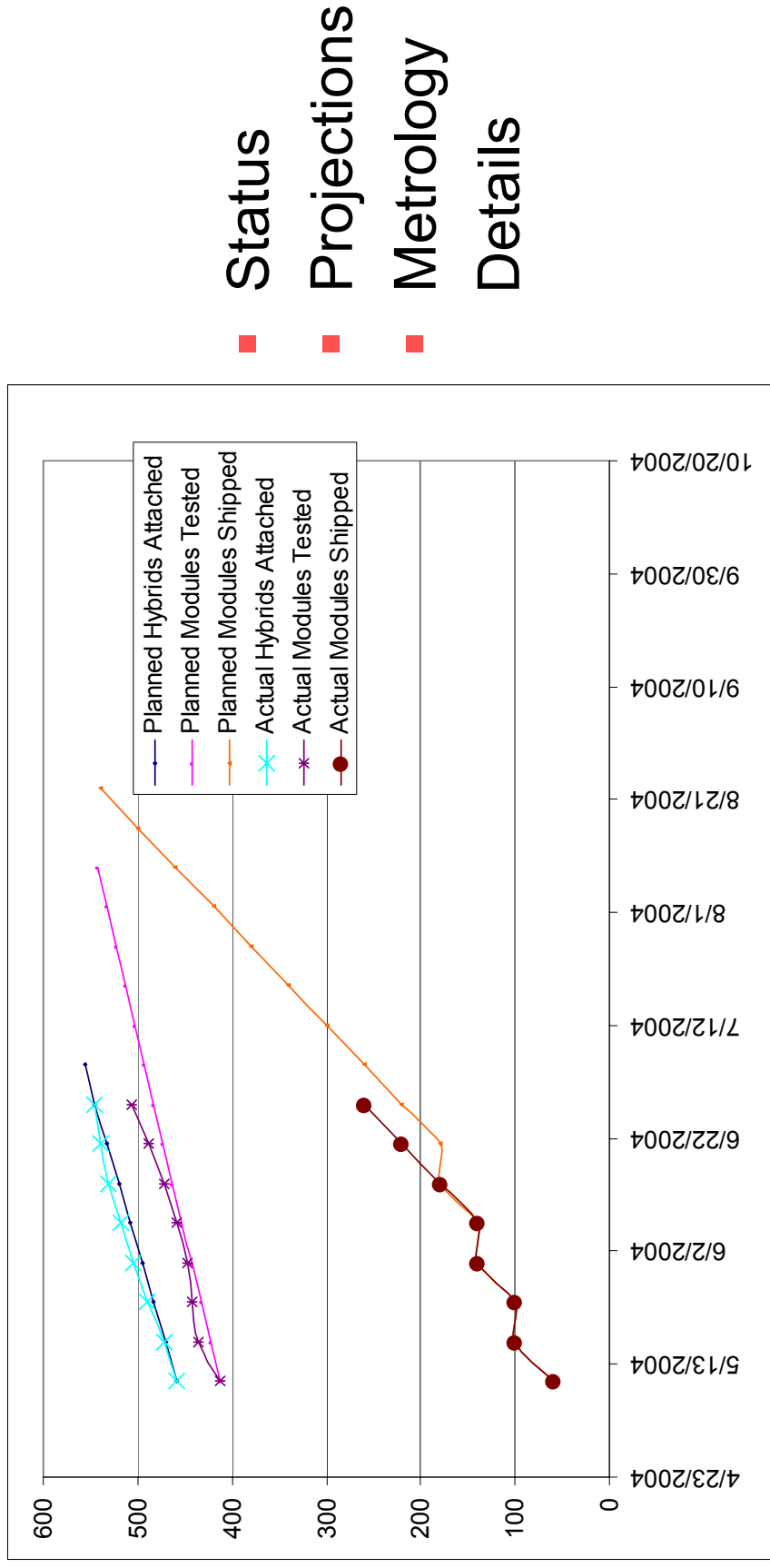


US SCT Barrel Module Assembly

Marc Weber, Lawrence Berkeley National Laboratory



■ Status

■ Projections

■ Metrology

■ Details

SCT Week June 2004

Marc Weber

Status

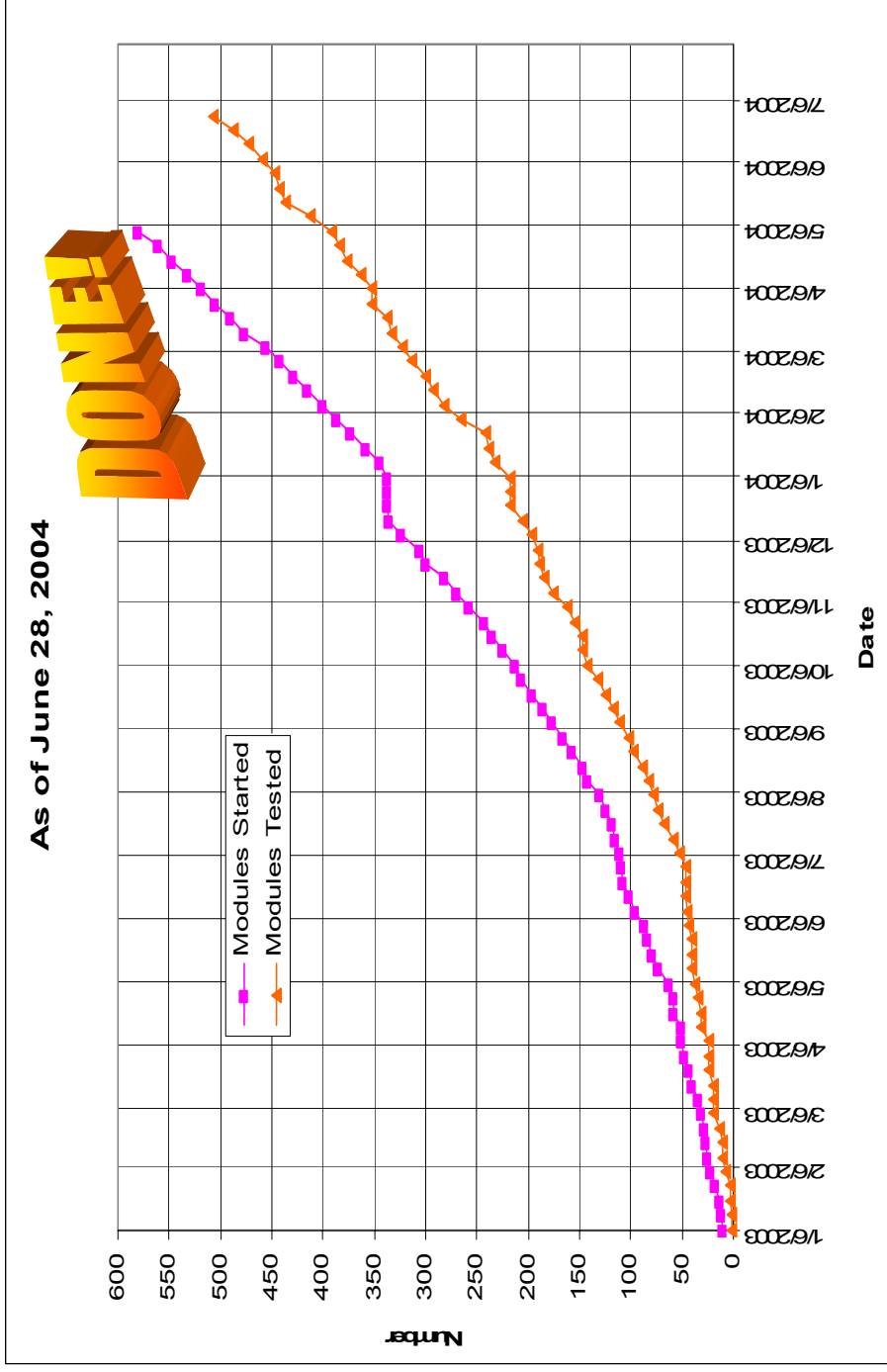
- Reminder: working on **580** modules
- Modules shipped to Oxford: **260**
- Modules completed including testing: **507**
- Modules with hybrids attached: **545**
- Sensor board assembly **completed** (since May 3)
- Will finish hybrid attachment within **1 week**
- Will finish module production within **~ 6 weeks**
- Shipping will be completed by **August 21**
(shipping 40 modules/week since 2 weeks)
- Regular shipments of hybrids to Scandinavia

Hybrid production

	US	Scandinavia
received	577	131
completed	551	62

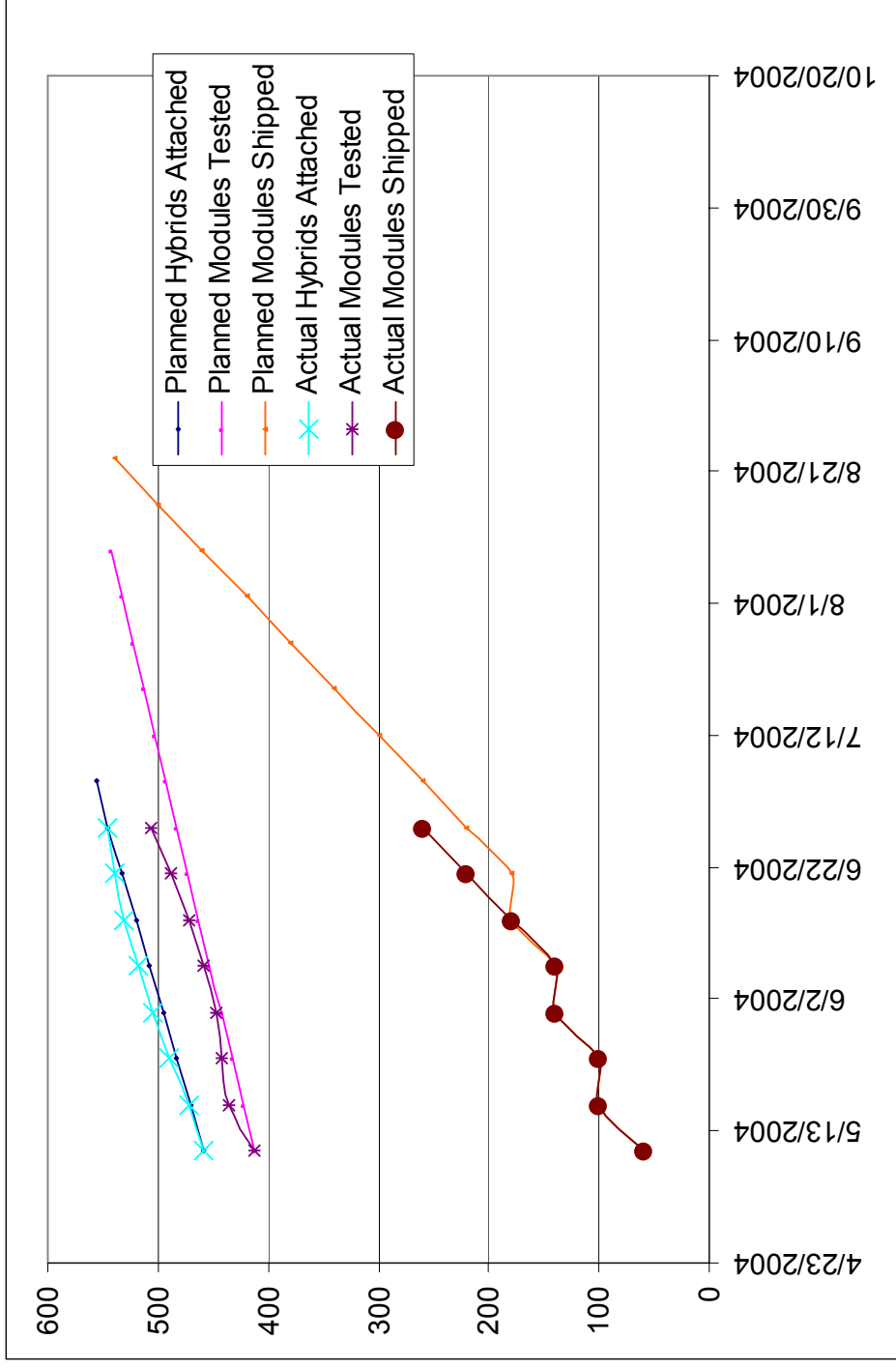
- 50 shipped to Scandinavia so far

Sensor board assembly



- module completion rate dominated by hybrid supply
- attaching up to 15 hybrids/week

