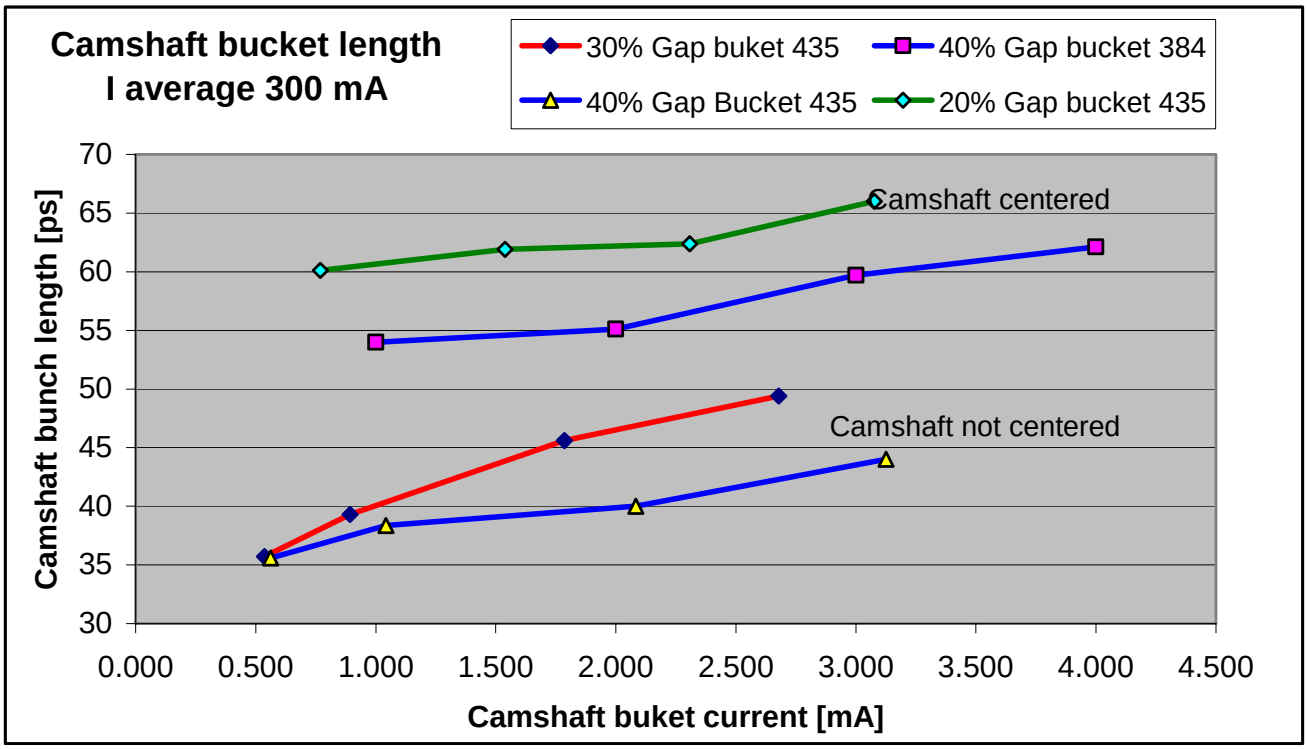
Measurements of transient Effects on Bunch Elongation with Super-3HC at SLS

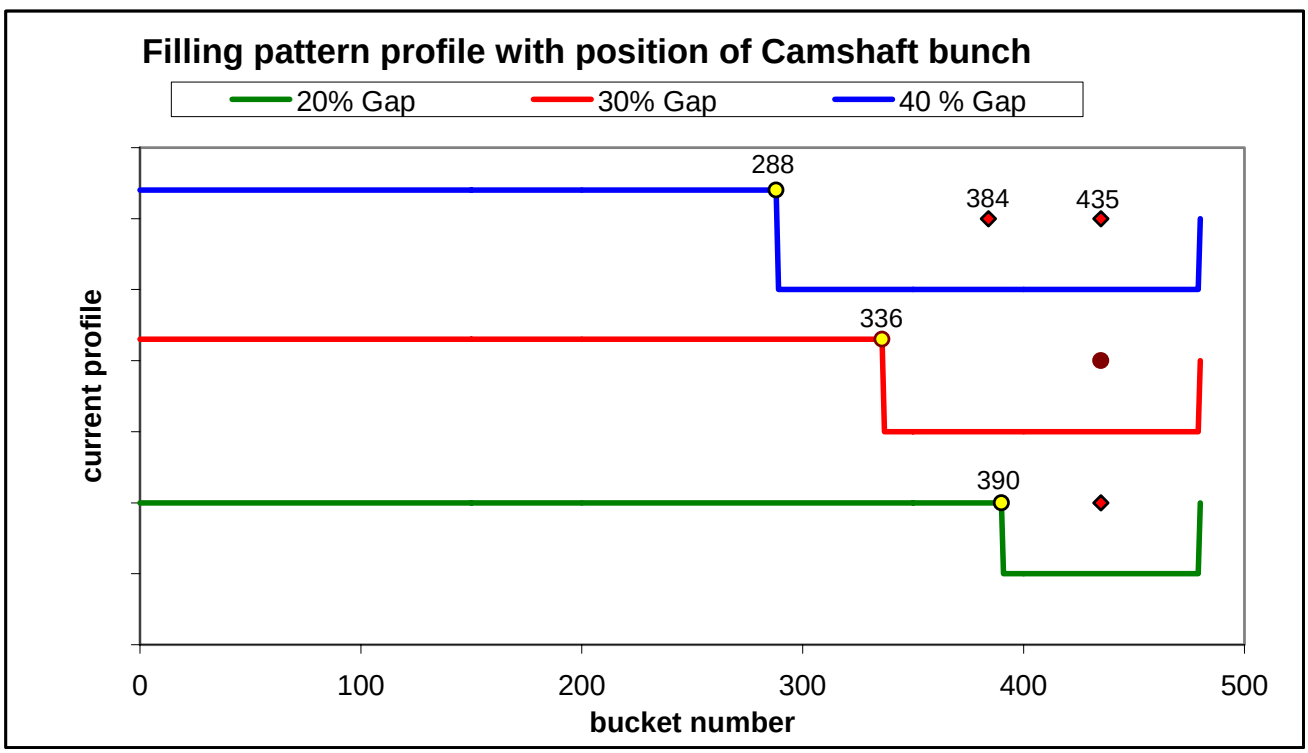
On behalf of Marco Pedrozzi

8th ESLS RF meeting, Daresbury, 29th-30th September 2004

Summary Camshaft mode bunch length measurements.

