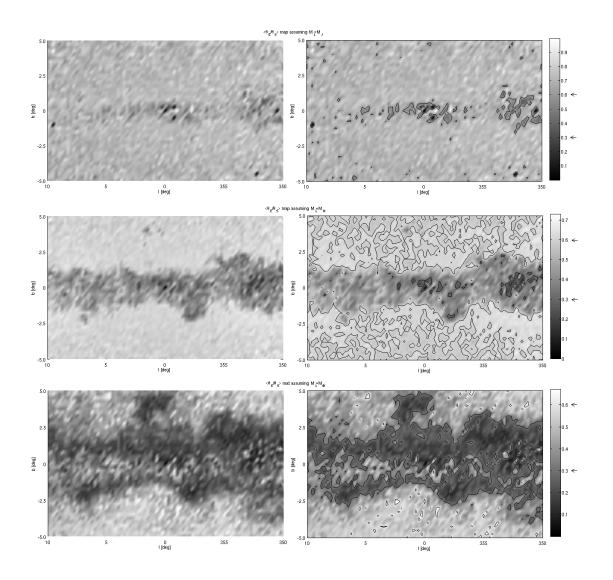
## Microlensing Effect with Planet-mass Lens

• Looking at the Galactic bulge

by Makiko "Sherwin" Ban, PhD Student

- Assuming the lens mass as  $M_{7+}, M_{7\!\!\!/}, M_{\odot}$
- Assuming angular radius of Einstein ring  $(\theta_E)$  < angular radius of a source star  $(\theta_S)$



- + Average ratio of radius shows almost the same image as the Galactic centre taken by telescope
- + Smaller ratio briefly reflects the stellar population
- + Smaller lens mass provides small ratio more frequently
- + A crack-like image at 0° latitude in  $M_{\oplus}$  map might be from arms laying between the Galactic centre and the Sun
  - (The crack can be seen very slightly in  $M_{\Xi}$  map)