

1. The codes in hand

- SixTrack-grd-tbt-noBBM:

Dump 6-D coordinates every k turns

Post-processing to get beam decay, emittance,...

- SixTrack-grd-sigma-noBBM:

Calculate Sum x^2 of all particles in all k turns

Dump Sum x^2 and N_part every k turns

- IDs for macro-particles are implemented for them.

2. Tracking jobs in past month

Job5000-5200: 685/695, BB, matched, Np=2e11

Job5200-5400: 685/695, BB+HBBC, matched, Np=2e11

Job5400-5600: 685/695, BB+FBBC, matched, Np=2e11

Job5600-5800: 695/685, BB, matched, Np=2e11

Job5800-6000: 695/685, BB+HBBC, matched, Np=2e11

Job6000-6200: 695/685, BB+FBBC, matched, Np=2e11 (suspended)

Hollow beam: 3-5 sigmas, 6400 p, represent totally 105634p

Job6200-6300: 685/695, BB+FBBC, unmatched, Np=2e11

Job6300-6400: 685/695, BB+HBBC, unmatched, Np=2e11

Job6400-6500: 685/695, BB, unmatched, Np=2e11

Hollow beam: 2-5 sigmas, 6400p, represent totally 15497p

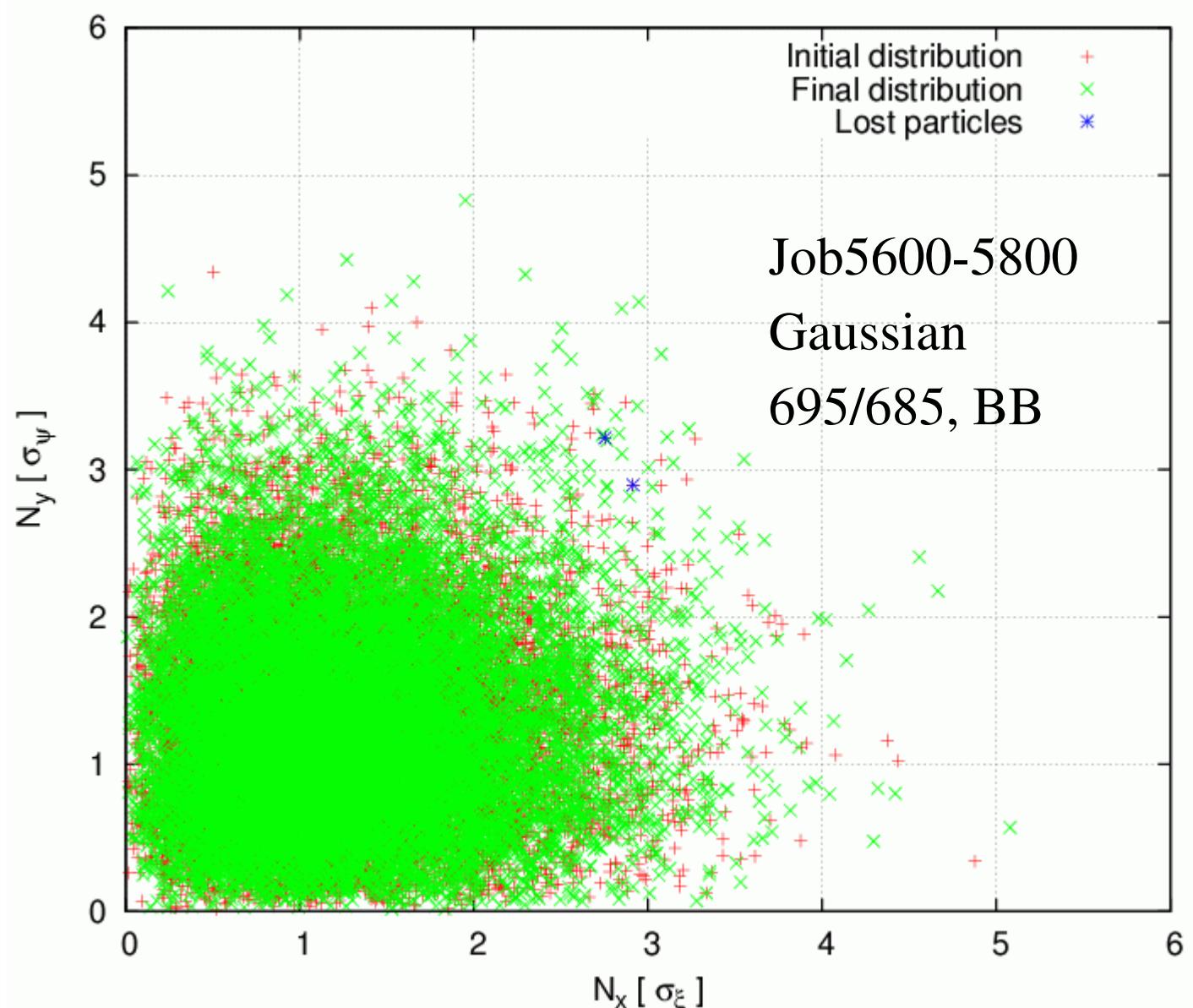
Job6500-6600: 685/695, BB, unmatched, Np=2e11

