

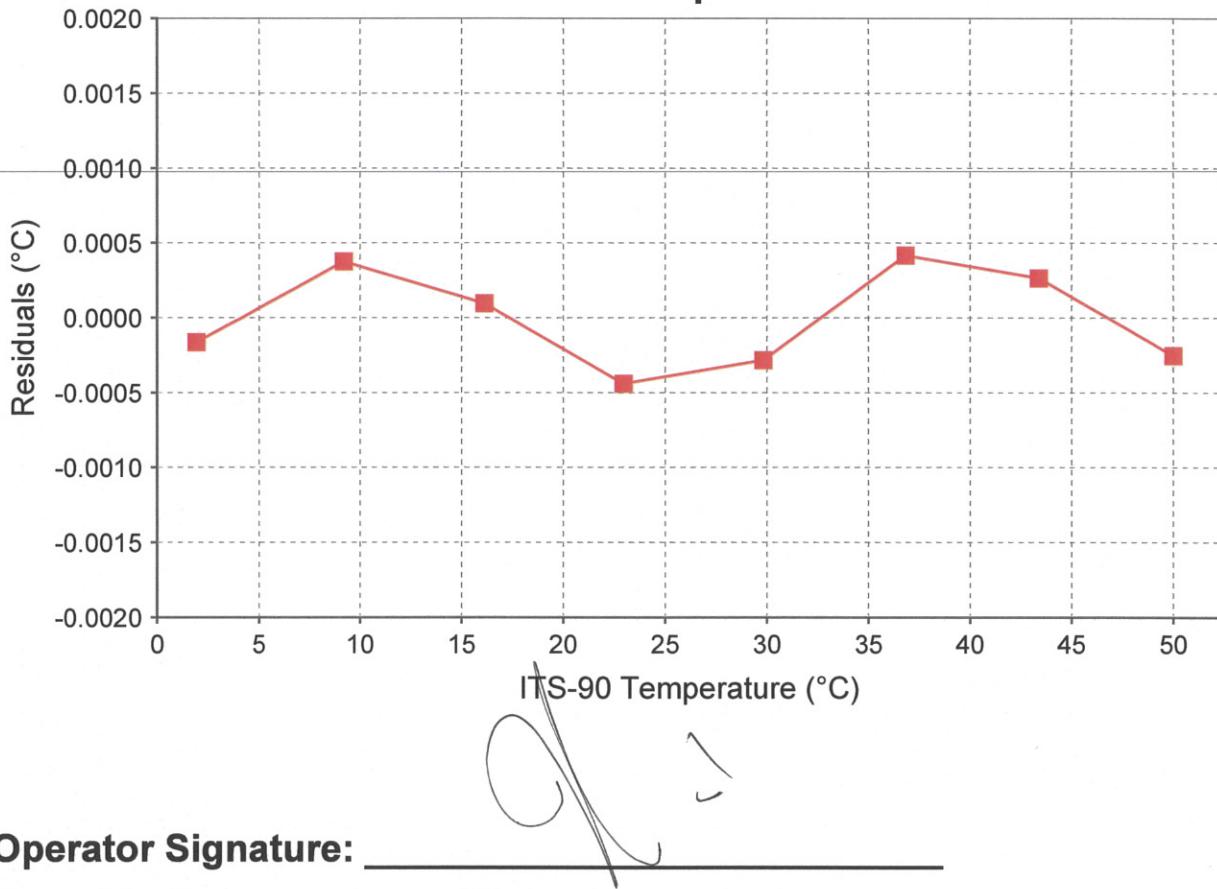
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 1

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.604197	-0.00016	0.003528263409430
9.21086	0.513218	0.00037	-0.000251341003402
16.13226	0.429225	0.00009	0.000002511825711
22.96470	0.353173	-0.00044	-0.000000073297298
29.84559	0.286017	-0.00028	
36.83539	0.228454	0.00042	
43.40987	0.183835	0.00026	
50.01219	0.147378	-0.00026	

Residuals vs. Temperature



Operator Signature: _____

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

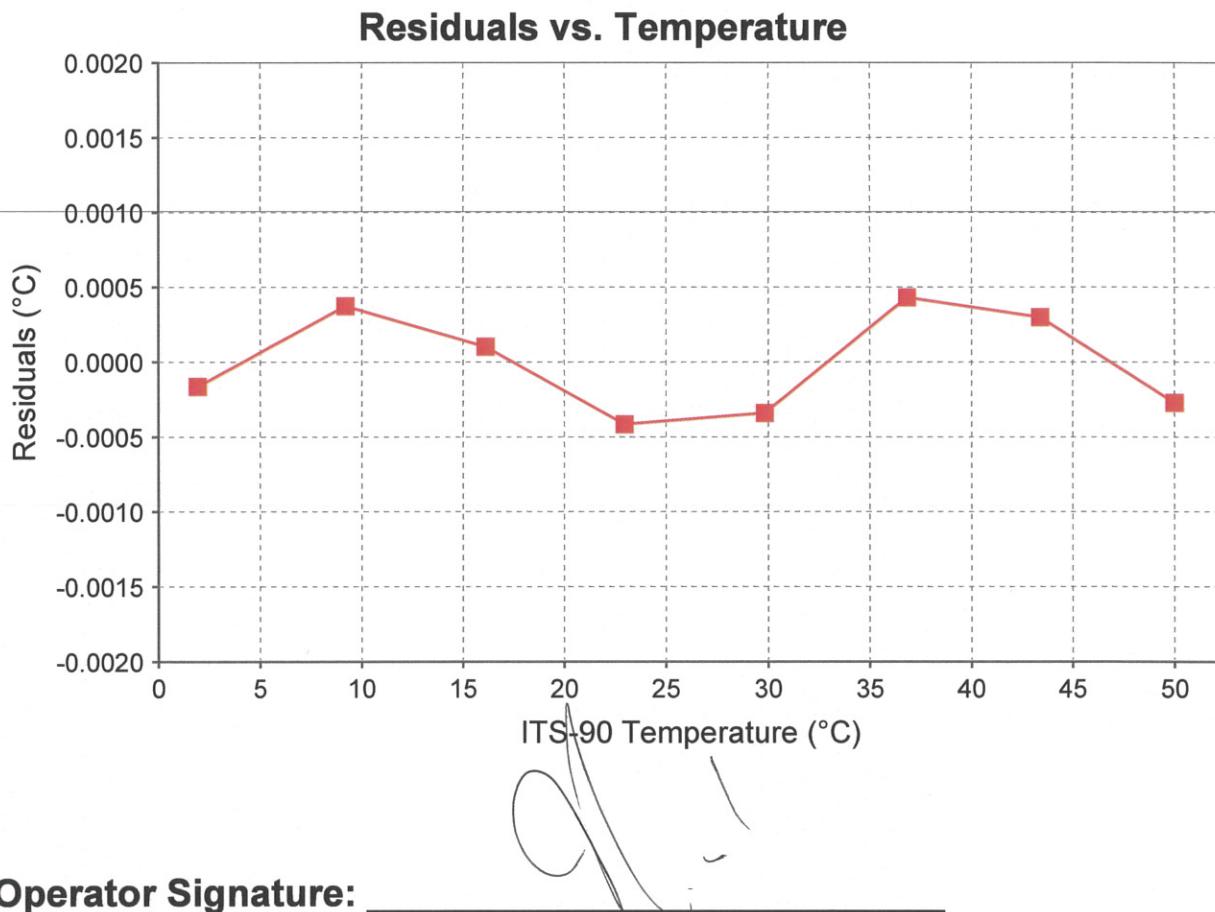
Calibration ID: 2082

RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 2

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.631598	-0.00017	0.003498965988283
9.21086	0.542245	0.00037	-0.000251064647972
16.13226	0.458073	0.00010	0.000002448508577
22.96469	0.380414	-0.00042	-0.000000062347388
29.84559	0.310659	-0.00034	
36.83540	0.249953	0.00043	
43.40987	0.202299	0.00030	
50.01219	0.162965	-0.00027	



Operator Signature: _____

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

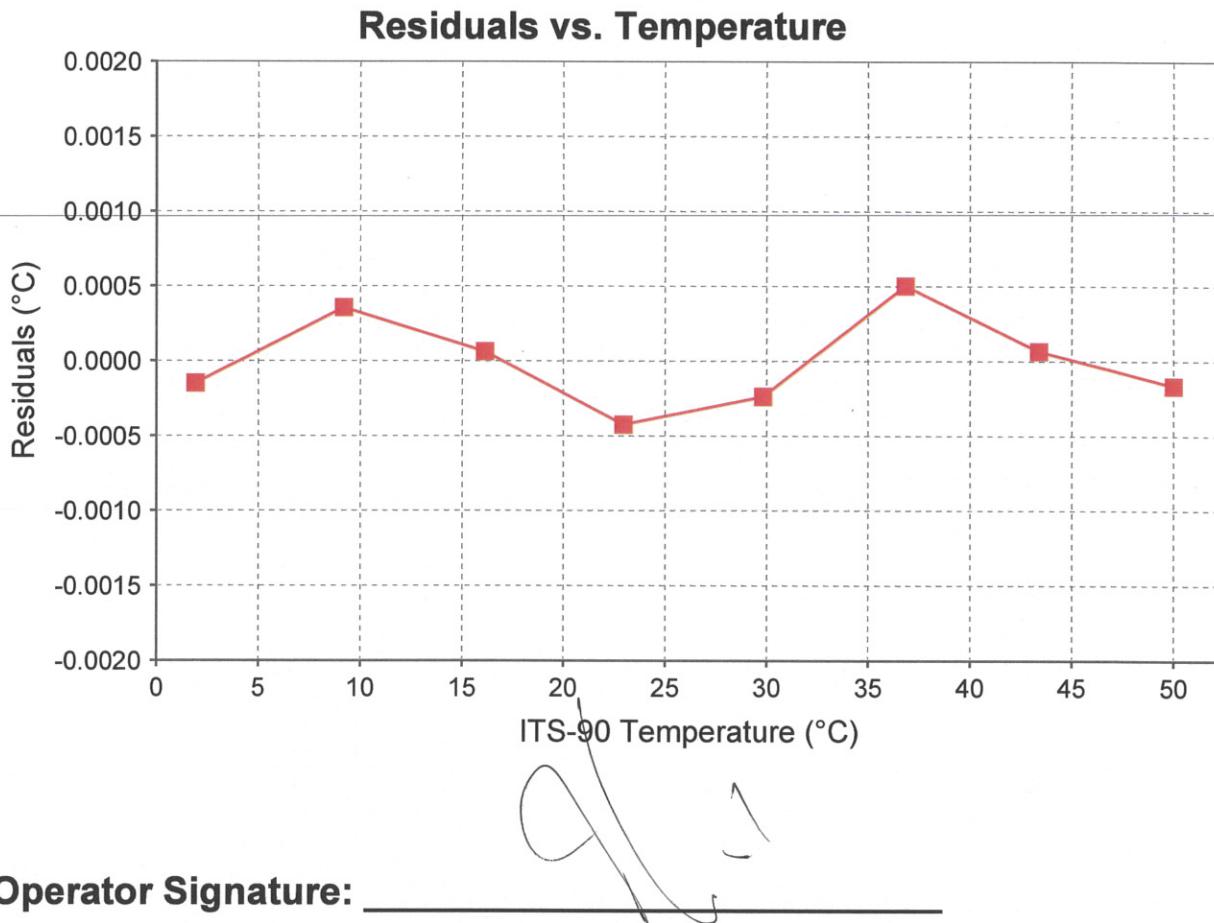
Calibration ID: 2083

RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 3

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.656639	-0.00015	0.003471887797304
9.21086	0.569038	0.00035	-0.000250010484373
16.13226	0.484939	0.00006	0.000002452873768
22.96470	0.405972	-0.00043	-0.000000065022510
29.84559	0.333901	-0.00024	
36.83539	0.270297	0.00050	
43.40987	0.219792	0.00006	
50.01219	0.177718	-0.00017	