Hybrid attach, Module bonding, Shipping



■ hybrid attachment for 1 more week

■ module bonding, metrology, testing for ~6 more weeks

Module quality

Production quality and yield very satisfactory in recent months

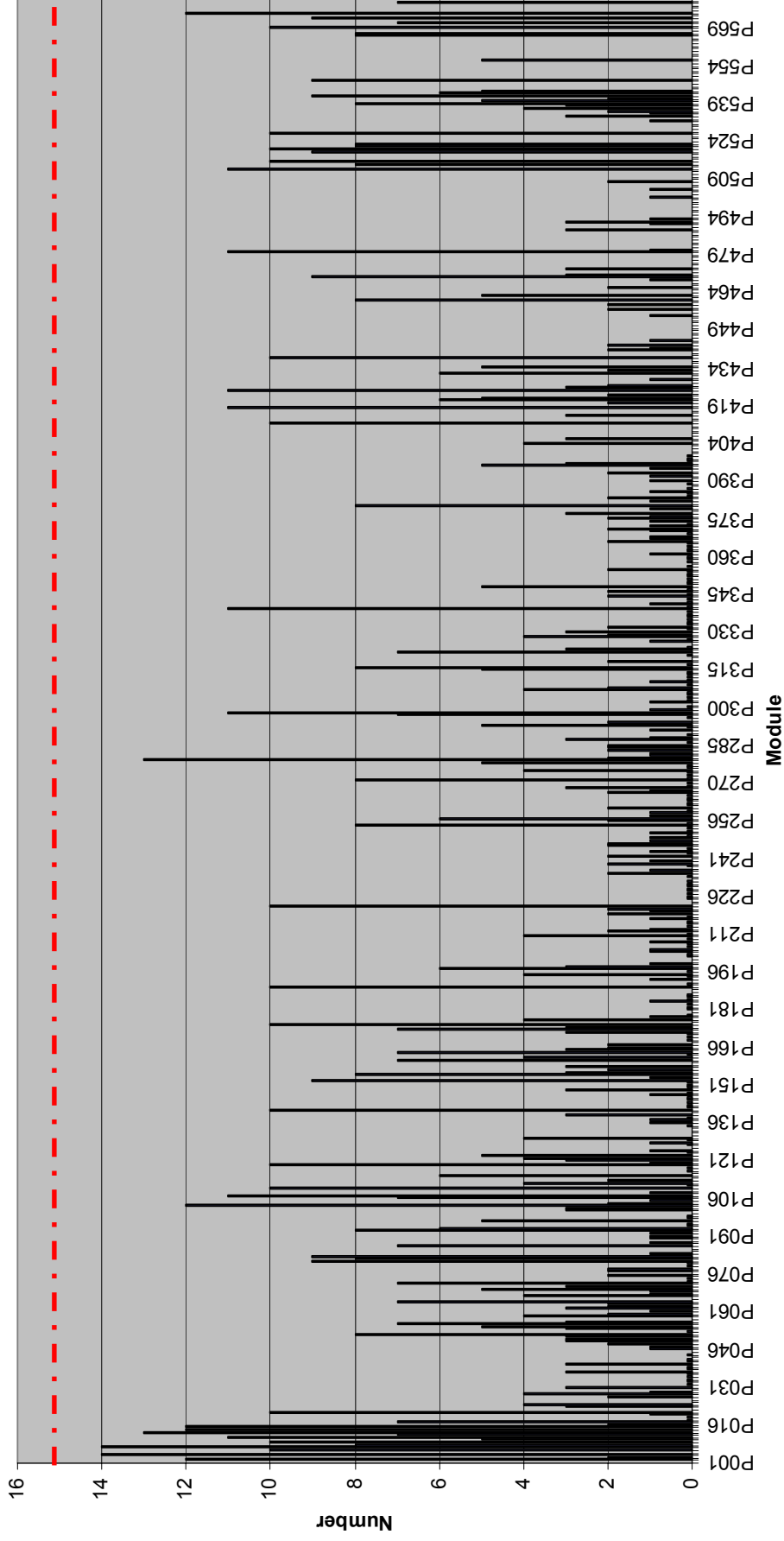
	546	ATLAS Classified	
68.1%	372	ATLAS Good	
11.0%	60	ATLAS Pass	
4.4%	24	ATLAS Pass2	
7.3%	40	ATLAS Spare	
0.0%	0	ATLAS Hold	
7.1%	39	ATLAS Fail	
2.0%	11	ATLAS Rework	

Overall numbers:

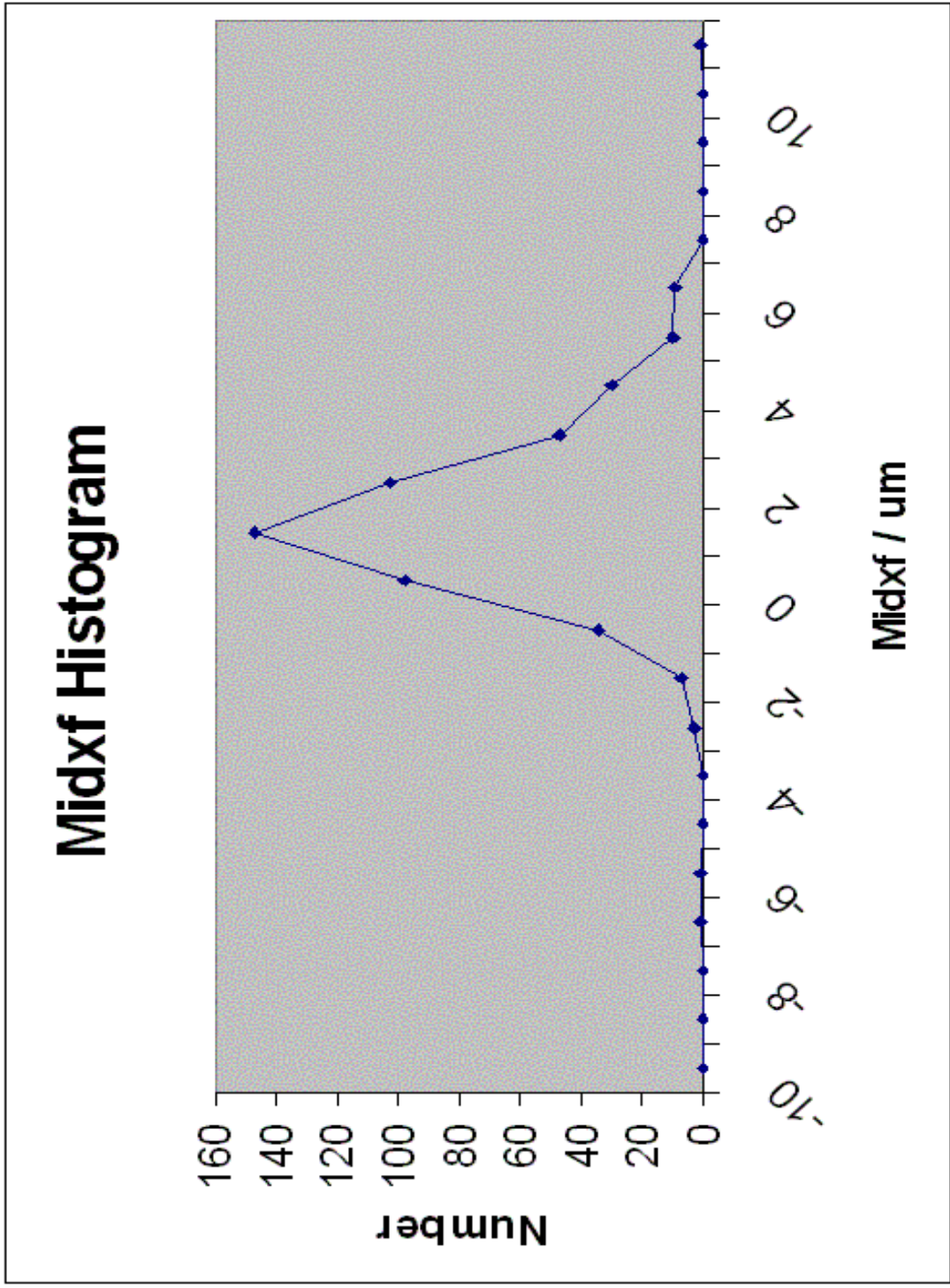
- All, but fail and rework: **91%**
- Good + Pass + Pass 2: **84%**