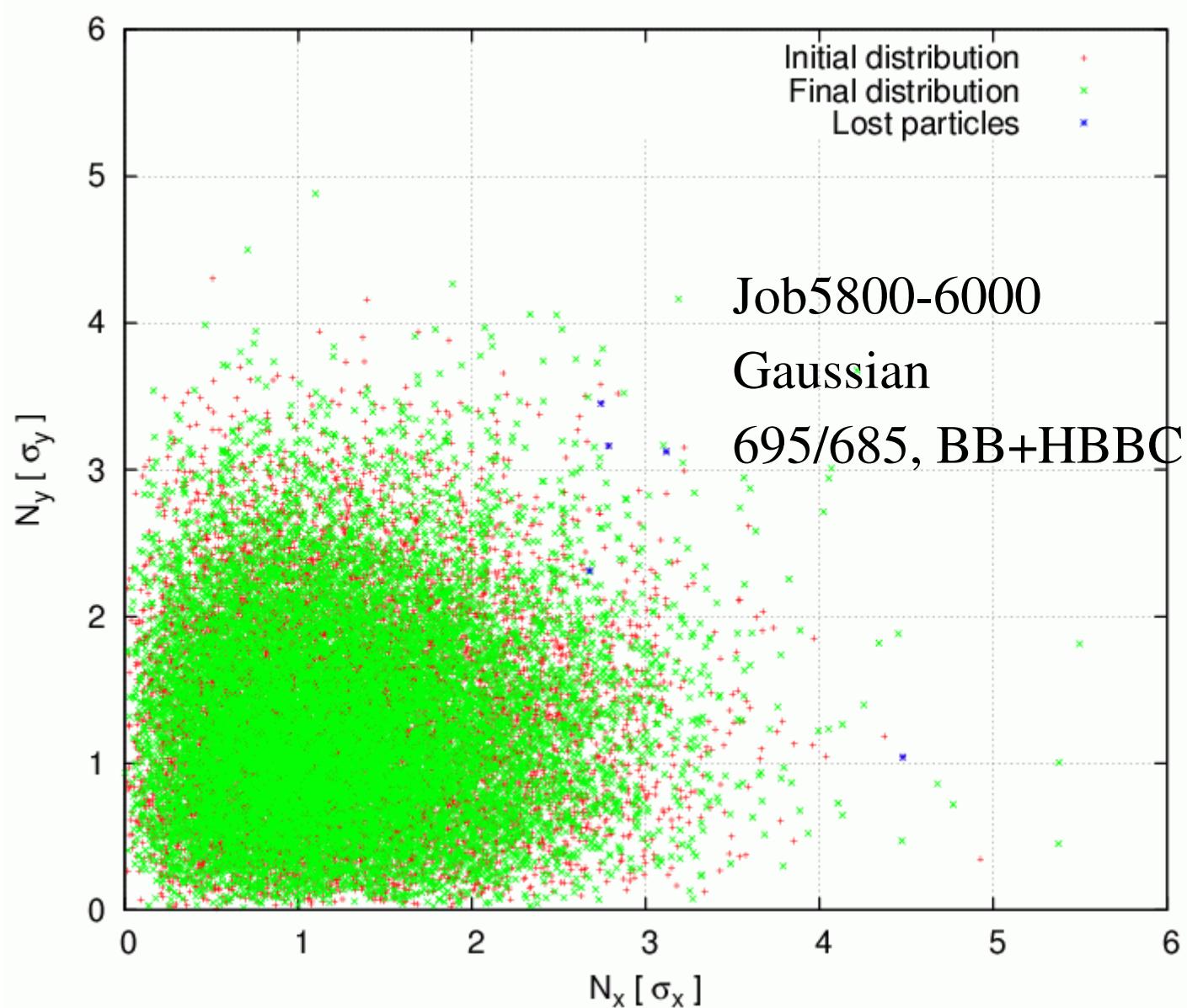
Hollow beam: 4-5 sigmas, 6400p, represent totally 2156698p