Operator Signature: _____

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2084

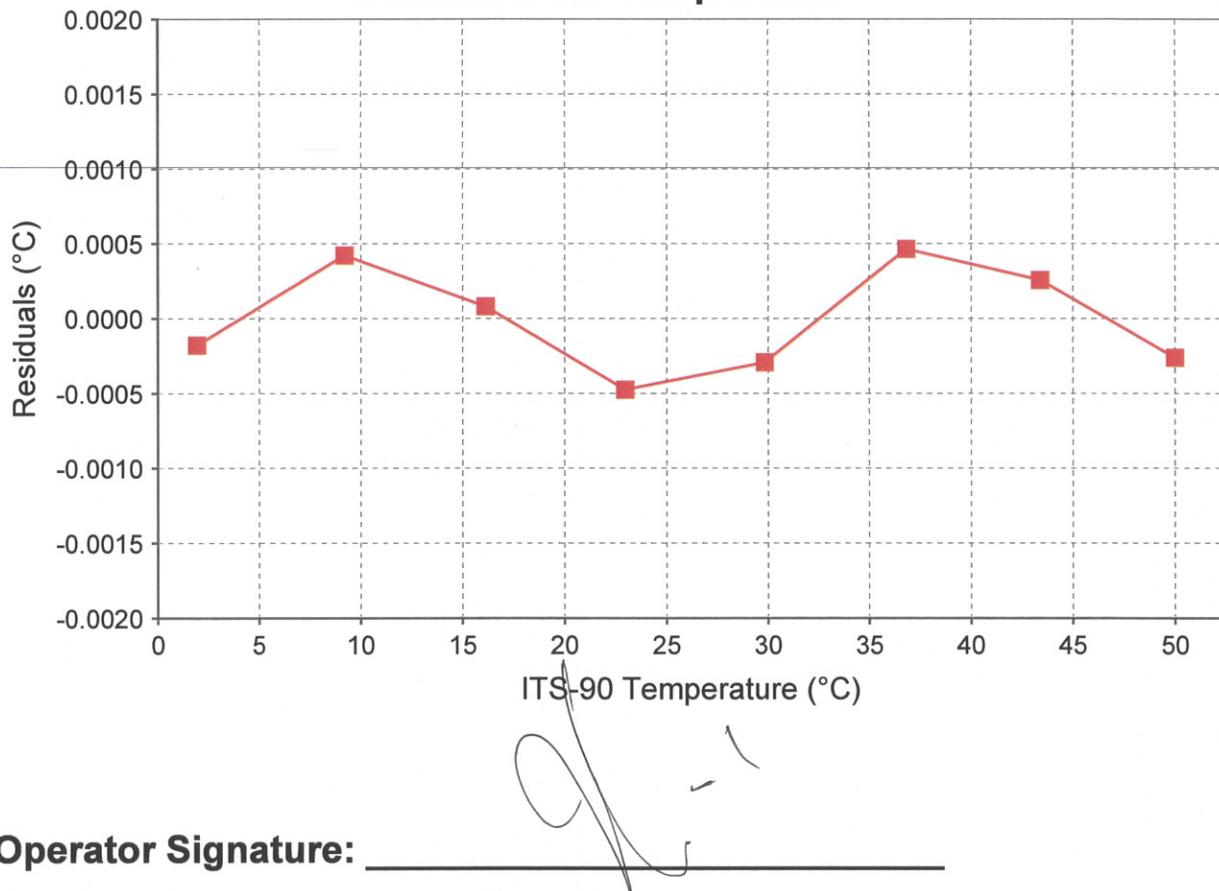
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 4

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.598999	-0.00018	0.003533725959622
9.21086	0.507789	0.00042	-0.000251407886519
16.13226	0.423894	0.00008	0.000002554904663
22.96469	0.348187	-0.00048	-0.000000071247491
29.84559	0.281539	-0.00029	
36.83539	0.224564	0.00046	
43.40987	0.180501	0.00026	
50.01219	0.144563	-0.00026	

Residuals vs. Temperature



Operator Signature: _____
Operator Name: M Luong

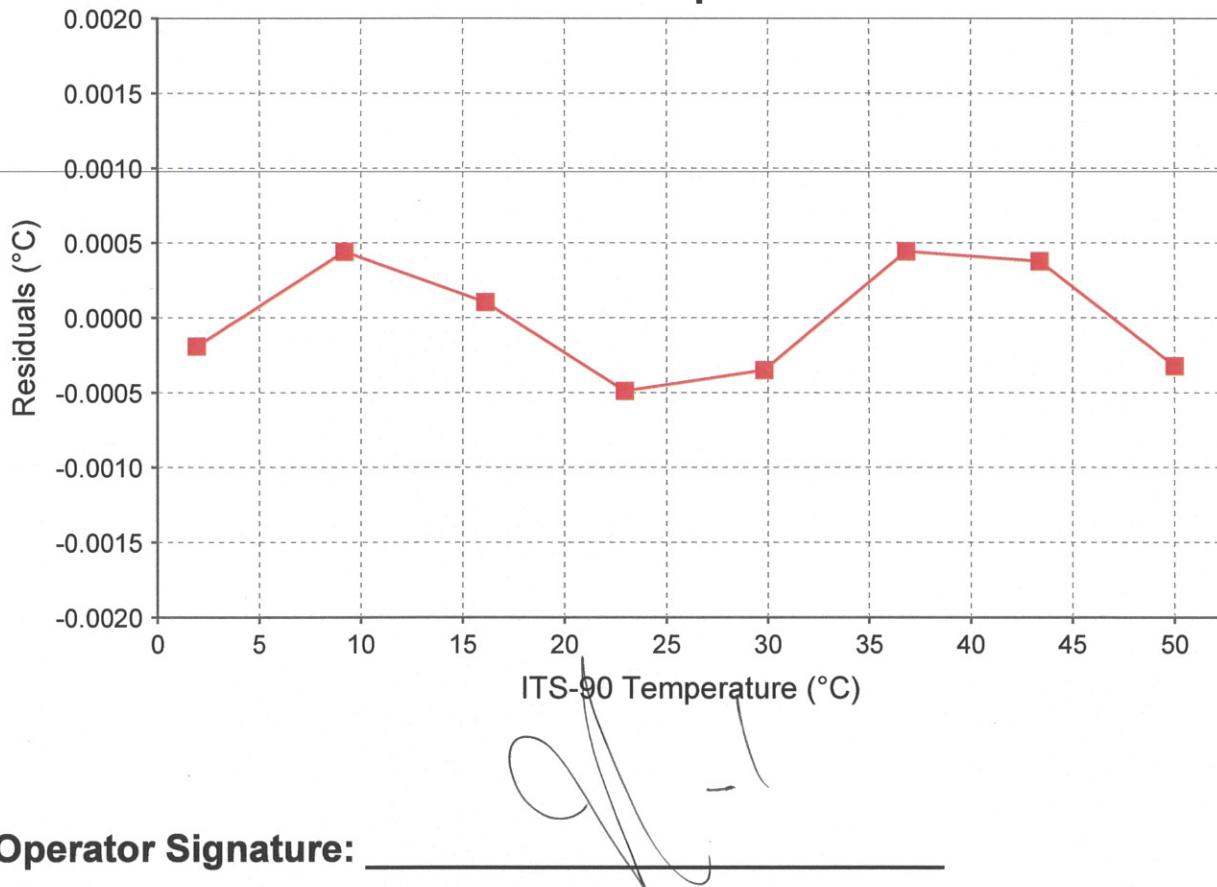
Calibration Date: 7/Nov/2012
Print Date:
Calibration ID: 2085

RBR Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 5

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.615128	-0.00019	0.003516301846603
9.21086	0.525013	0.00044	-0.000252008137139
16.13226	0.441138	0.00010	0.000002509358665
22.96470	0.364589	-0.00049	-0.000000057289023
29.84559	0.296486	-0.00035	
36.83539	0.237706	0.00044	
43.40987	0.191870	0.00038	
50.01219	0.154233	-0.00032	

Residuals vs. Temperature



Operator Signature:

Operator Name: MLuong

Calibration Date: 7/Nov/2012

Print Date:

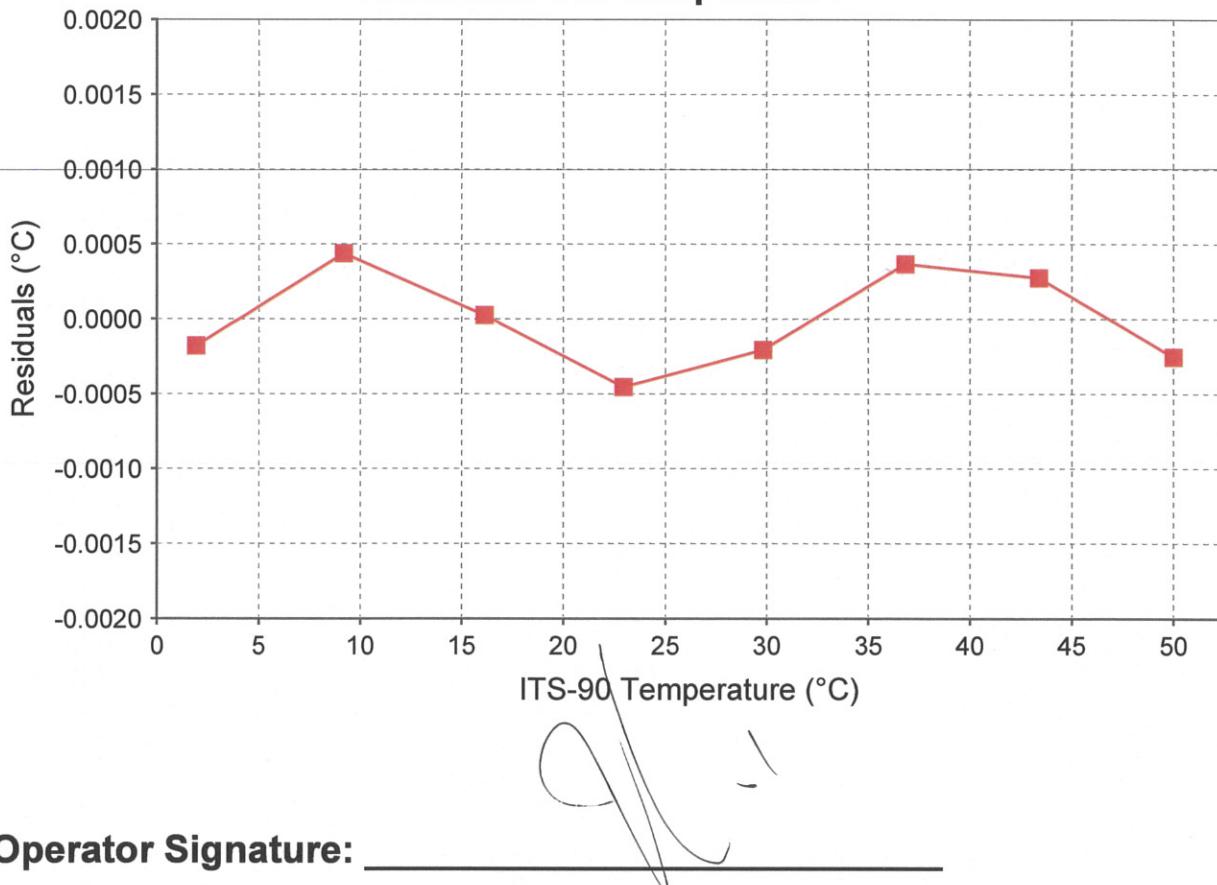
Calibration ID: 2086

RBR Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 6

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.593951	-0.00018	0.003538843150985
9.21086	0.502697	0.00044	-0.000251953103966
16.13226	0.419080	0.00002	0.000002494055251
22.96469	0.343865	-0.00046	-0.000000067056885
29.84559	0.277829	-0.00021	
36.83540	0.221497	0.00037	
43.40987	0.177996	0.00027	
50.01219	0.142555	-0.00026	

