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Report No. Y/LB-15,968

OAK RIDGE

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**NWIS CASTING MEASUREMENTS
TAKEN DURING DEMONSTRATIONS
TO RUSSIAN VISITORS**

**J. A. Mullens
T. E. Valentine
J. T. Mihalczo**

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JUN 08 1998
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**Nuclear Materials Management and
Storage Program Office**

April 15, 1998

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**Prepared by the
Oak Ridge Y-12 Plant
Oak Ridge, Tennessee 37831
managed by
Lockheed Martin Energy Systems, Inc.
for the
U.S. DEPARTMENT OF ENERGY
under contract DE-AC05-84OR21400**

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NWIS Casting Measurements Taken During Demonstrations to Russian Visitors

This report describes a set of NWIS measurements made during demonstrations to Russian visitors on August 28, 1997. These measurements will be given to the Russian visitors from Arzamus-16 as part of their NWIS training (part of a DOE laboratory-to-laboratory exchange program).

These measurements are made on standard highly enriched Uranium annular castings (as used for storage). Associated NWIS calibration runs were made in air (no casting, just the NWIS Californium source and detectors).

NWIS Casting Measurements

Table 1 lists the casting measurements in this set. Each measurement contains data from the ^{252}Cf detector and two detectors. The Uranium casting was between the Cf source and the other detectors.

Table 1 Casting Measurements for Aug 28, 1997 NWIS demonstration.

Name	channels	sample rate (MHz)	block size	blocks	Det1 – Cf (cps)	Det2 (cps)	Det3 (cps)
Cast2801	3	1000	512	1.00E+08	430469	14213	9155
Cast2802	3	1000	512	1.00E+08	430527	13337	9127
Cast2803	3	1000	512	1.00E+08	430527	13767	9304
Cast2804	3	1000	512	1.00E+08	430625	14030	9404
Cast2805	3	1000	512	1.00E+08	430605	13859	9013
Cast2806	3	1000	512	1.00E+08	430703	14778	9433
Cast2807	3	1000	512	1.00E+08	430508	15052	9384
Cast2808	3	1000	512	1.00E+07	430840	13049	8525
Cast2809	3	1000	512	1.00E+07	430977	13779	8955
Cast2810	3	1000	512	1.00E+07	430352	14533	9244
Cast2811	3	1000	512	1.00E+07	430391	13564	8827
Cast2812	3	1000	512	1.00E+07	431035	15272	9416
Cast2813	3	1000	512	1.00E+07	430234	13561	8612
Cast2814	3	1000	512	1.00E+07	430781	13885	8907
Cast2815	3	1000	512	1.00E+09	430547	13409	8782
Cast2816	3	1000	512	1.00E+08	430449	12956	8887

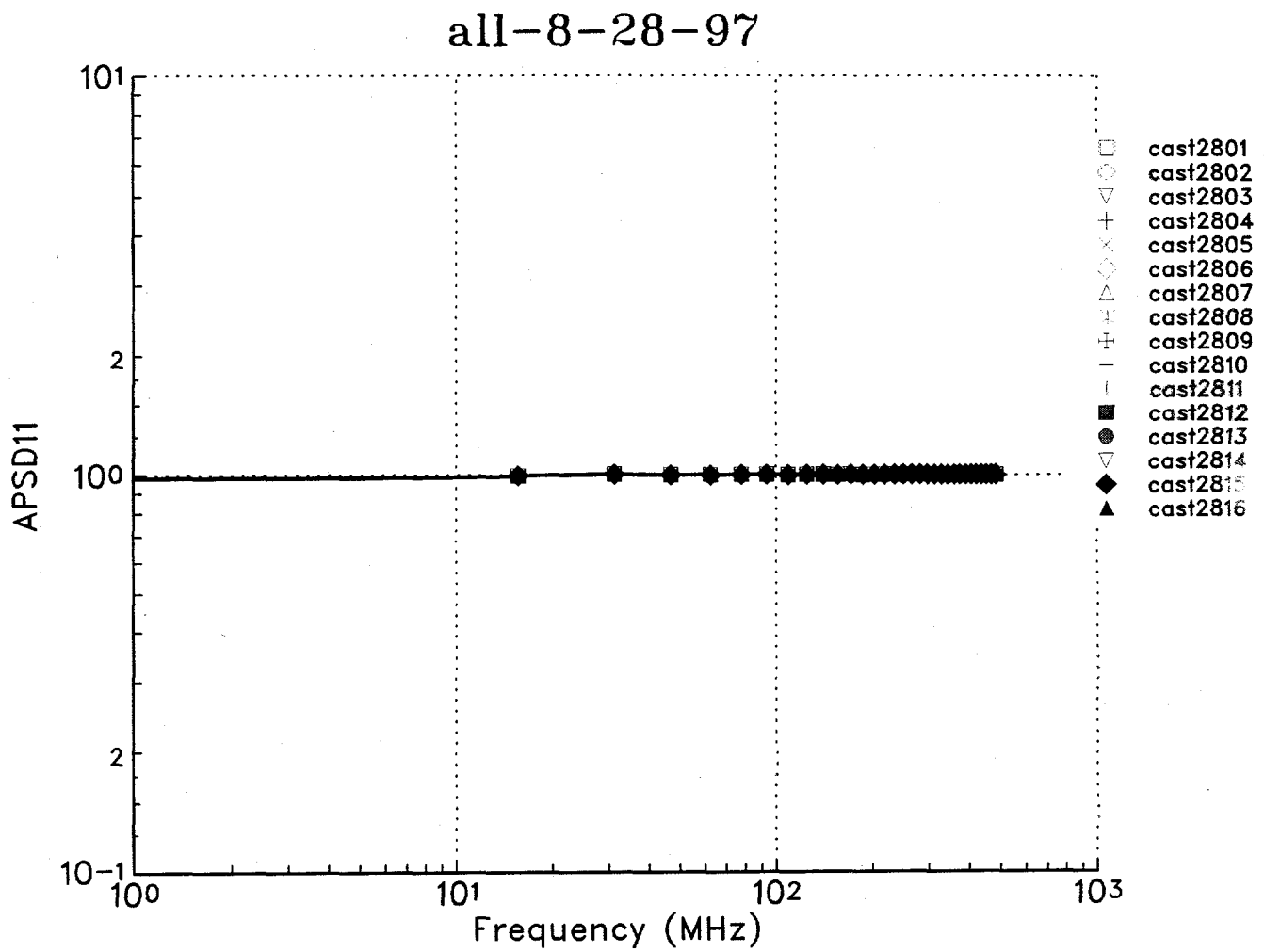
Figures 1 to 27 show the measurement signatures for these measurements.

NWIS Calibration Measurements

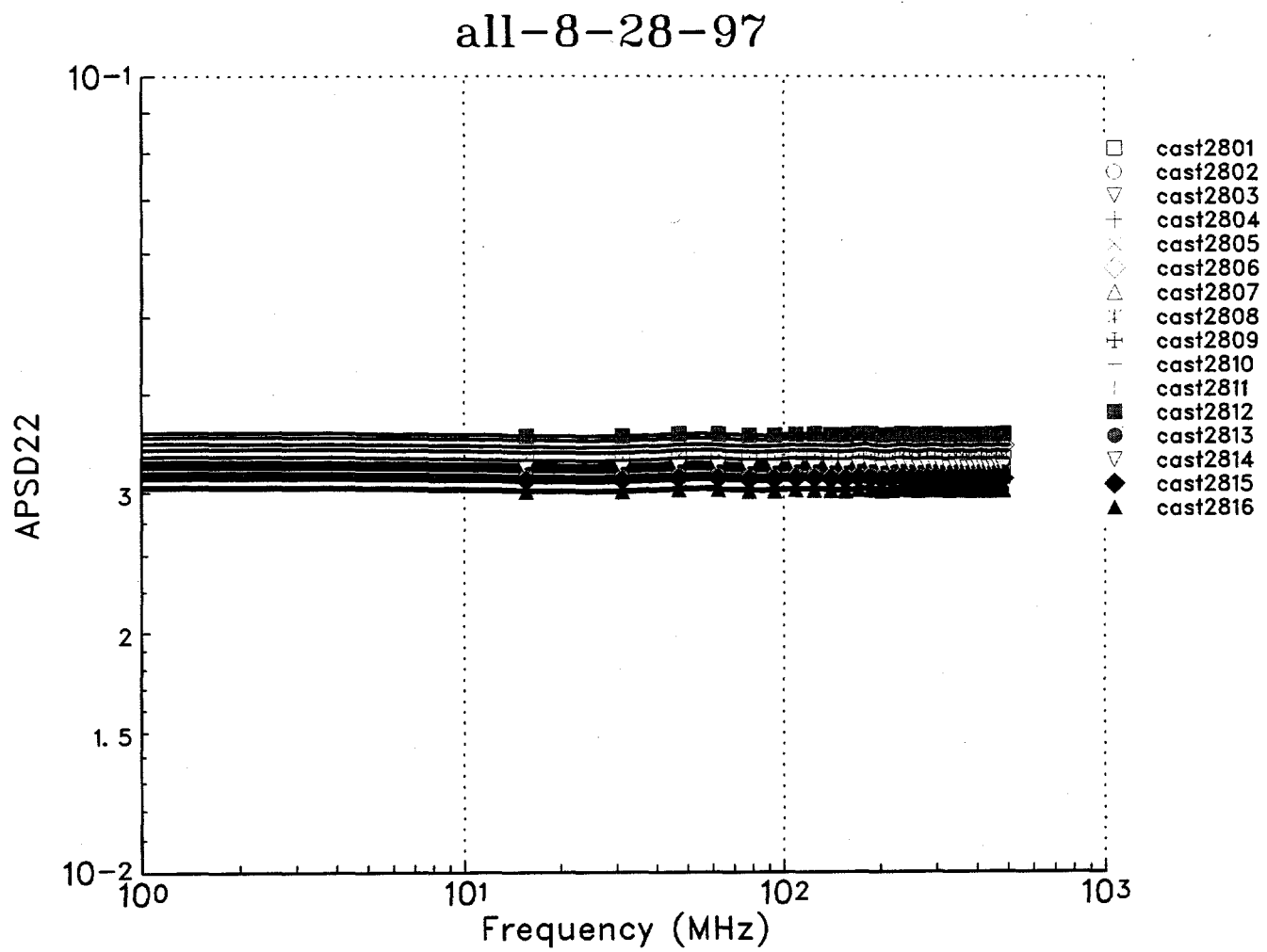
Table 2 lists the calibration measurements in this set. These measurements were made with the same detectors as the casting measurements above.