I average = 300 mA for all filling patterns

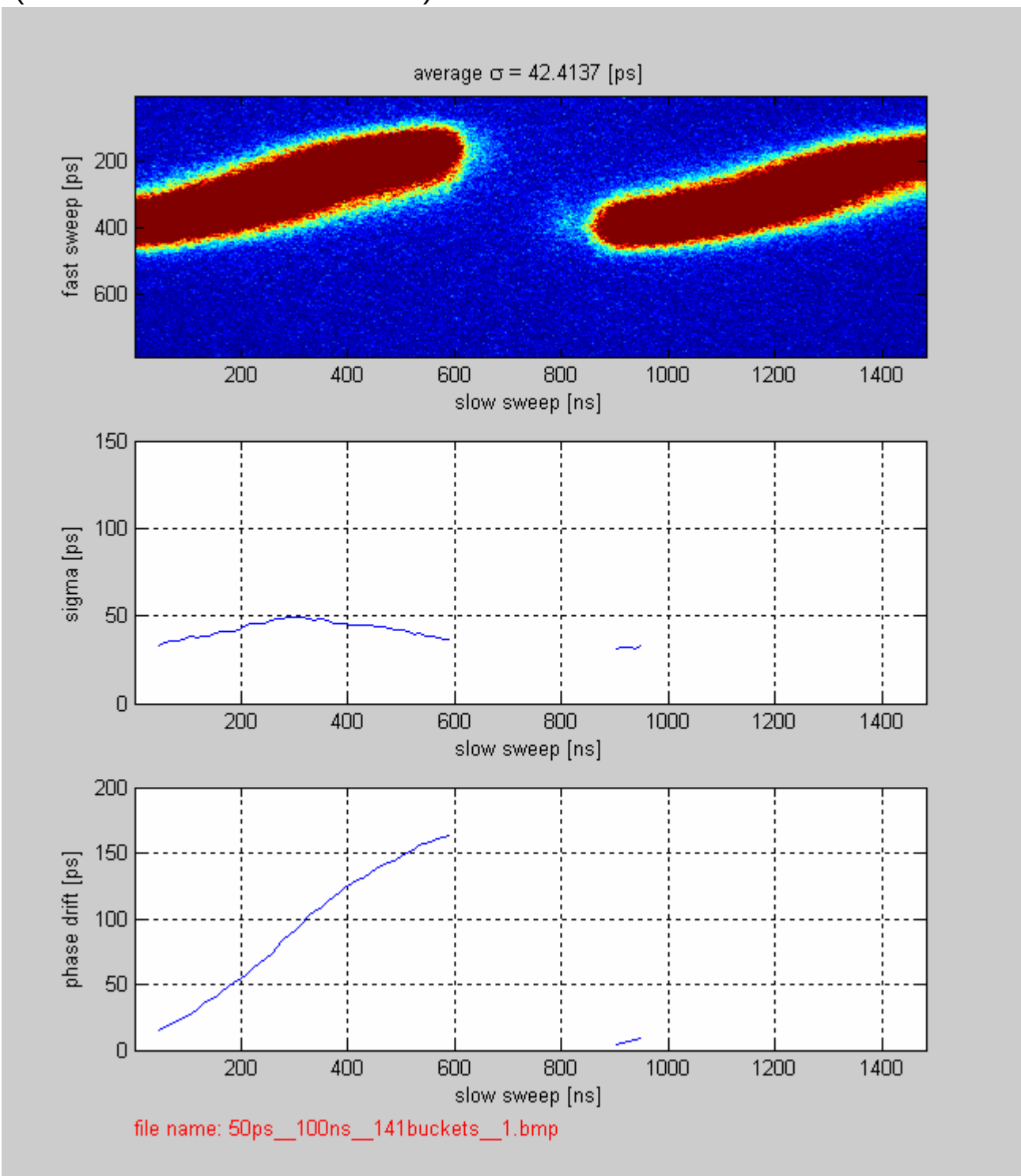




30% gap – Camshaft current 0.536mA

Camshaft bunch 435 - Start/end gap 336/480

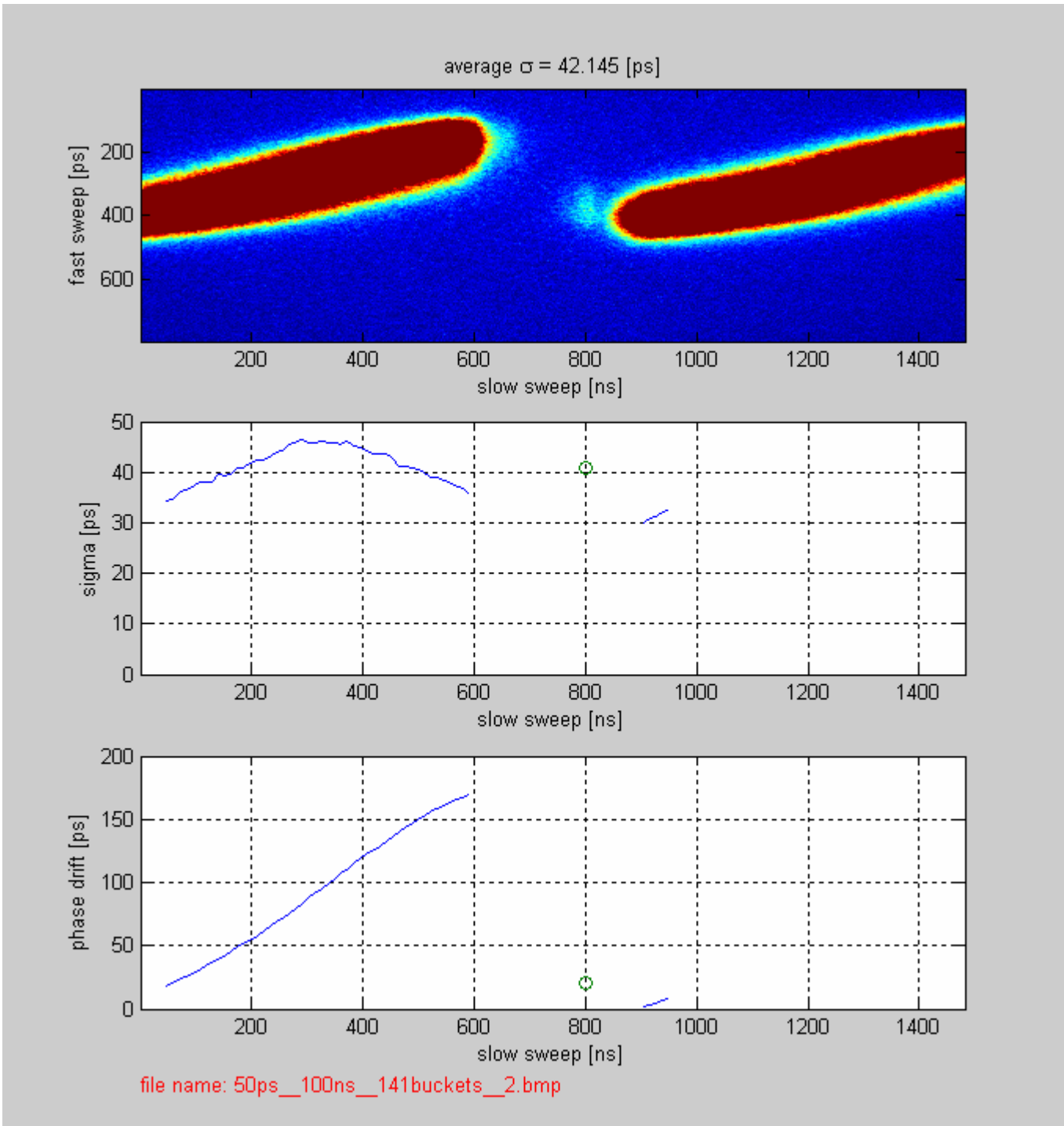
(bunch 0 and 480 are the same)



