

# Analyse de bruit des BPM

→ Données prises:

- ◆ Dans LI: li/dg/bpm.01-lib.01 SpX/SpY
  - Énergie max (14h46)
  - Charge max (15h13)
- ◆ Dans TL: tl/dg/bpm.01-lib.02 SpX/SpY (16h39)

→ Extraction du bruit:

- ◆ Histogramme du bruit

→ Calculs:

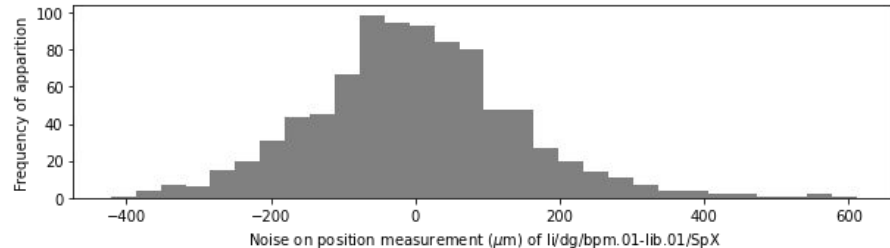
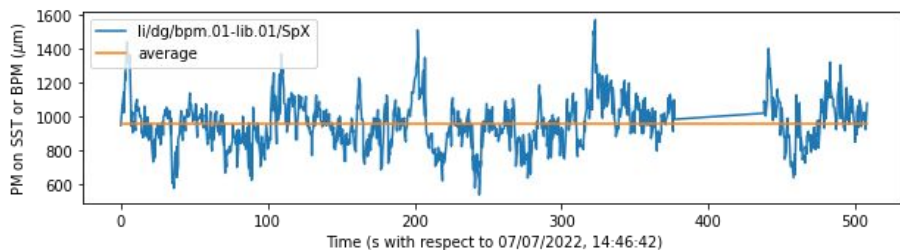
- ◆ De l'écart-type (RMSD  $\mu\text{m}$ )

# Analyse de bruit des BPM

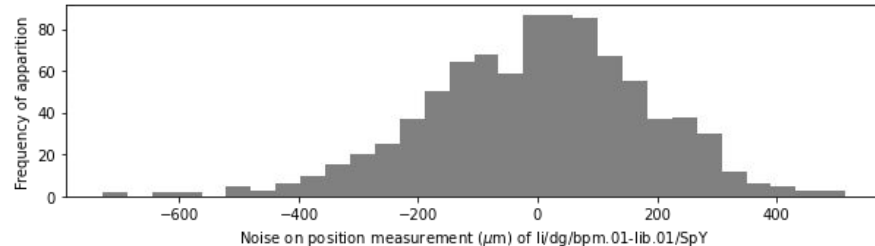
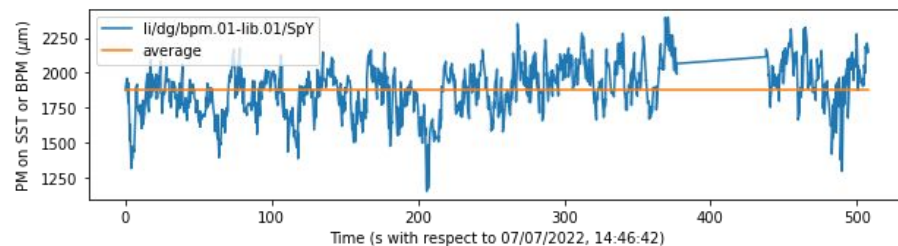
Phase:  $136^\circ$   
Dipôle RI-c1/dp à 170 A

Données du 07/07/2022 à 14h46: **Énergie max (dans LI)**

li/dg/bpm.01-lib.01/SpX dans LI (Energie Max)  
number of samples = 883 and RMSD = 143.273 ( $\mu\text{m}$ )



li/dg/bpm.01-lib.01/SpY dans LI (Energie Max)  
number of samples = 883 and RMSD = 185.258 ( $\mu\text{m}$ )

