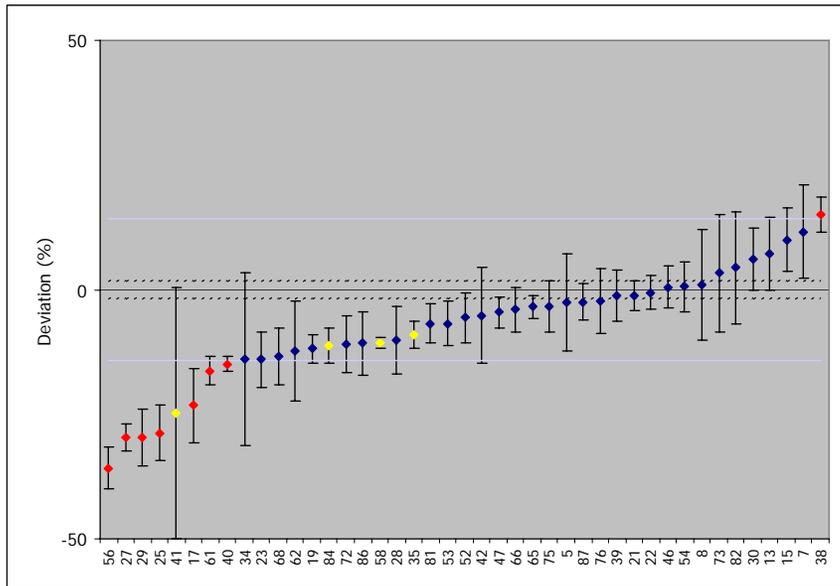


Exercise 2008 summary



Arvic Harms
National Physical Laboratory
27 January 2009

Summary

	2005	2007	2008
Sample types	5	8	7
Participants	48	65	78
UK participants	28	32	37
Results	898	1356	1372
'In agreement'	72%	73%	68%

Results in agreement (%) (excluding C samples)

<u>2008</u>		Proportion
Total	66	
2007 participants	72	66%
New participants	55	34%
UK	67	56%
non-UK	66	44%

<u>2007</u>		
Total	72	
2008 participants	74	73%
'Lost' participants	65	27%
UK	74	56%
non-UK	69	44%

Comments

Overall performance lower (however, compared to 2007 three 'easy' gamma emitters were excluded, while the problematic ^{22}Na was included).