30% gap – Camshaft current 0.893mA

Camshaft bunch 435 - Start/end gap 336/480

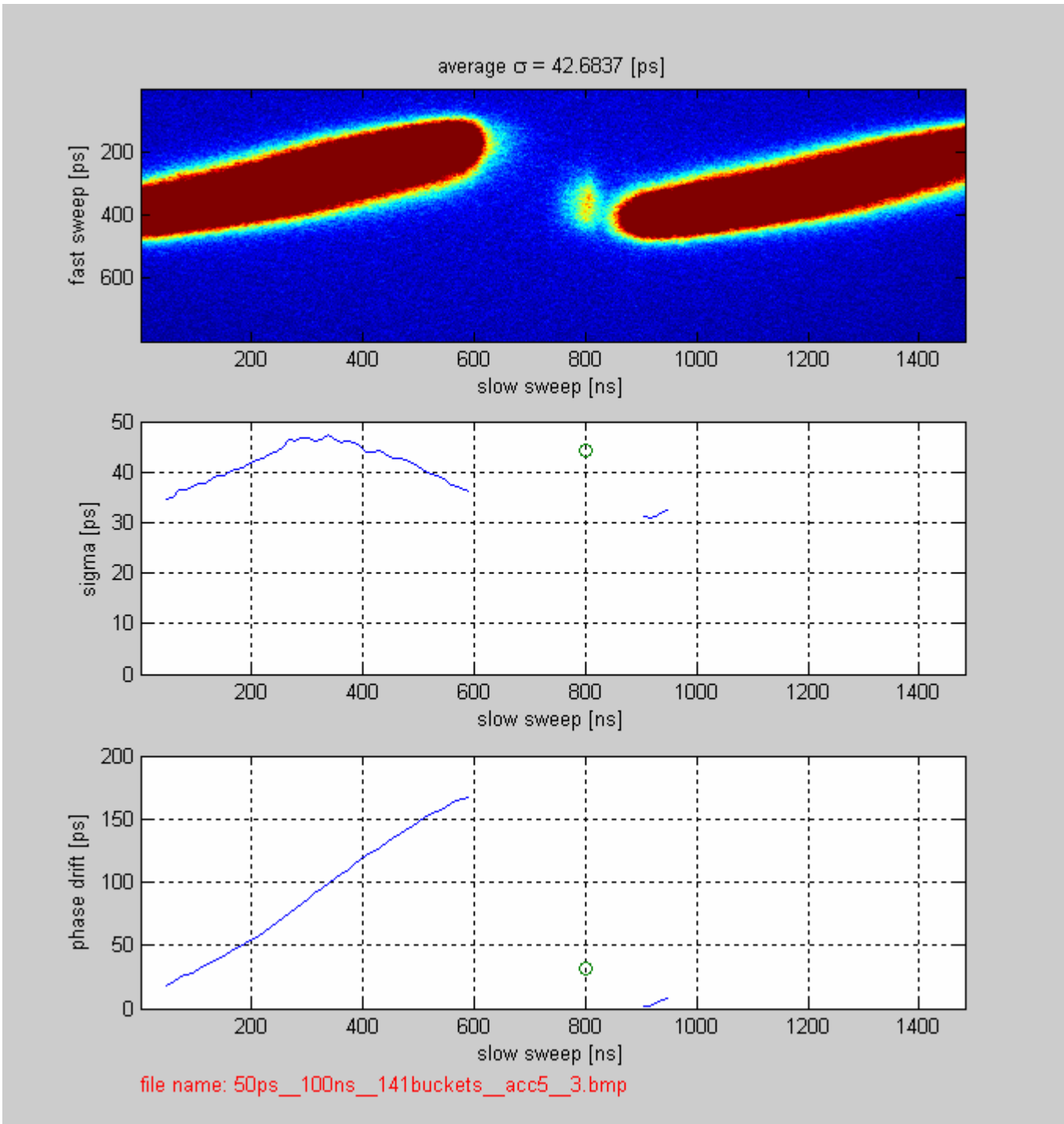
(bunch 0 and 480 are the same)



30% gap – Camshaft current 1.78 mA

Camshaft bunch 435 - Start/end gap 336/480

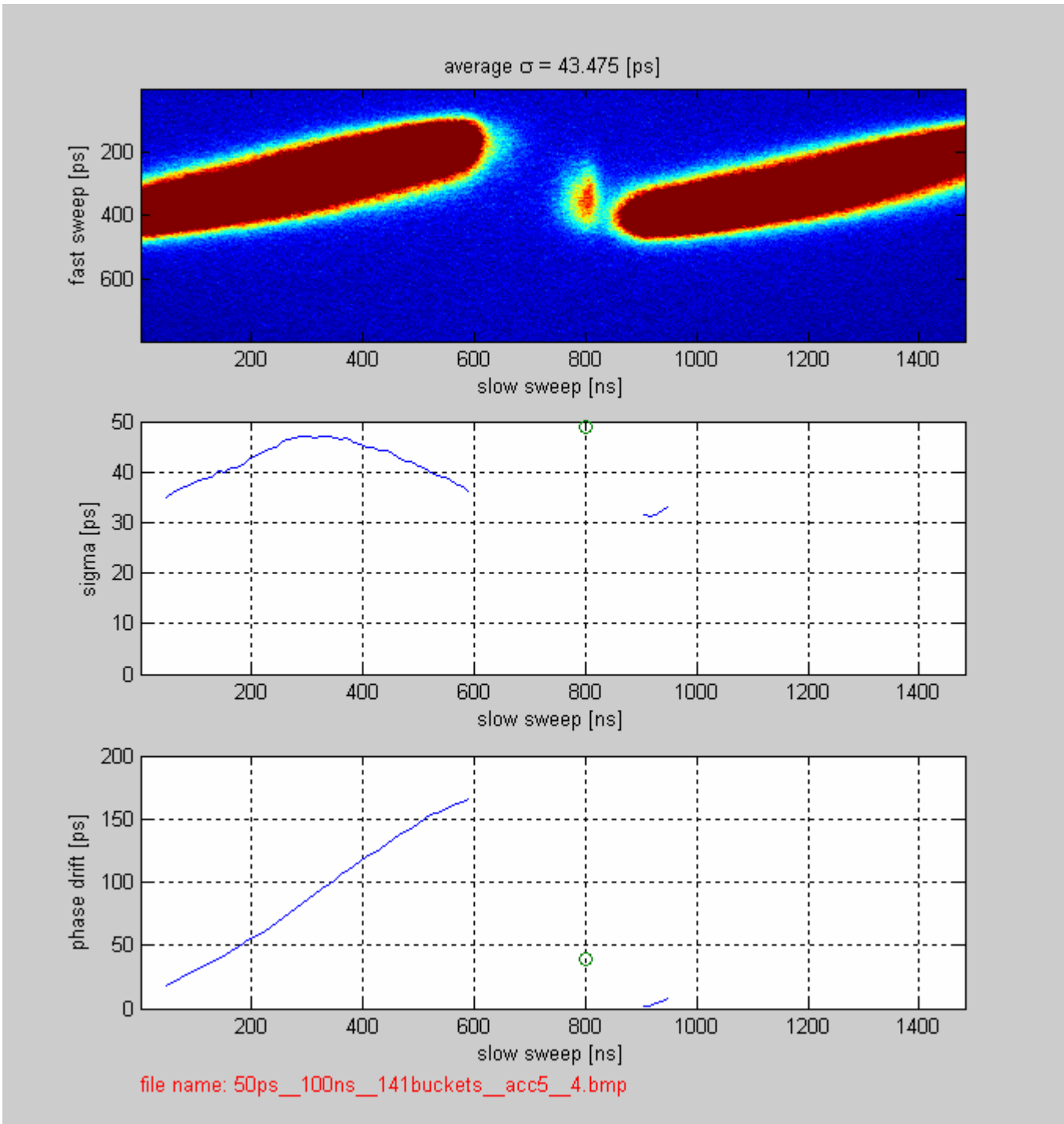
(bunch 0 and 480 are the same)