Table 2 Calibration measurements for Aug 28, 1997 NWIS demonstration.

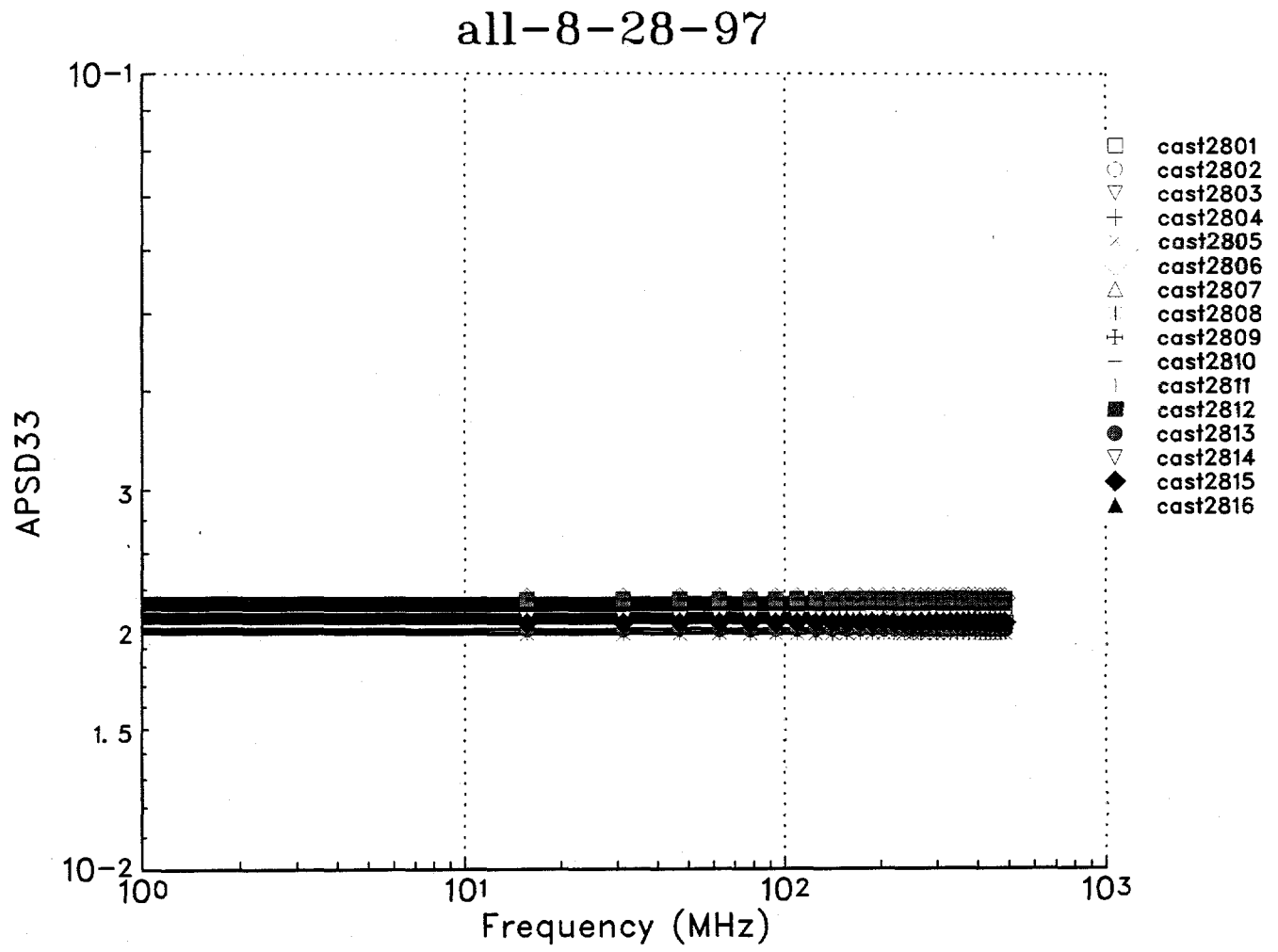
Name	channels	sample rate (MHz)	block size	blocks	Det1 – Cf (cps)	Det2 (cps)	Det3 (cps)
cal2801	3	1000	512	1.00E+08	430664	26531	19396
cal2802	3	1000	512	1.00E+09	430547	26648	19370
cal2803	3	1000	512	1.00E+08	430703	25266	19629



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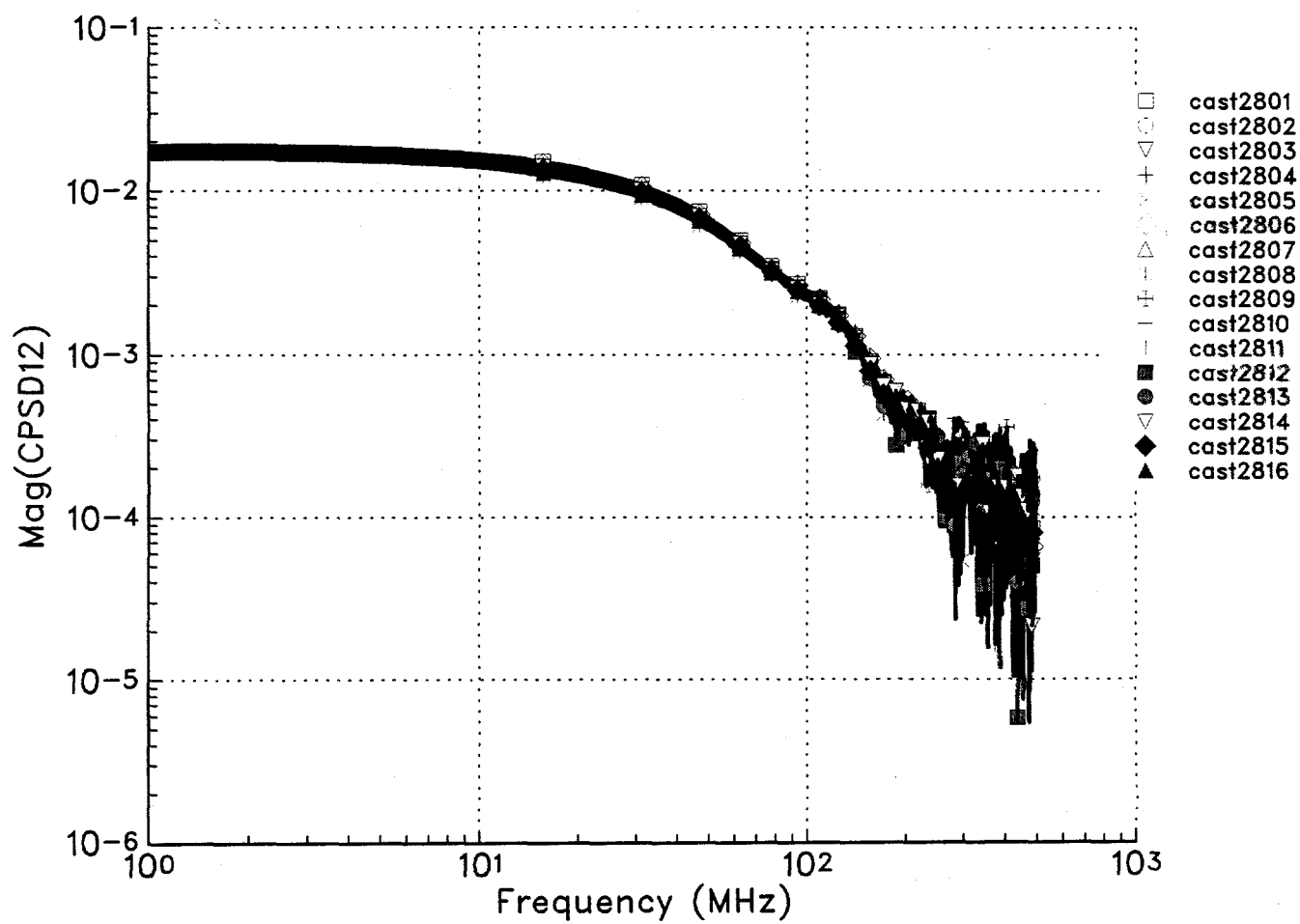


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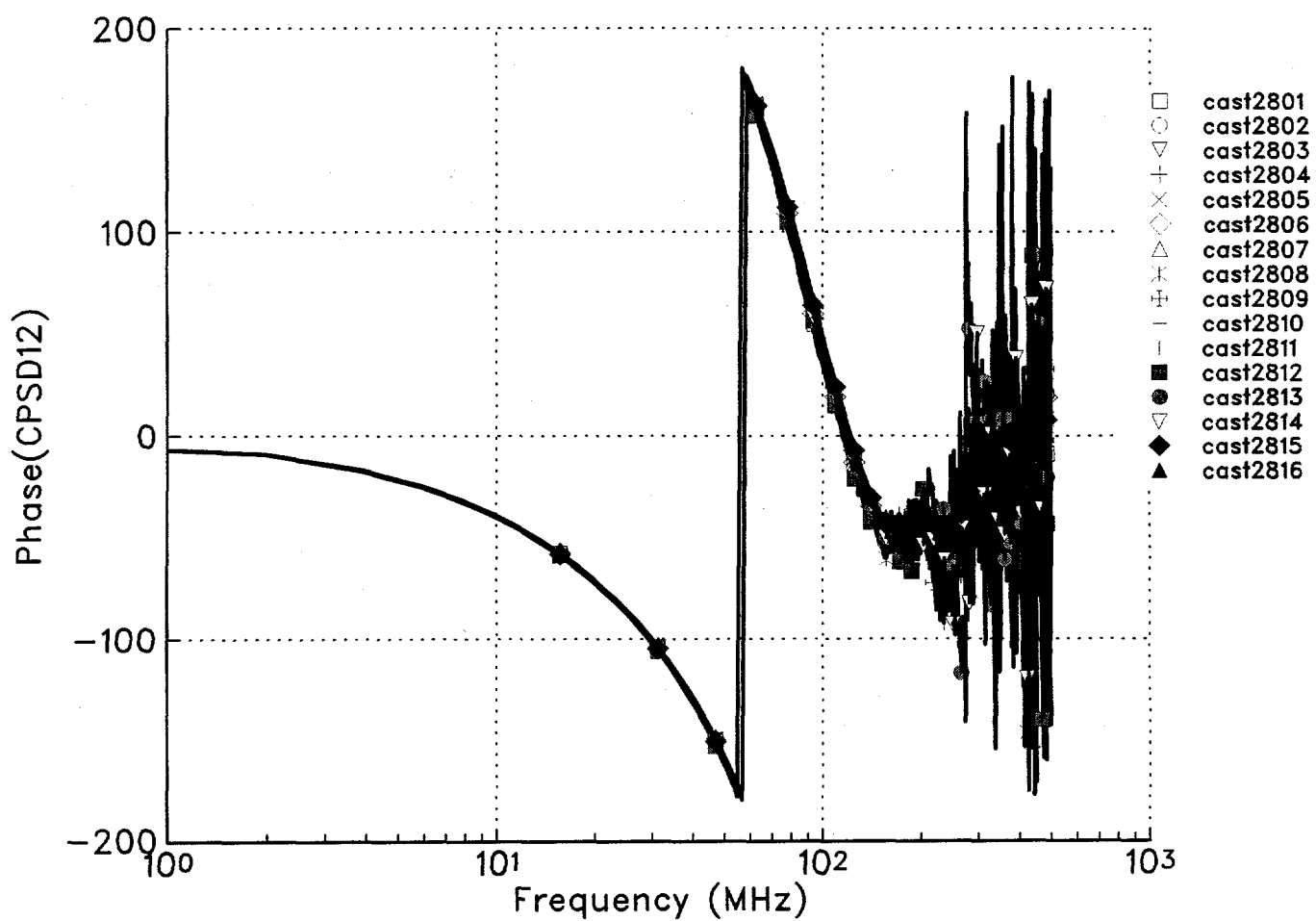