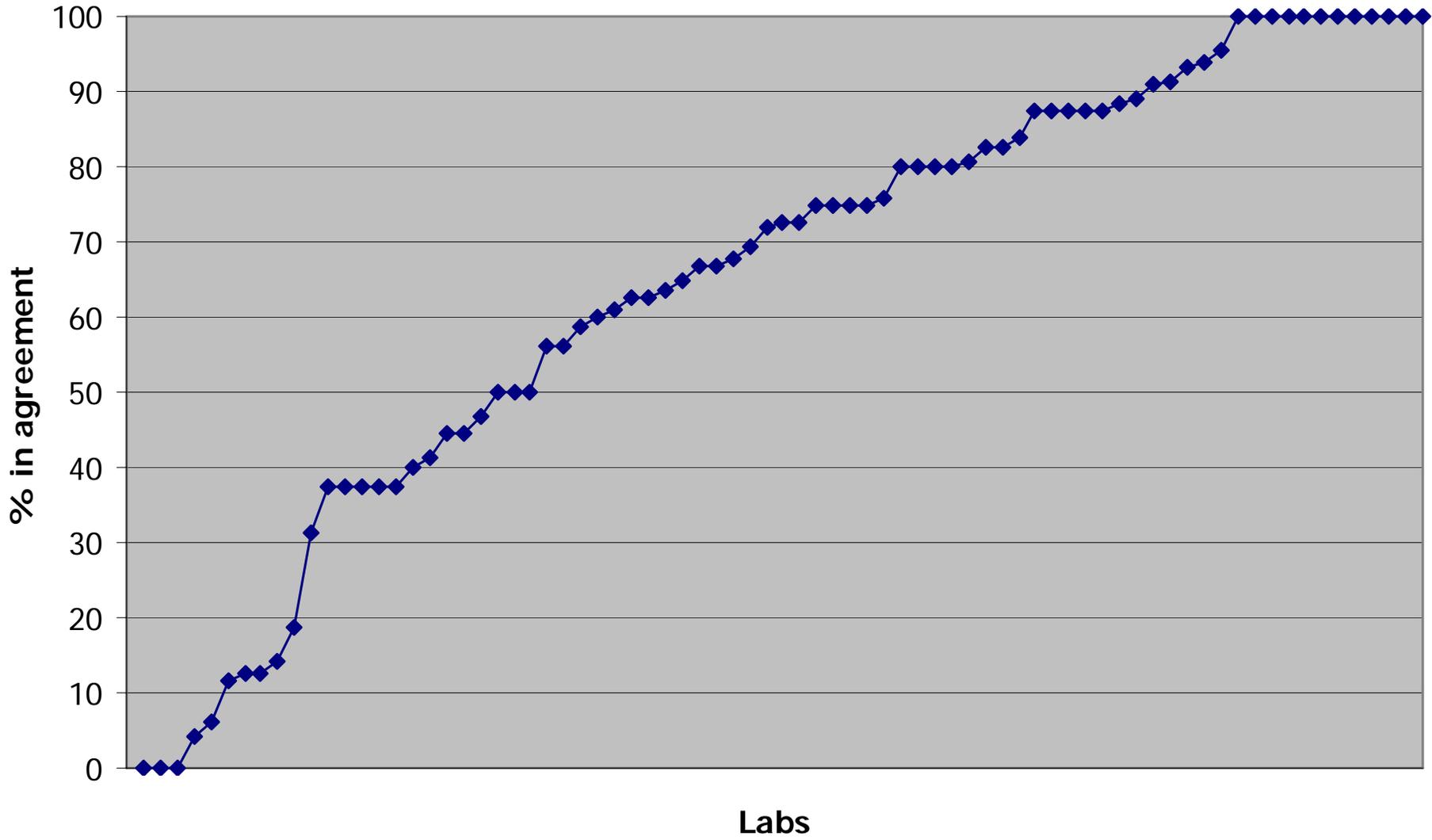
Still problems with coincidence summing corrections:
 ^{22}Na , ^{133}Ba , ^{134}Cs and ^{152}Eu

