red: verified
blue: candidates



red: verified
blue: candidates

**Video-3**

Upper left (Horizontal: Query ImageID, Vertical: Resultant Image ID [0-2199])
> Blue dots : top candidates
> Red dots: verified (qualified) answers
There are many false positives if top top candidates are taken as answers.

Upper right (Horizontal: Query Image by path distance, Vertical: Resultant Image by path dist.)
> Blue dots: top candidates
> Red dots: verified answers
Red dots are almost on y=x (correct positions).

Right (Horizontal / Vertical same as upper right)
This is a comparison with a method of "say yes if the number of pairs is big enough."
The threshold of the pairs is set to get the same rate of our method.
> Black dots: queries of which both methods tells the same ID.
> Orange dots: queries for which only the pair counting method tells.
> Green dots: queries for which only the proposed method tells.

| Pair counting method | |
| --- | --- |
| Threshold: | 8 |
| Answer: | 3507 |

| Proposed method | |
| --- | --- |
| Answer: | 3911 |

Note that some orange dots go at incorrect positions.
(Some green dots also go far, but fewer than the orange ones.)
The verification process needs extra time compared with the pair counting method,
but it is less than 1ms.