Residuals vs. Temperature



Operator Signature: _____

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2087

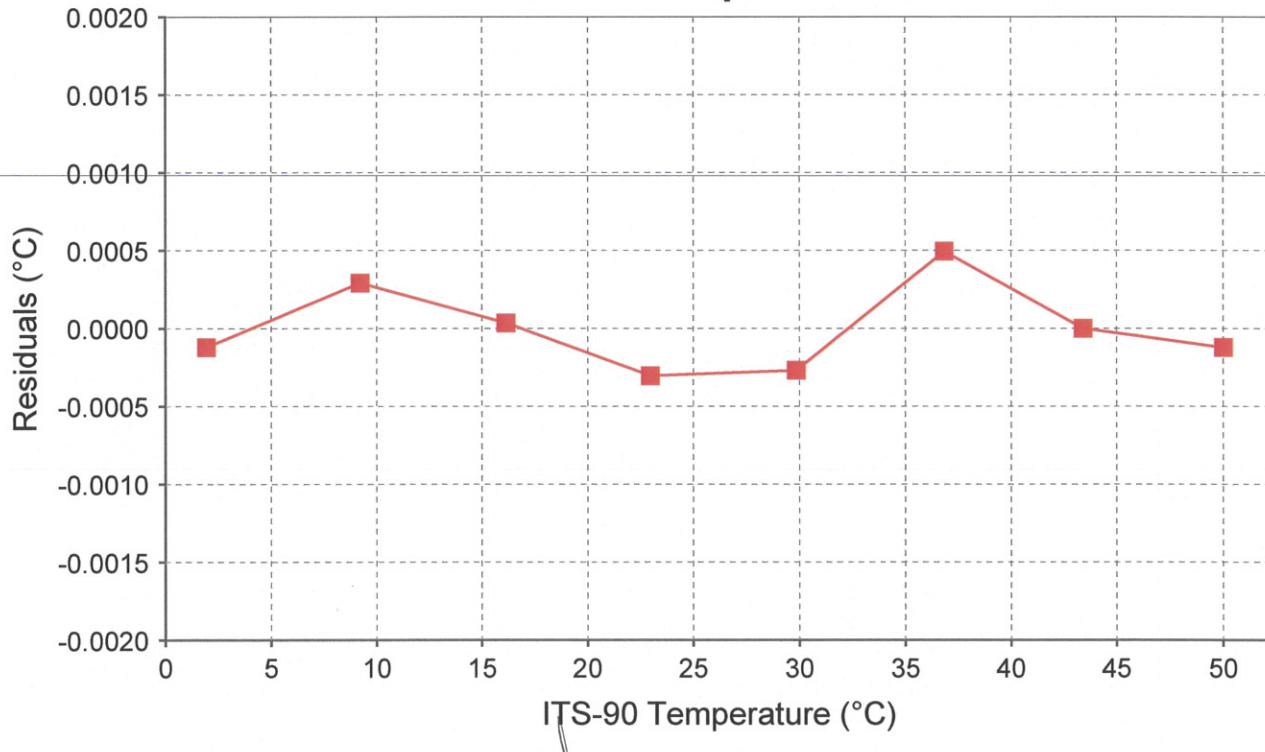
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 7

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.650431	-0.00012	0.003478497030097
9.21086	0.562447	0.00029	-0.000250537875533
16.13226	0.478376	0.00004	0.000002467967863
22.96469	0.399767	-0.00030	-0.000000061804171
29.84559	0.328298	-0.00027	
36.83539	0.265426	0.00049	
43.40987	0.215633	-0.00000	
50.01219	0.174233	-0.00012	

Residuals vs. Temperature



Operator Signature:

Operator Name:

MLuong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2088

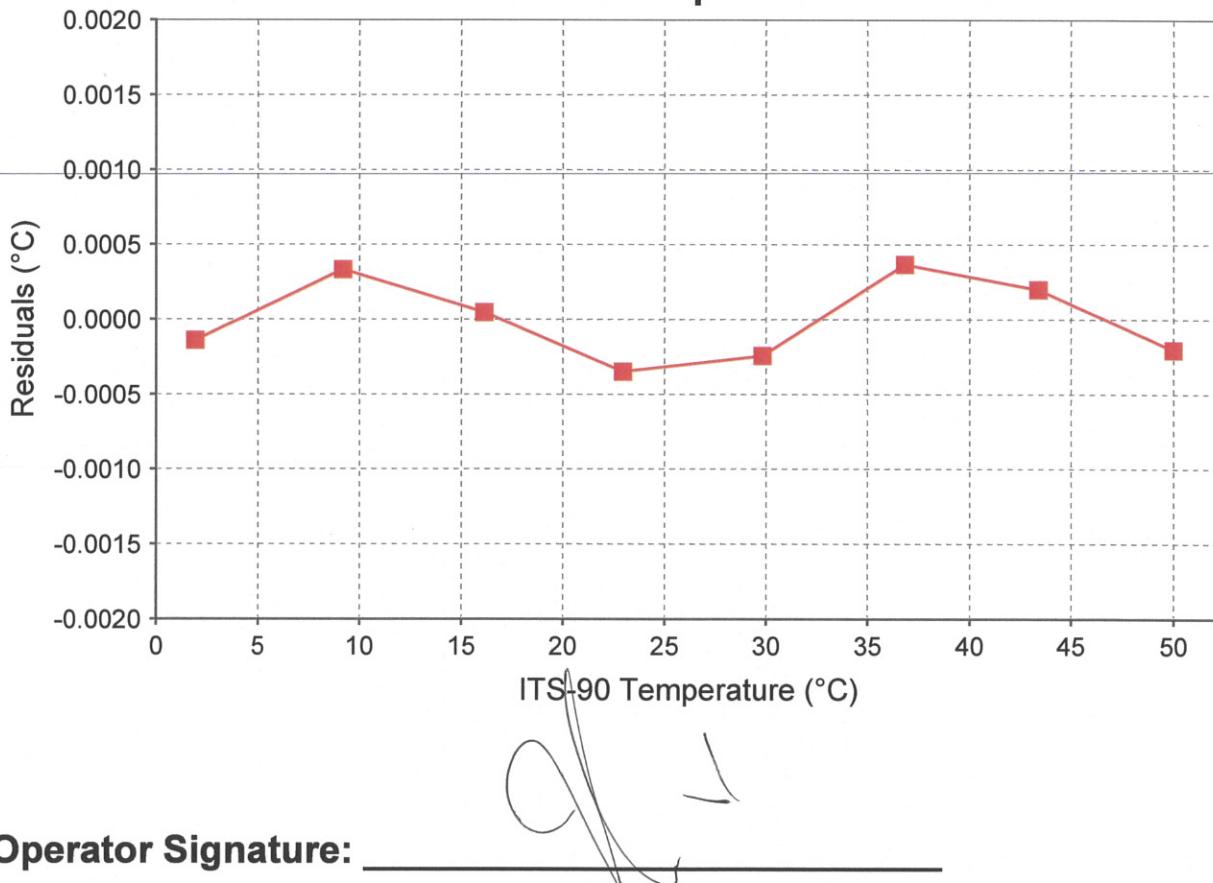
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 8

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.649346	-0.00014	0.003479381707780
9.21086	0.561449	0.00033	-0.000251102731484
16.13226	0.477544	0.00005	0.000002419050744
22.96469	0.399144	-0.00035	-0.000000042607778
29.84559	0.327886	-0.00024	
36.83539	0.265206	0.00037	
43.40987	0.215552	0.00020	
50.01219	0.174257	-0.00021	

Residuals vs. Temperature



Operator Signature: _____
Operator Name: M Luong

Calibration Date: 7/Nov/2012
Print Date:
Calibration ID: 2089

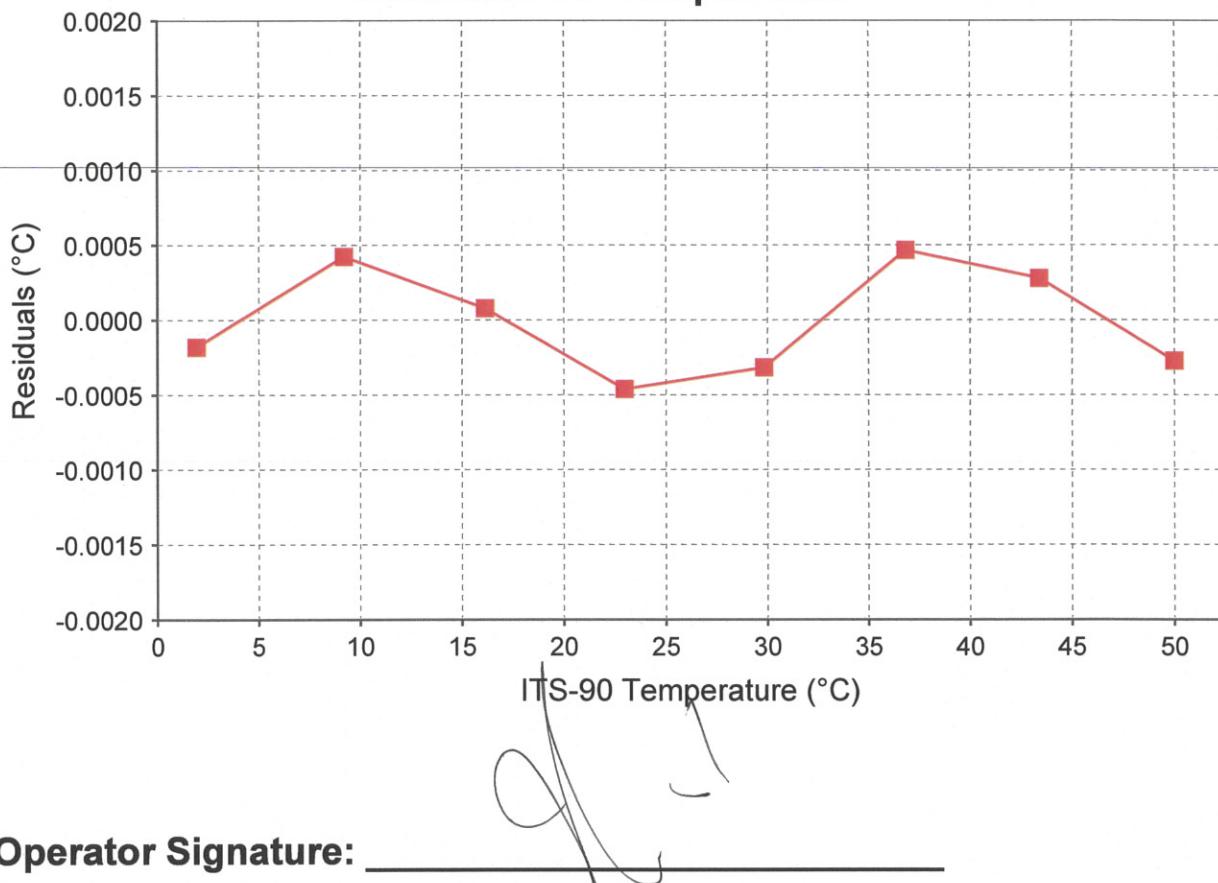
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 9