Bad channel number

Total bad channels



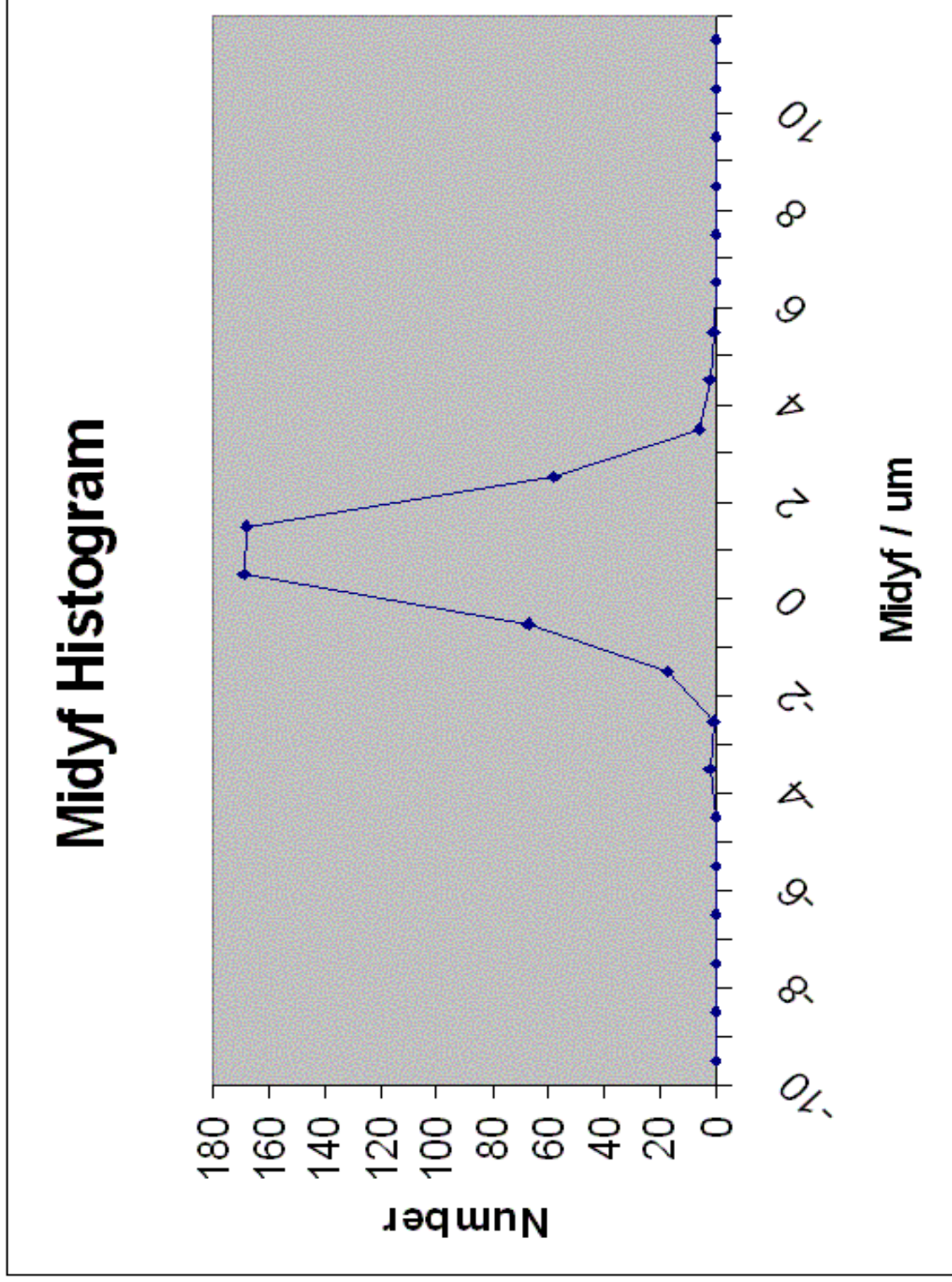
Metrology: Clear / hybrid consistency



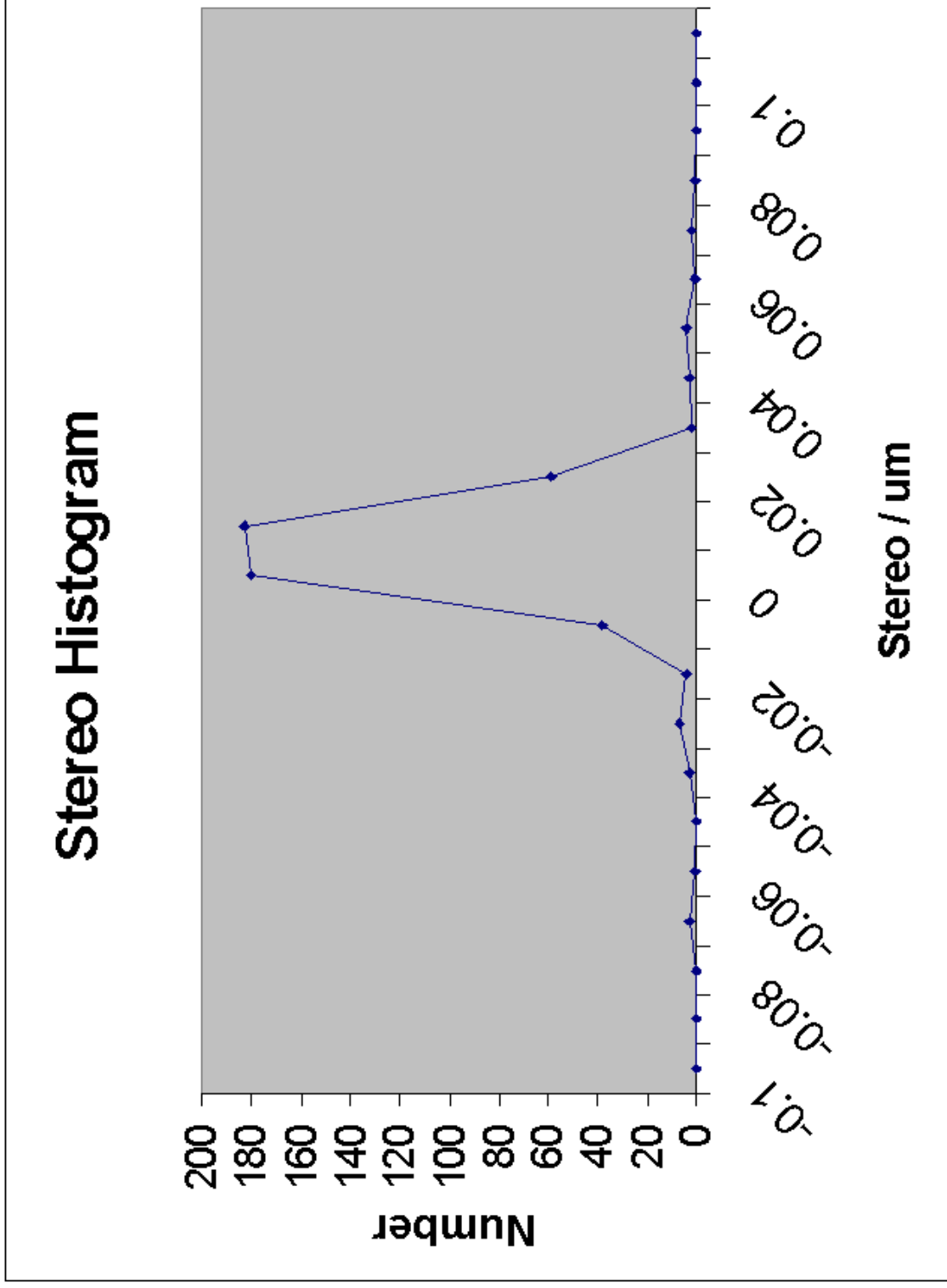
	Midxf
AVE	1.06
STDEV	1.83
NUMB	491

Metrology: Clear / hybrid consistency

	Midyf
AVE	-0.211
STDEV	0.983
NUMB	491

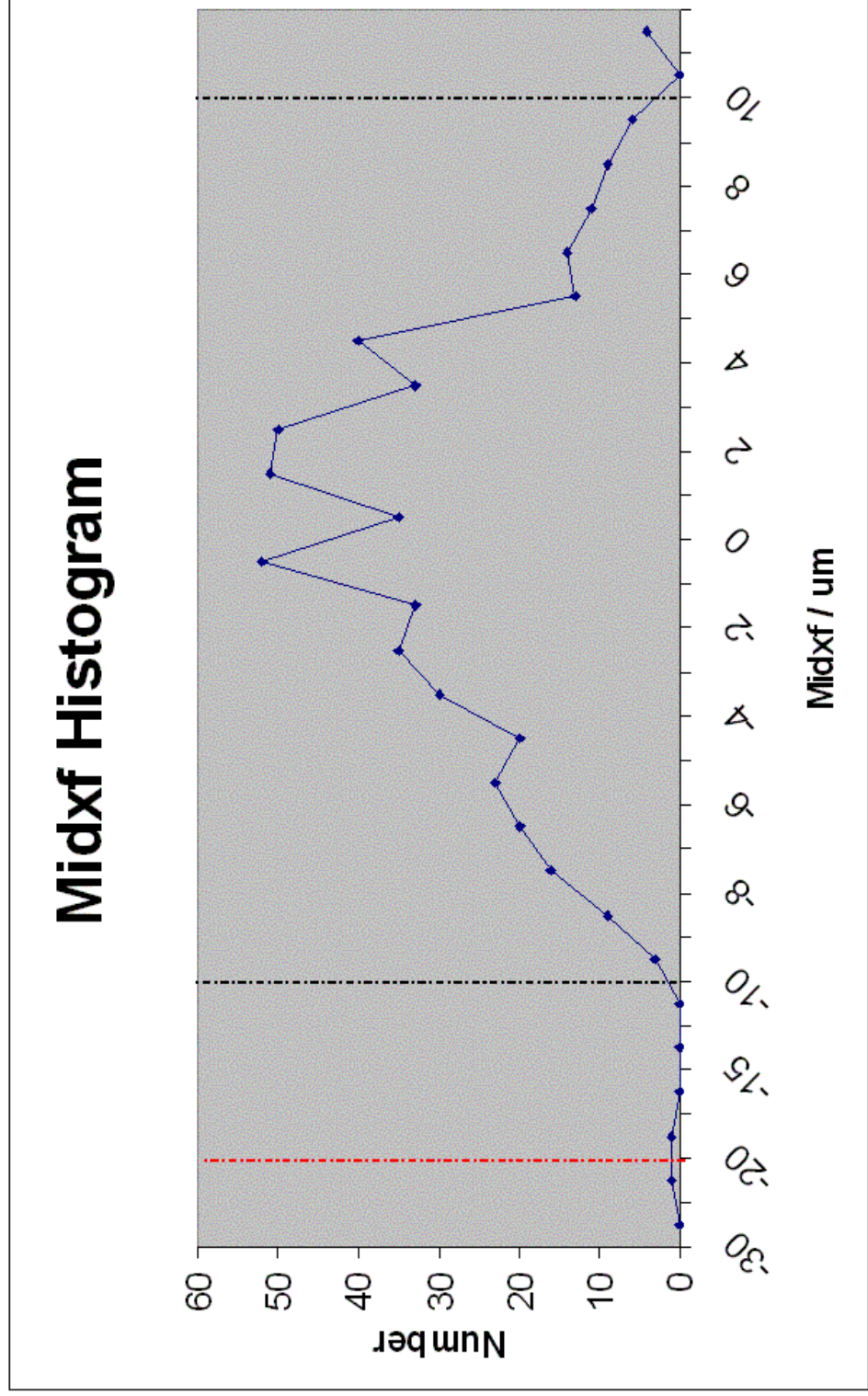


Metrology: Clear / hybrid consistency



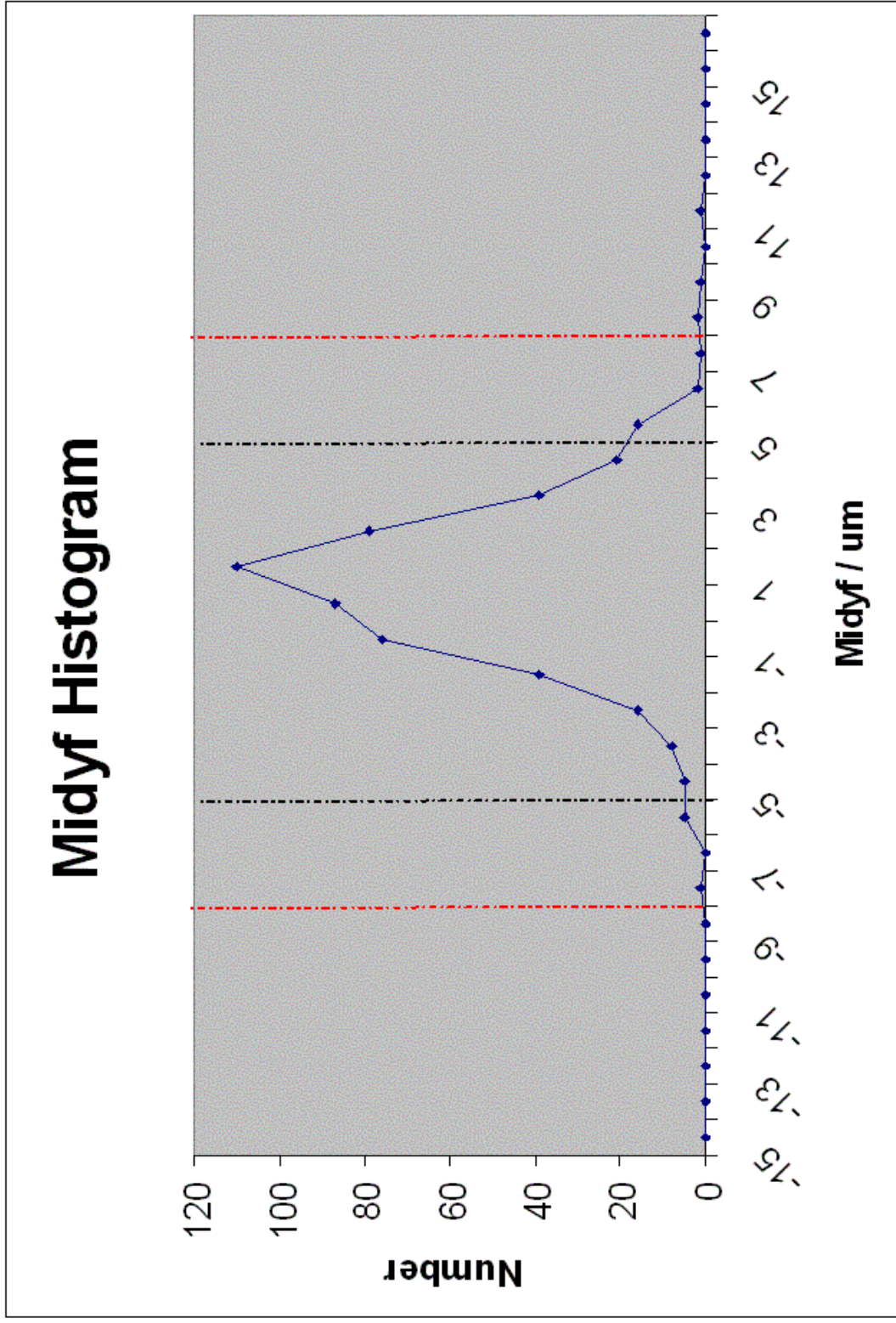
	Stereo
AVE	0.002
STDEV	0.01
NUMB	491

Metrology: Midxf (clear)