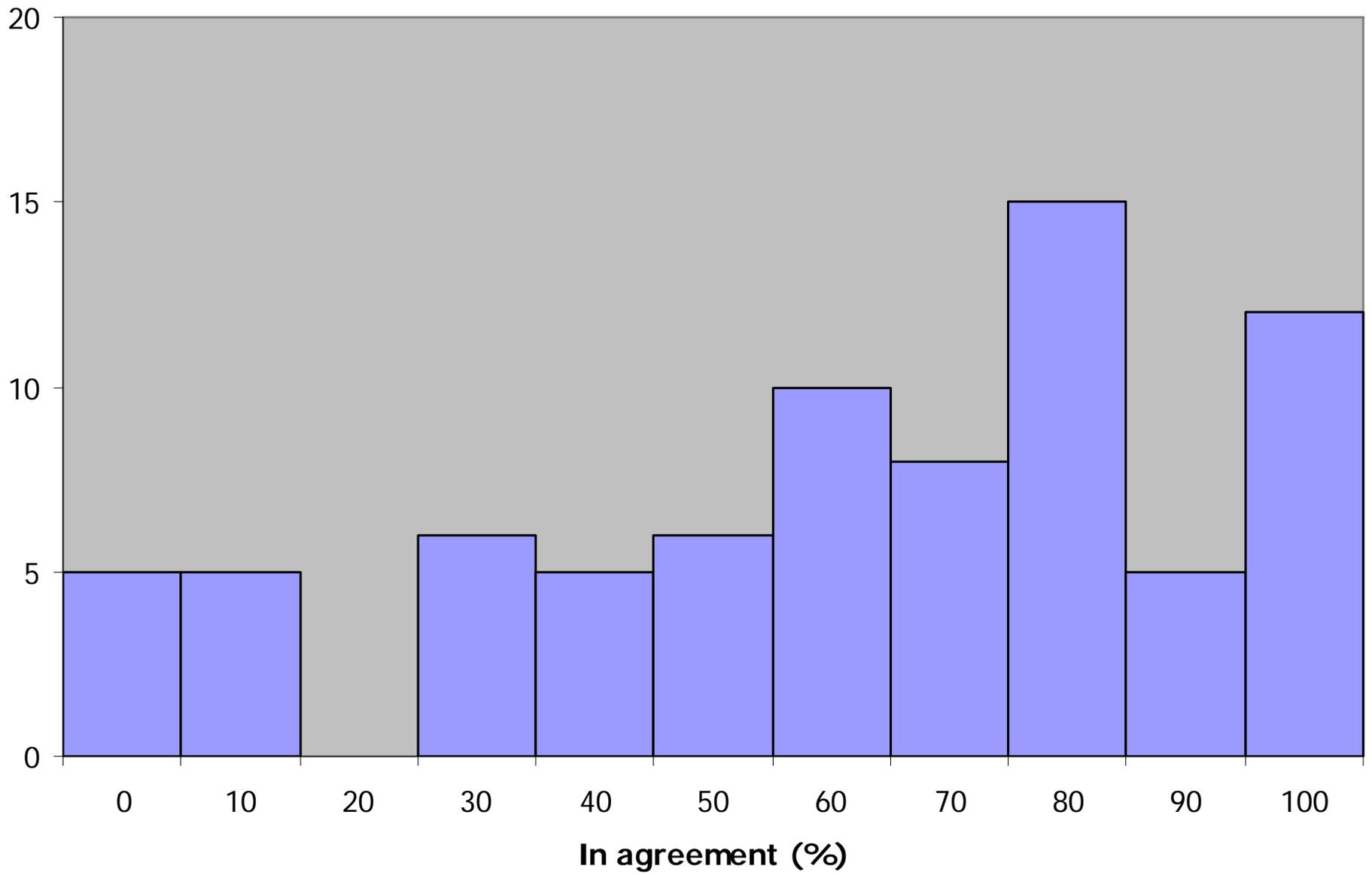
Significant improvement for ^{95}Nb and ^{244}Cm results

Large spread for gross alpha and gross beta results

C samples were homogeneous

In agreement (excl C samples)