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.597914	-0.00018	0.003534744475253
9.21086	0.506768	0.00042	-0.000251755914728
16.13226	0.423012	0.00008	0.000002478721348
22.96469	0.347484	-0.00046	-0.000000071496321
29.84559	0.281028	-0.00032	
36.83539	0.224232	0.00046	
43.40987	0.180309	0.00028	
50.01219	0.144483	-0.00027	

Residuals vs. Temperature



Operator Signature:

Operator Name: MLuong

Calibration Date: 7/Nov/2012

Print Date:

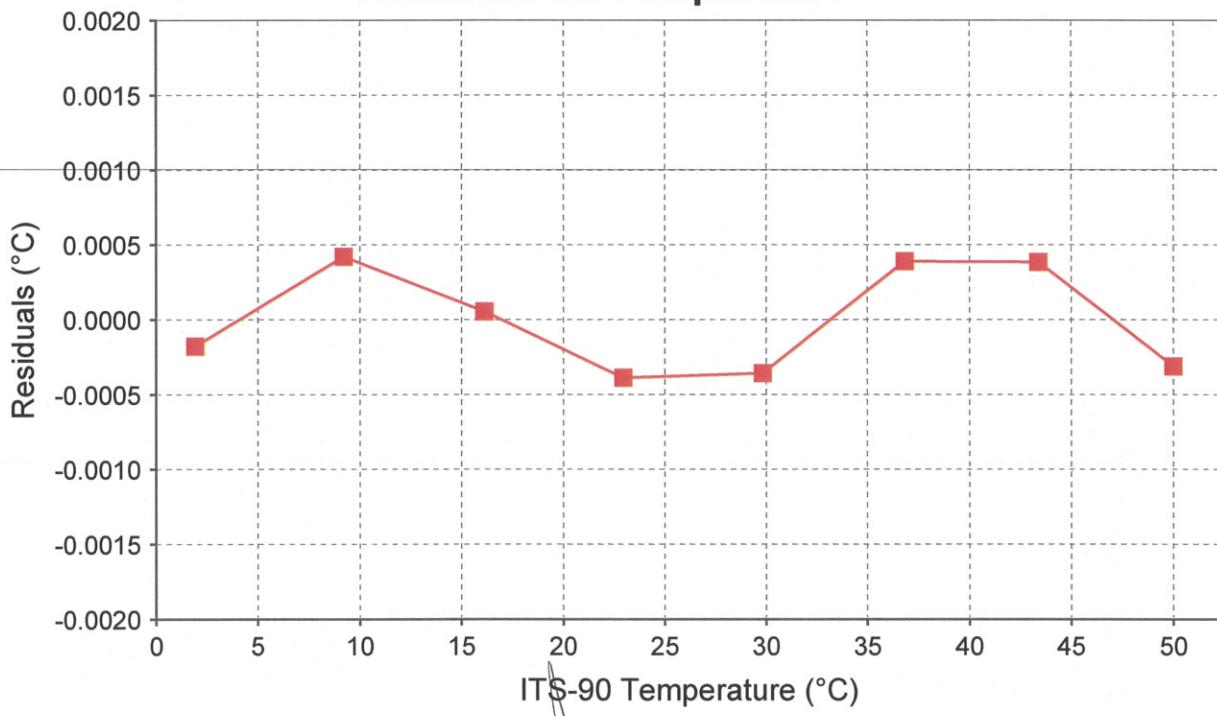
Calibration ID: 2090

RBR Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 10

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.630095	-0.00018	0.003500812818554
9.21086	0.540489	0.00042	-0.000250653052962
16.13226	0.456169	0.00005	0.000002479658302
22.96469	0.378467	-0.00039	-0.000000075561664
29.84559	0.308764	-0.00036	
36.83539	0.248186	0.00039	
43.40987	0.200694	0.00038	
50.01219	0.161542	-0.00031	

Residuals vs. Temperature



Operator Signature:

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2091

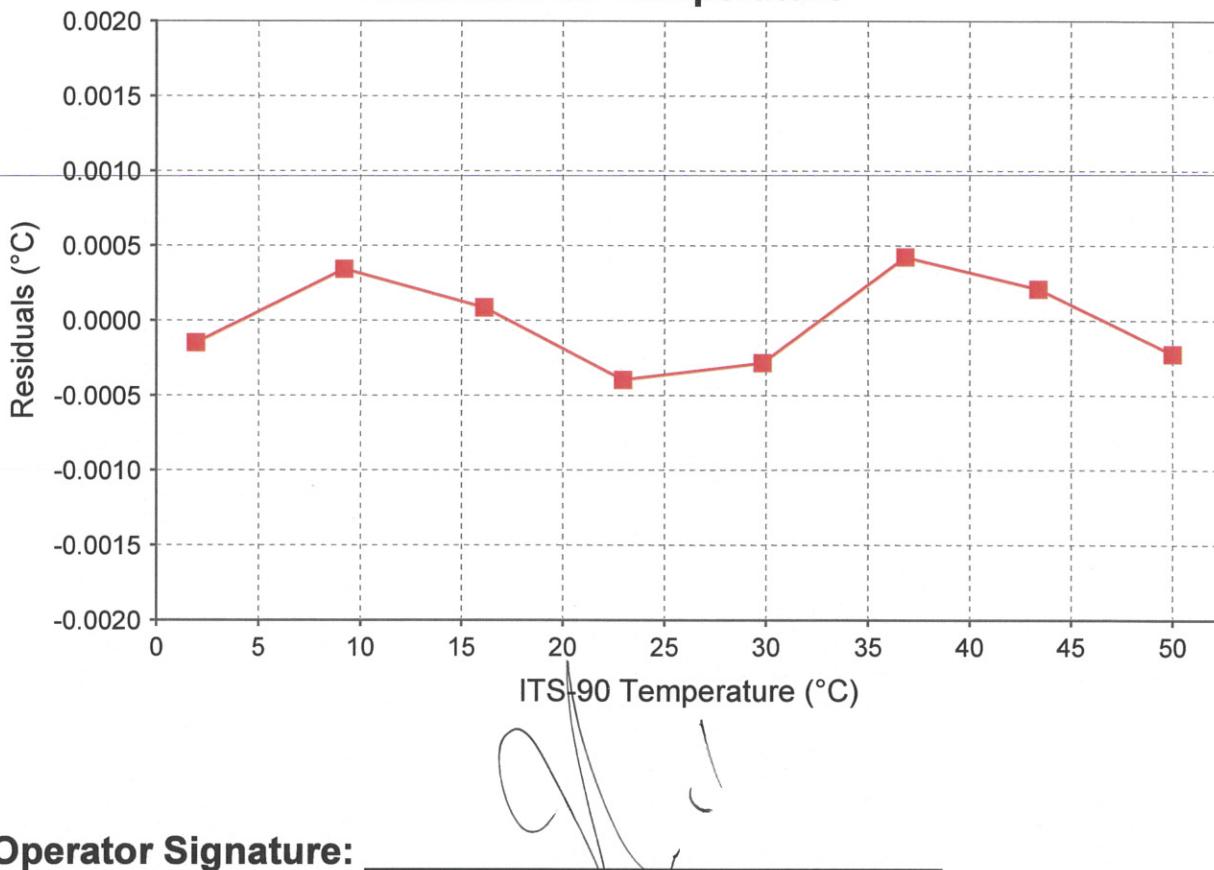
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 11

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.663261	-0.00015	0.003464114454922
9.21086	0.576463	0.00034	-0.000250493314673
16.13226	0.492729	0.00008	0.000002383331978
22.96469	0.413717	-0.00040	-0.000000070849748
29.84559	0.341261	-0.00029	
36.83540	0.277024	0.00042	
43.40987	0.225808	0.00021	
50.01219	0.182992	-0.00022	

Residuals vs. Temperature



Operator Signature: _____

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2092

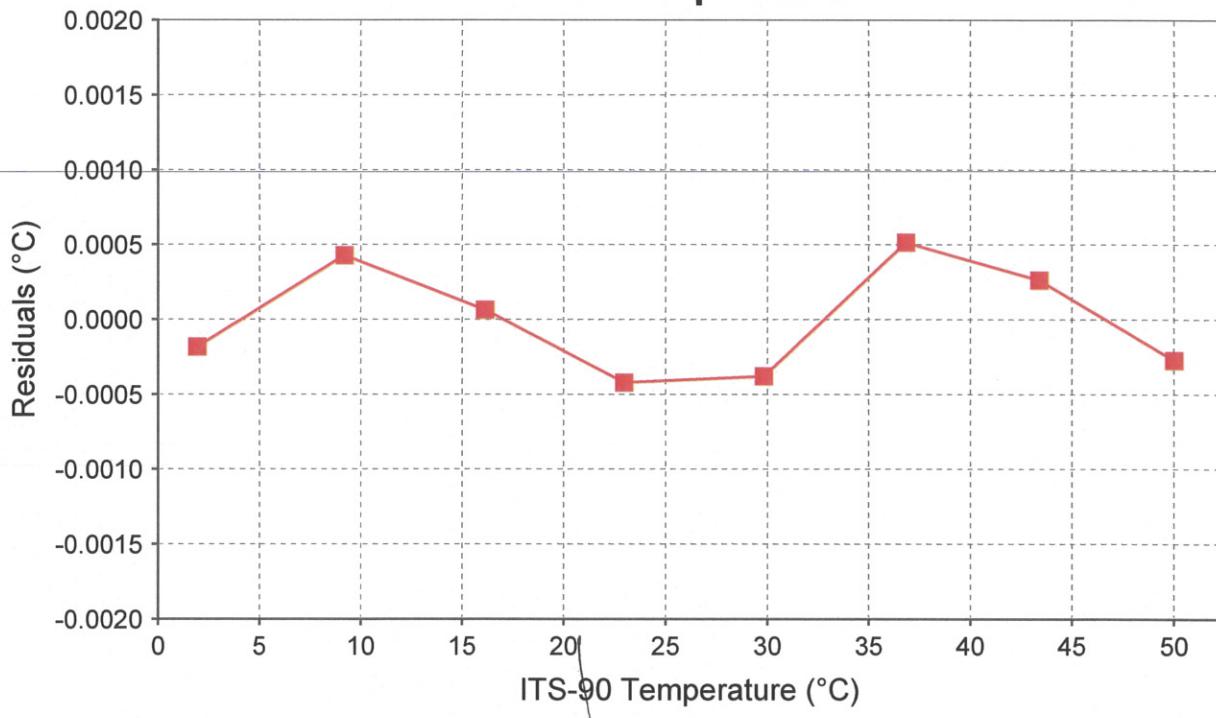
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 12

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.654354	-0.00018	0.003474087991827
9.21086	0.566740	0.00043	-0.000250578826237
16.13226	0.482778	0.00006	0.000002455371023
22.96470	0.404049	-0.00042	-0.000000060641018
29.84559	0.332276	-0.00038	
36.83539	0.268981	0.00051	
43.40987	0.218746	0.00026	
50.01219	0.176909	-0.00027	

Residuals vs. Temperature



Operator Signature:

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2093

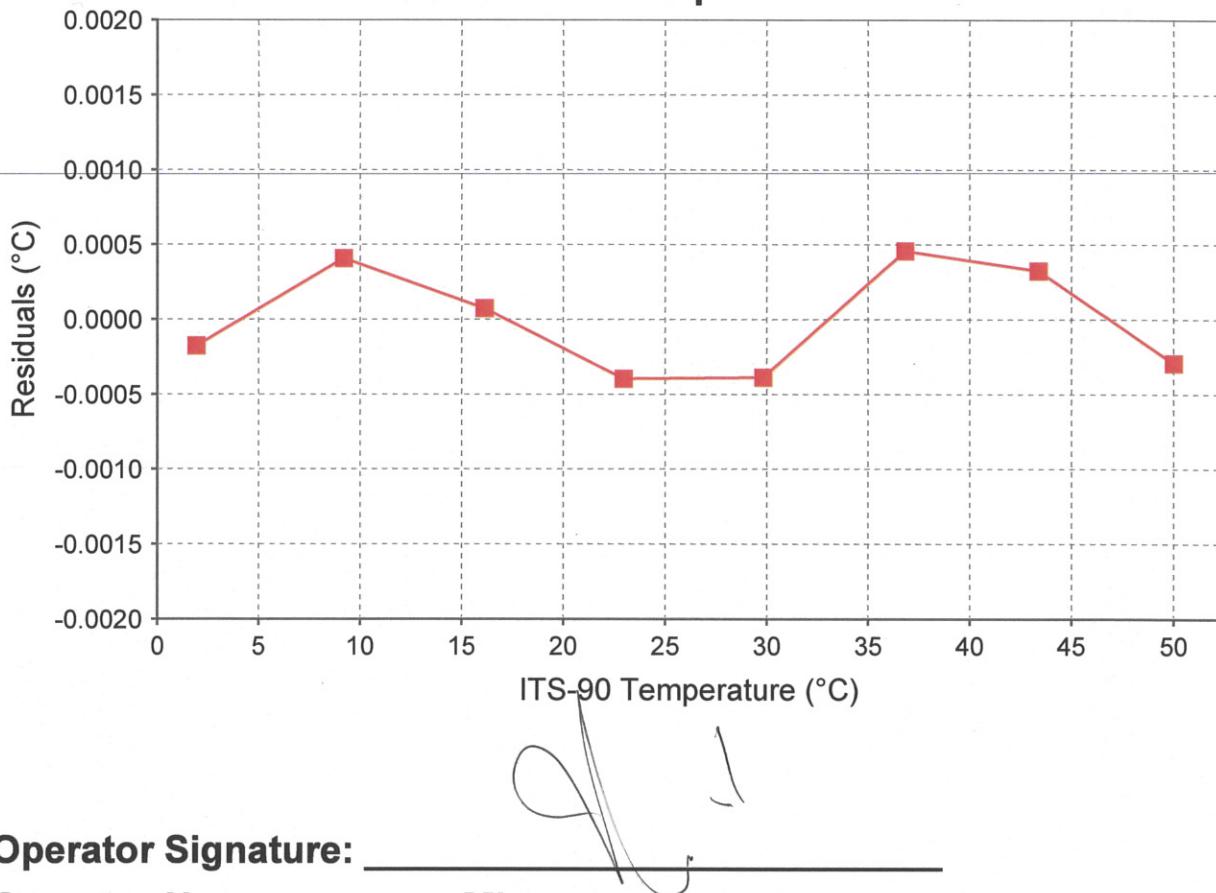
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 13

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.607636	-0.00018	0.003524921296540
9.21086	0.516583	0.00041	-0.000250615935580
16.13226	0.432307	0.00007	0.000002549109667
22.96470	0.355842	-0.00040	-0.000000070294734
29.84559	0.288218	-0.00039	
36.83539	0.230186	0.00046	
43.40987	0.185174	0.00032	
50.01219	0.148386	-0.00029	

Residuals vs. Temperature



Operator Signature:

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2094

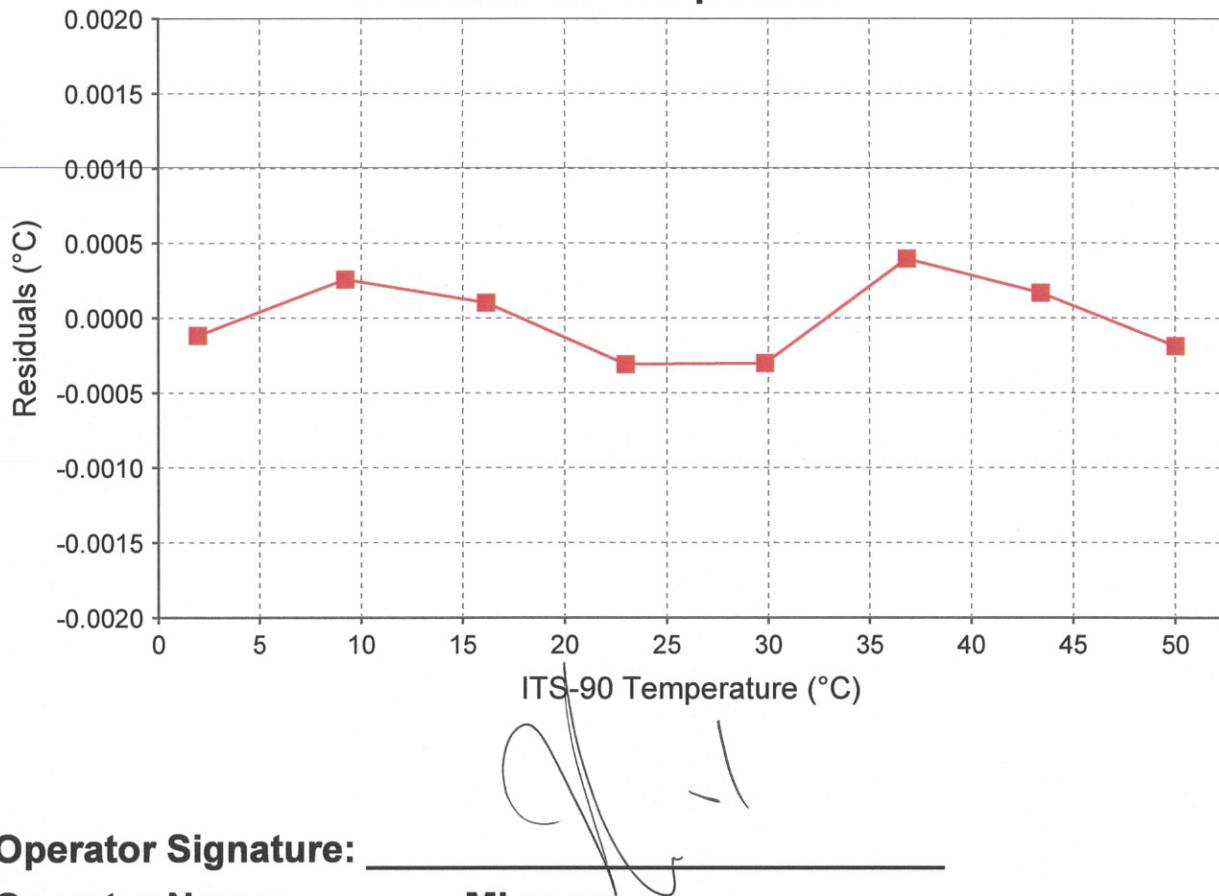
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 14

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.668054	-0.00012	0.003459051093650
9.21086	0.581553	0.00026	-0.000249867273233
16.13226	0.497778	0.00010	0.000002455925728
22.96469	0.418450	-0.00031	-0.000000062949595
29.84559	0.345481	-0.00030	
36.83540	0.280621	0.00040	
43.40987	0.228806	0.00017	
50.01219	0.185428	-0.00019	

Residuals vs. Temperature



Operator Signature:

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2095

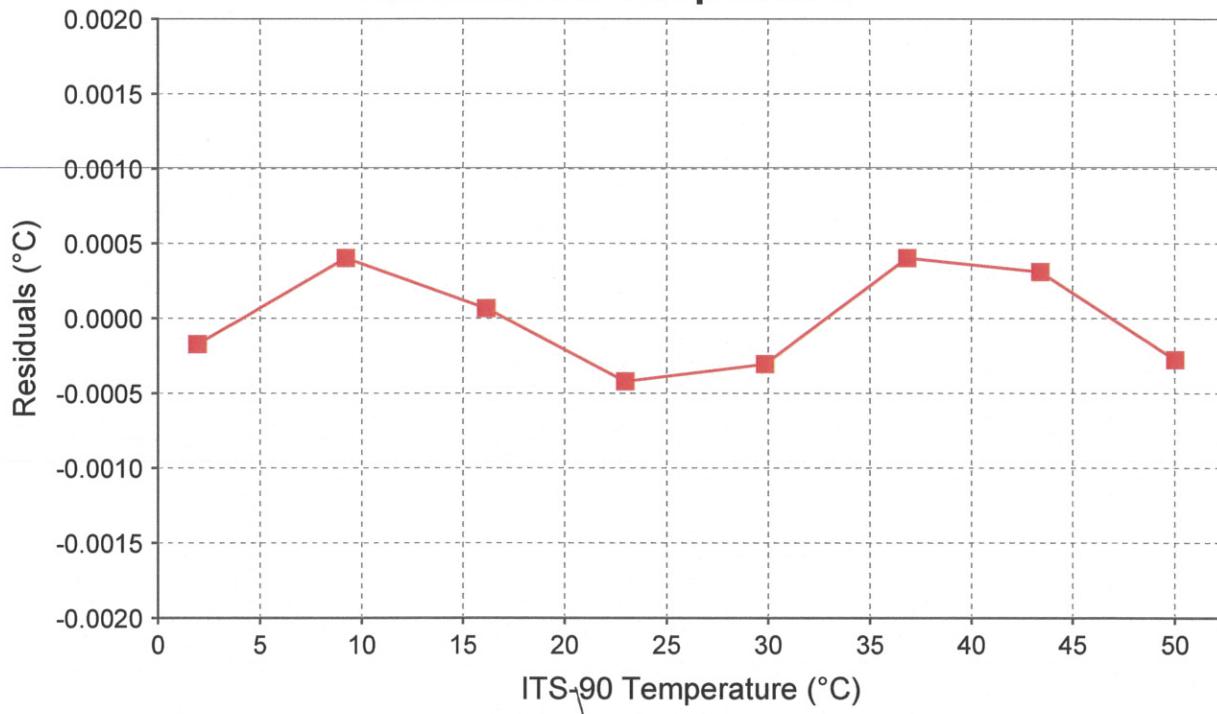
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 15

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.611348	-0.00017	0.003520871516358
9.21086	0.520591	0.00040	-0.000250854298390
16.13226	0.436359	0.00007	0.000002541152448
22.96469	0.359728	-0.00042	-0.000000064643368
29.84559	0.291782	-0.00031	
36.83540	0.233339	0.00040	
43.40987	0.187914	0.00031	
50.01219	0.150725	-0.00028	

Residuals vs. Temperature



Operator Signature:

Operator Name: MLuong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2097

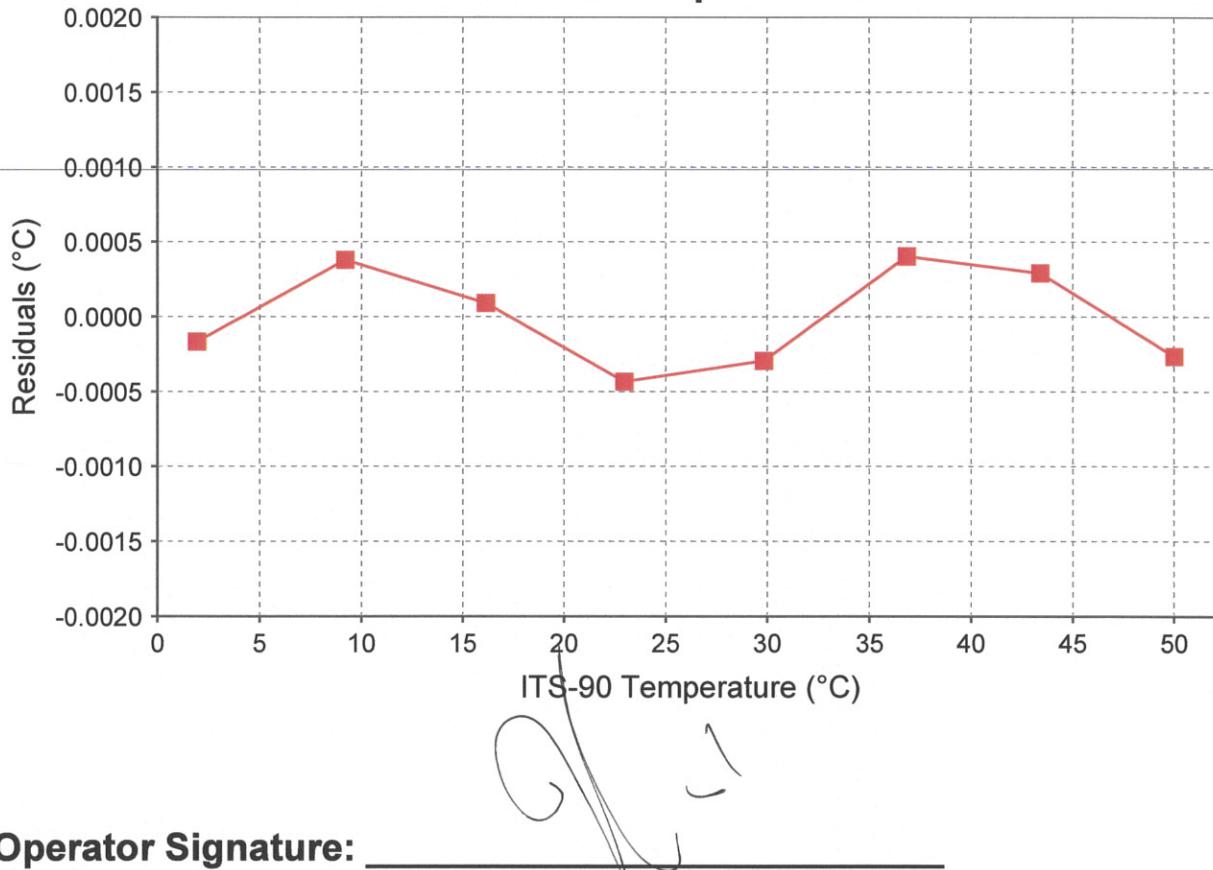
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 16

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.634510	-0.00017	0.003495749504368
9.21086	0.545405	0.00038	-0.000251095721771
16.13226	0.461268	0.00009	0.000002508956199
22.96470	0.383468	-0.00043	-0.000000061273810
29.84559	0.313439	-0.00029	
36.83539	0.252383	0.00040	
43.40987	0.204381	0.00029	
50.01219	0.164710	-0.00027	

Residuals vs. Temperature



Operator Signature:

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2098

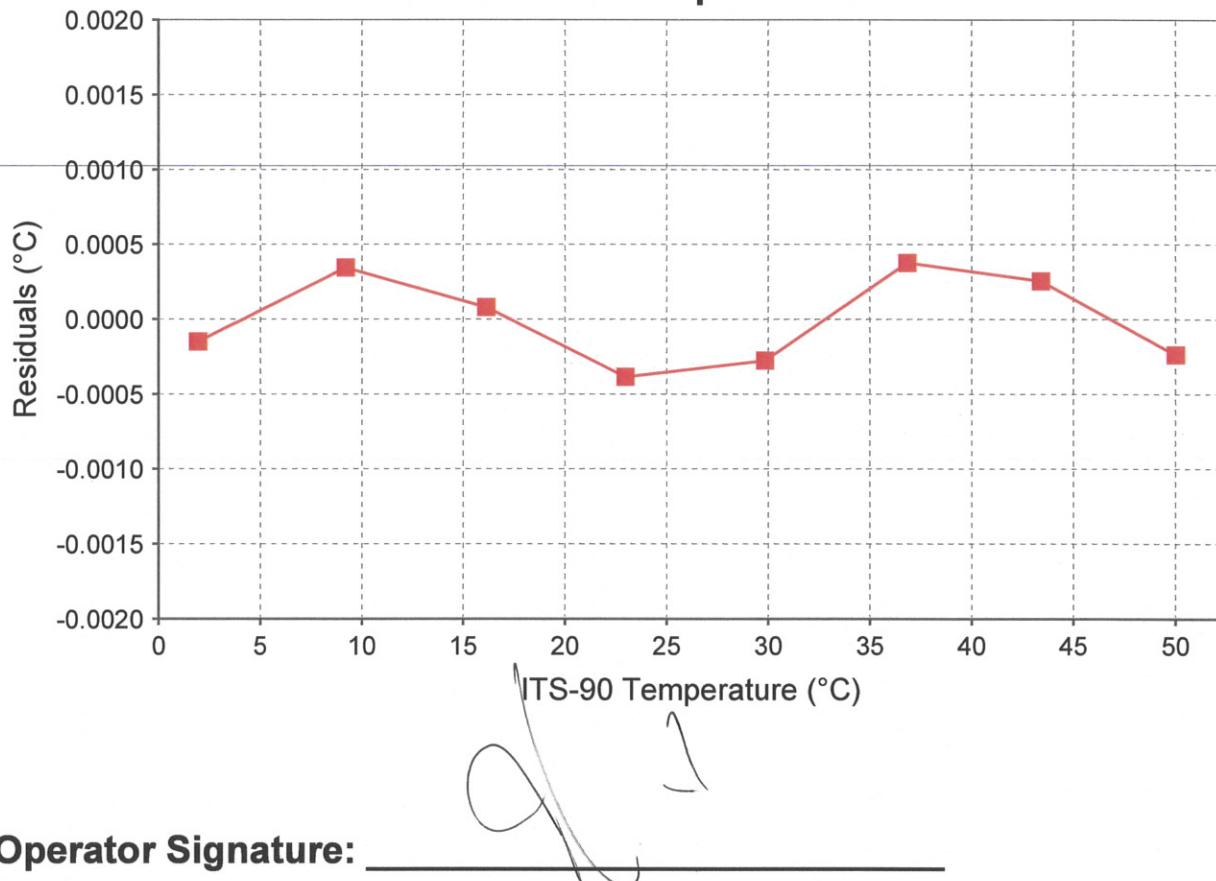
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 17

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.591548	-0.00015	0.003541519680004
9.21086	0.500043	0.00034	-0.000251527836026
16.13226	0.416333	0.00008	0.000002550485975
22.96469	0.341166	-0.00039	-0.000000066439307
29.84559	0.275288	-0.00028	
36.83540	0.219186	0.00038	
43.40987	0.175932	0.00025	
50.01219	0.140741	-0.00024	

Residuals vs. Temperature



Operator Signature:

Operator Name: MLuong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2099

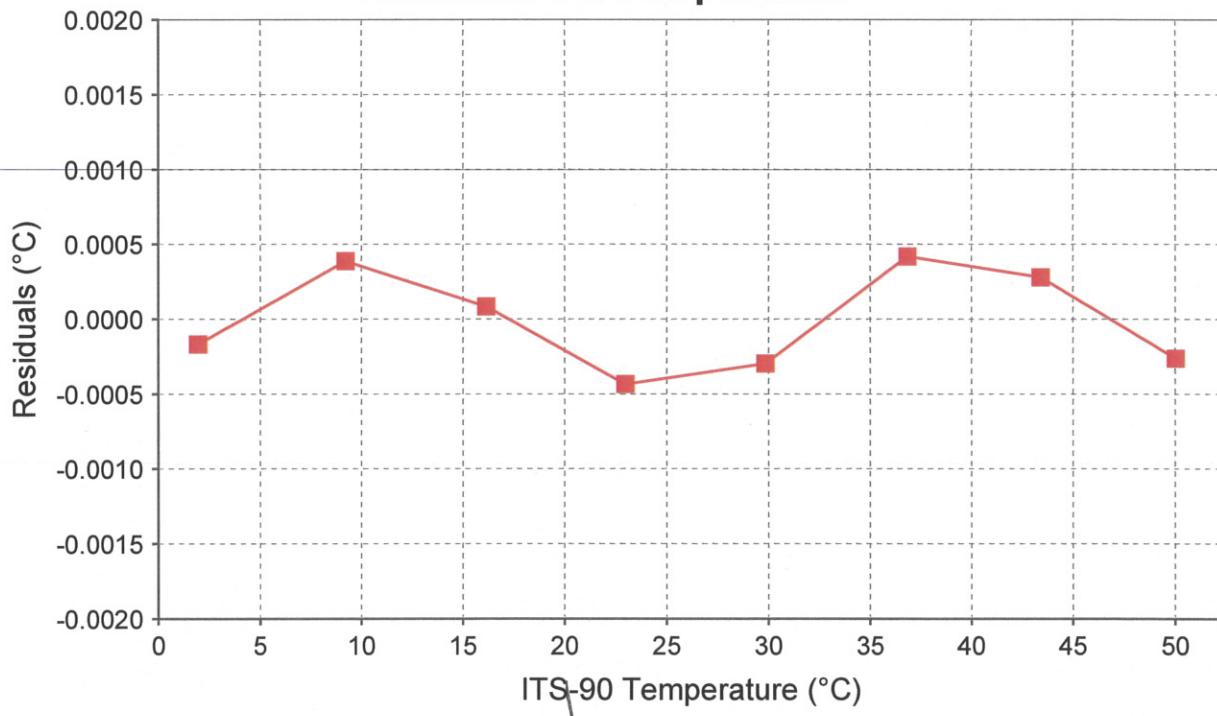
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 18

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.609406	-0.00017	0.003522732013995
9.21086	0.518709	0.00039	-0.000251319225037
16.13226	0.434647	0.00008	0.000002537877028
22.96469	0.358254	-0.00044	-0.000000065093758
29.84559	0.290574	-0.00030	
36.83539	0.232392	0.00042	
43.40987	0.187184	0.00028	
50.01219	0.150175	-0.00026	

Residuals vs. Temperature



Operator Signature:

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2100

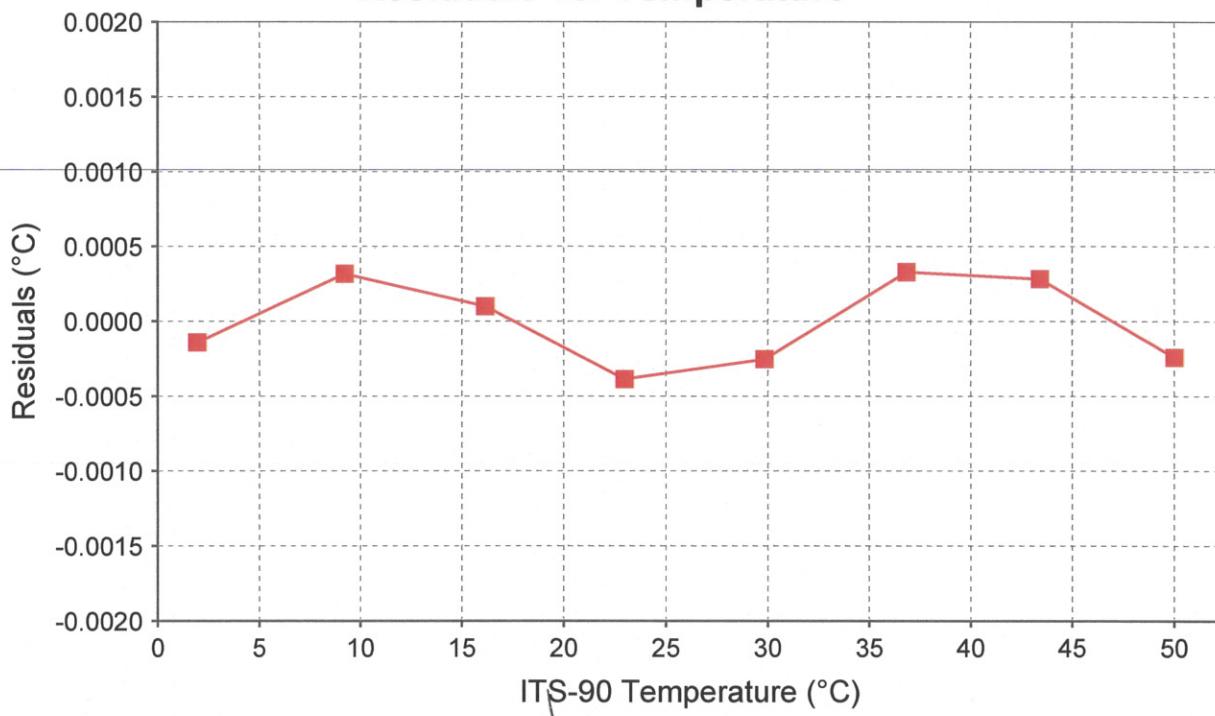
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 19