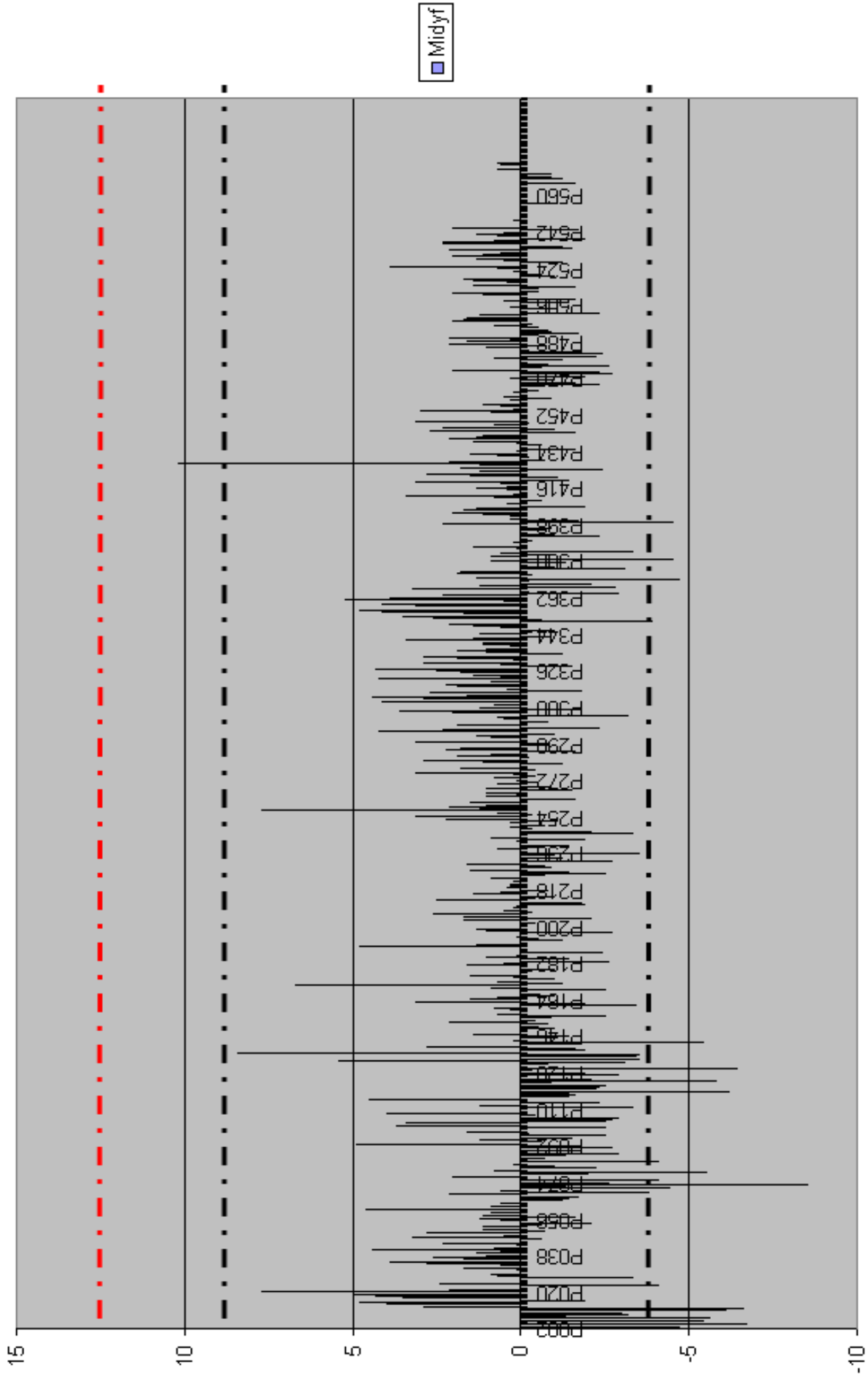
	Midfx
AVE	0.88
STDEV	1.70
NUMB	491

Metrology: Midyf (clear)