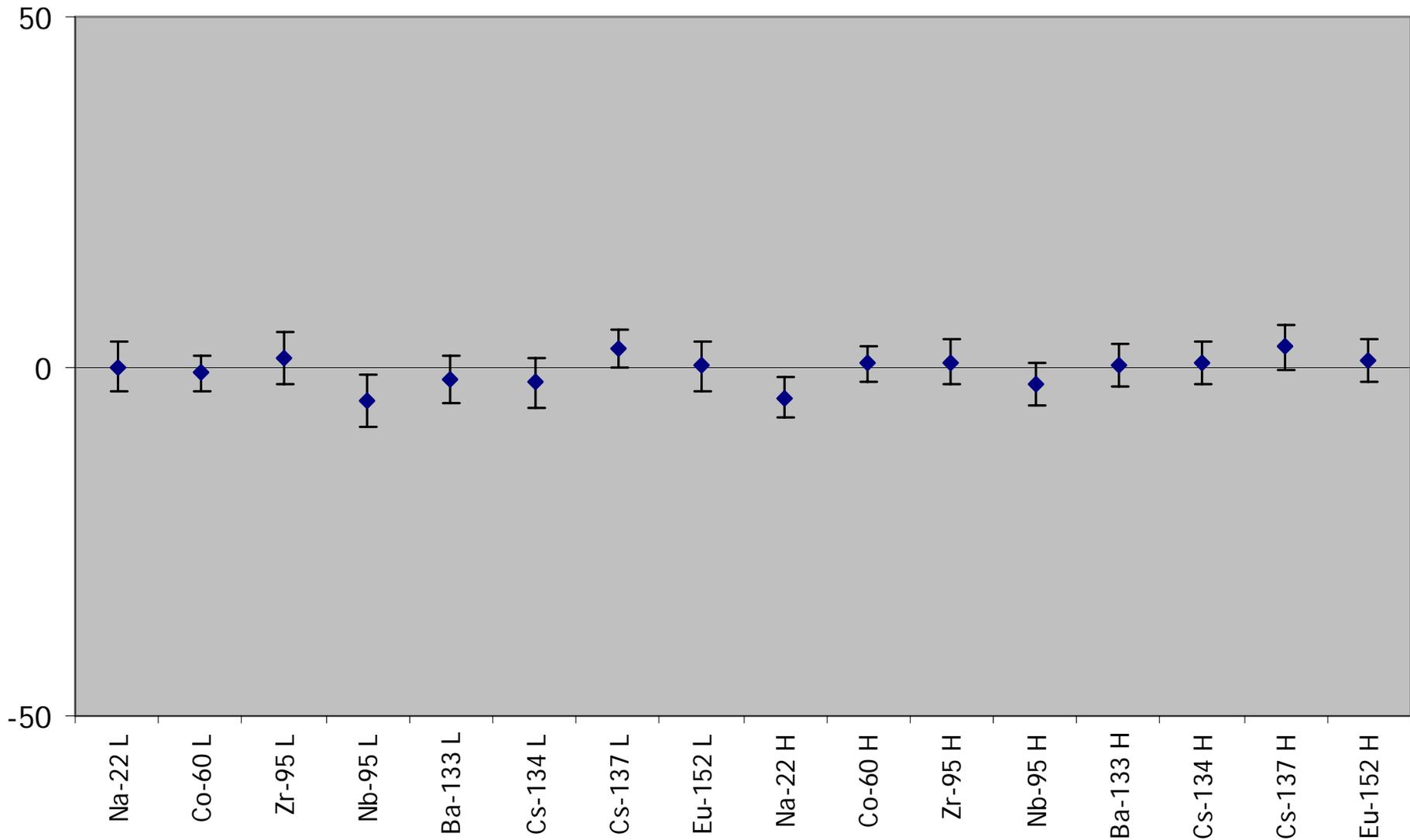
Top labs (excluding C samples)

Lab 29	100% (24)	Lab 101	100% (4)
Lab 18	100% (16)	Lab 103	100% (2)
Lab 46	100% (16)	Lab 38	95% (22)
Lab 52	100% (16)	Lab 24	94% (16)
Lab 88	100% (16)	Lab 13	93% (15)
Lab 23	100% (8)	Lab 21	91% (23)
Lab 53	100% (8)	Lab 42	91% (11)
Lab 76	100% (8)	Lab 72	89% (9)
Lab 108	100% (8)	Lab 8	88% (51)
Lab 110	100% (8)	Lab 47	88% (32)
		Lab 90	88% (16)