30% gap – Camshaft current 2.68 mA

Camshaft bunch 435 - Start/end gap 336/480

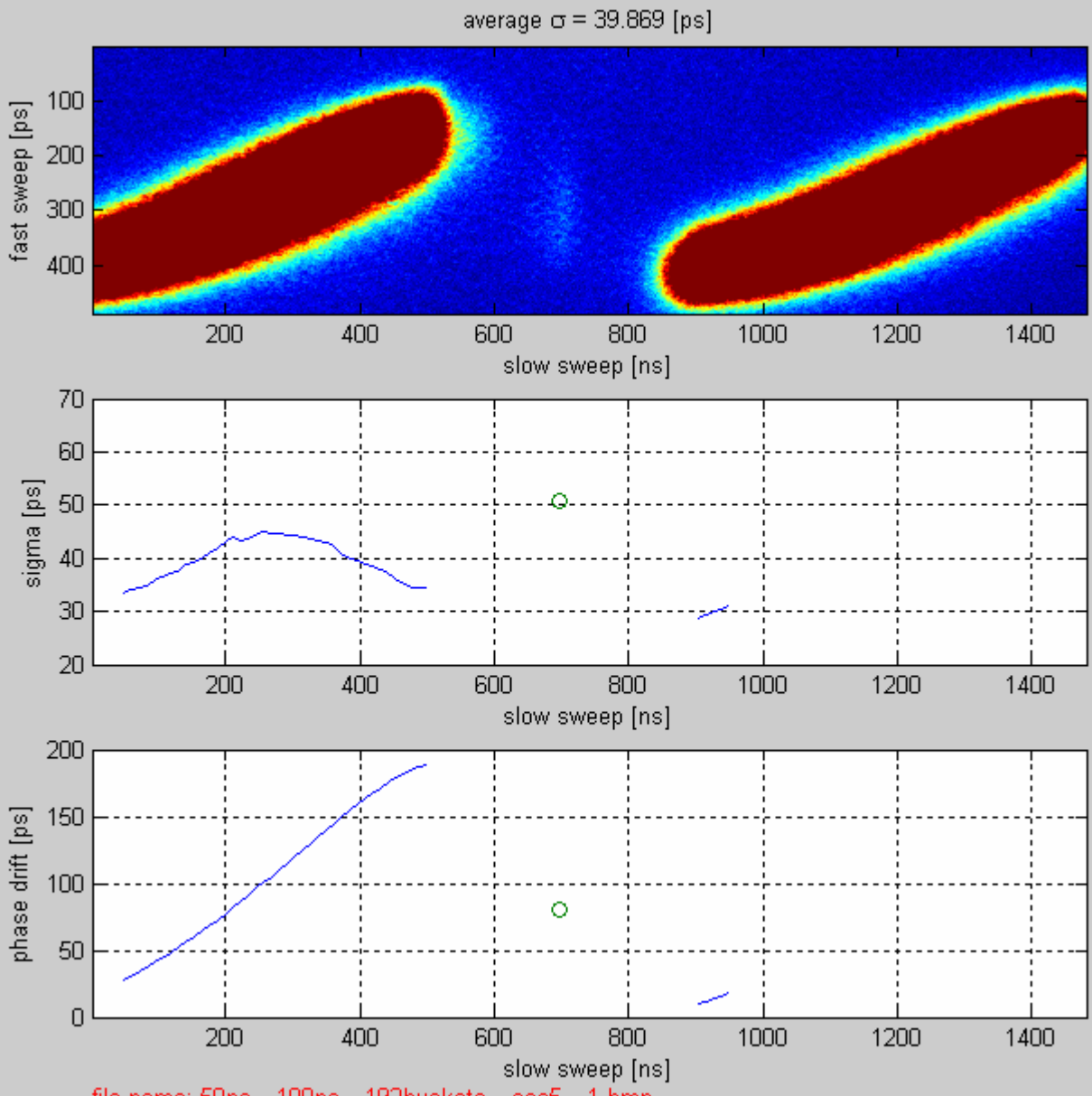
(bunch 0 and 480 are the same)



40% gap – Camshaft current 0.56mA

Camshaft bunch 384 - Start/end gap 288/480

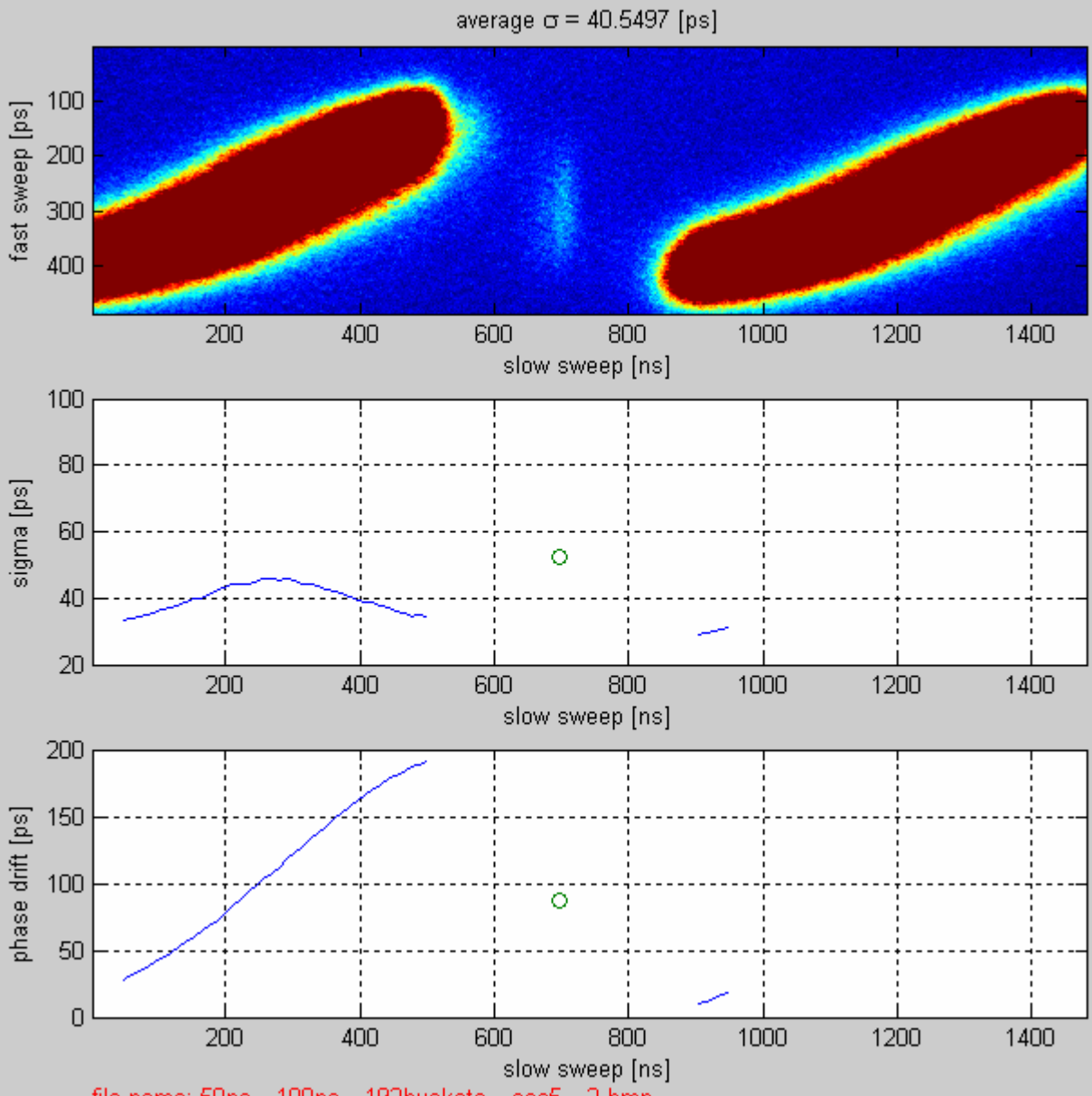
(Remarks bunch 0 and 480 are the same, signal marginally saturate)