	Midyf
AVE	-0.05
STDEV	1.09
NUMB	491

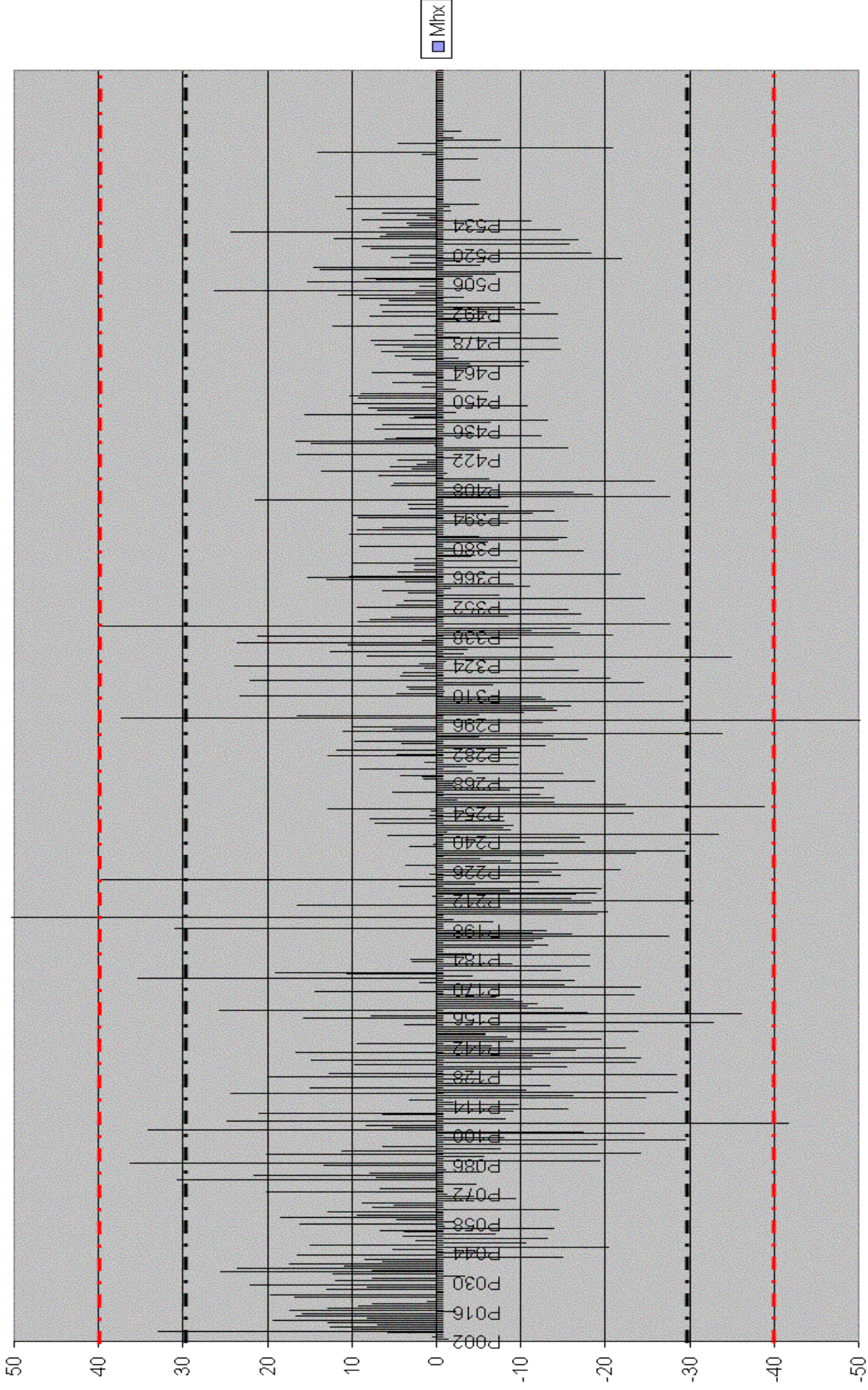
Mirdyf



SCT Week June 2004

Marc Weber

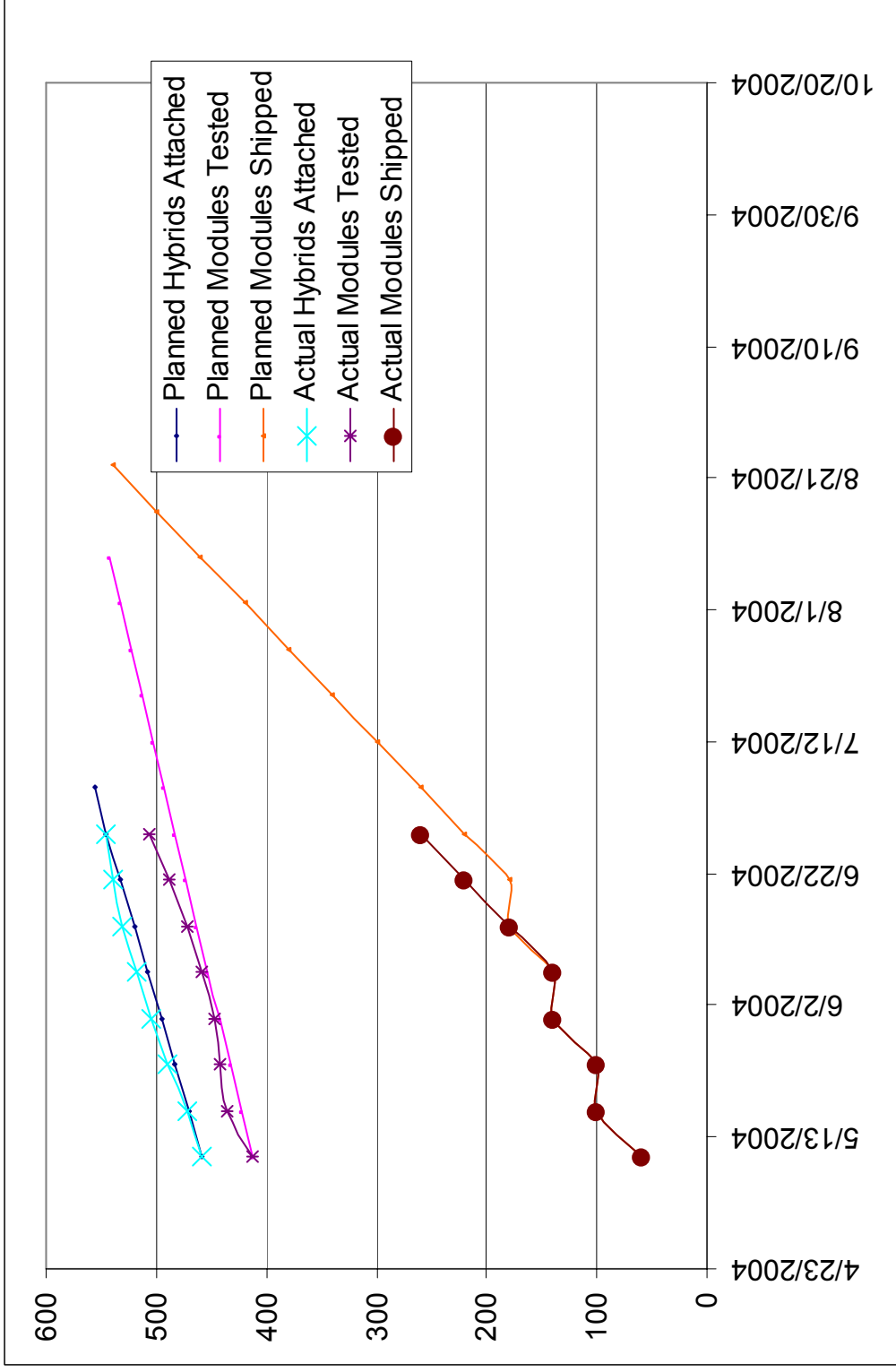
Mhx



SCT Week June 2004

Marc Weber

Conclusion

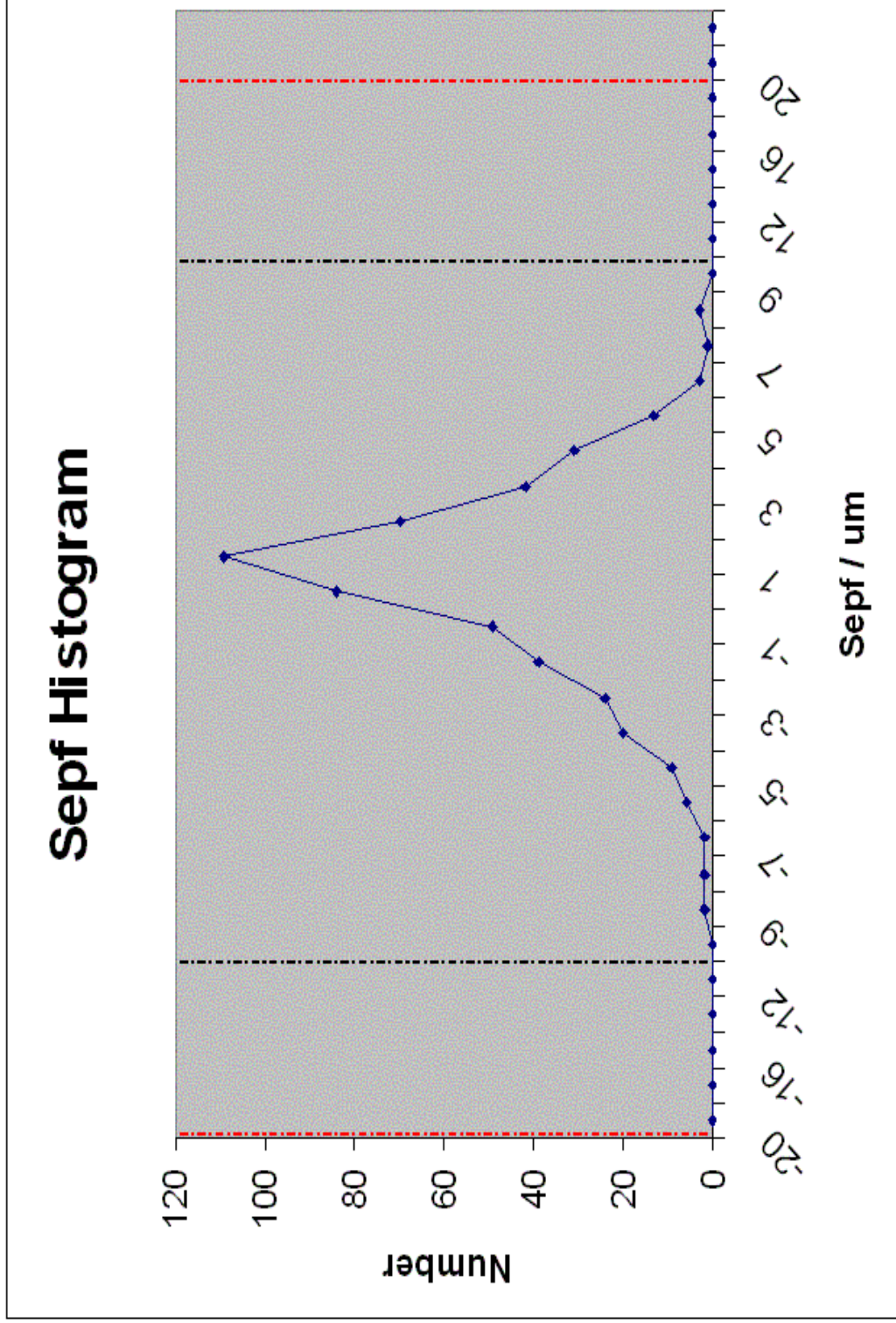


We are nearly done !

SCT Week June 2004

Marc Weber

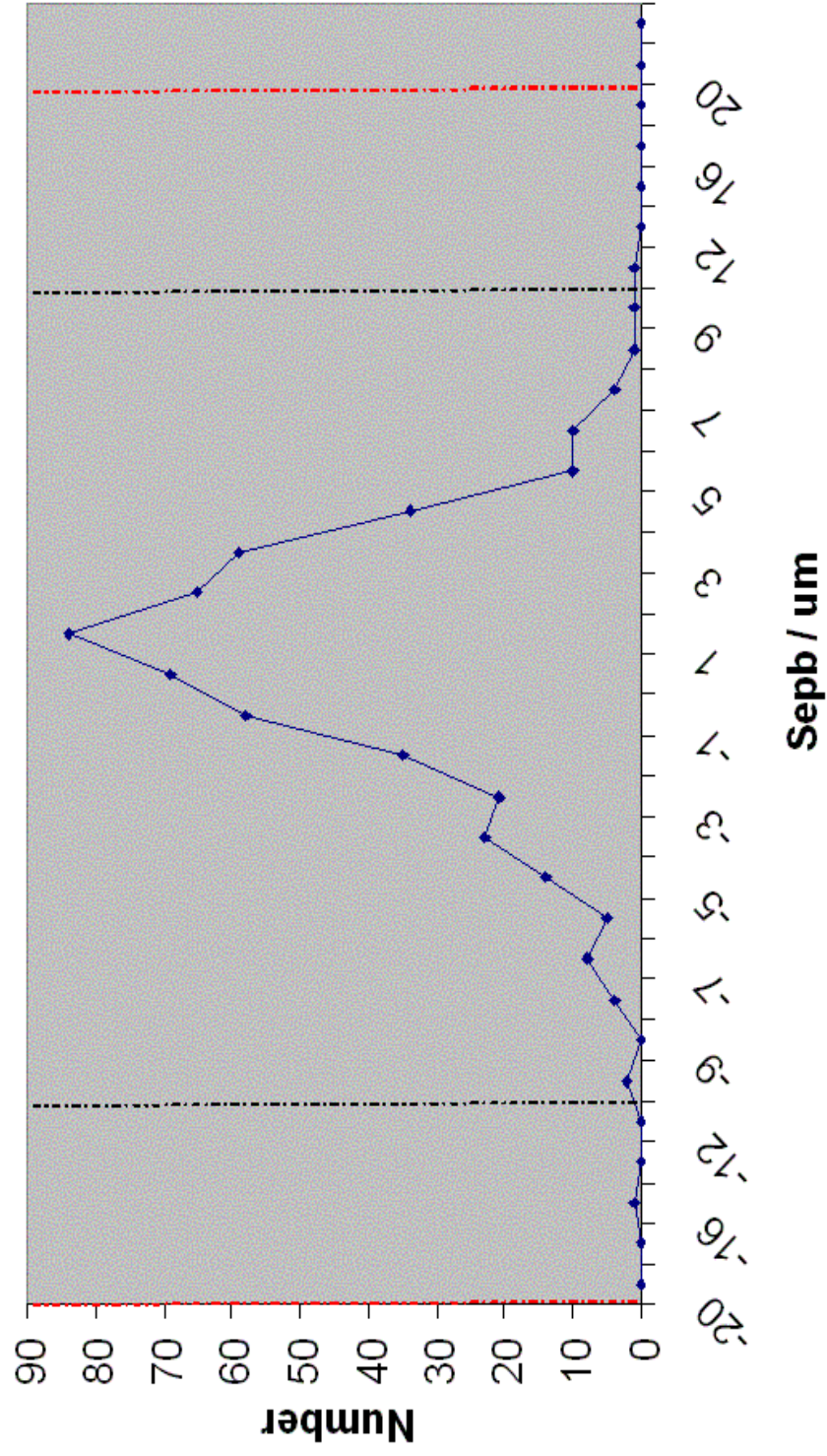
Metrology: Sepf (clear)



Sepf	
AVE	0.44
STDEV	1.07
NUMB	491

Metrology: Sepb (clear)