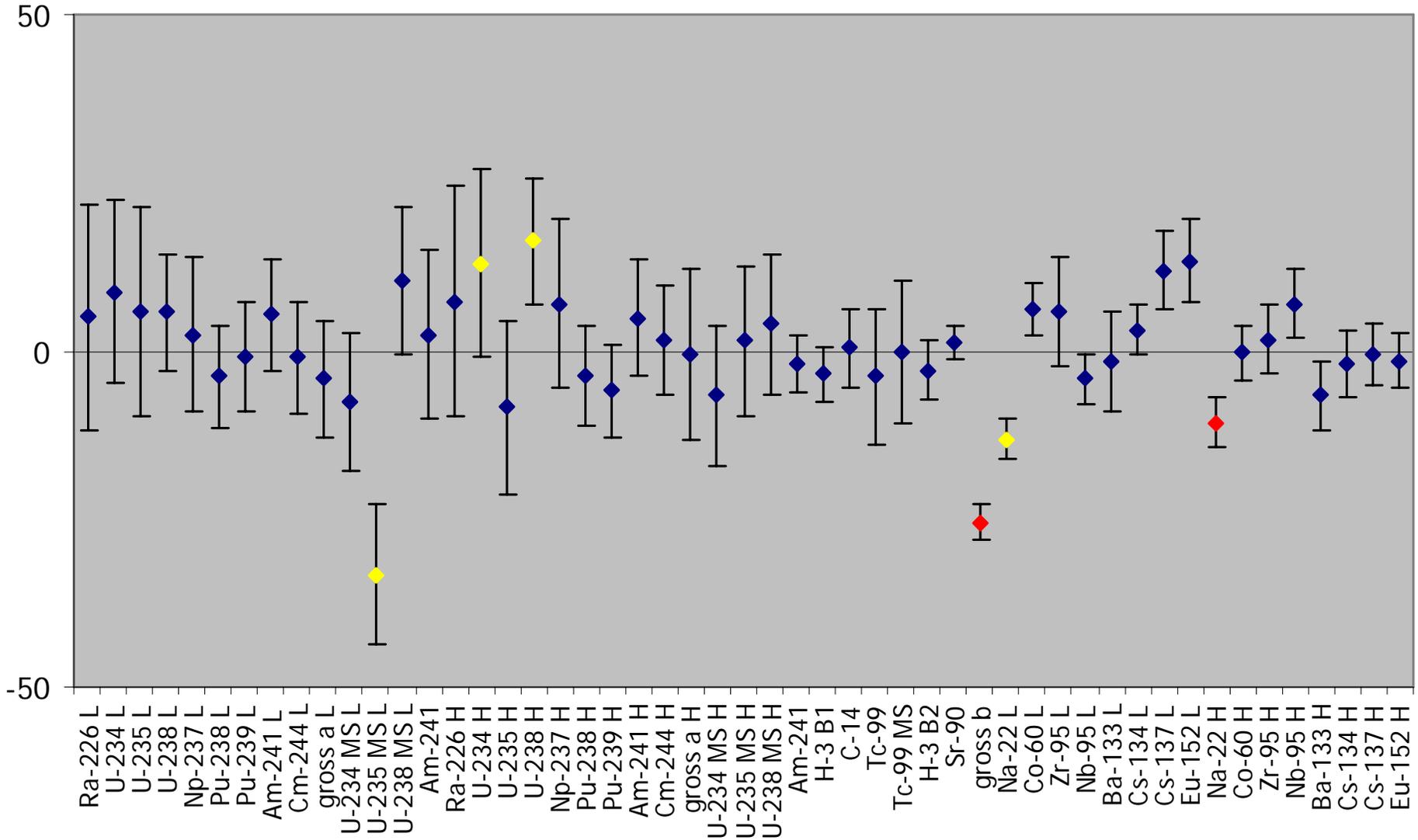
Bottom labs (excluding C samples)

Lab 92	0% (9)	Lab 82	31% (16)
Lab 44	0% (8)	Lab 54	38% (16)
Lab 112	0% (8)	Lab 11	38% (8)
Lab 31	4% (24)	Lab 33	38% (8)
Lab 27	6% (16)	Lab 93	38% (8)
Lab 83	12% (17)	Lab 97	38% (8)
Lab 98	13% (16)	Lab 5	40% (20)
Lab 111	13% (8)	Lab 17	41% (29)
Lab 113	14% (14)	Lab 89	44% (18)
Lab 105	19% (16)	Lab 96	44% (18)