40% gap – Camshaft current 1.04mA

Camshaft bunch 384 - Start/end gap 288/480

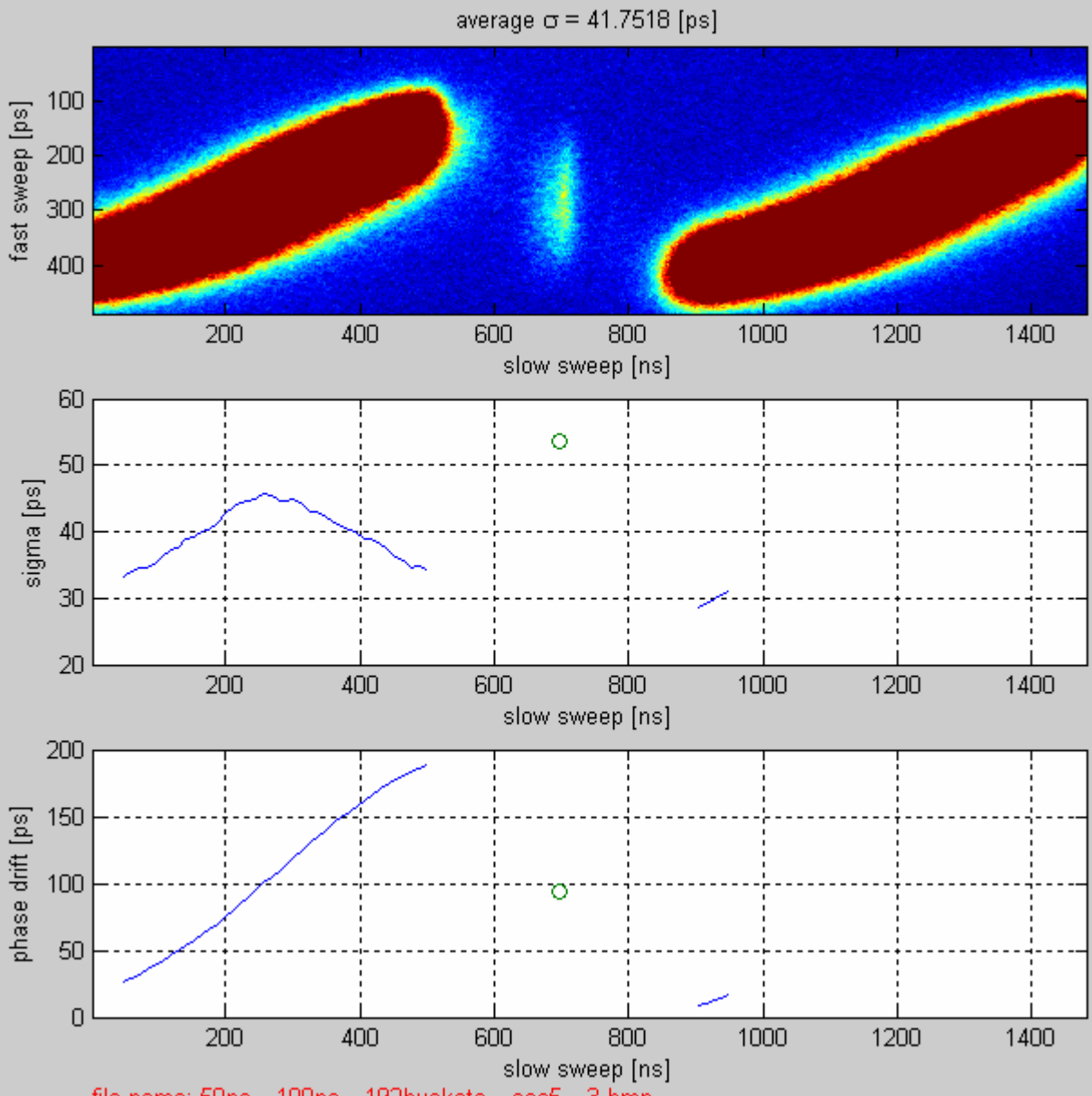
(Remarks bunch 0 and 480 are the same, signal marginally saturate)



40% gap – Camshaft current 2.08mA

Camshaft bunch 384 - Start/end gap 288/480

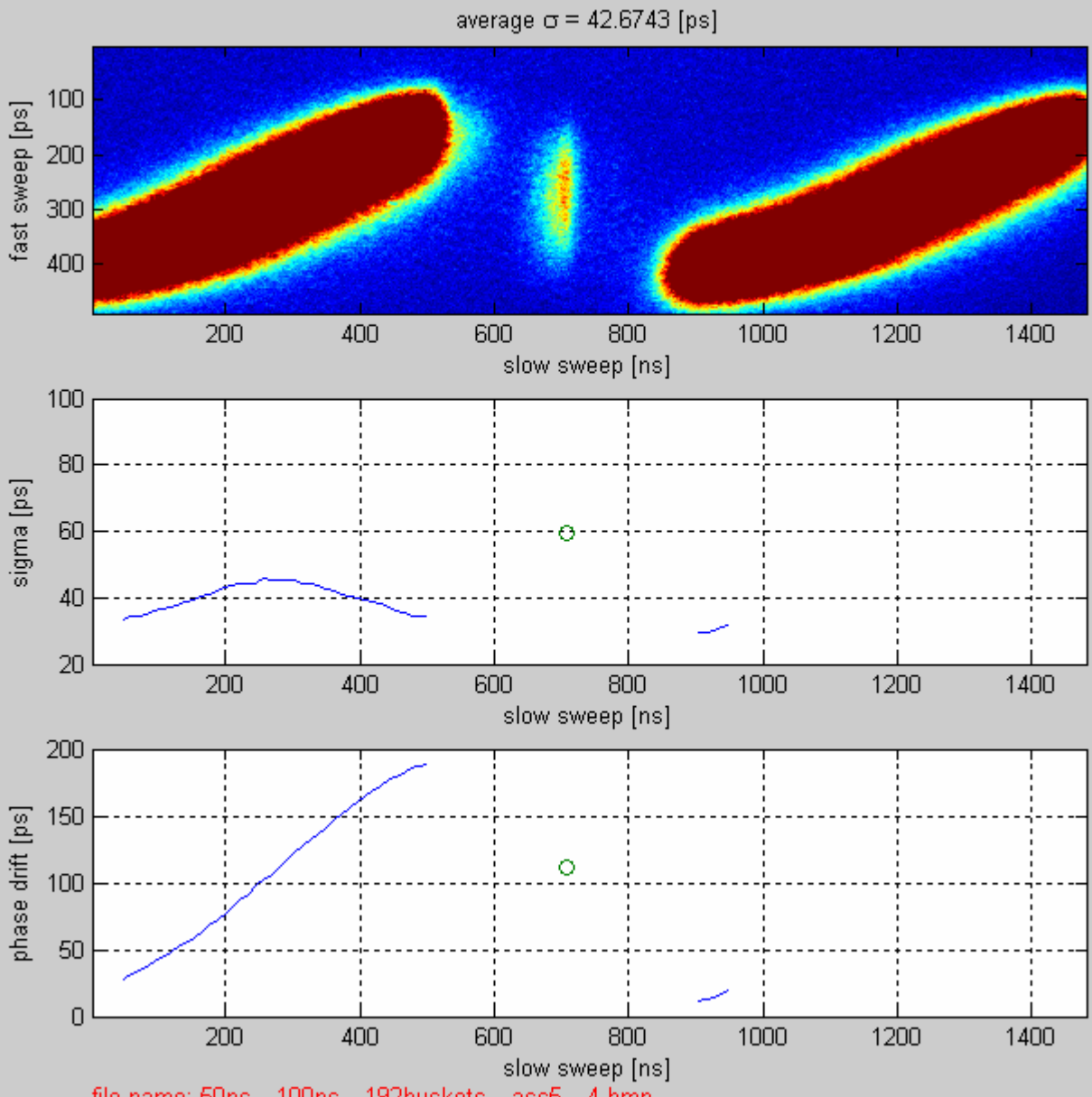
(Remarks bunch 0 and 480 are the same, signal marginally saturate)