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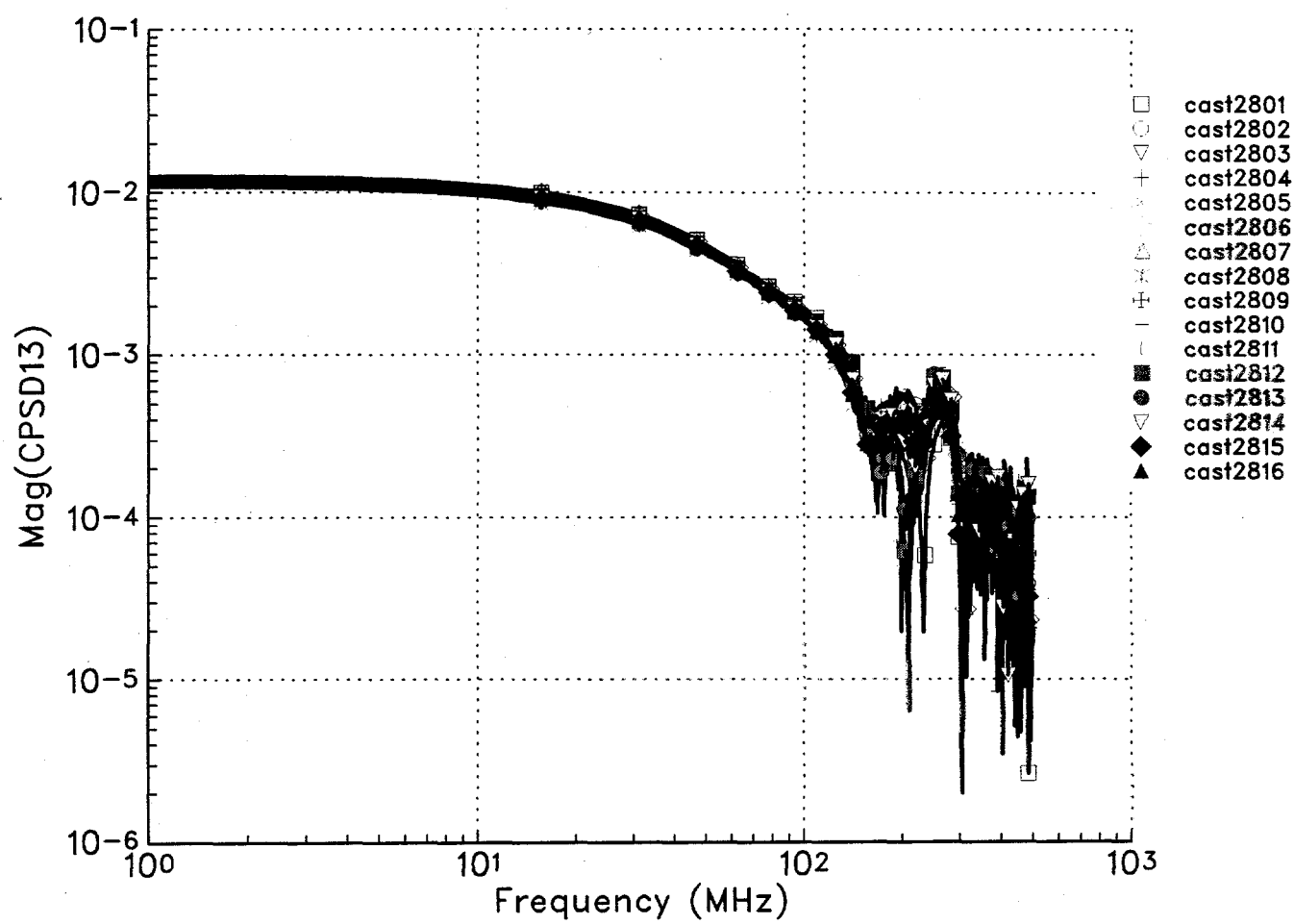


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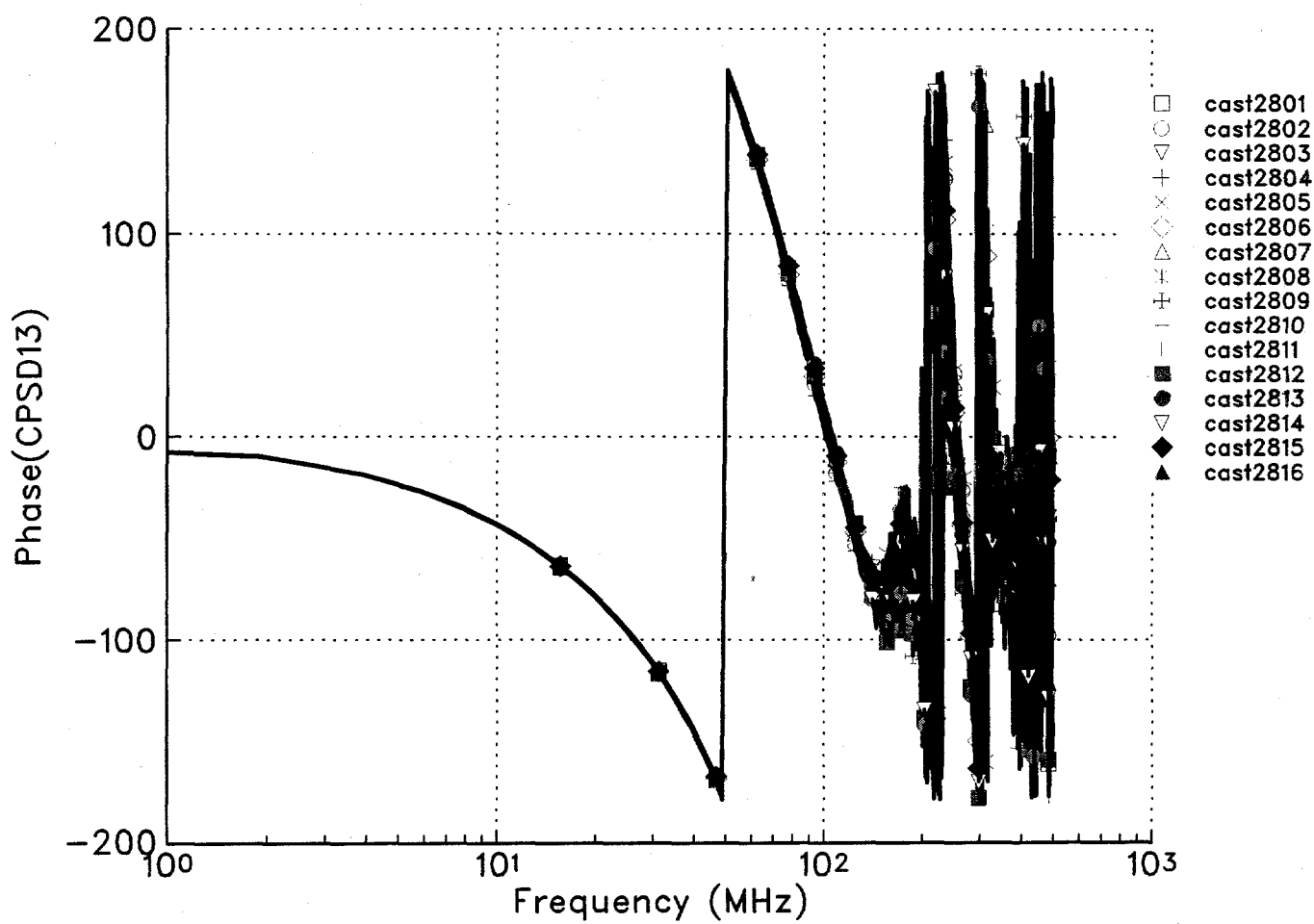
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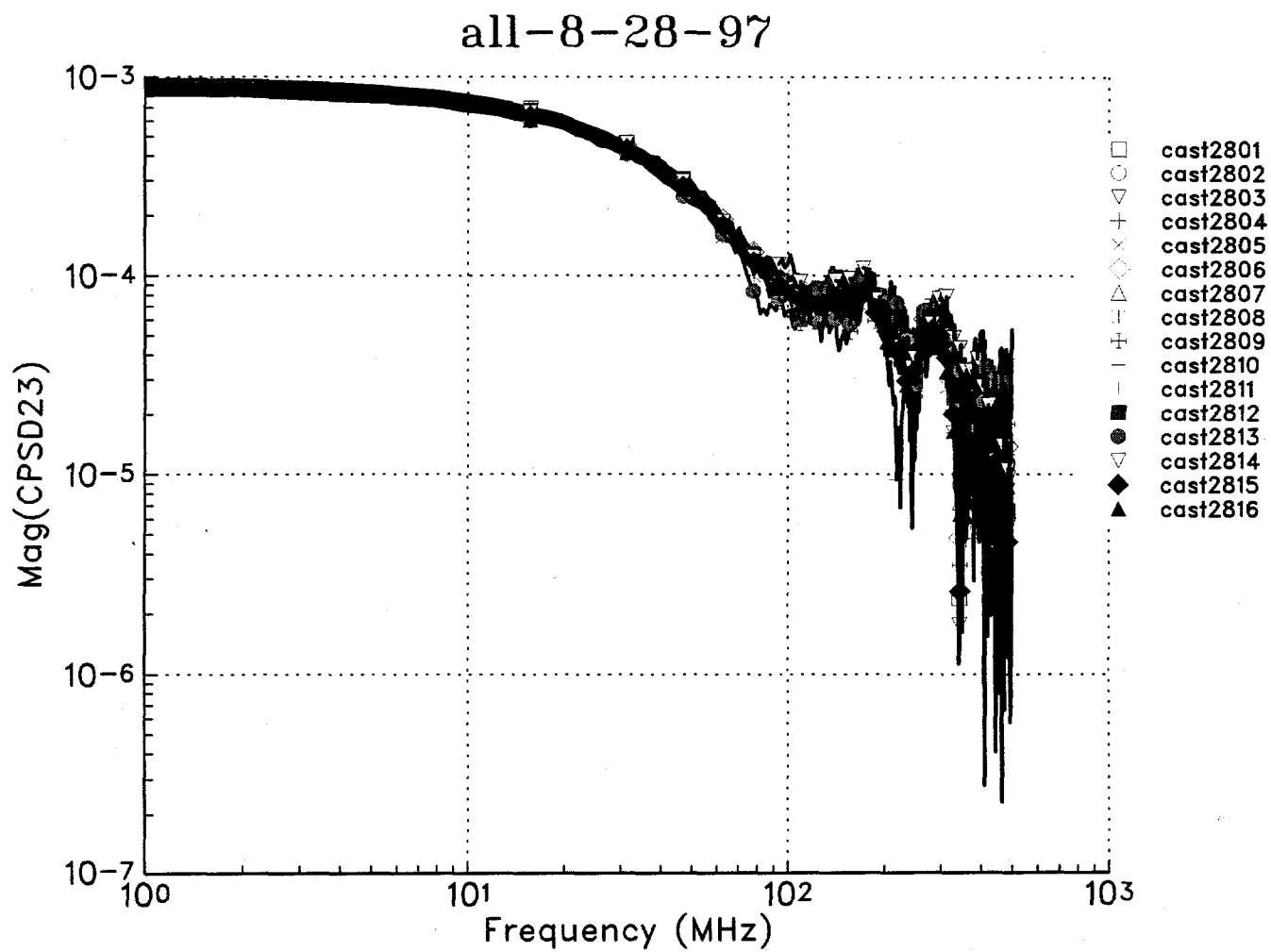