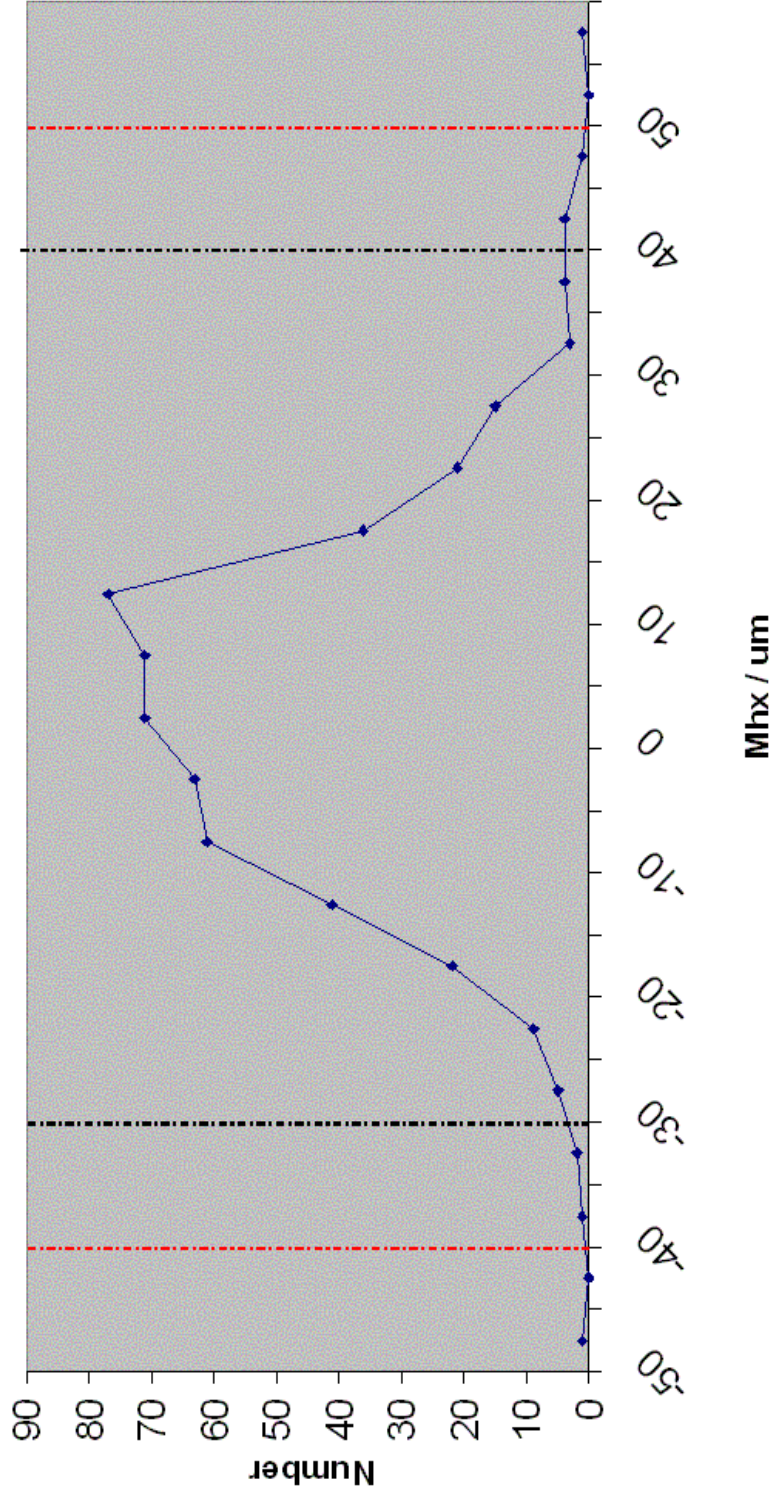
Sepb Histogram



	Sepb
AVE	0.65
STDEV	1.15
NUMB	491

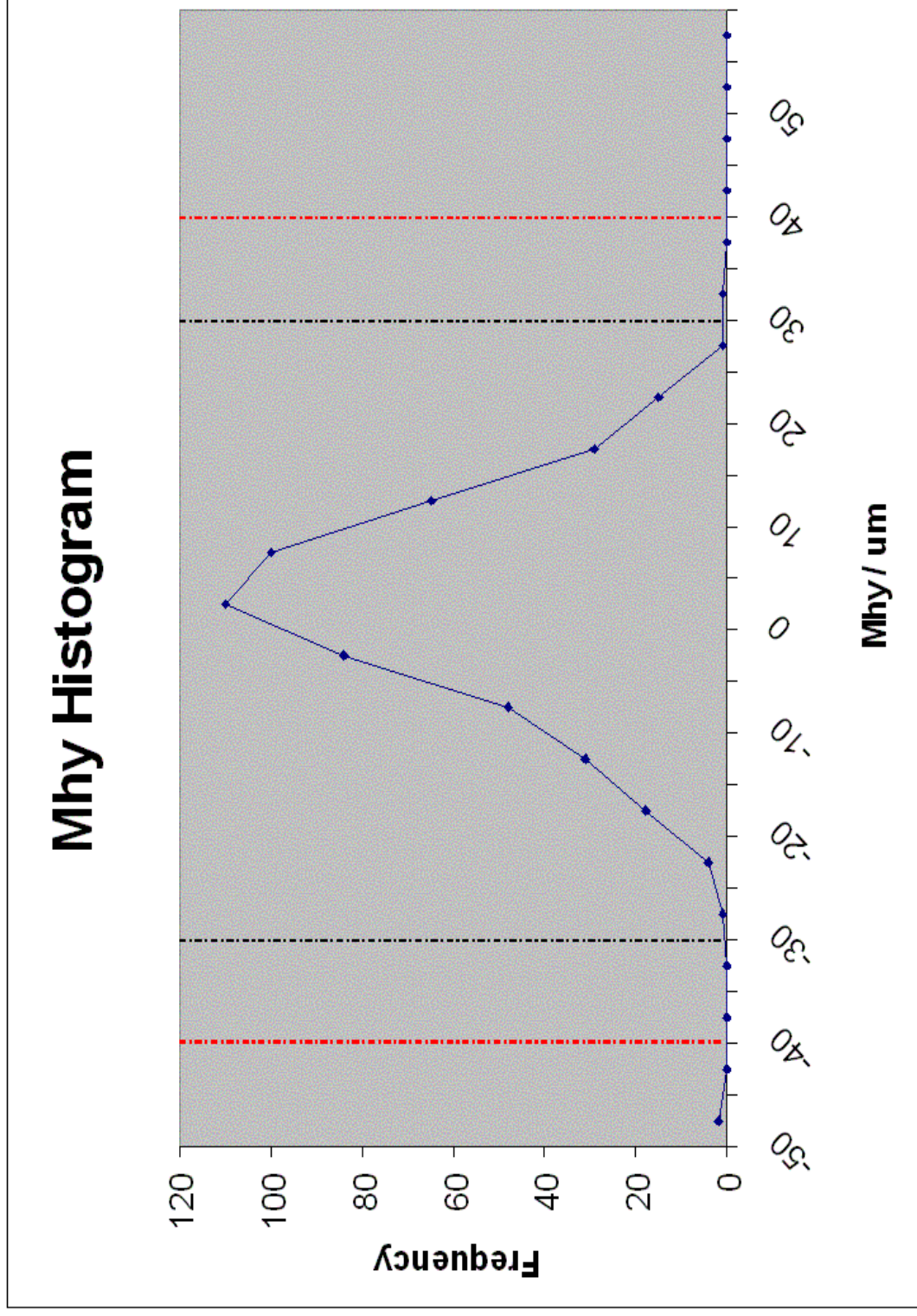
Metrology: Mhx (clear)

Mhx Histogram



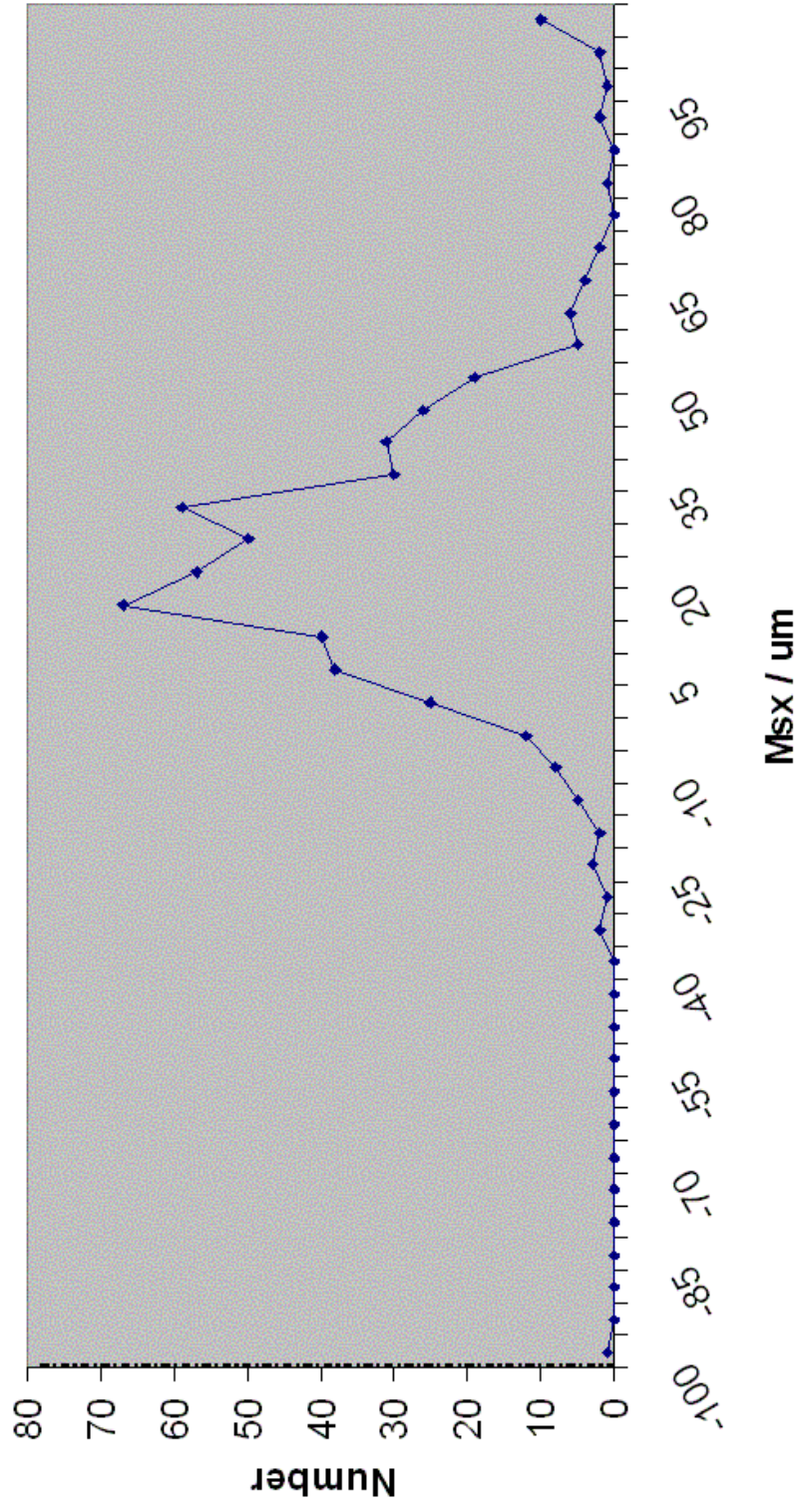
Mhx	
AVE	1.23
STDEV	4.79
NUMB	491

Metrology: Mhy (clear)



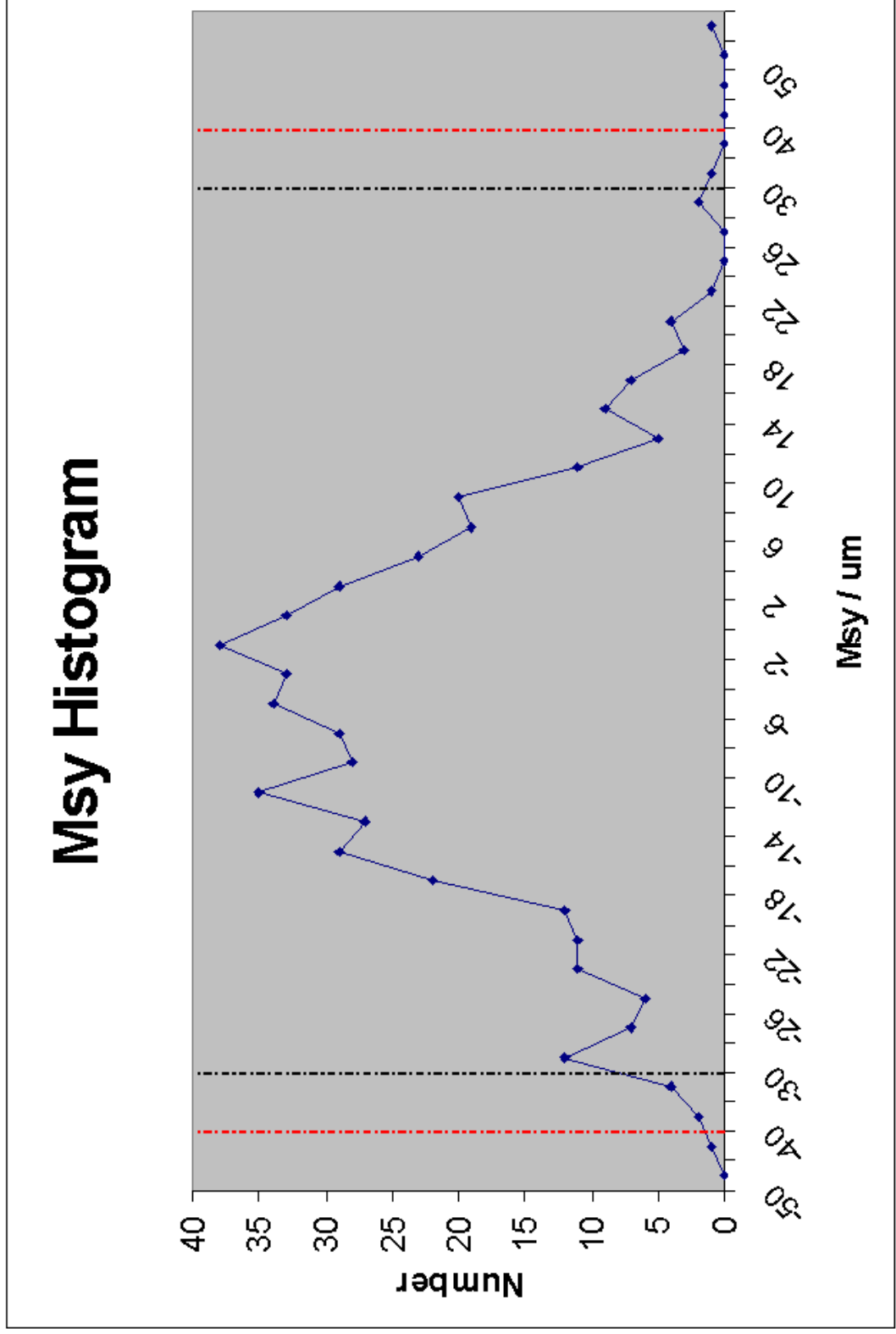
Metrology: Msx (clear)