40% gap – Camshaft current 3.12mA

Camshaft bunch 384 - Start/end gap 288/480

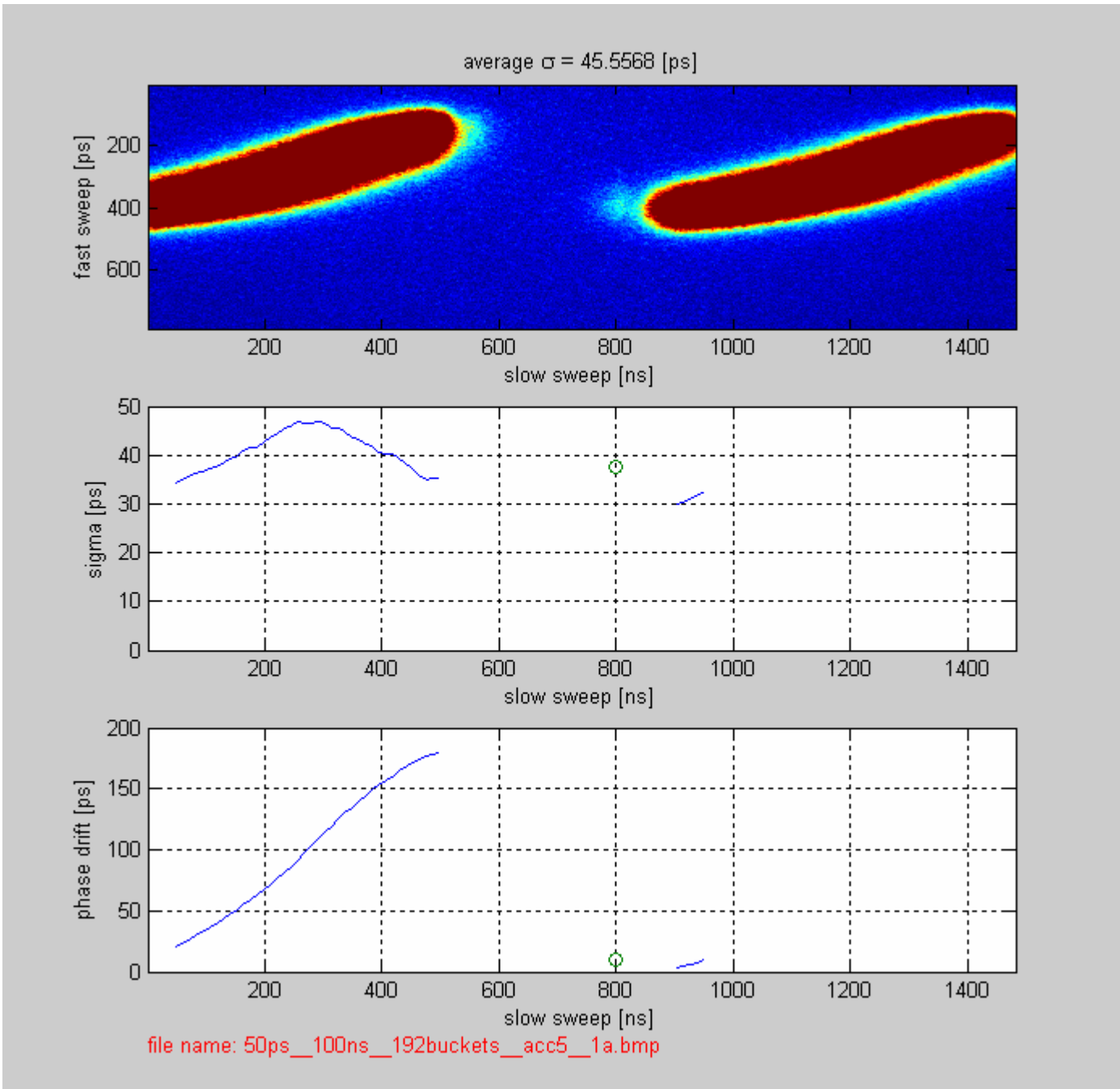
(Remarks bunch 0 and 480 are the same, signal marginally saturate)



40% gap – Camshaft current 0.56mA

Camshaft bunch 435 - Start/end gap 288/480

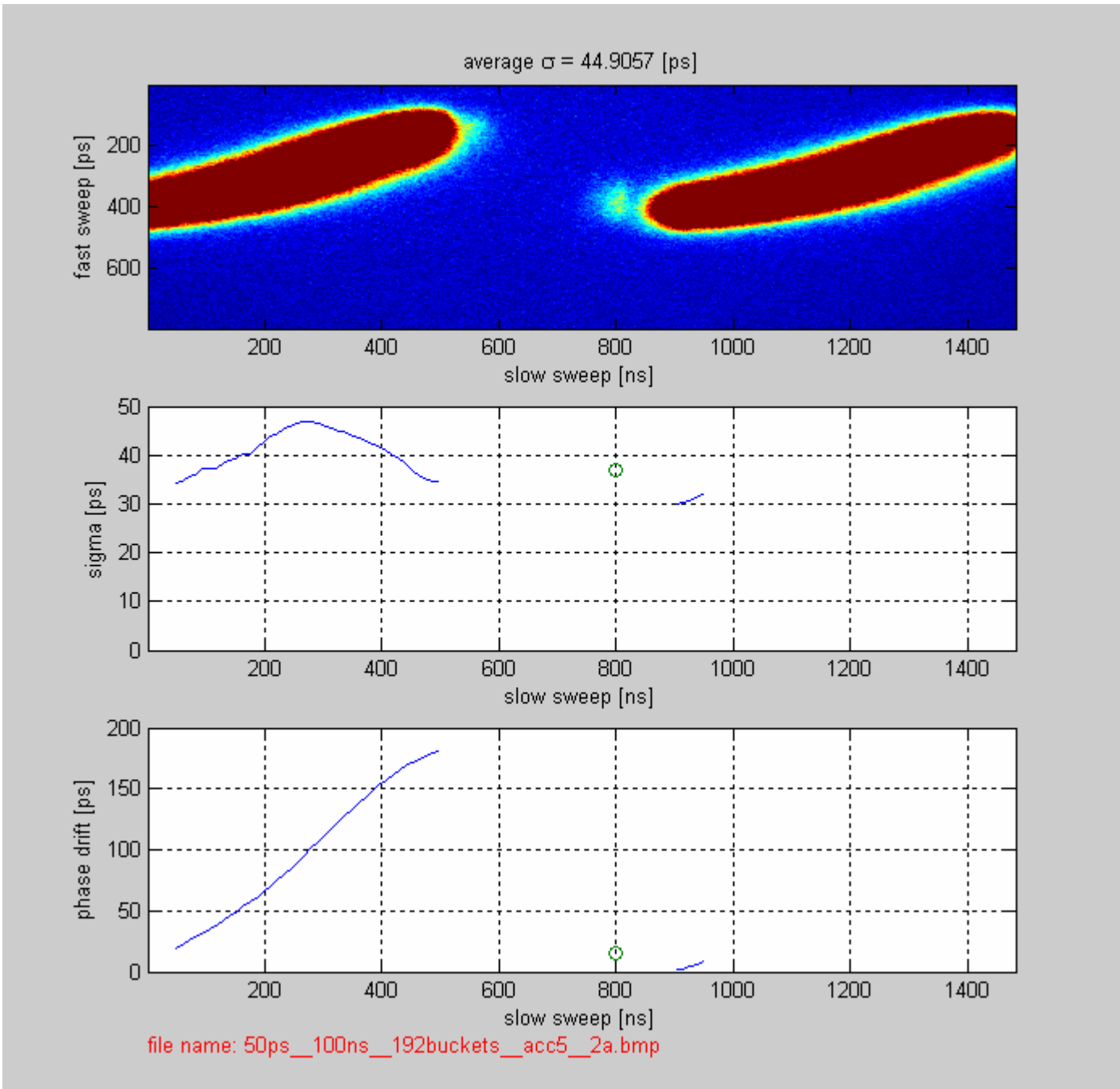
(Remarks bunch 0 and 480 are the same, signal marginally saturate)



