Observation accuracy improvement of faint minor planet with small telescope

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We develop moving object detection software in JAXA/IAT, and discover a lot of unknown minor planets.
It is a special feature to discover 22 magnitude class faint minor planet by a small aperture telescope.
As for the stacking method, it is possible for competitive observation in the world astronomical observatories with such a small aperture telescope.
This stacking method enables detection of the invisible moving object in noise in one image.
Therefore we calculate the position coordinate from a motion by the search.
However, the coordinates decision is difficult.
Here, the motion measurement of a bright movement heavenly body is compared with the center of gravity measurement of the heavenly body, and it gropes for the technique to be able to do the measurement with high accuracy also by a small aperture telescope.