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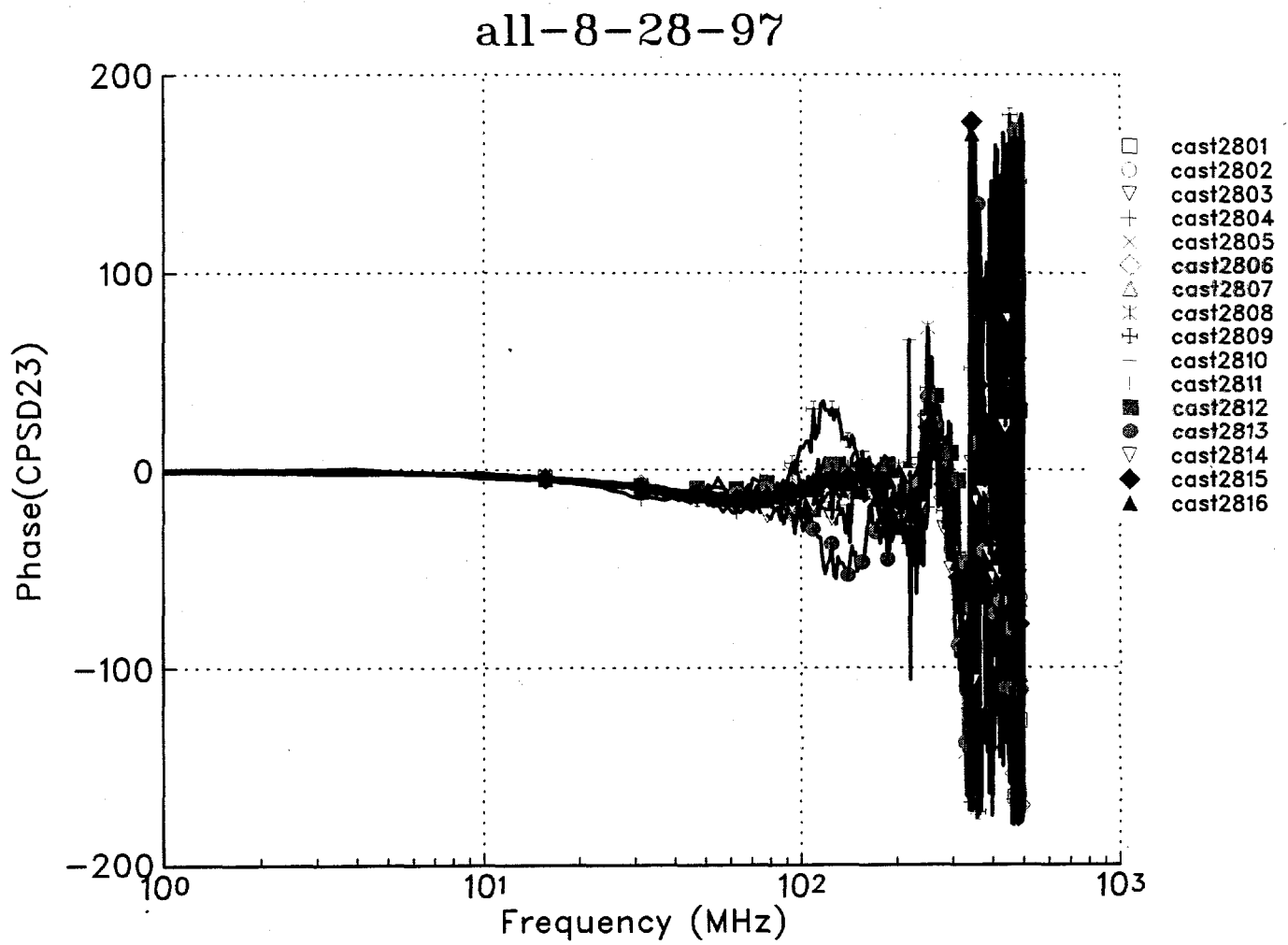
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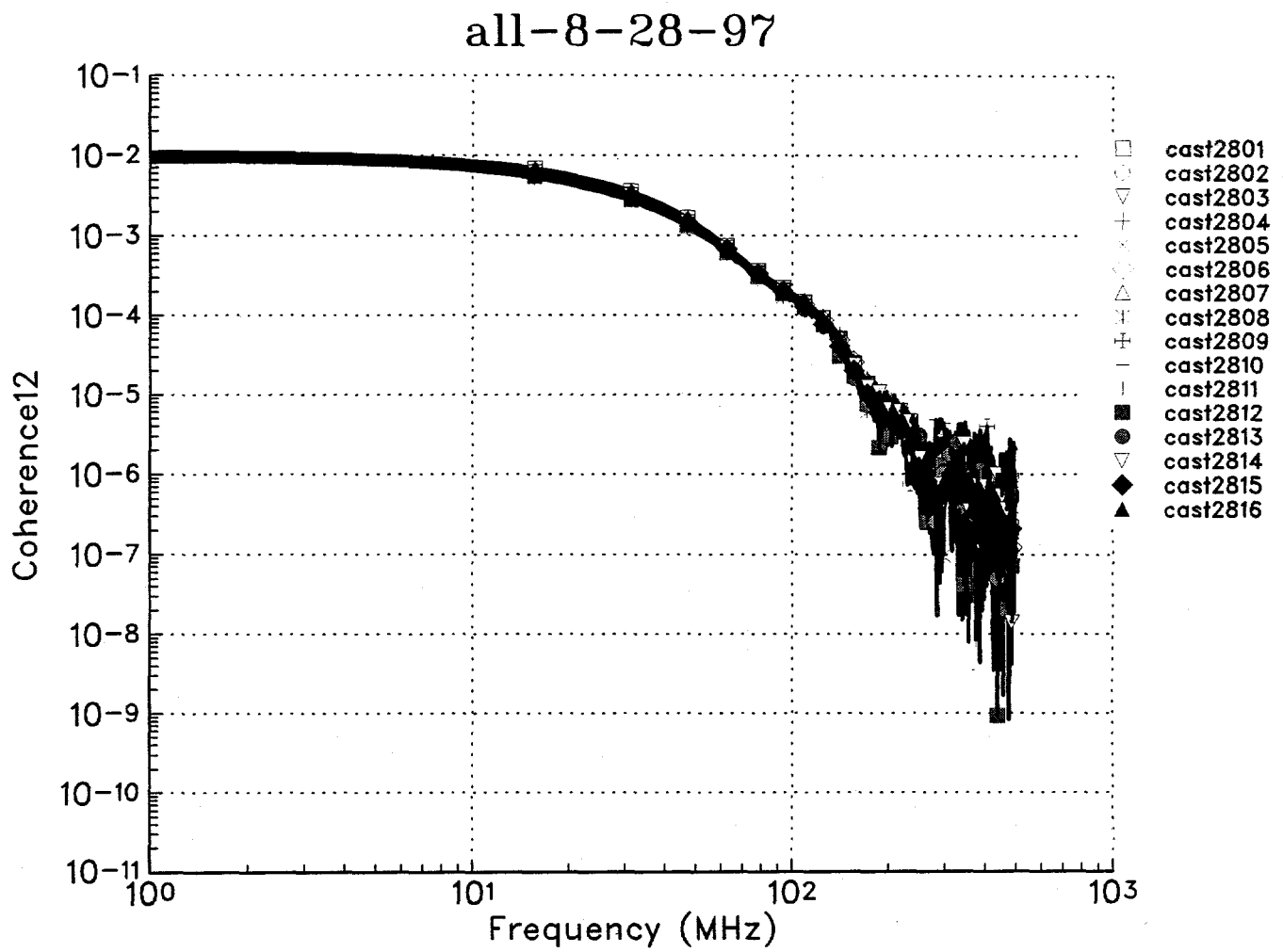
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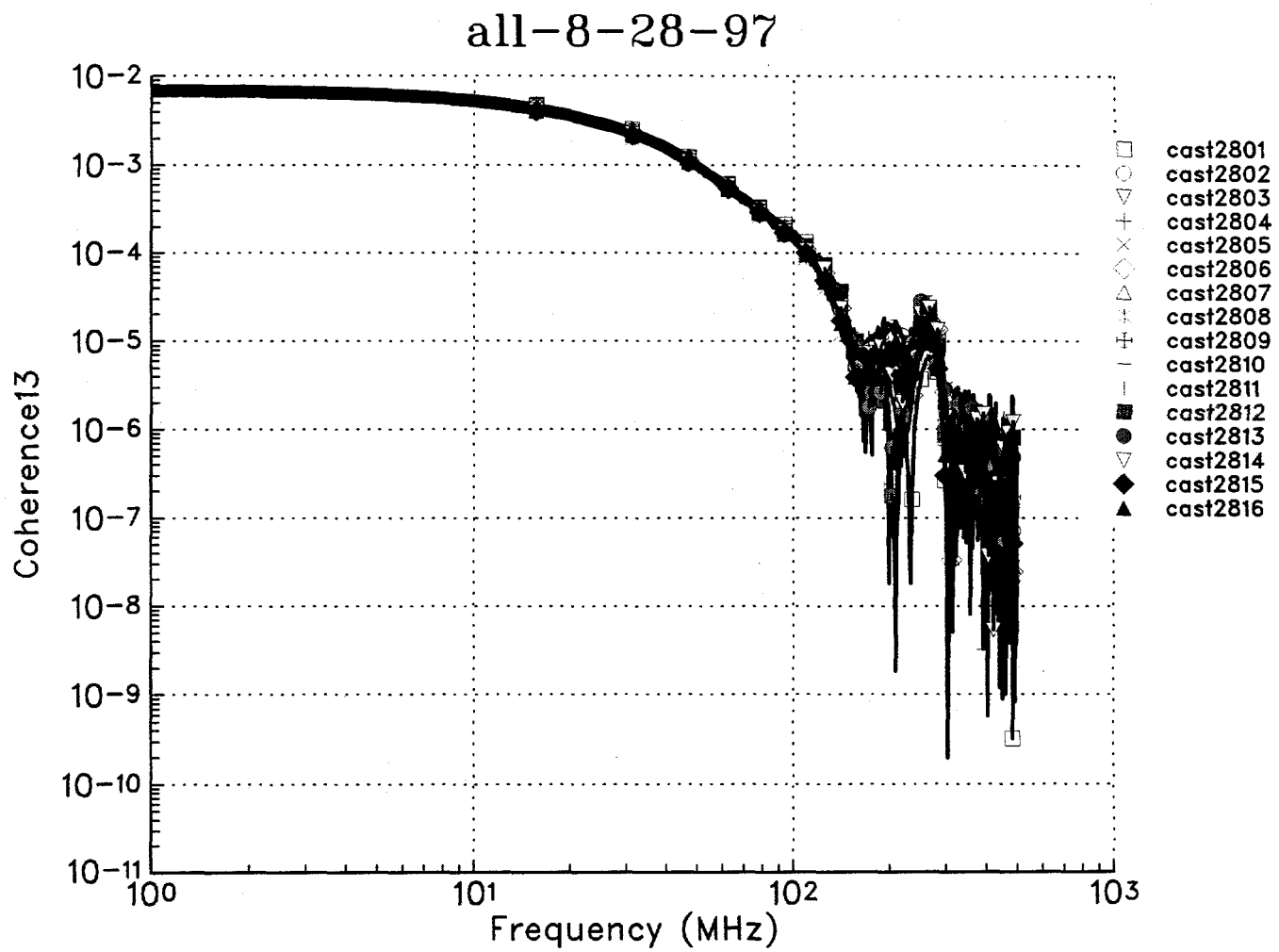
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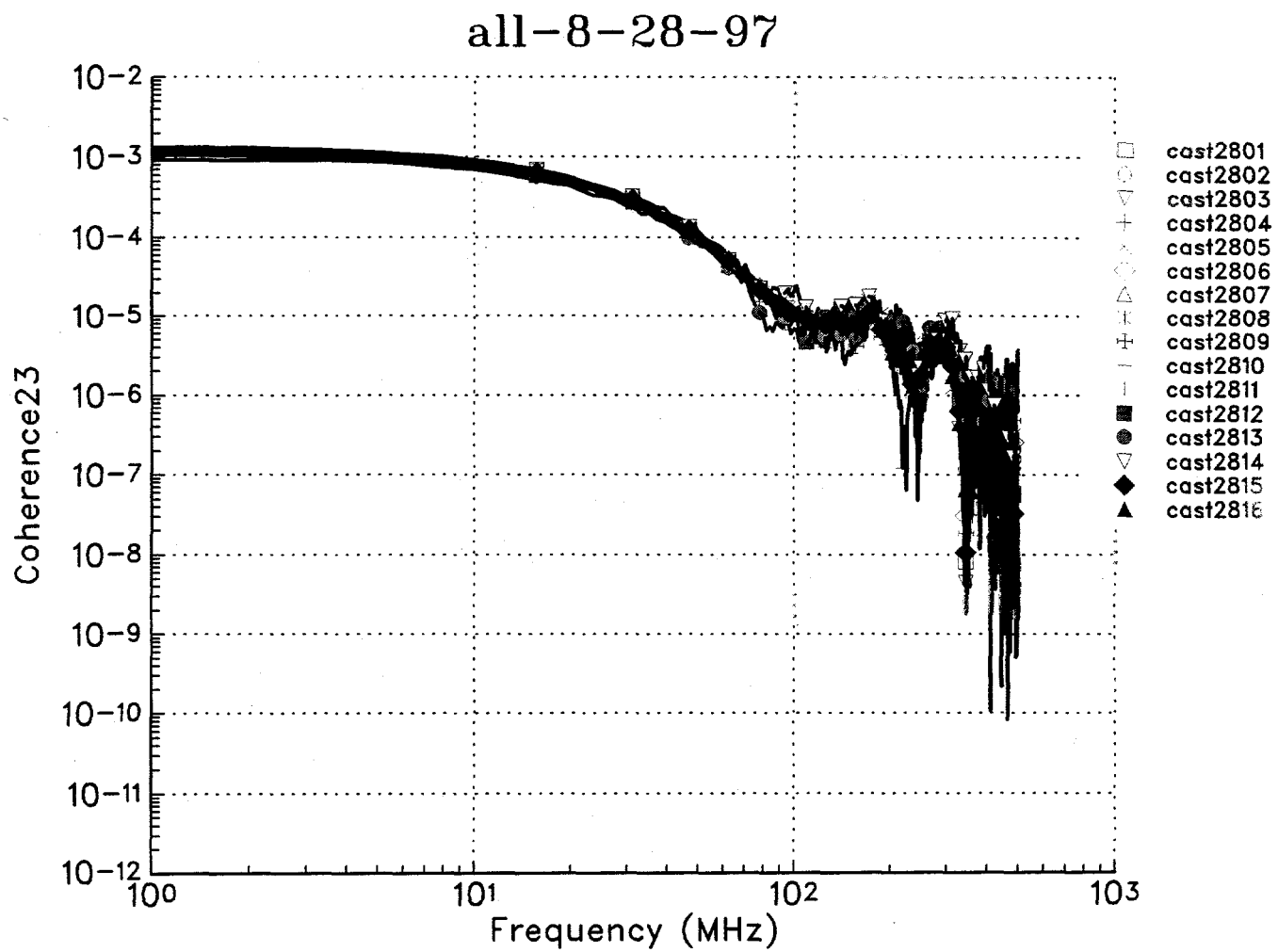


