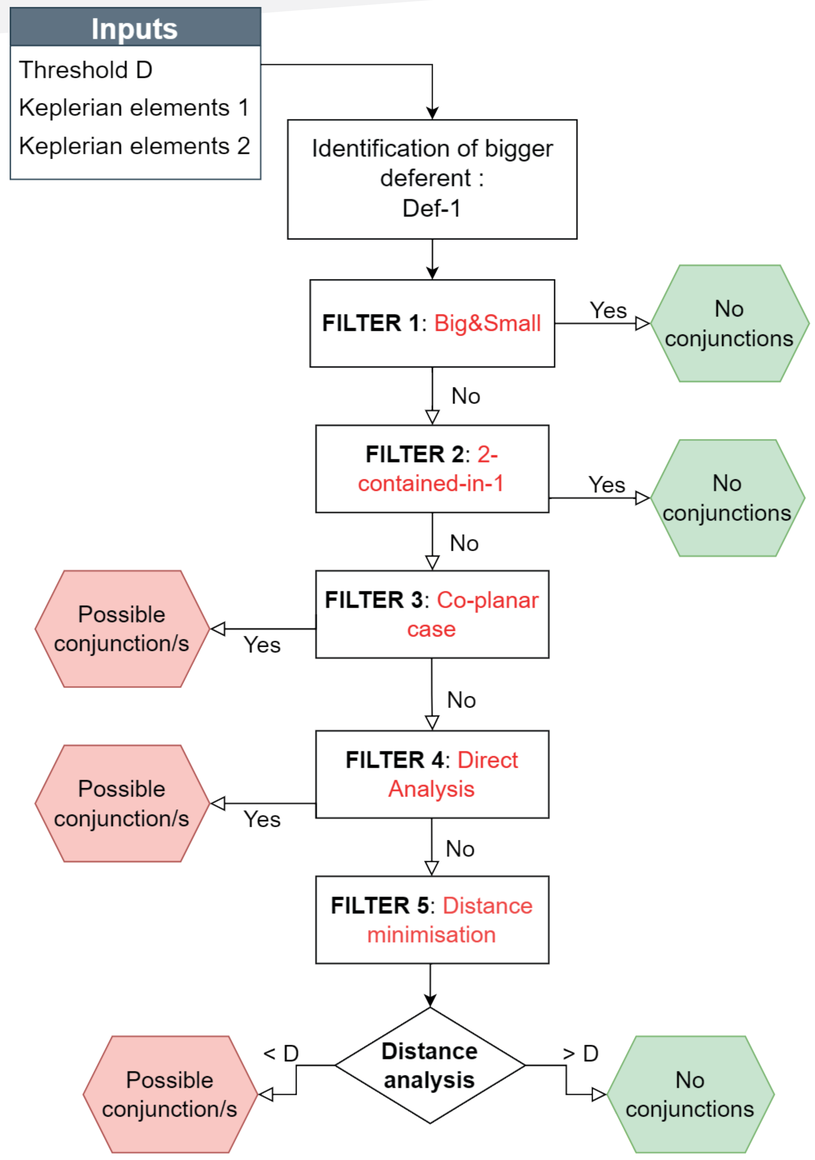
Mean elements for the deferent model

4. The filter

Catalogue

Pre-filtering

Precise analysis & CDMs



5. Main results & takeaway points

Tested on LEO catalogue...

+ computational efficiency
  2x wrt benchmark
+ quickly discard many couples
  23% more than benchmark
+ preserve the propagation history

Soon...

+ precise MOID computation
+ integration in AI-based pipeline

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