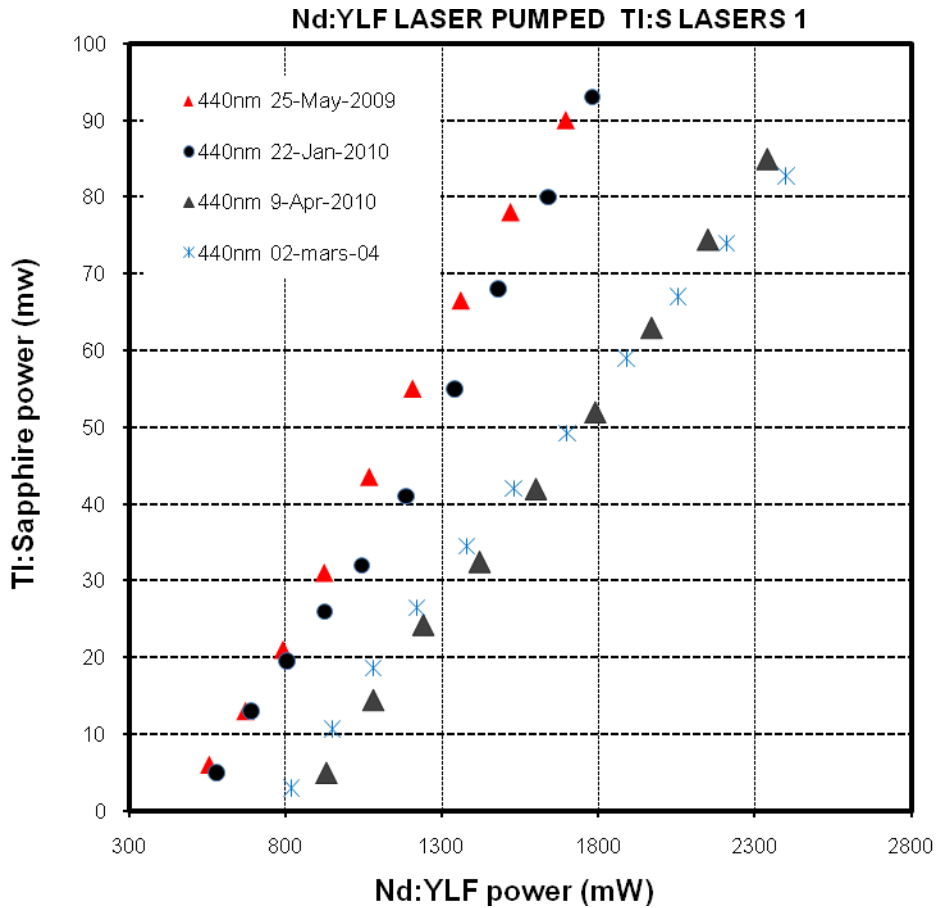
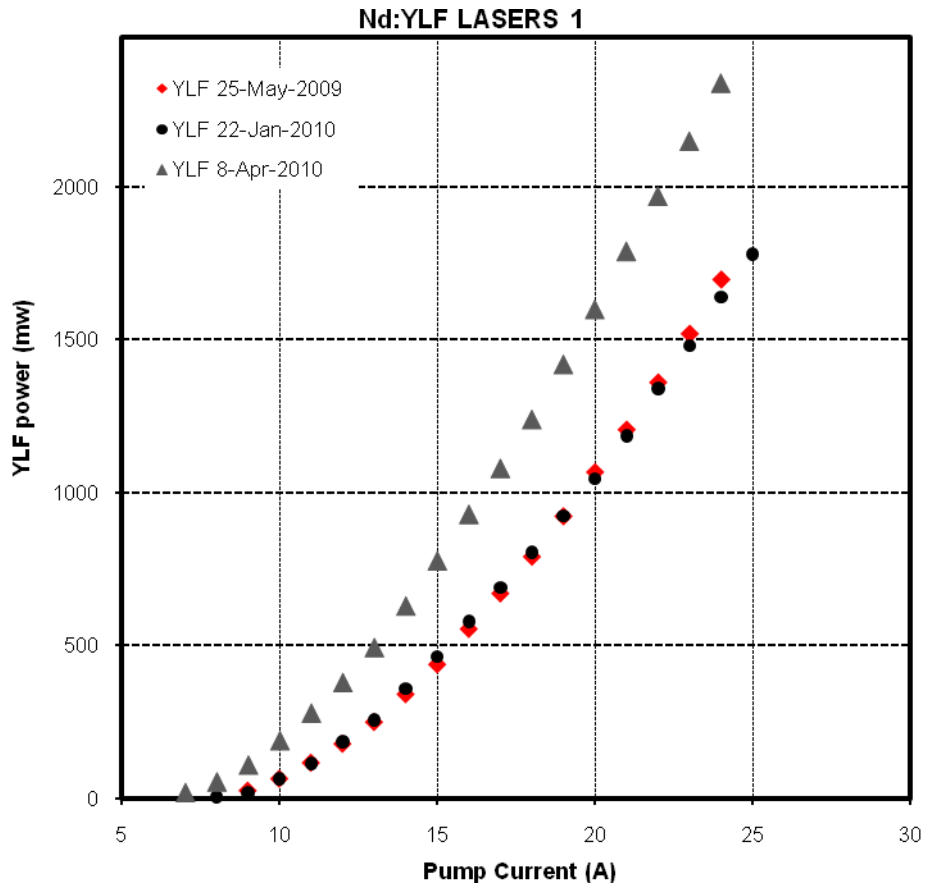