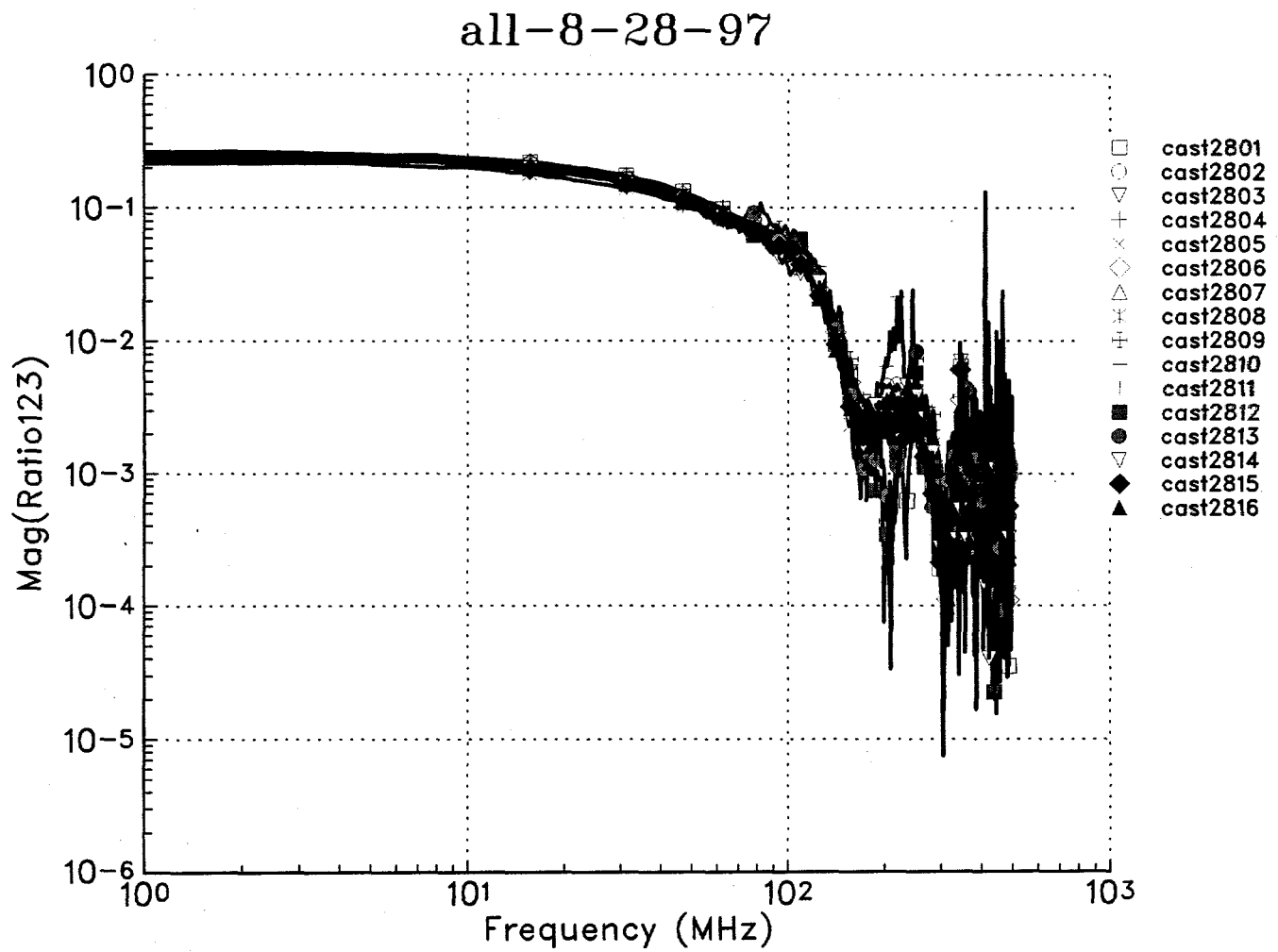
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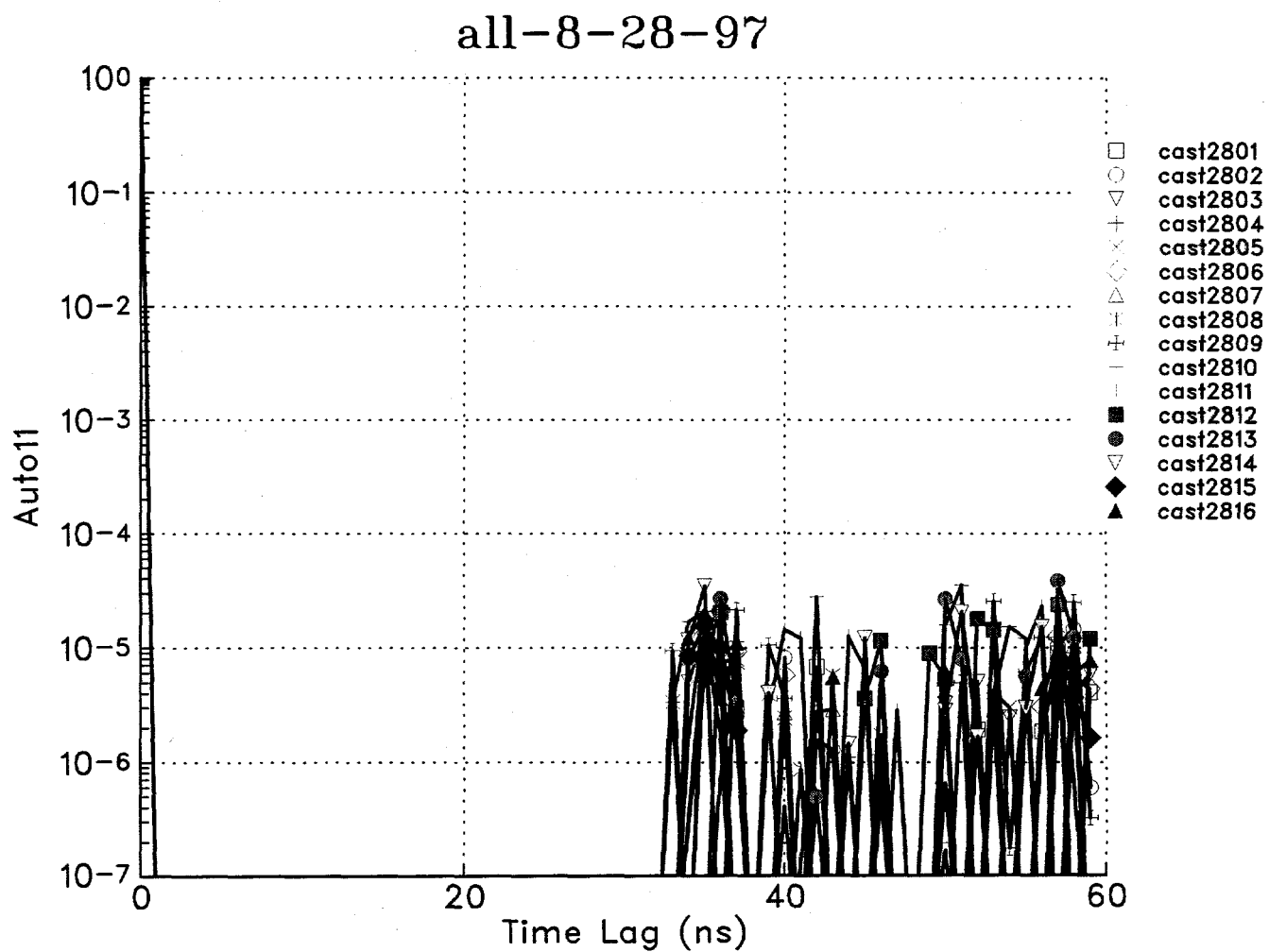