Job6500-6600: 685/695, BB, unmatched, Np=2e11

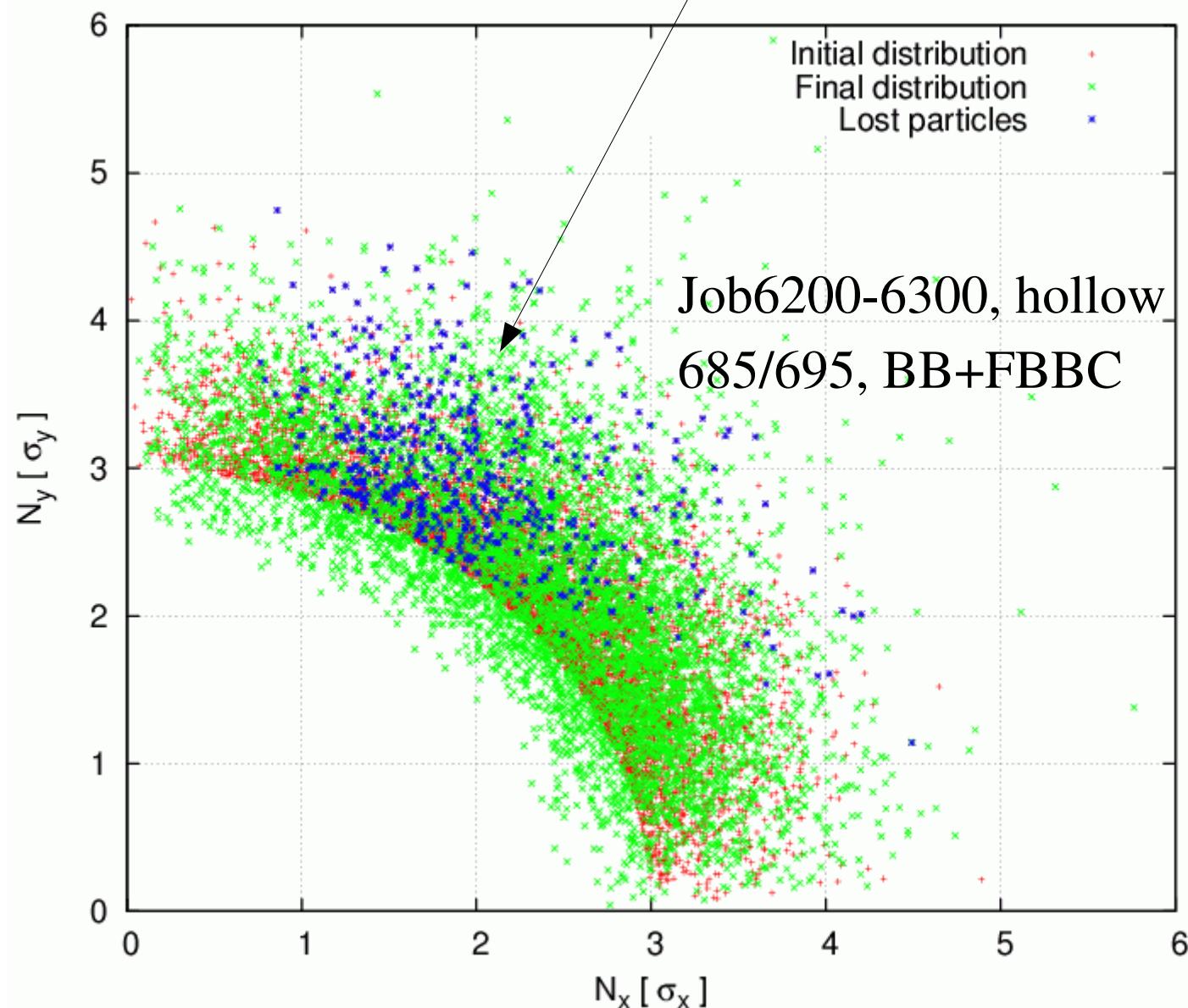
ID
applied

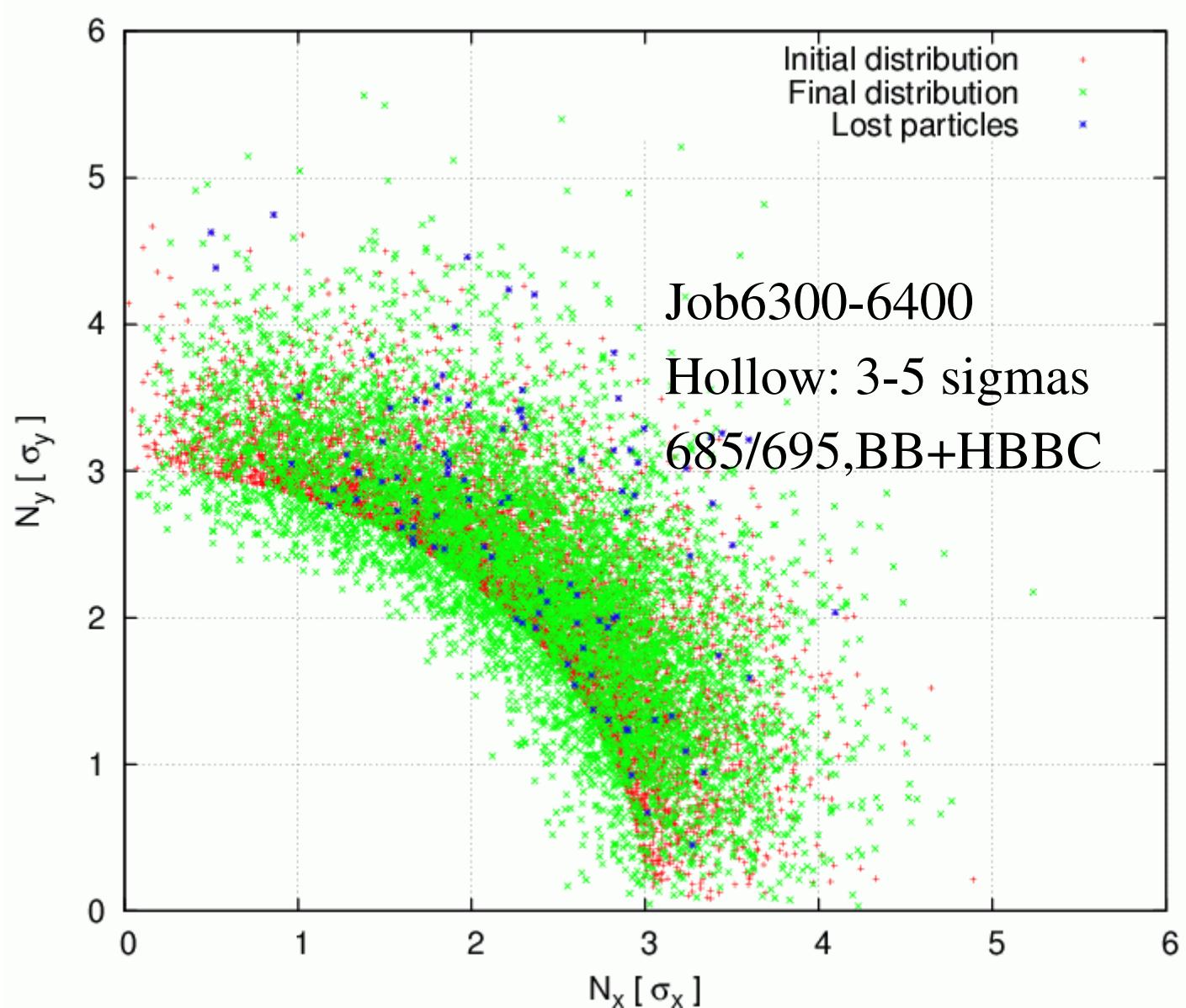
