What does the Milky Way look like?

"Gold standard" distances are Trigonometric parallax measurements

M 74

Hipparcos Satellite range of distances (early '90s)

The <u>BeSSeL Survey</u> range of distances: improve by a factor more than 100! (late 2010 on)

NGC 1300

we can trace <u>spiral structure</u> by observing <u>regions where "big" stars form</u>