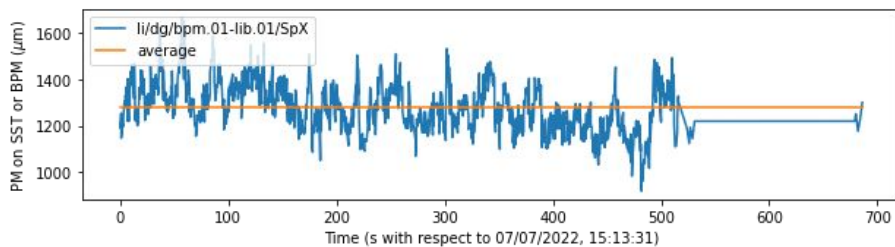


# Analyse de bruit des BPM

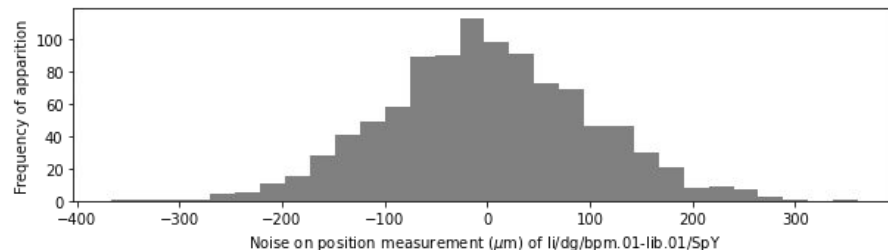
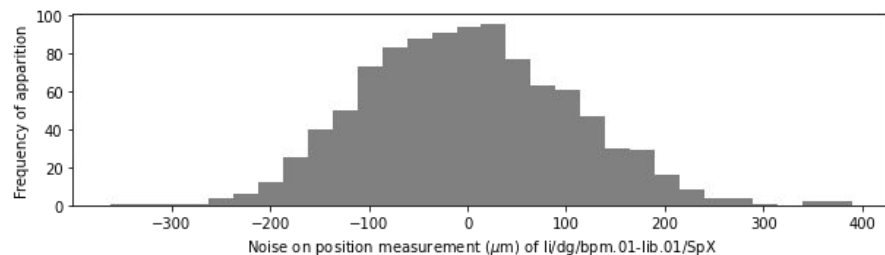
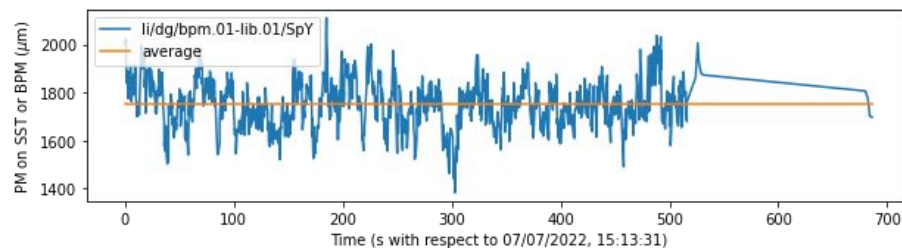
Phase: 136°  
Dipôle RI-c1/dp à 170 A

Données du 07/07/2022 à 15h13: Charge max (dans LI)

li/dg/bpm.01-lib.01/SpX dans LI (Energie Max)  
number of samples = 1010 and RMSD = 104.868 ( $\mu\text{m}$ )



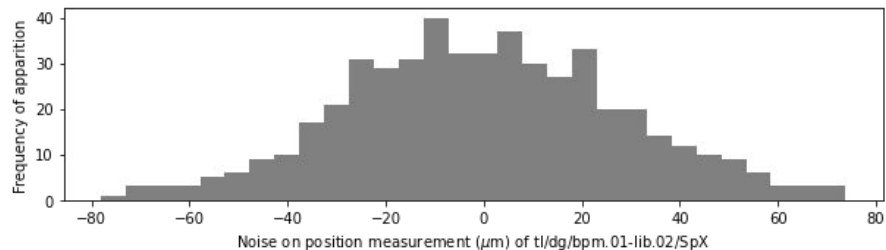
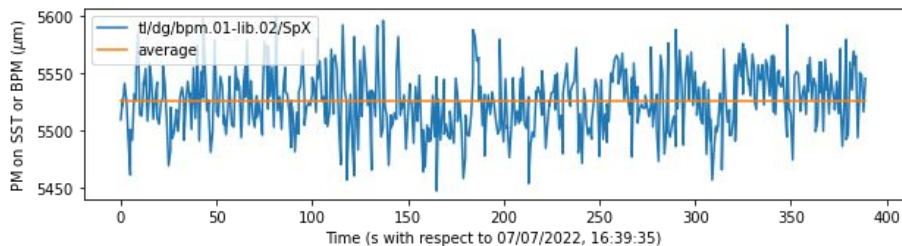
li/dg/bpm.01-lib.01/SpY dans LI (Energie Max)  
number of samples = 1010 and RMSD = 100.479 ( $\mu\text{m}$ )



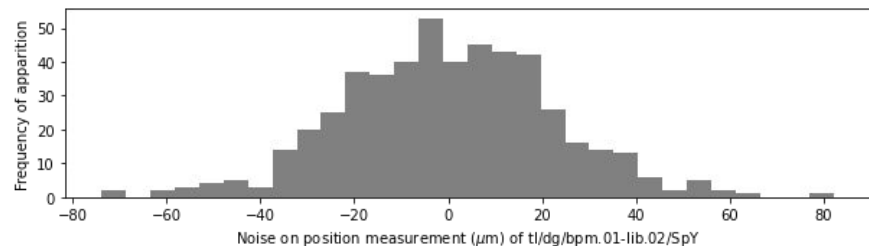
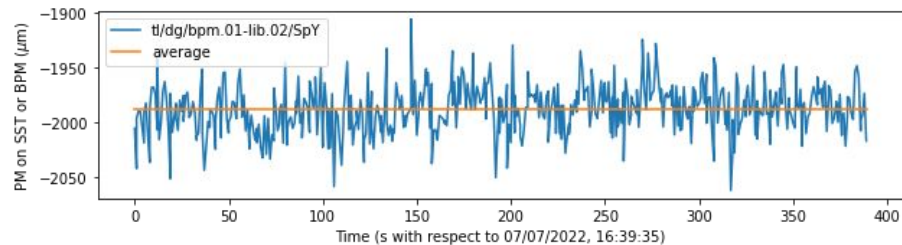
# Analyse de bruit des BPM

Données du 07/07/2022 à 16h39: Dans la ligne de transfert

tl/dg/bpm.01-lib.02/SpX dans TL  
number of samples = 500 and RMSD = 27.847 ( $\mu\text{m}$ )



tl/dg/bpm.01-lib.02/SpY dans TL  
number of samples = 500 and RMSD = 22.445 ( $\mu\text{m}$ )



# Comparaison des résultats

Données	Caractéristique	Axe	Nombre de tirs	RMSD ( $\mu\text{m}$ )
li/dg/bpm.01-lib.01	Énergie max	SpX	883	143.273
		SpY		185.258
	Charge max	SpX	1010	104.868
		SpY		100.479
tl/dg/bpm.01-lib.02		SpX	500	28.847
		SpY		22.445