3. Particle Loss map

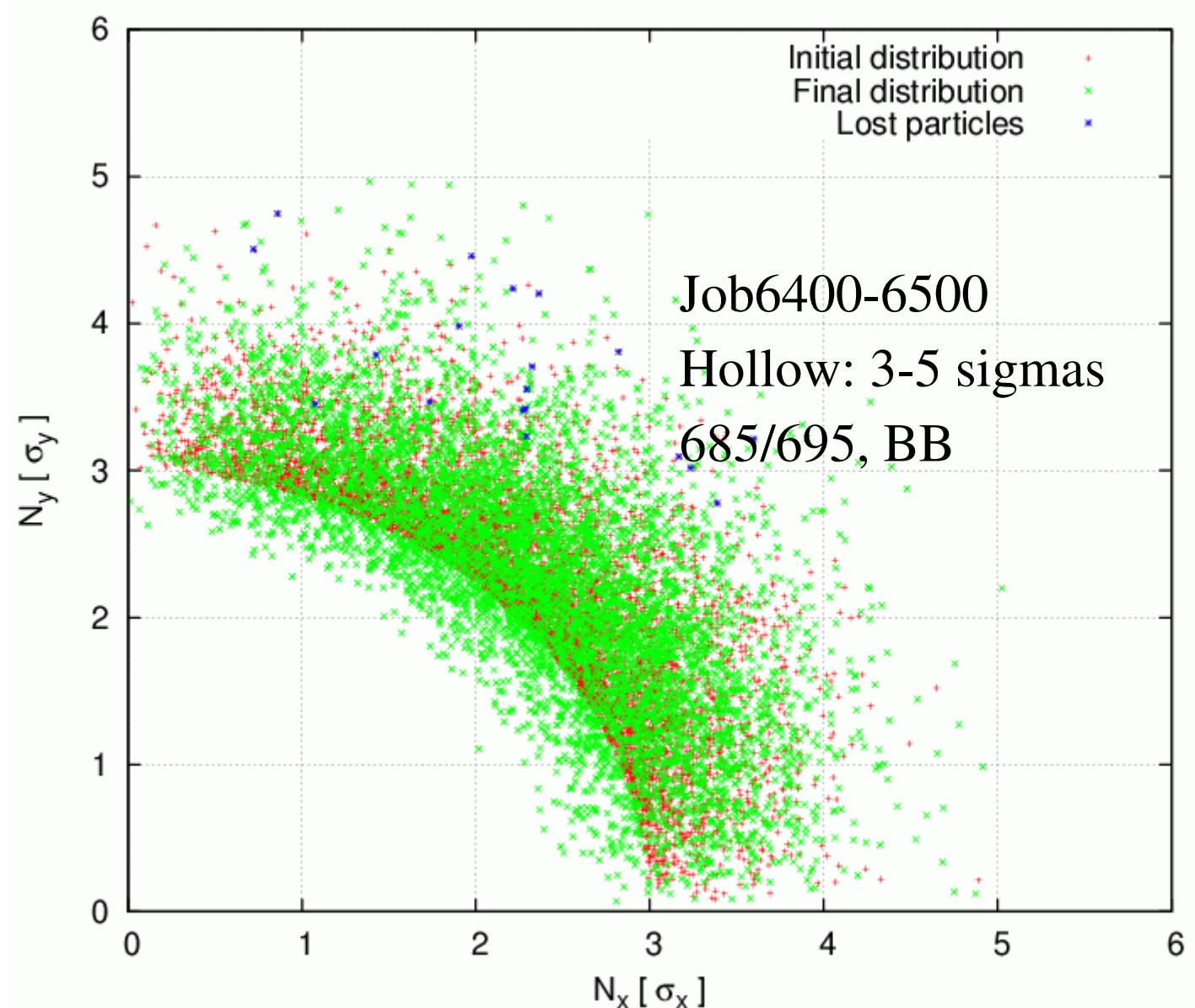


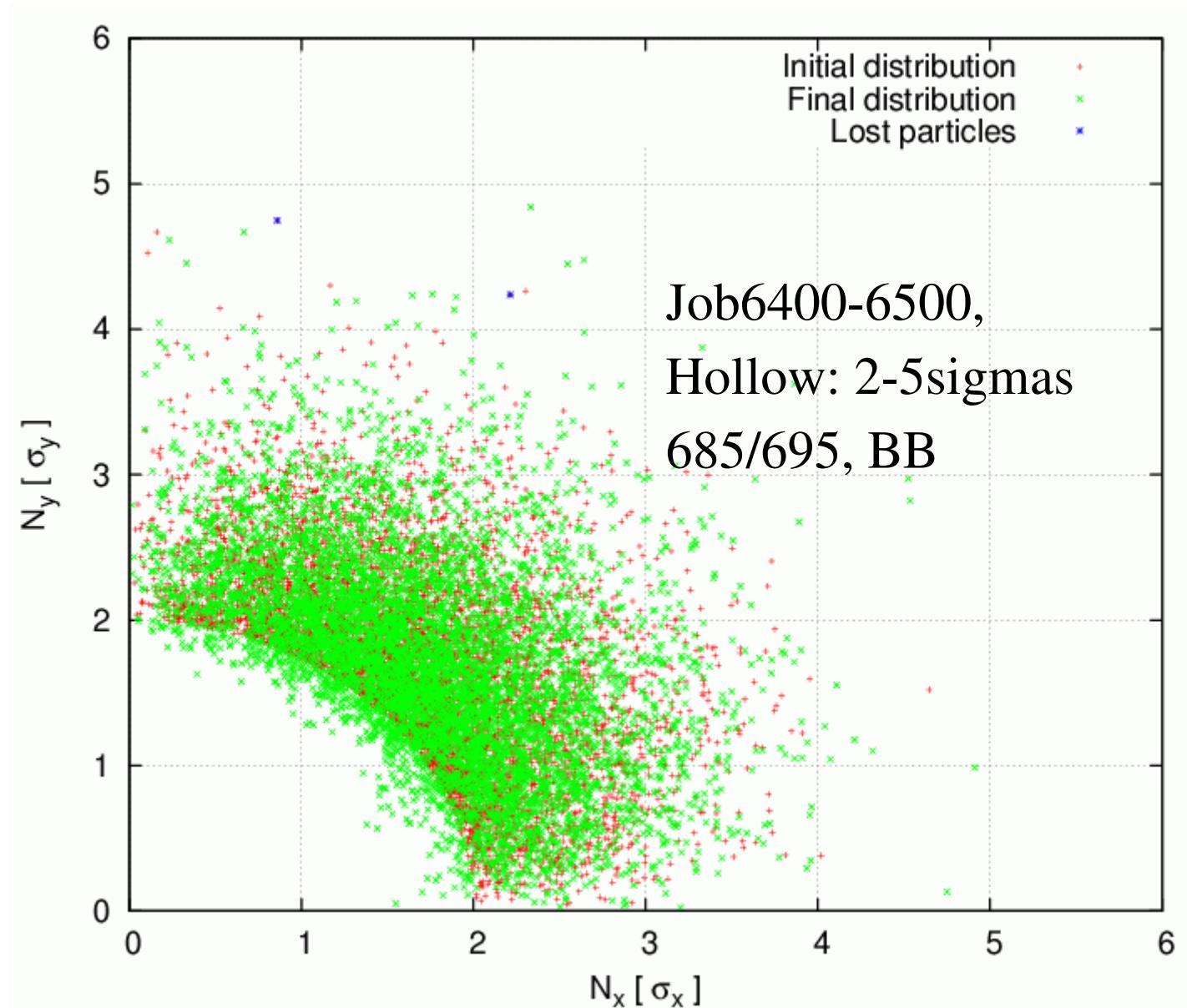


This region predicted by