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.600859	-0.00014	0.003531565635949
9.21086	0.509916	0.00032	-0.000251920490258
16.13226	0.426162	0.00010	0.000002475330897
22.96469	0.350478	-0.00039	-0.000000061669372
29.84559	0.283753	-0.00025	
36.83539	0.226624	0.00033	
43.40987	0.182371	0.00028	
50.01219	0.146230	-0.00024	

Residuals vs. Temperature



Operator Signature:

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2101

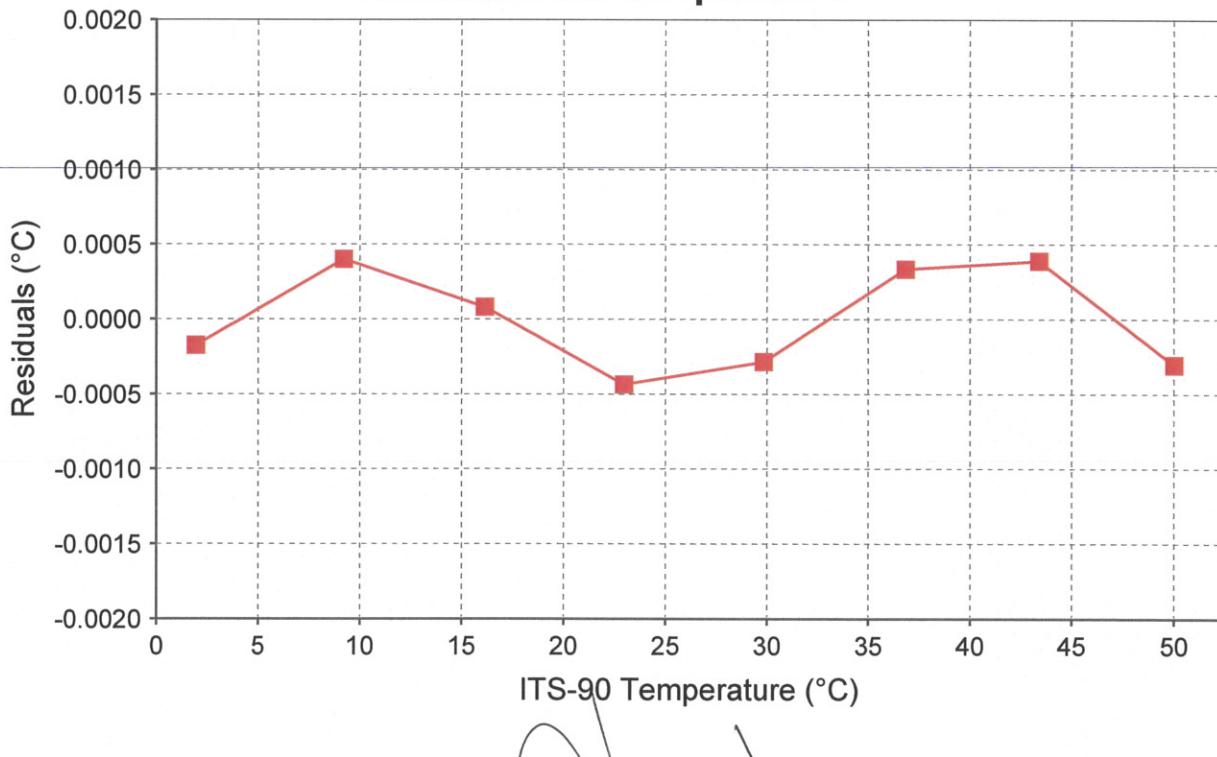
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 20

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.620914	-0.00018	0.003510220553284
9.21086	0.531051	0.00040	-0.000251704903828
16.13226	0.447059	0.00008	0.000002491944830
22.96470	0.370109	-0.00044	-0.000000047073647
29.84559	0.301418	-0.00029	
36.83539	0.241955	0.00033	
43.40987	0.195474	0.00039	
50.01219	0.157236	-0.00031	

Residuals vs. Temperature



Operator Signature:

Operator Name:

MLuong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2102

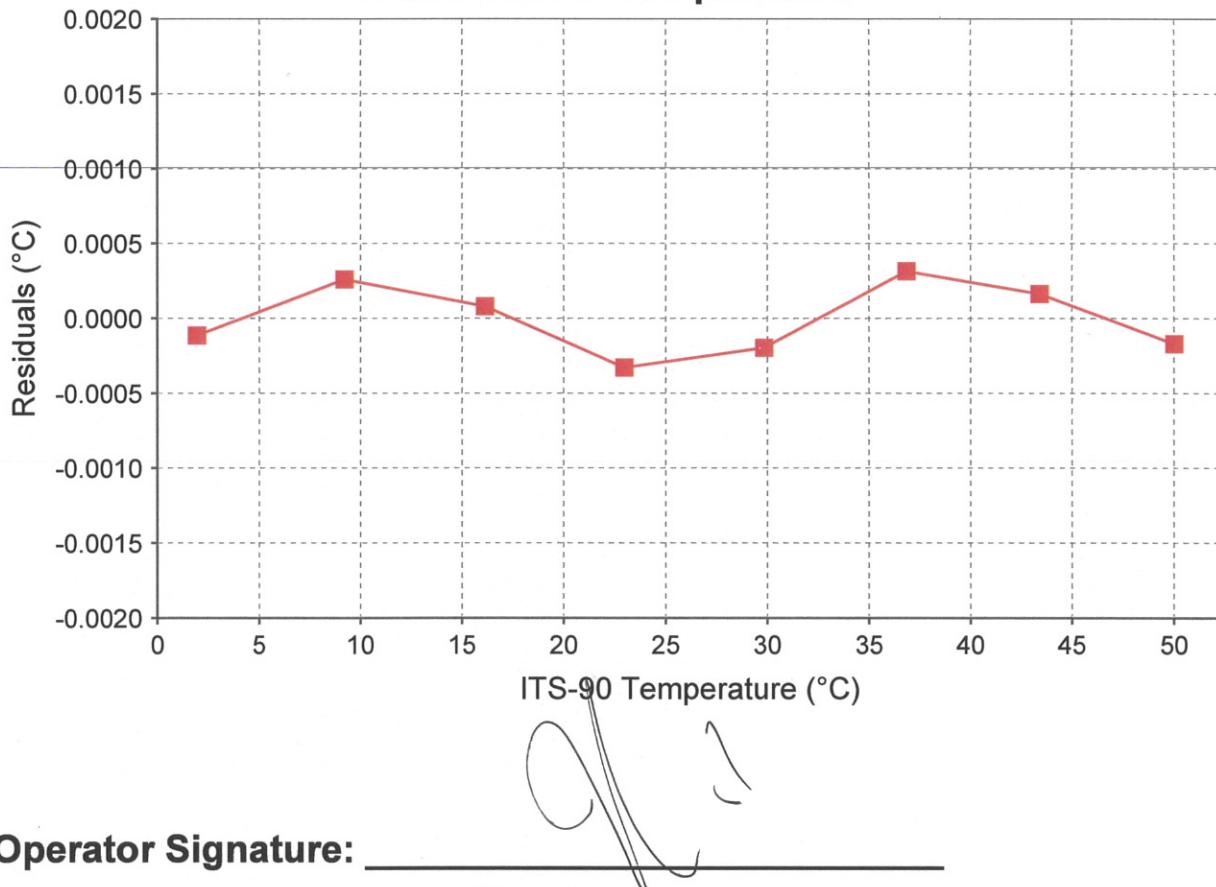
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 21

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.596381	-0.00012	0.003536558458089
9.21086	0.504980	0.00026	-0.000251233105106
16.13226	0.421077	0.00008	0.000002520629918
22.96470	0.345511	-0.00033	-0.000000068640971
29.84559	0.279111	-0.00020	
36.83539	0.222442	0.00031	
43.40987	0.178673	0.00016	
50.01219	0.143017	-0.00017	

Residuals vs. Temperature



Operator Signature:

Operator Name: MLuong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2103

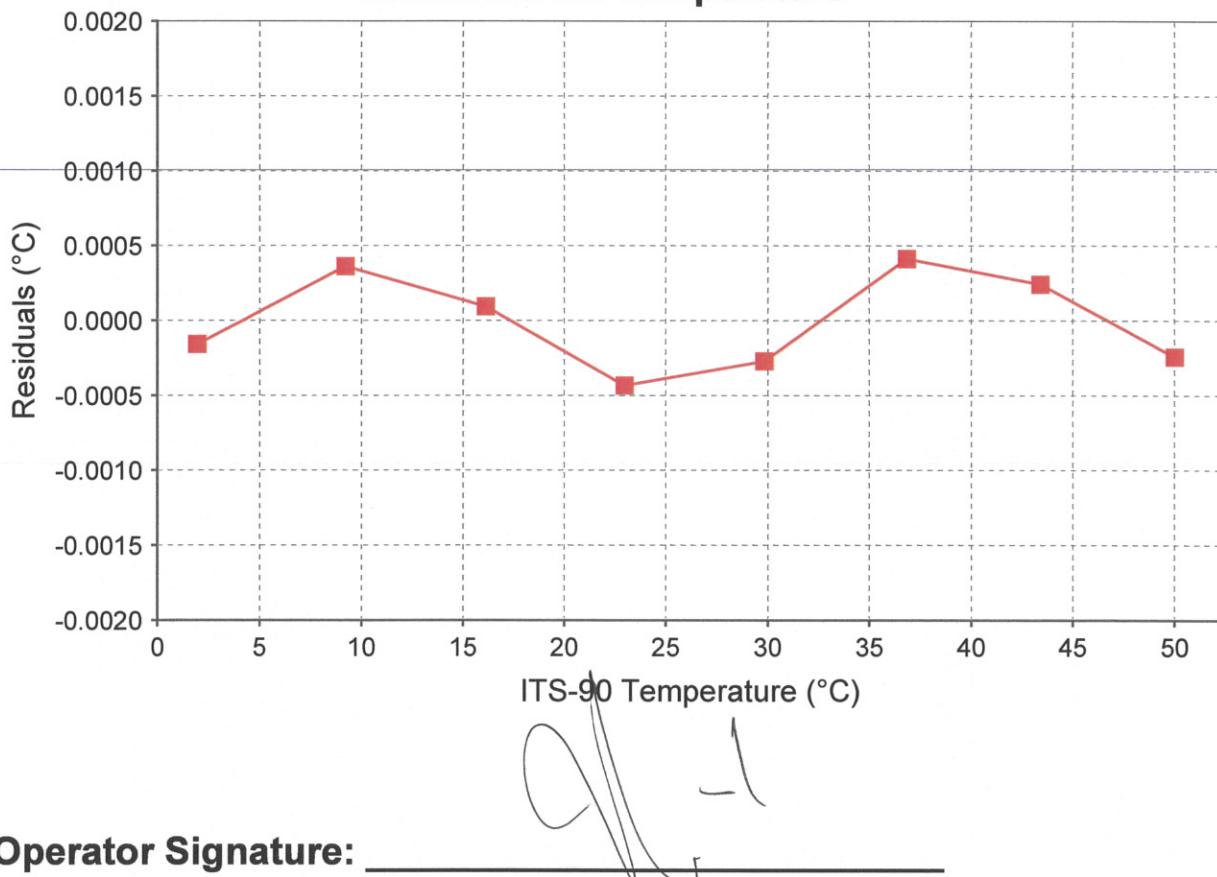
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 22