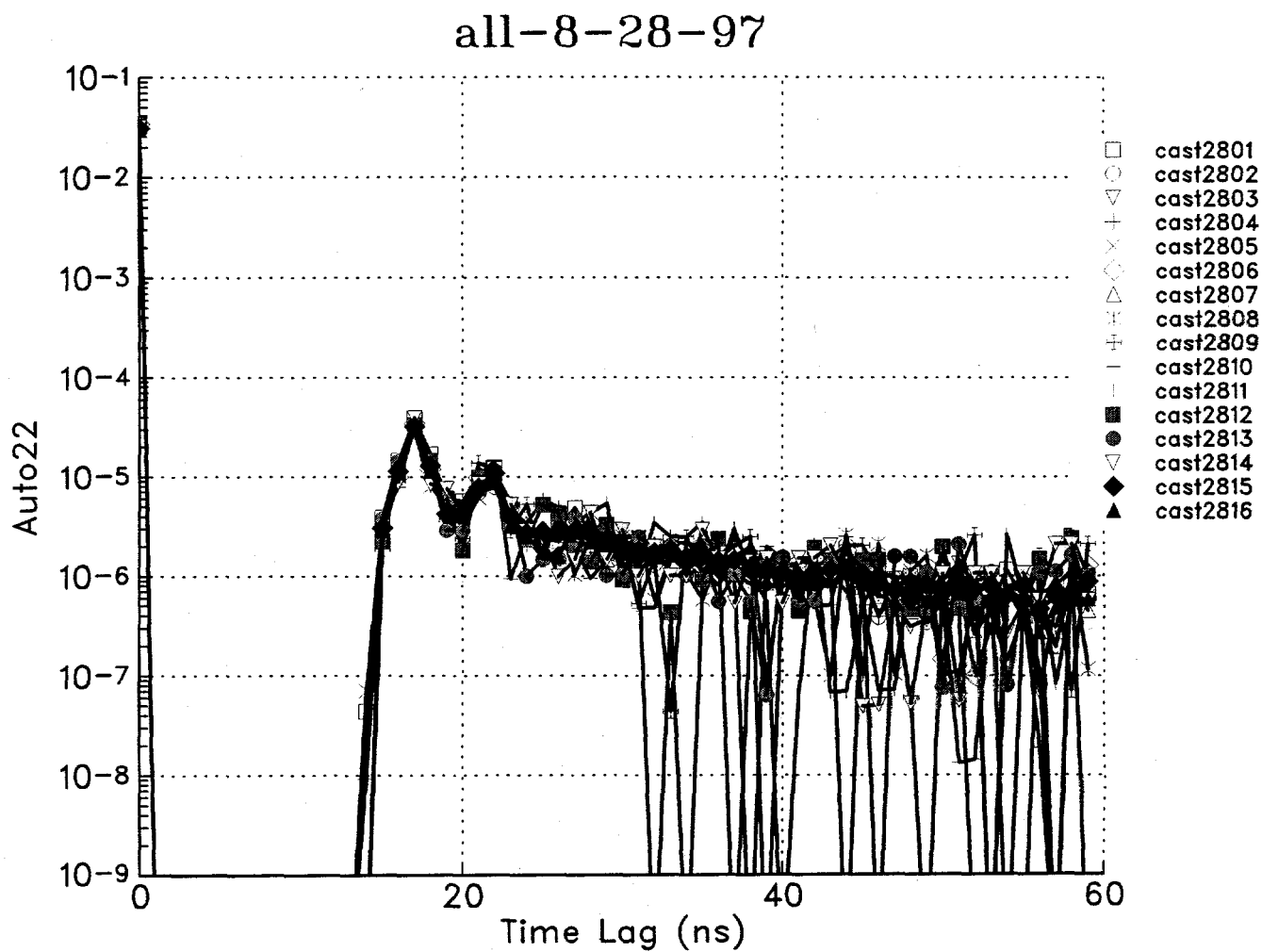
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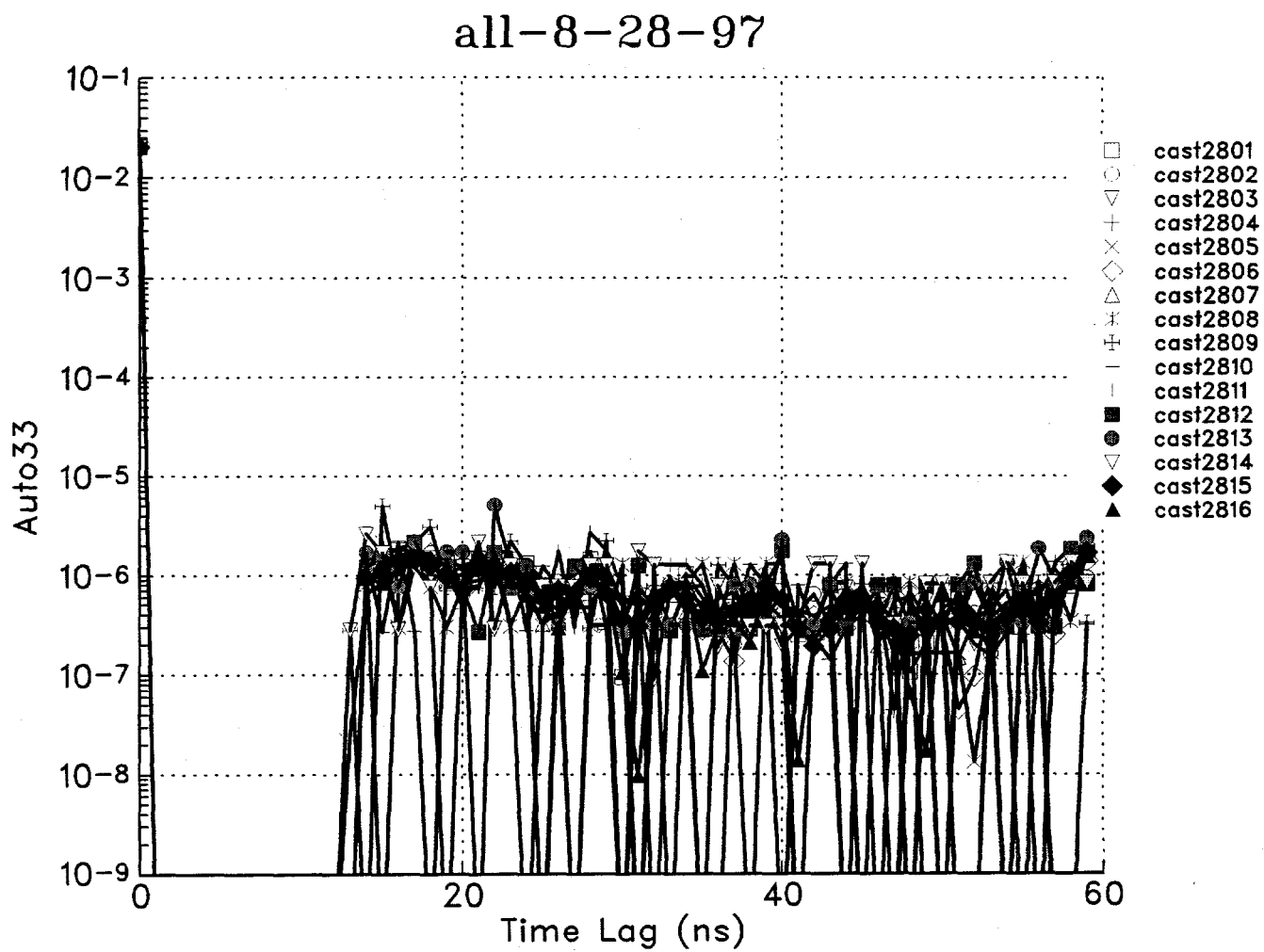