FMA and Lyapunov map

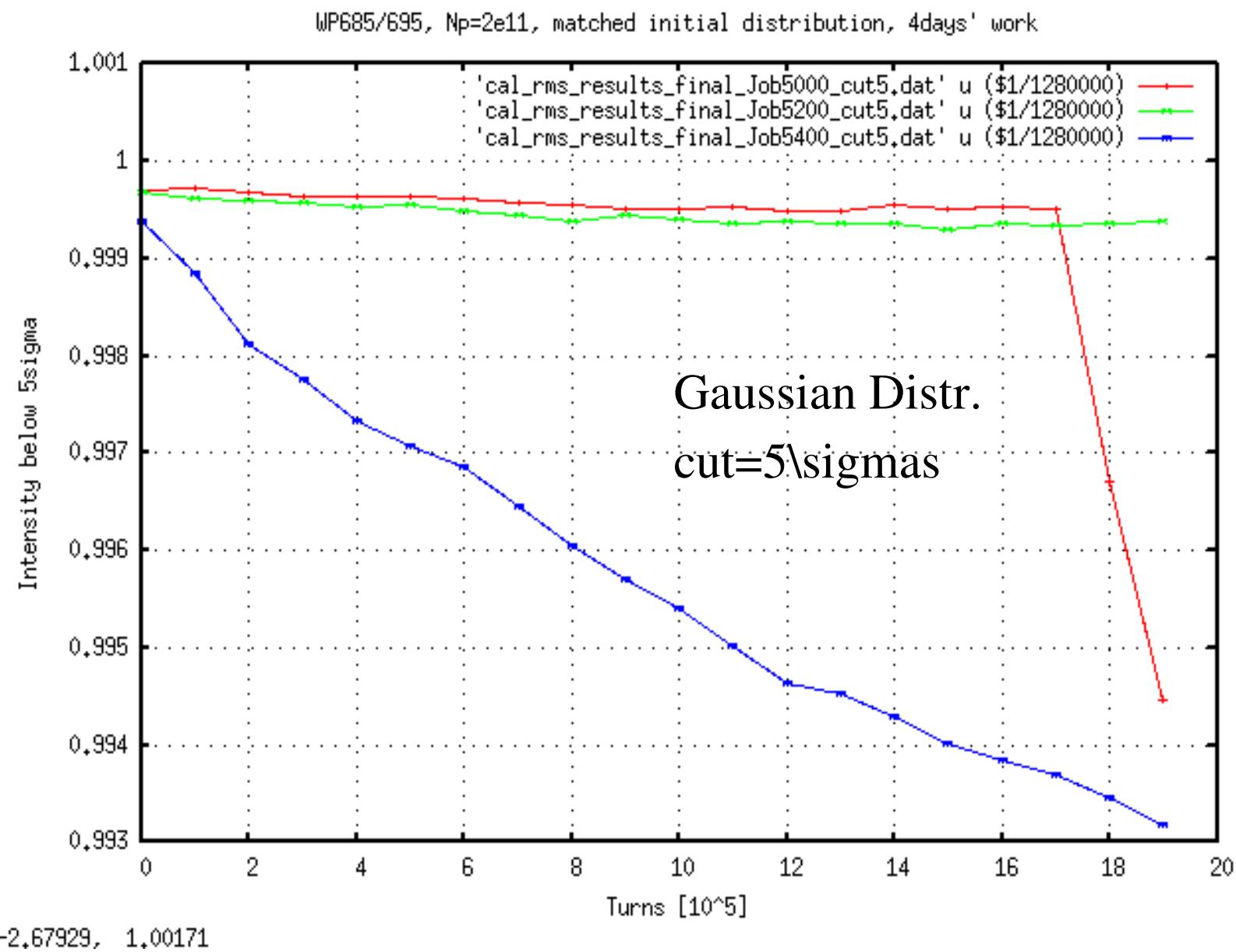




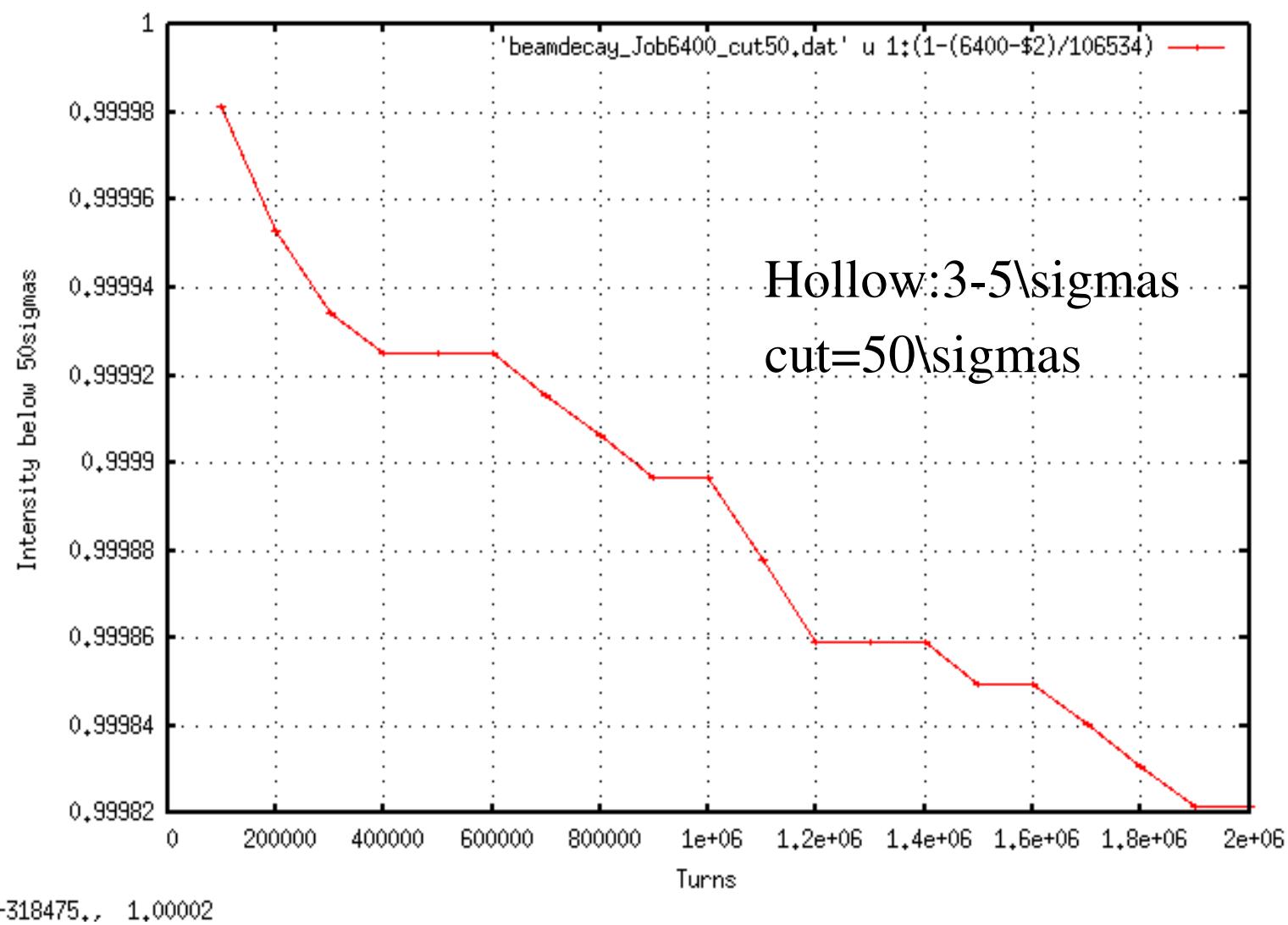




4. Particle loss calculation