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.643125	-0.00016	0.003486792479654
9.21086	0.554390	0.00036	-0.000250204438102
16.13226	0.470062	0.00009	0.000002503796604
22.96469	0.391637	-0.00043	-0.000000055411798
29.84559	0.320695	-0.00027	
36.83540	0.258583	0.00041	
43.40987	0.209593	0.00024	
50.01219	0.169007	-0.00024	

Residuals vs. Temperature



Operator Signature: _____

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2104

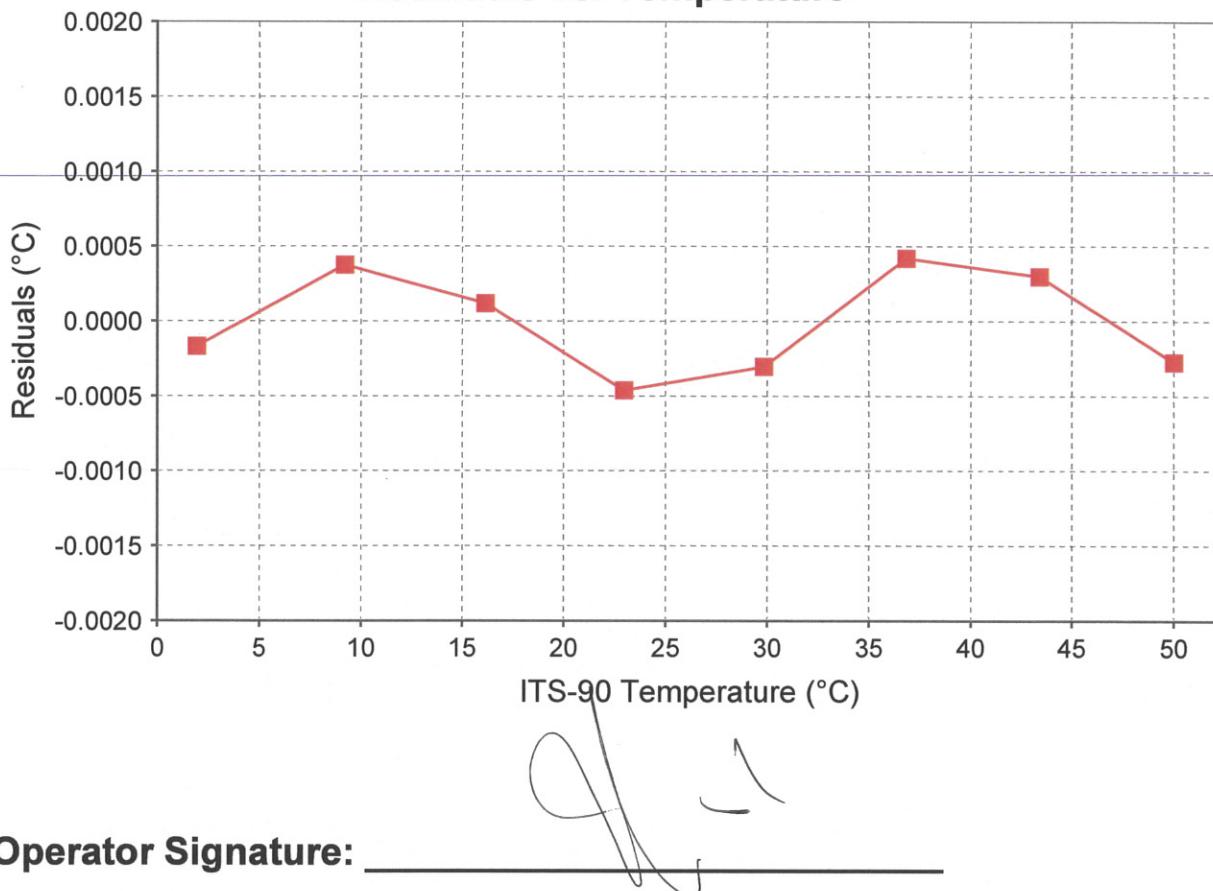
RBR

Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 23

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
1.95098	0.660778	-0.00017	0.003467575208700
9.21086	0.573392	0.00037	-0.000249471443927
16.13226	0.489229	0.00012	0.000002480432585
22.96470	0.409973	-0.00046	-0.000000050872773
29.84559	0.337455	-0.00030	
36.83539	0.273319	0.00042	
43.40987	0.222306	0.00030	
50.01219	0.179762	-0.00027	

Residuals vs. Temperature



Operator Signature:

Operator Name: MLuong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2105

RBR

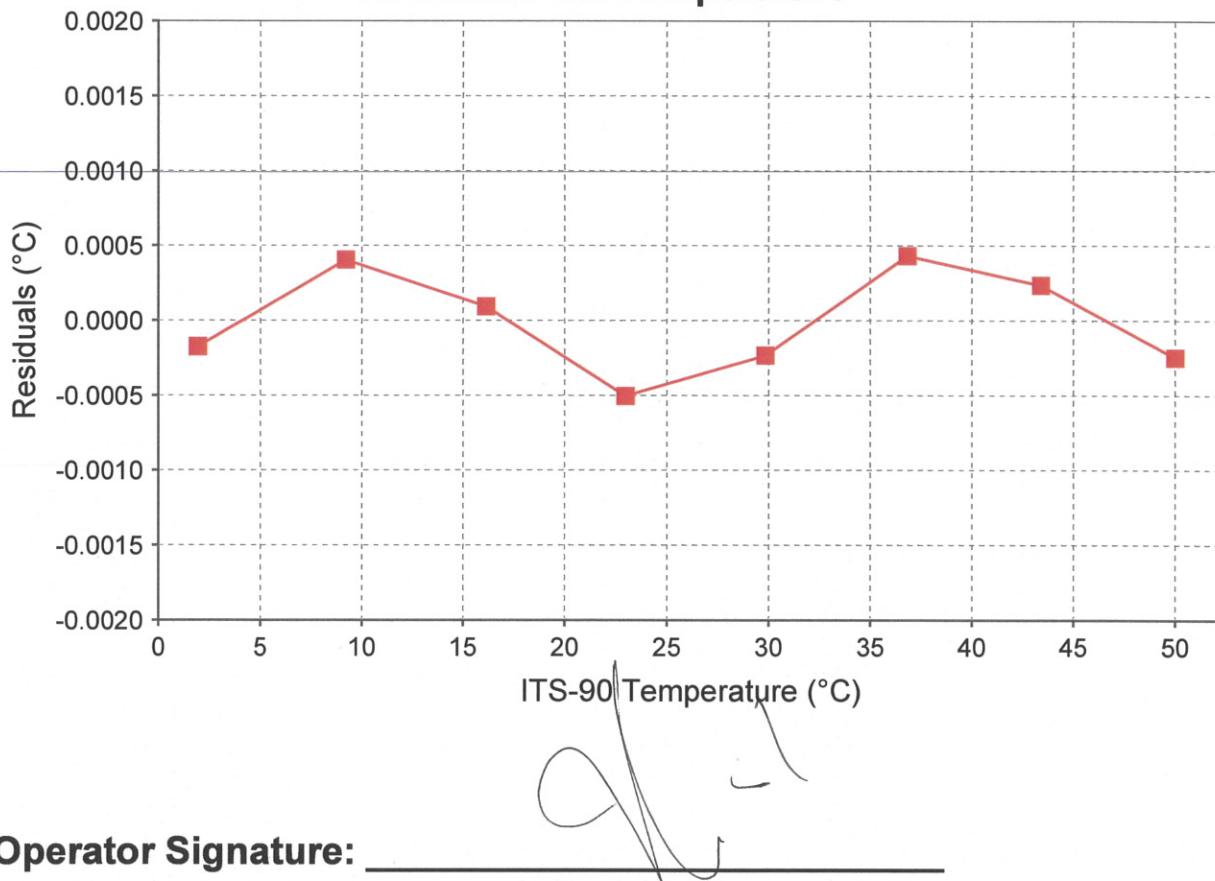
Temperature Calibration Certificate

Logger ID: XR-420 Serial No: 021969 Channel No: 24

ITS-90 Temp	Voltage Ratio	Residuals	Coefficients
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1.95098	0.610821	-0.00017	0.003521195154777
9.21086	0.520227	0.00040	-0.000251390264974
16.13226	0.436177	0.00009	0.000002524795243
22.96470	0.359718	-0.00050	-0.000000056547630
29.84559	0.291915	-0.00023	
36.83539	0.233574	0.00043	
43.40987	0.188209	0.00023	
50.01219	0.151046	-0.00025	

Residuals vs. Temperature



Operator Signature:

Operator Name: M Luong

Calibration Date: 7/Nov/2012

Print Date:

Calibration ID: 2106

RBR Calibration Shipping Certificate

Calibration values for all channels when shipped.

Logger ID: XR-420 Serial No: 21969

2012/Nov/07 14:11:39

1: 0.003528263409430 -0.000251341003402 0.000002511825711 -0.000000073297298
2: 0.003498965988283 -0.000251064647972 0.000002448508577 -0.000000062347388
3: 0.003471887797304 -0.000250010484373 0.000002452873768 -0.000000065022510
4: 0.003533725959622 -0.000251407886519 0.000002554904663 -0.000000071247491
5: 0.003516301846603 -0.000252008137139 0.000002509358665 -0.000000057289023
6: 0.003538843150985 -0.000251953103966 0.000002494055251 -0.000000067056885
7: 0.003478497030097 -0.000250537875533 0.000002467967863 -0.000000061804171
8: 0.003479381707780 -0.000251102731484 0.000002419050744 -0.000000042607778
9: 0.003534744475253 -0.000251755914728 0.000002478721348 -0.000000071496321
10: 0.003500812818554 -0.000250653052962 0.000002479658302 -0.000000075561664
11: 0.003464114454922 -0.000250493314673 0.000002383331978 -0.000000070849748
12: 0.003474087991827 -0.000250578826237 0.000002455371023 -0.000000060641018
13: 0.003524921296540 -0.000250615935580 0.000002549109667 -0.000000070294734
14: 0.003459051093650 -0.000249867273233 0.000002455925728 -0.000000062949595
15: 0.003520871516358 -0.000250854298390 0.000002541152448 -0.000000064643368
16: 0.003495749504368 -0.000251095721771 0.000002508956199 -0.000000061273810
17: 0.003541519680004 -0.000251527836026 0.000002550485975 -0.000000066439307
18: 0.003522732013995 -0.000251319225037 0.000002537877028 -0.000000065093758
19: 0.003531565635949 -0.000251920490258 0.000002475330897 -0.000000061669372
20: 0.003510220553284 -0.000251704903828 0.000002491944830 -0.000000047073647
21: 0.003536558458089 -0.000251233105106 0.000002520629918 -0.000000068640971
22: 0.003486792479654 -0.000250204438102 0.000002503796604 -0.000000055411798
23: 0.003467575208700 -0.000249471443927 0.000002480432585 -0.000000050872773
24: 0.003521195154777 -0.000251390264974 0.000002524795243 -0.000000056547630

Operator: _____

9/Nov/2012