Msx Histogram



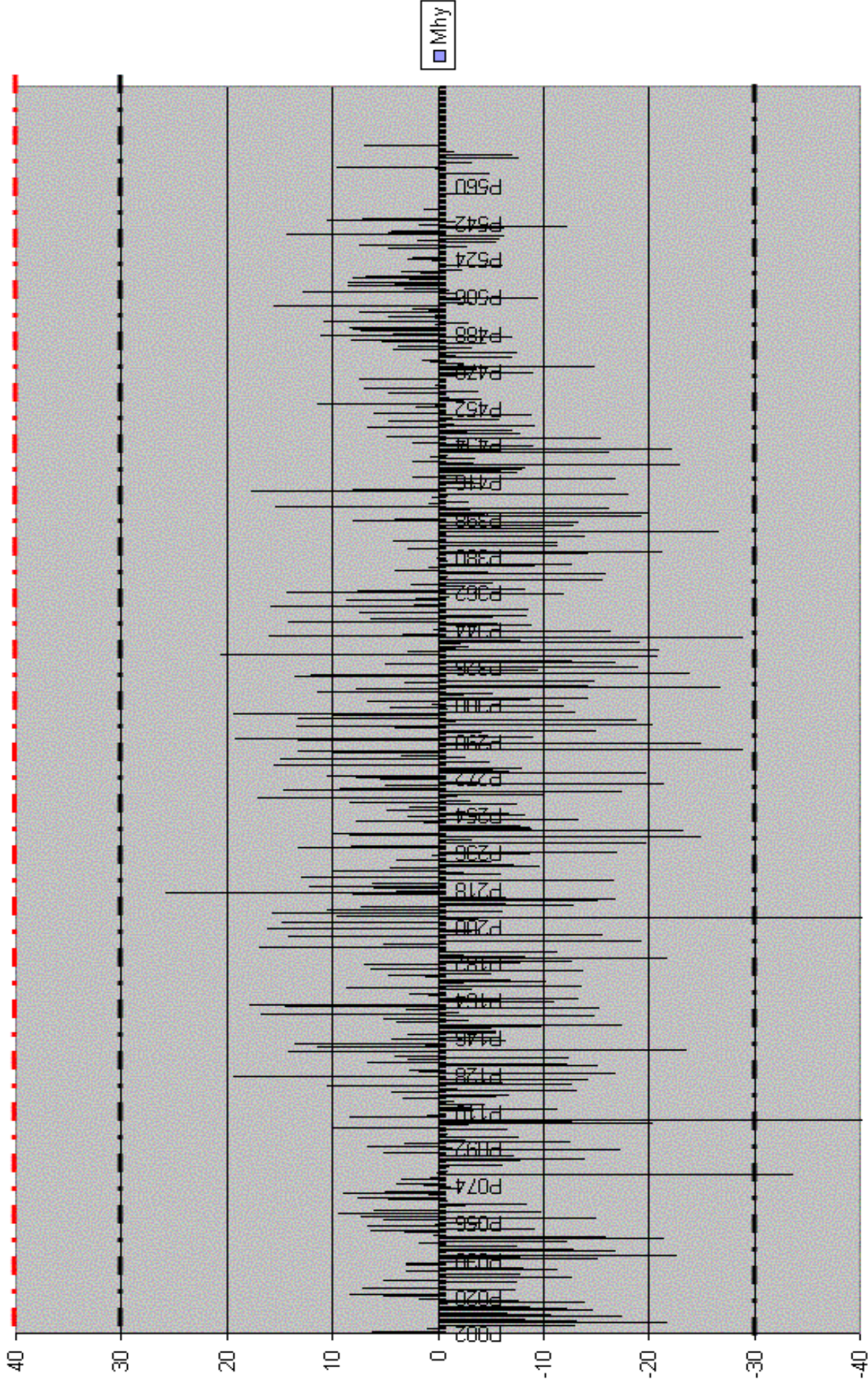
	Msx
AVE	2.18
STDEV	24.12
NUMB	491

Metrology: Msy (clear)