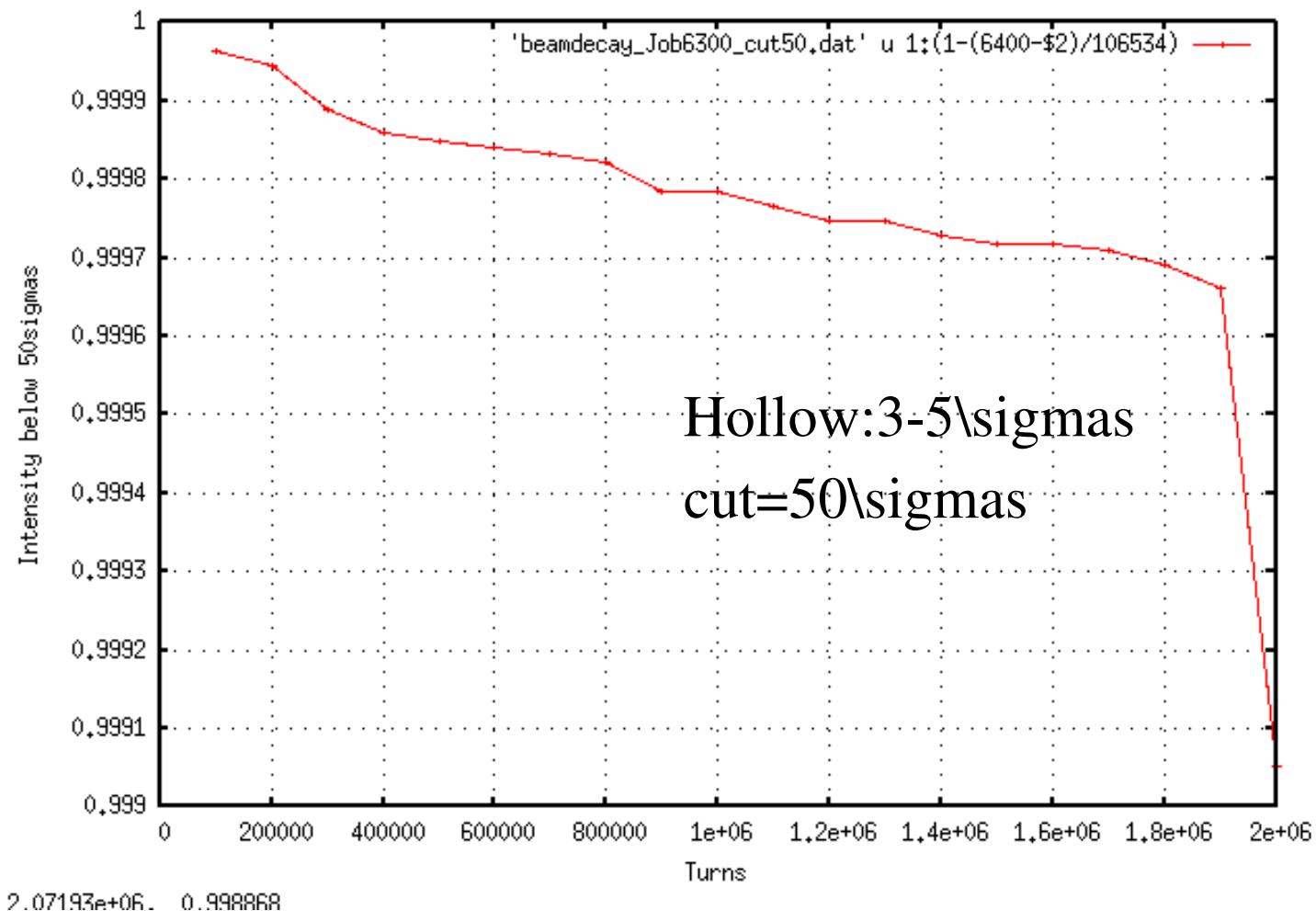


WP685/695, Np=2e11, BB only, Hollow dist, 2 days' work

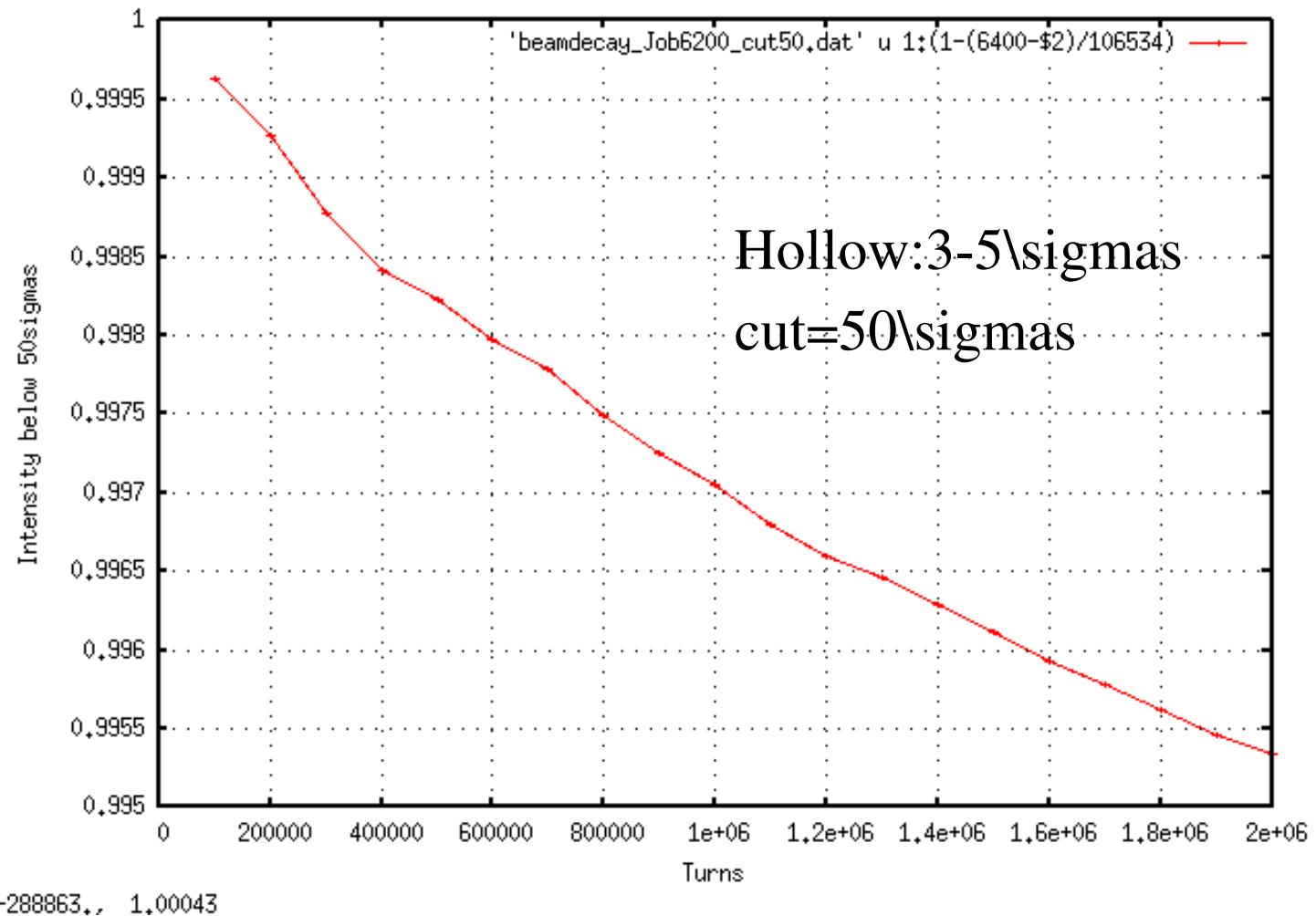


-318475., 1.00002

