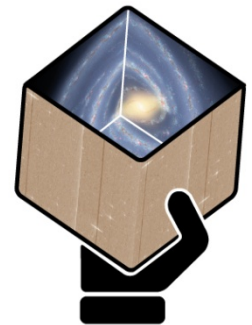


GENIUS Final Report for Validation of NonSingle Stars T5.6.2



gaia



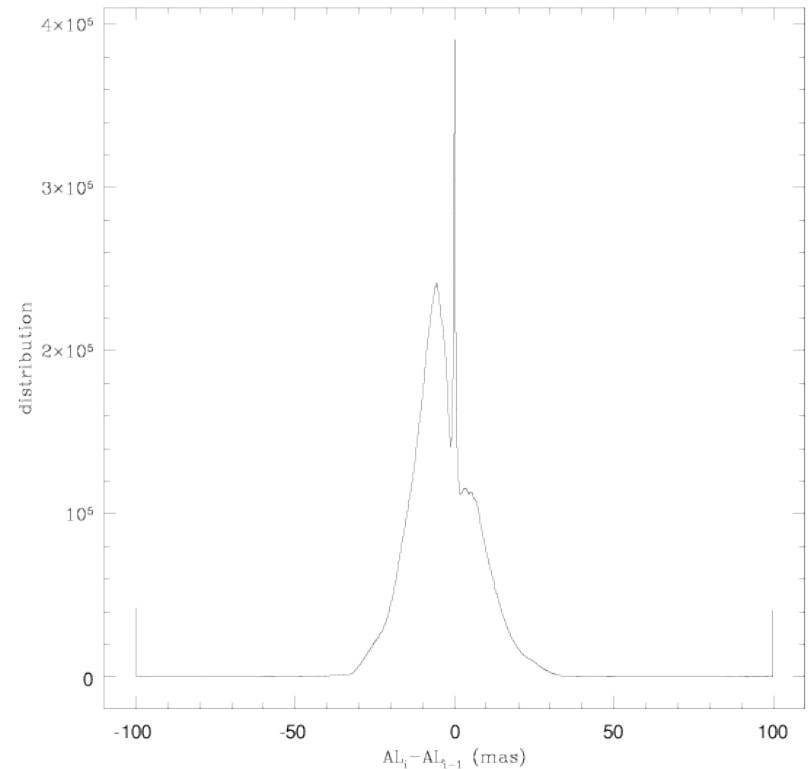
D. Pourbaix
FNRS @ ULB (Brussels)

Validation of NonSingle Star solutions

- It is fair to assume that 95% of the objects observed by Gaia behave like single stars of constant brightness.
- What about the other 5%, should one simply throw them away?
- Within DPAC, that garbage is recycled into scientific gems (stellar masses, extrasolar planet candidates, ...).
- Even if the recycling codes have been extensively tested on simulated data, should one trust them on real data?
- This WP deals with the validation of these potential gems.

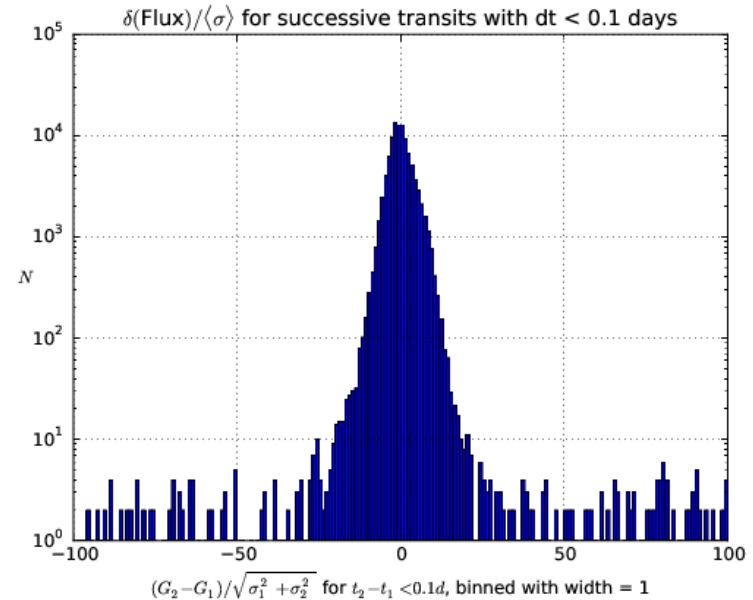
Positional input

- Any validation of a NonSingle Star solution begins with the detection of its abnormal behaviour wrt genuine single stars.
- The position of a star should not change much over a 6h interval.
- Troublesome inputs should be fixed first!



Brightness stability

- Though less constrained, should that constancy hold on brightness too?
- Variable stars do exist but one does not turn a star off in two hours.



Management

- Post-doc paid by GENIUS for 3 months out of a long-term PRODEX (ESA) contract
- + know-how available right away;
- - no additional manpower.
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