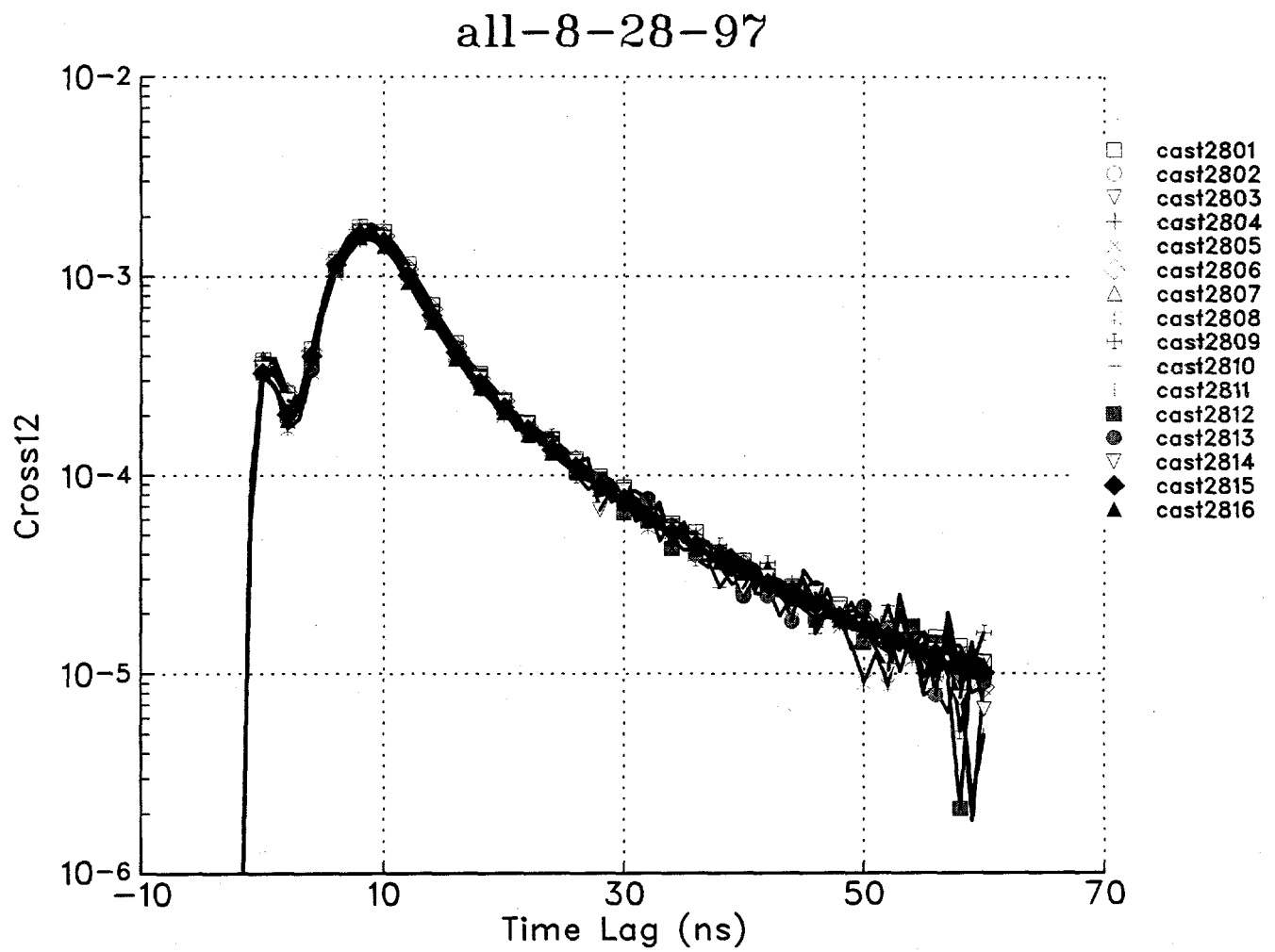


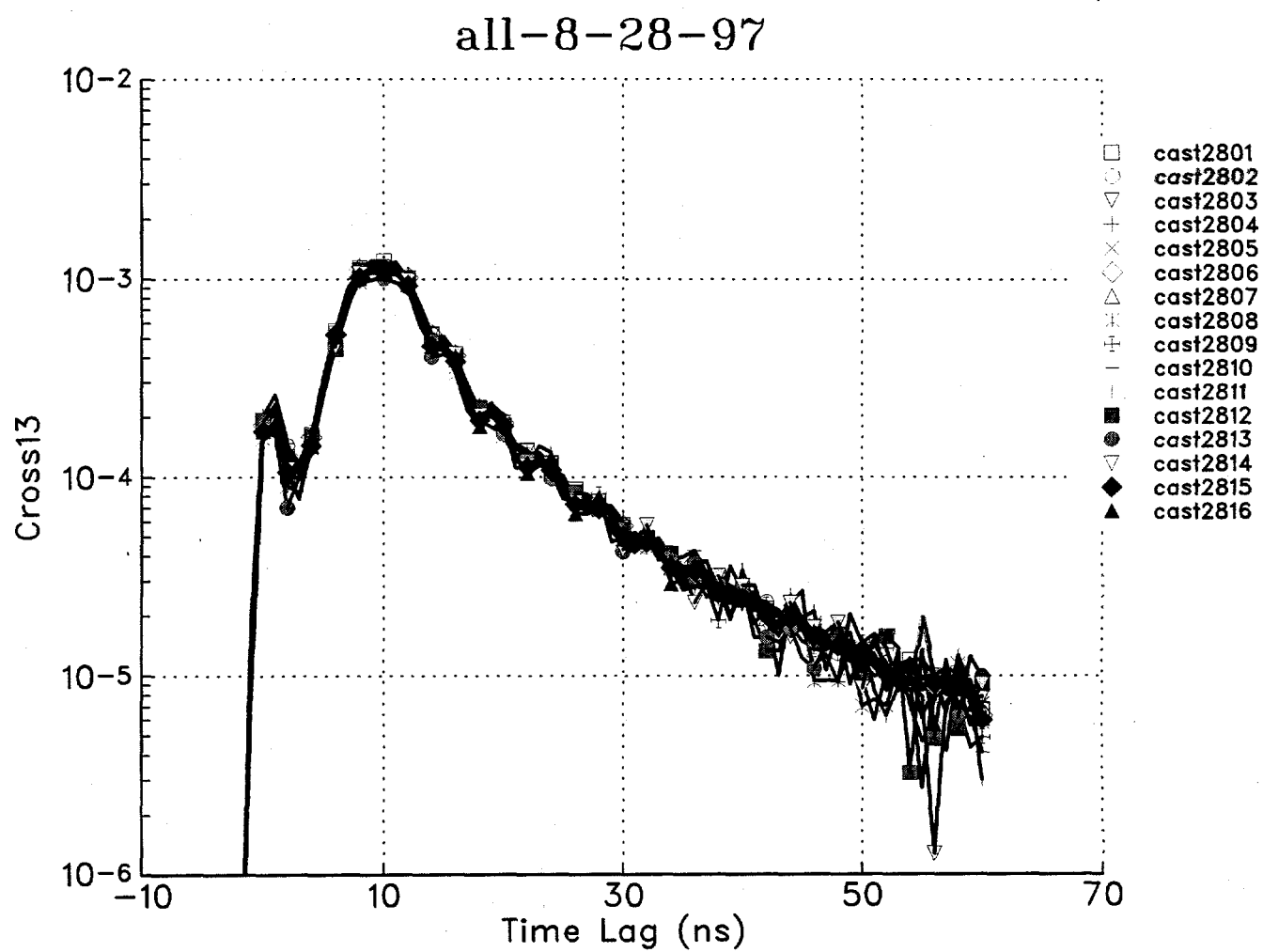


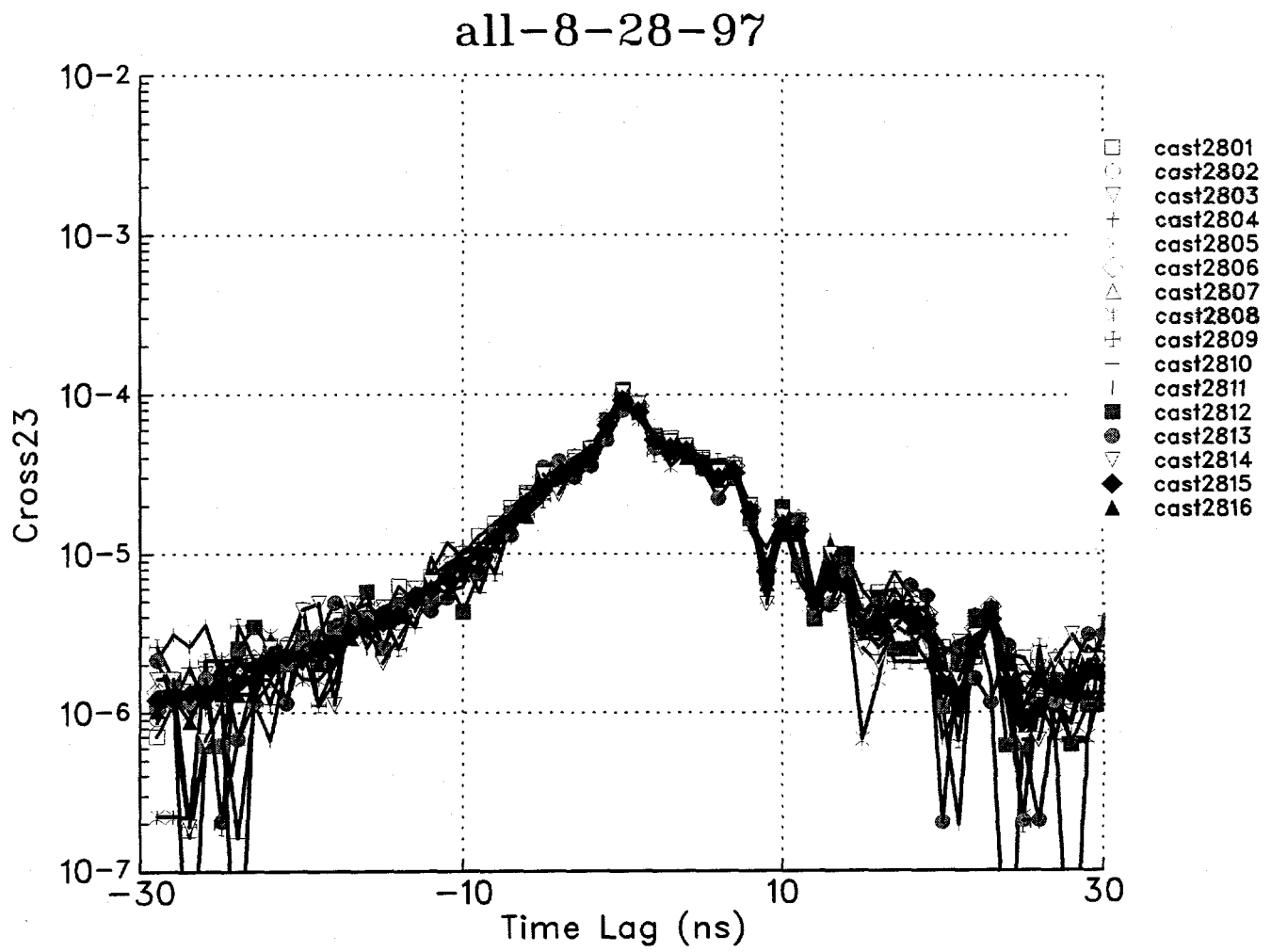