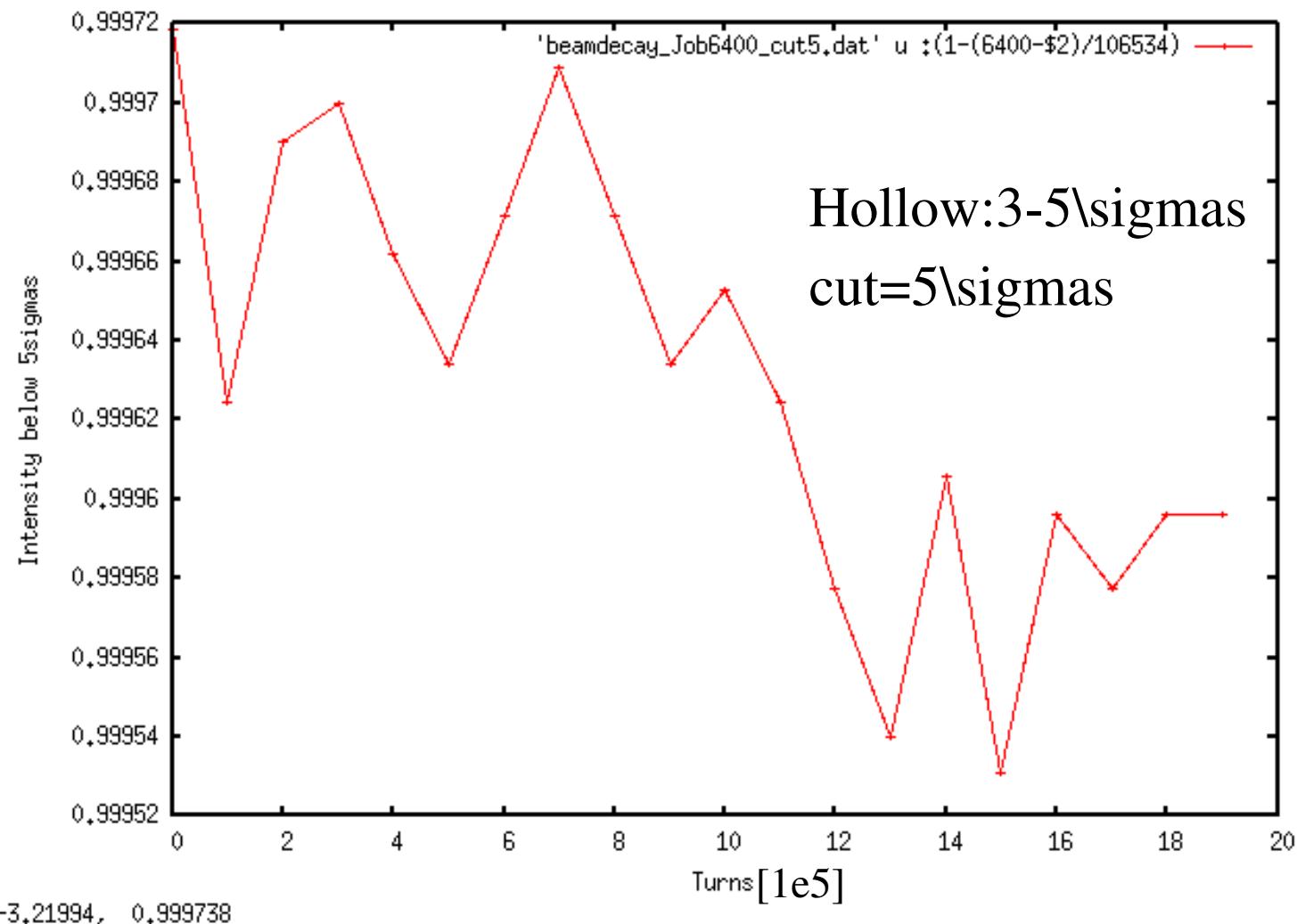
WP685/695, Np=2e11, BB + HBBC, Hollow dist, 2 days' work



WP685/695, Np=2e11, BB + FBBC, Hollow dist, 2 days' work



WP685/695, Np=2e11, BB only, Hollow dist, 2 days' work



WP685/695, Np=2e11, BB only, Hollow dist, 2 days' work