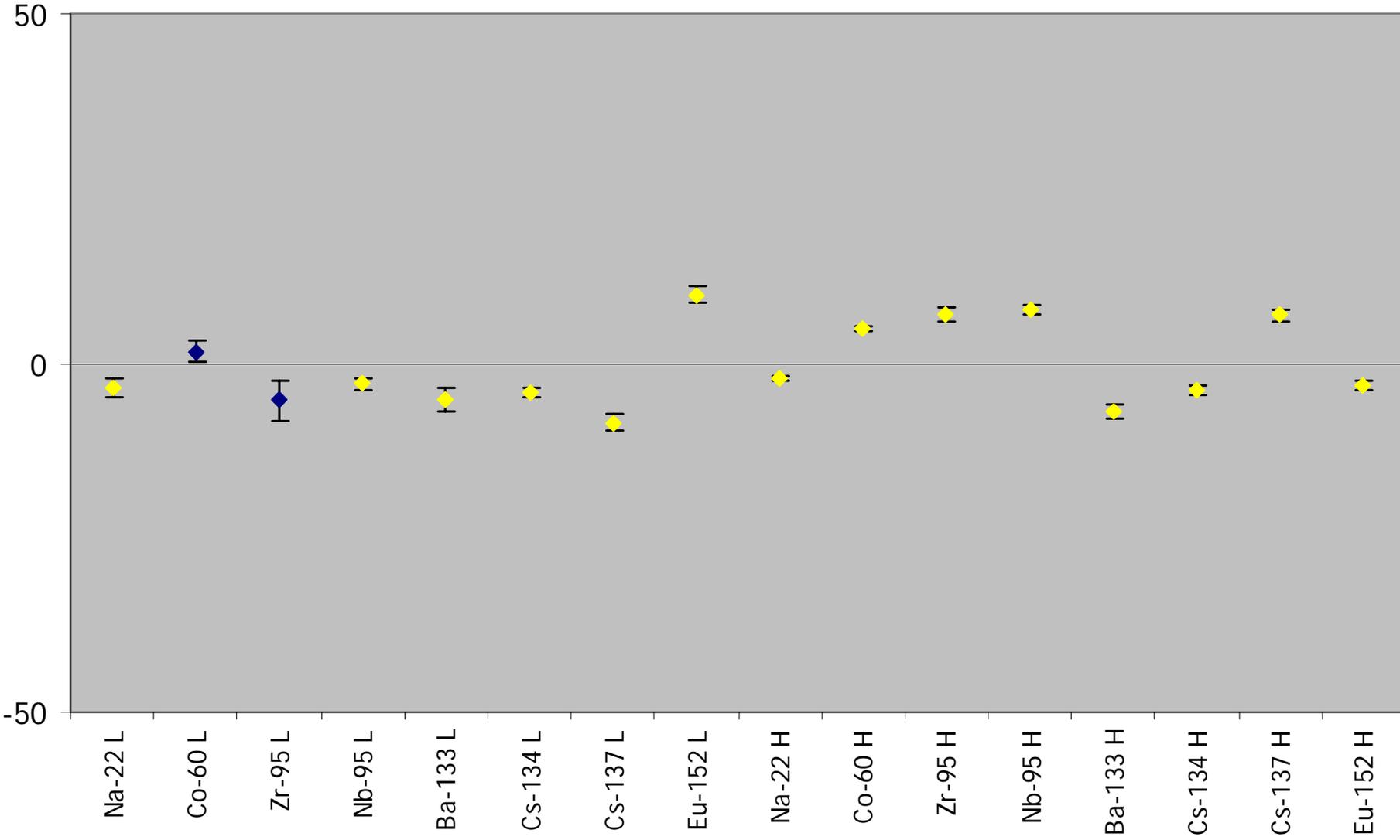
Deviation (%) Lab 18



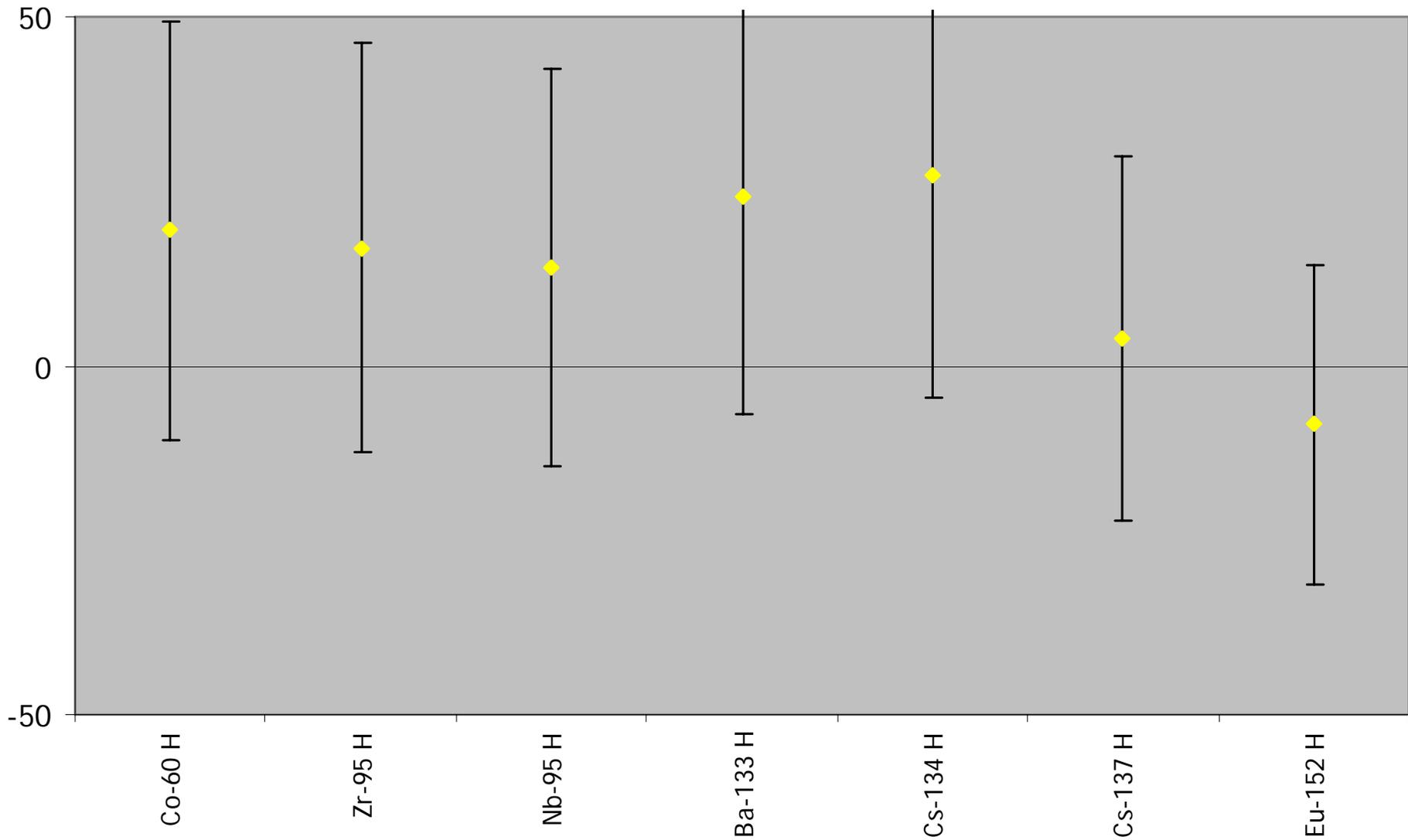
Deviation (%) Lab 8



Deviation (%) Lab 98



Deviation (%) Lab 112



Publications

NPL Report on PTE 2007 (IR 8) published in April 2007

One paper accepted

- Decay correction of ^{95}Nb (Applied Radiation and Isotopes)

Three papers submitted

- Accreditation (Applied Radiation and Isotopes)
- Kiri plots (Accreditation and Quality Assurance)
- Data evaluation (Accreditation and Quality Assurance)

Two papers in preparation

- Combined results 1989-2008 (Applied Radiation and Isotopes)
- Concrete reference material (Applied Radiation and Isotopes)

Thank you

Jaiyana Ahmed

Eleanor Bakhshandeiari

Chris Cross

Andy Fenwick

Simon Jerome

John Keightley

Piers de Lavisson

John Makepeace

Andy Pearce

Maggie Tunnicliff

Selina Woods

Arzu Arinc

Sean Collins

Julian Dean

Maria Garcia-Miranda

Lena Johansson

Lynsey Keightley

Amanda Law

Ami Patel

Andy Stroak

Jean Wong

Thank you