40% gap – Camshaft current 1.042mA

Camshaft bunch 435 - Start/end gap 288/480

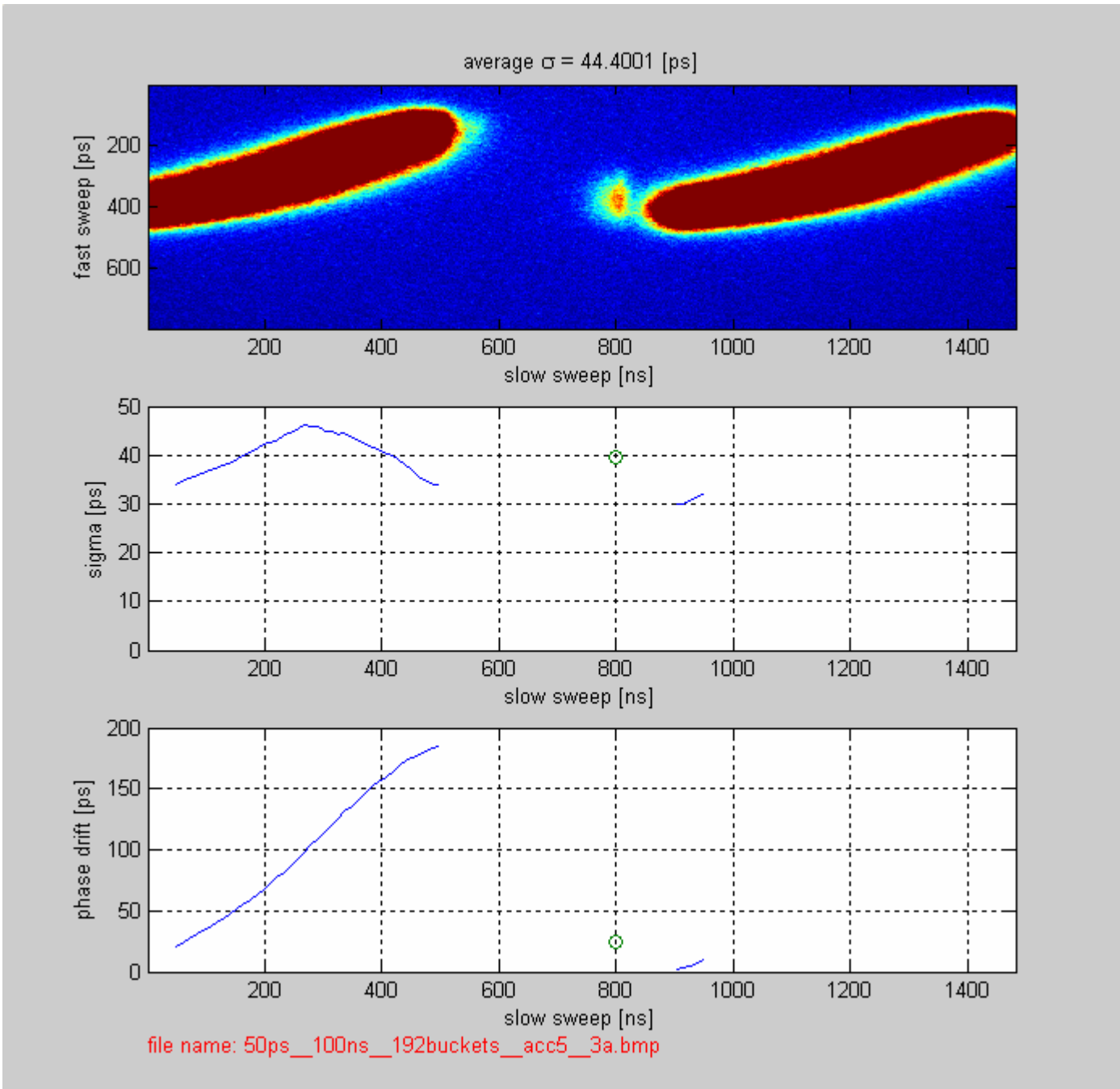
(Remarks bunch 0 and 480 are the same, signal marginally saturate)



40% gap – Camshaft current 2.08mA

Camshaft bunch 435 - Start/end gap 288/480

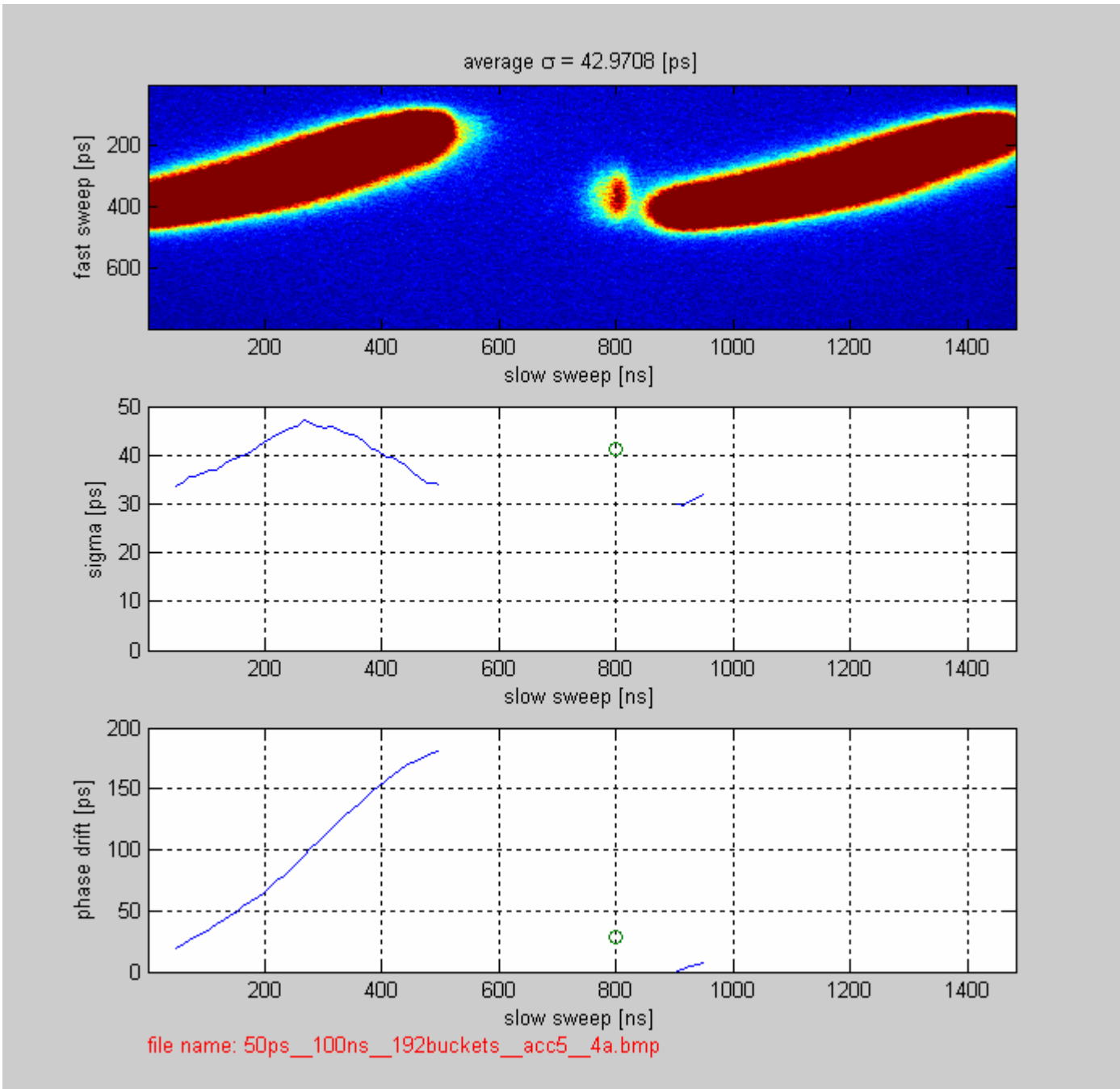
(Remarks bunch 0 and 480 are the same, signal marginally saturate)