Laser1

New crystal ROD Assy.

ETH=24950 hrs



16 Feb: YLF tuning from scratch

1) Spherical lens		2) + Cylindrical lens		3) + Qswitch, CW mode	
	920		740		800
10A	mW	10A	mW	10A	mW
15A	8 W	15A	8,4 W	15A	8,7 w
20A	17 W	20A	19,4 W	20A	19,2 W

4) 1KHz

15A	5 W		
20A	11,2 W	FWHM=200ns	
24 A	16 W	try to get pulse stable - oscillation	

5) + HT@1053nm/HR@527nm , CW

15A	9,5 W
20A	21,3 W

6) + 344 SHG, CW

15A	8,8 W
20A	20 W

7) 1KHz

15A	4,3 W		T green = 9,4 A
20A	10,5 W	pulse , large jitter	

10-16 March, + 26 March

YLF tuning...

7 April: New crystal

1) Spherical lens	2) + Polarizer	3) + Qswitch, 1KHz (OK CW)
10A 3,9W	10A	10A 1,1 w
15A 18,5W	15A 15,5w	15A 7,1 W jitter OK, <5ns
20A 37 W	20A 31,8W	20A 14,2W
25A 57,5W	25A 49,6W	25A 19 W

4) + Cylindrical lens, 1KHz

15A	6,9 W
20A	13,5 W
25A	20,6 W

5) + HT@1053nm/HR@527nm , CW

15A	12 W	before, 14W but power lower CW to get nice pulse
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6) + 334 SHG, 1

KHz

15A	5,5 W	
20A	12,5 W	FWHM = 156 ns, jitter ~5ns
25A	18,6 W	

8) remove 12% T mirror, 100Hz:

see calibration table. **23A --> 2120 mW, FWHM= 112 ns**

Quantronix value CW mode:

Table with Power values in W

I(A)	Only Spherical	+ Polarizer	+ Q-Switch 1KHz	+ Cylindrical lens	+ HT/HR, CW	+ LBO, 1KHz
15	18,5	16	7,1	6,9	12	5,5
20	37	32	14,2	13,5		12,5
25	57,5	50	19	20,6		18,6

Value in 2007, new crystal

Quantronix value CW mode: **46W @ 25A**

Table with Power values in W

I(A)	Only polarizer	+ Sphe + CYL	+ Q-Switch CW	Q-Switch 1KHz	Pulse width (ns)	+ HT/HR	+ LBO CW	1KHz
15	12		11.7	5.5		11	10.5	4.7
20	27		26.1	12.2	380	24.8	23.7	11
25	44	idem	43	19	210	41.3	39.6	17.3
26	47		45.8	20.1	178			
27	50		49.2	21.3	150			

Current A	YLF 8-Apr-2010	440nm 9-Apr-2010
7	20	
8	55	
9	110	
10	190	
11	280	
12	380	
13	494	
14	630	
15	778	T = 15.4A
16	930	5
17	1080	14,5
18	1240	24,3
19	1420	32,5
20	1600	42
21	1790	52
22	1970	63
23	2150	74,5
24	2340	85
25	2530	