Msy	
AVE	1.39
STDEV	8.06
NUMB	491

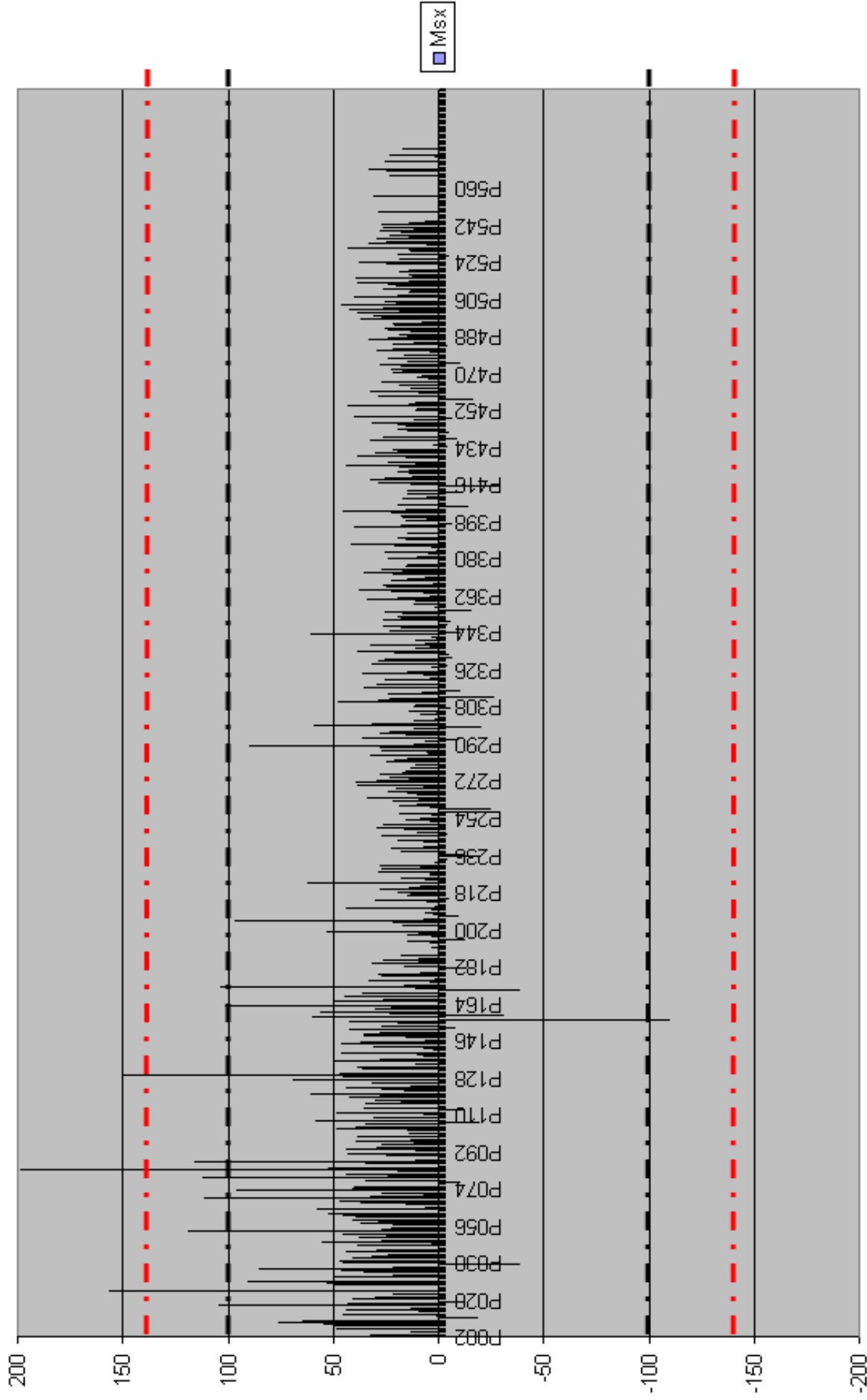
Mhy



Marc Weber

SCT Week June 2004

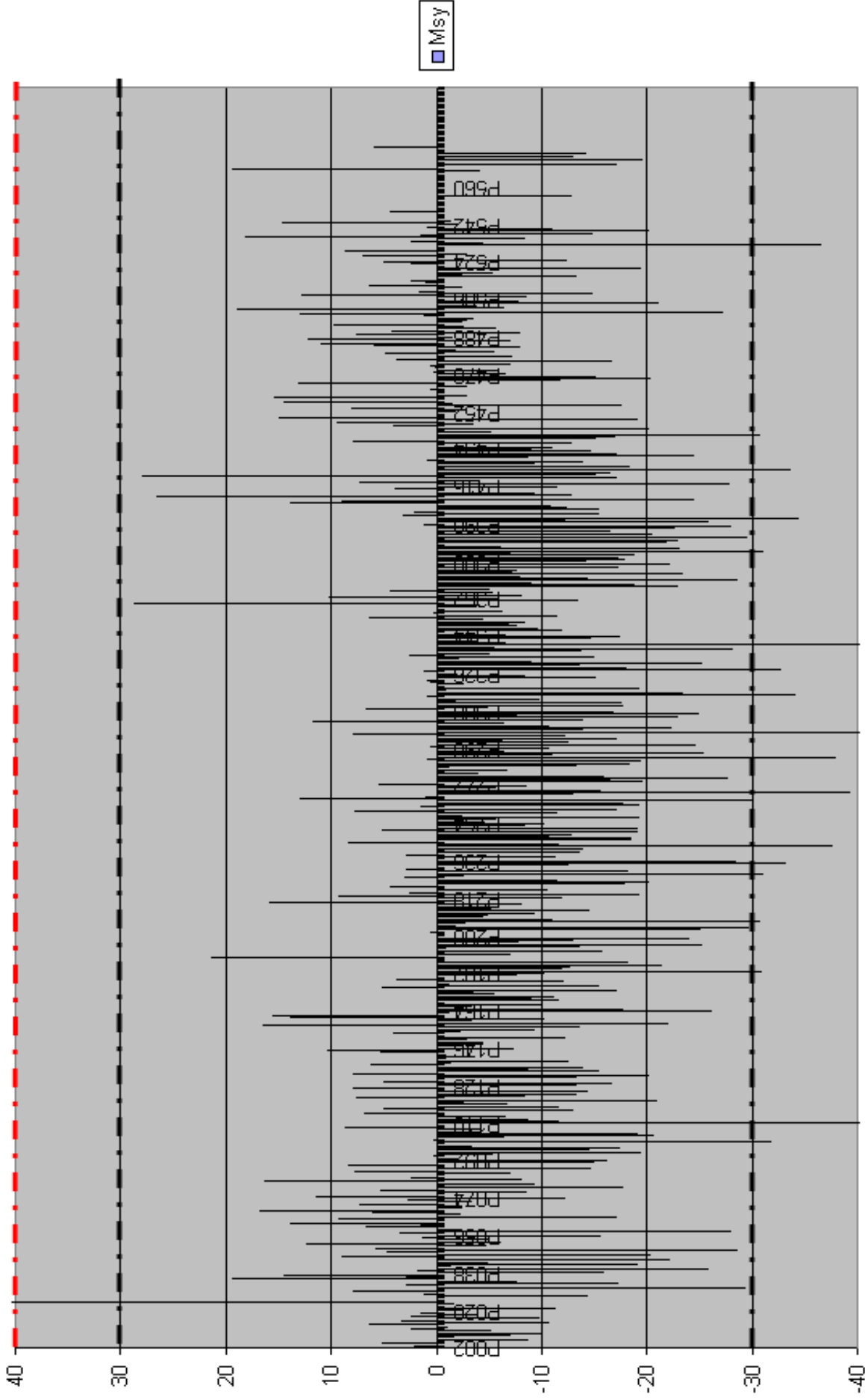
Msx



SCT Week June 2004

Marc Weber

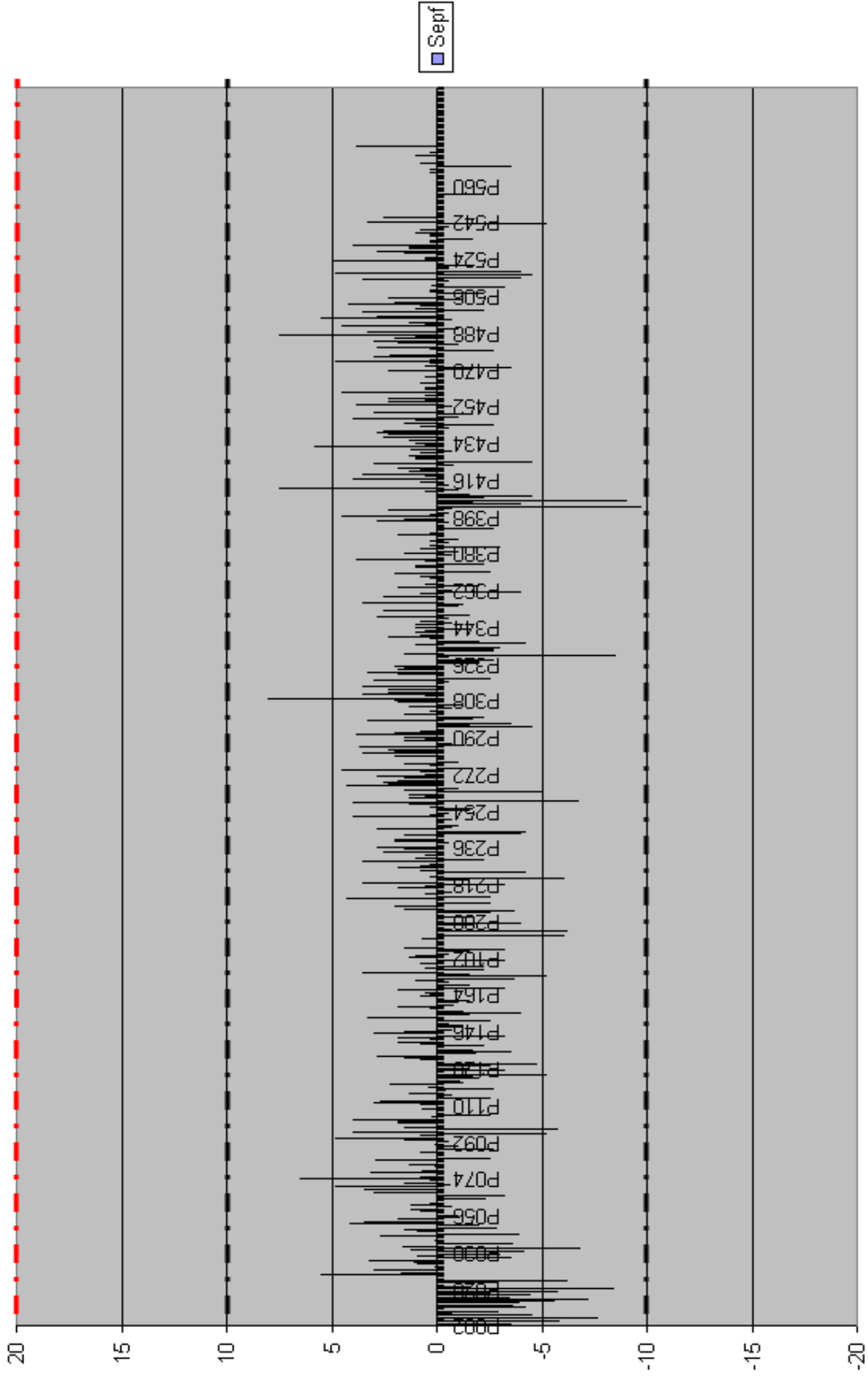
Msy



SCT Week June 2004

Marc Weber

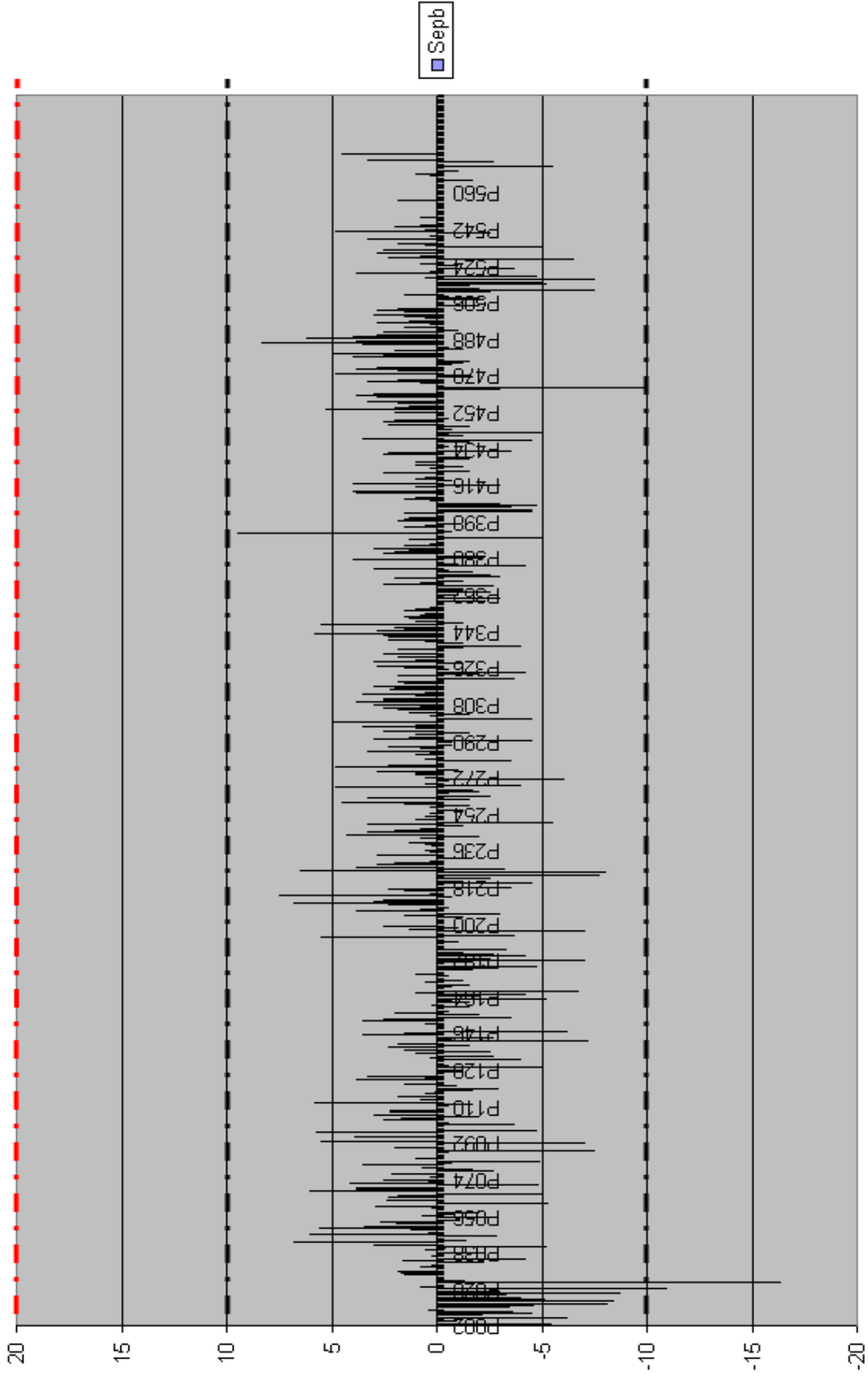
Sept



SCT Week June 2004

Marc Weber

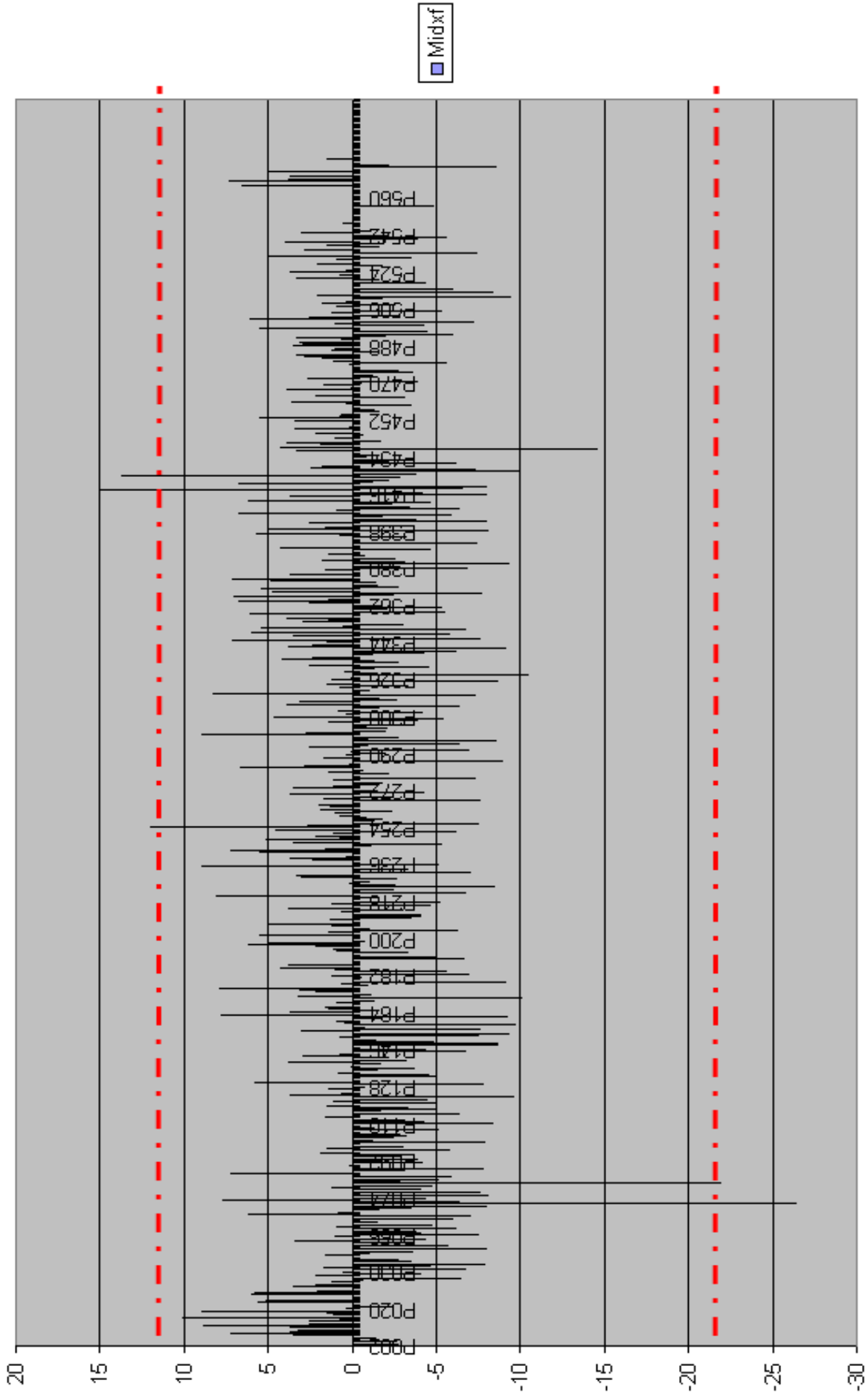
Sepb



SCT Week June 2004

Marc Weber

Midxf



SCT Week June 2004

Marc Weber

Stereo