40% gap – Camshaft current 3.12mA

Camshaft bunch 435 - Start/end gap 288/480

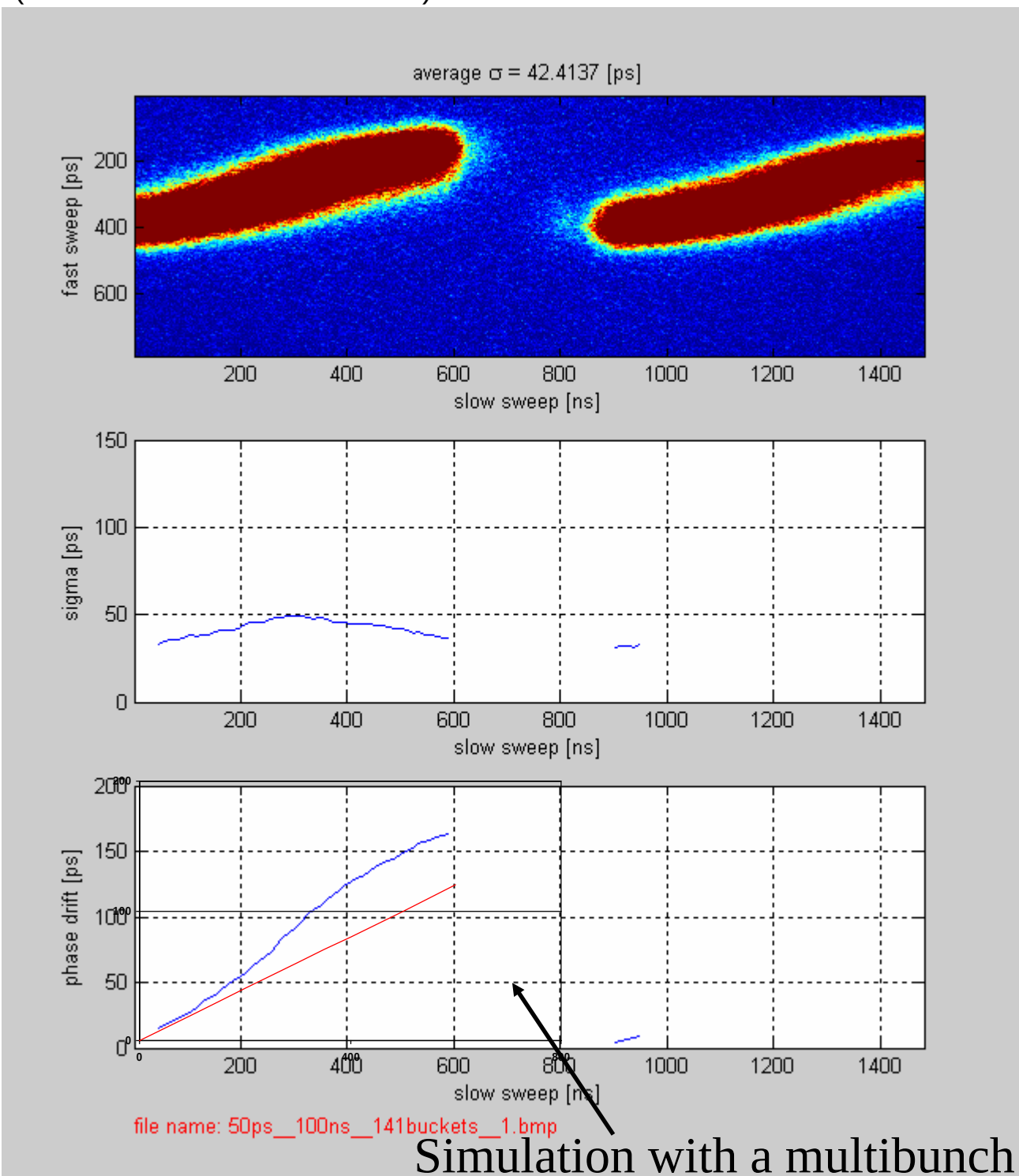
(Remarks bunch 0 and 480 are the same, signal marginally saturate)



30% gap – Camshaft current 0.536mA

Camshaft bunch 435 - Start/end gap 336/480

(bunch 0 and 480 are the same)

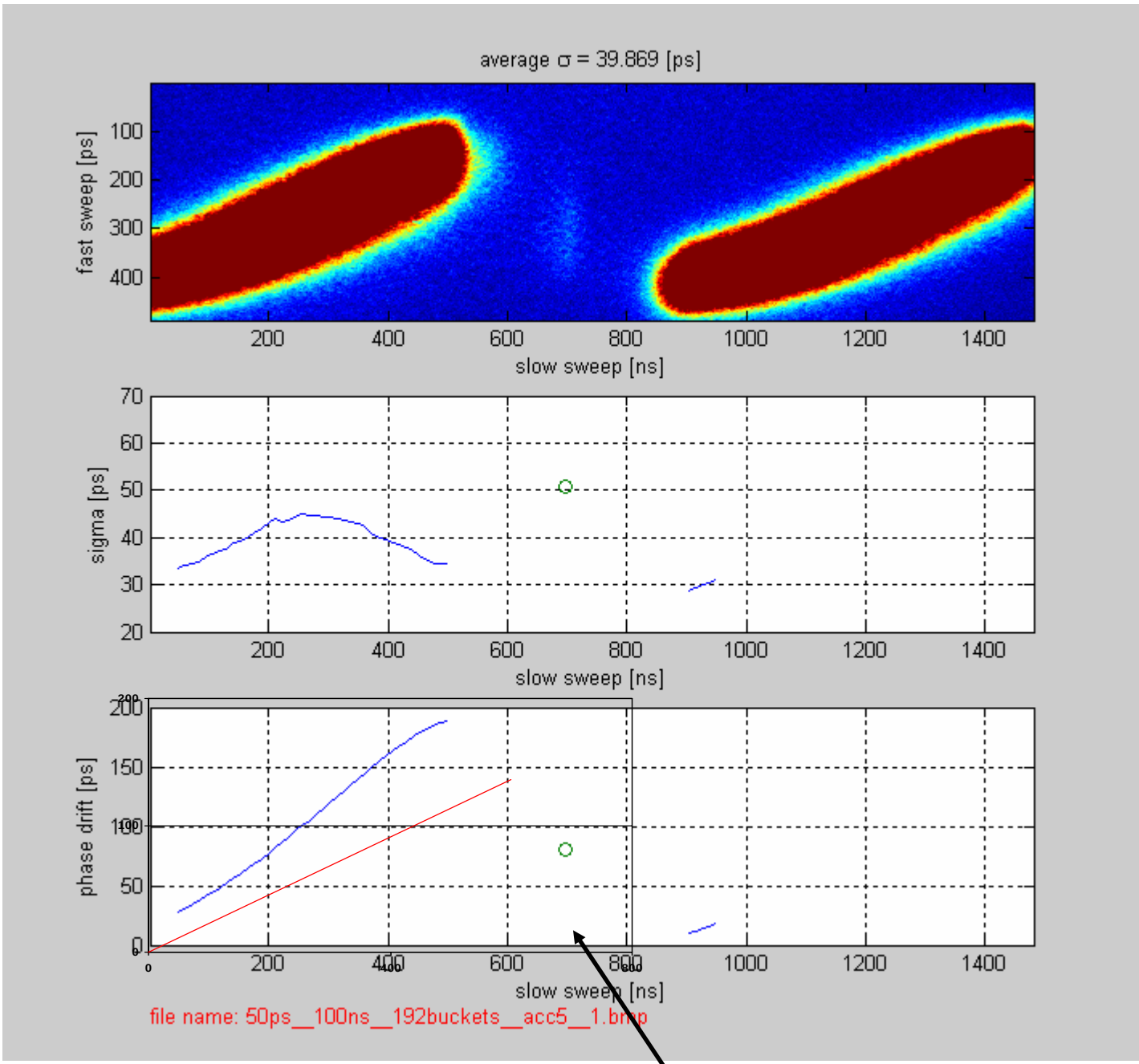


Simulation with a multibunch single particle tracking code

40% gap – Camshaft current 0.56mA

Camshaft bunch 384 - Start/end gap 288/480

(Remarks bunch 0 and 480 are the same, signal marginally saturate)



Simulation with a multibunch single particle tracking code