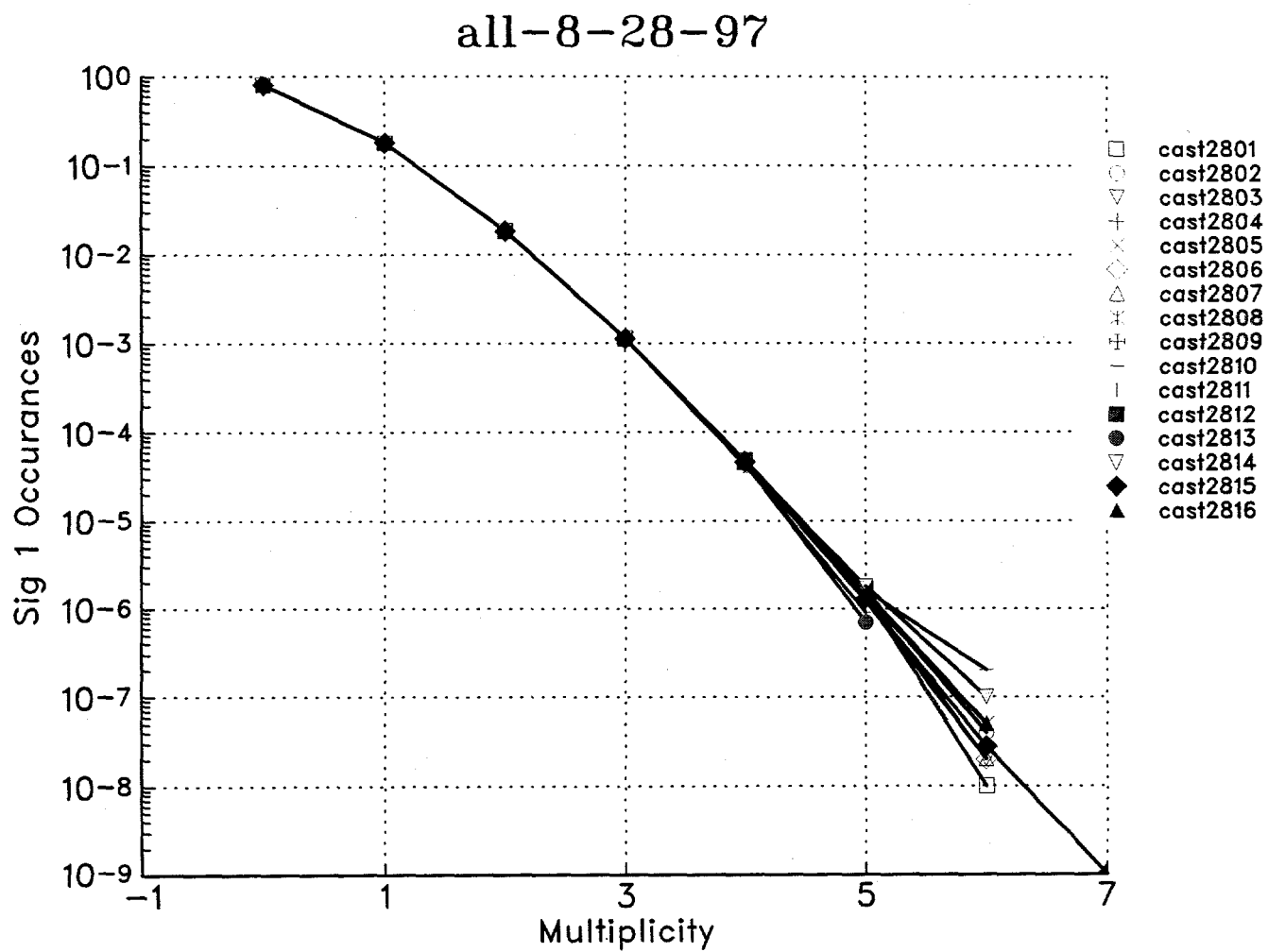




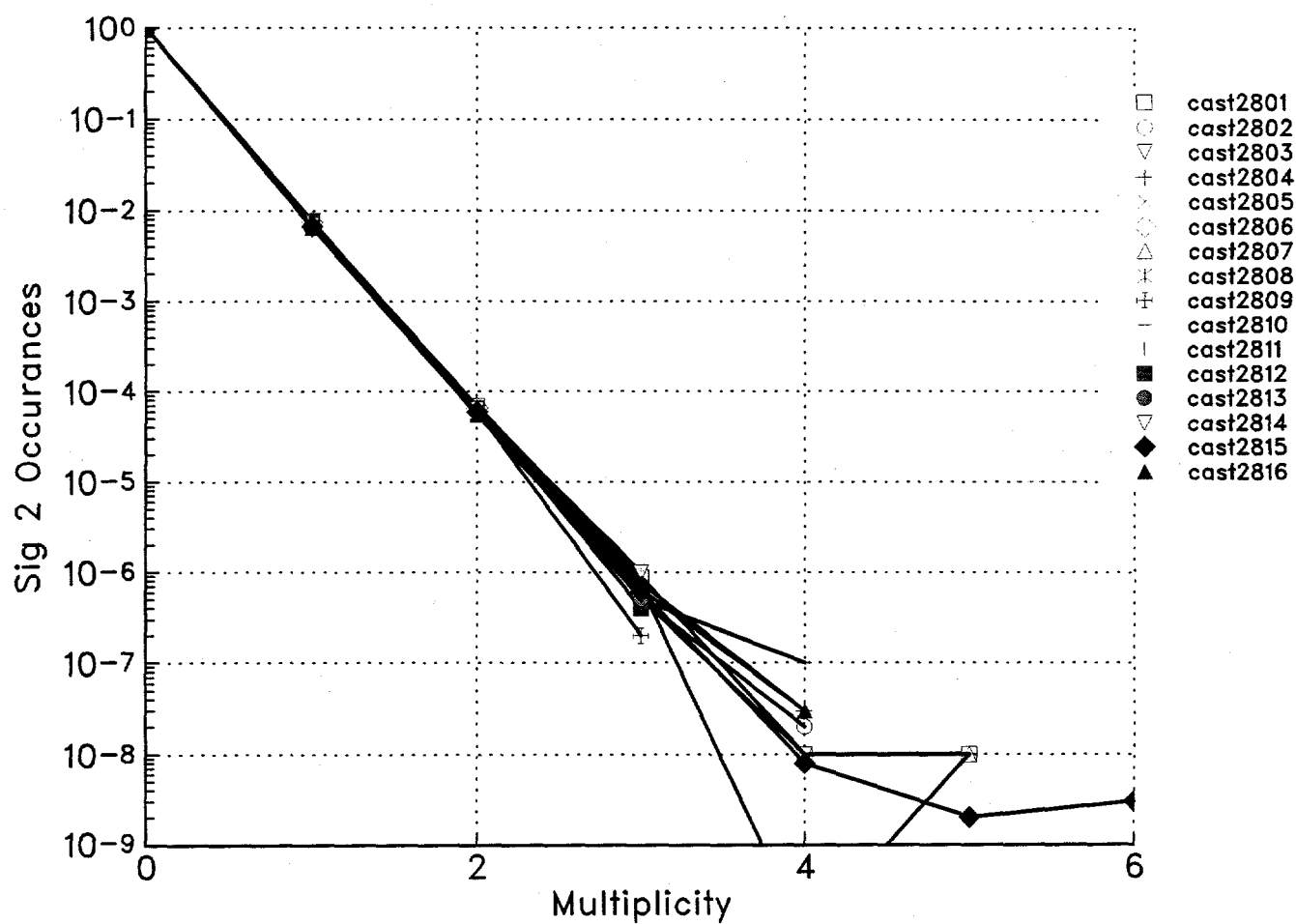




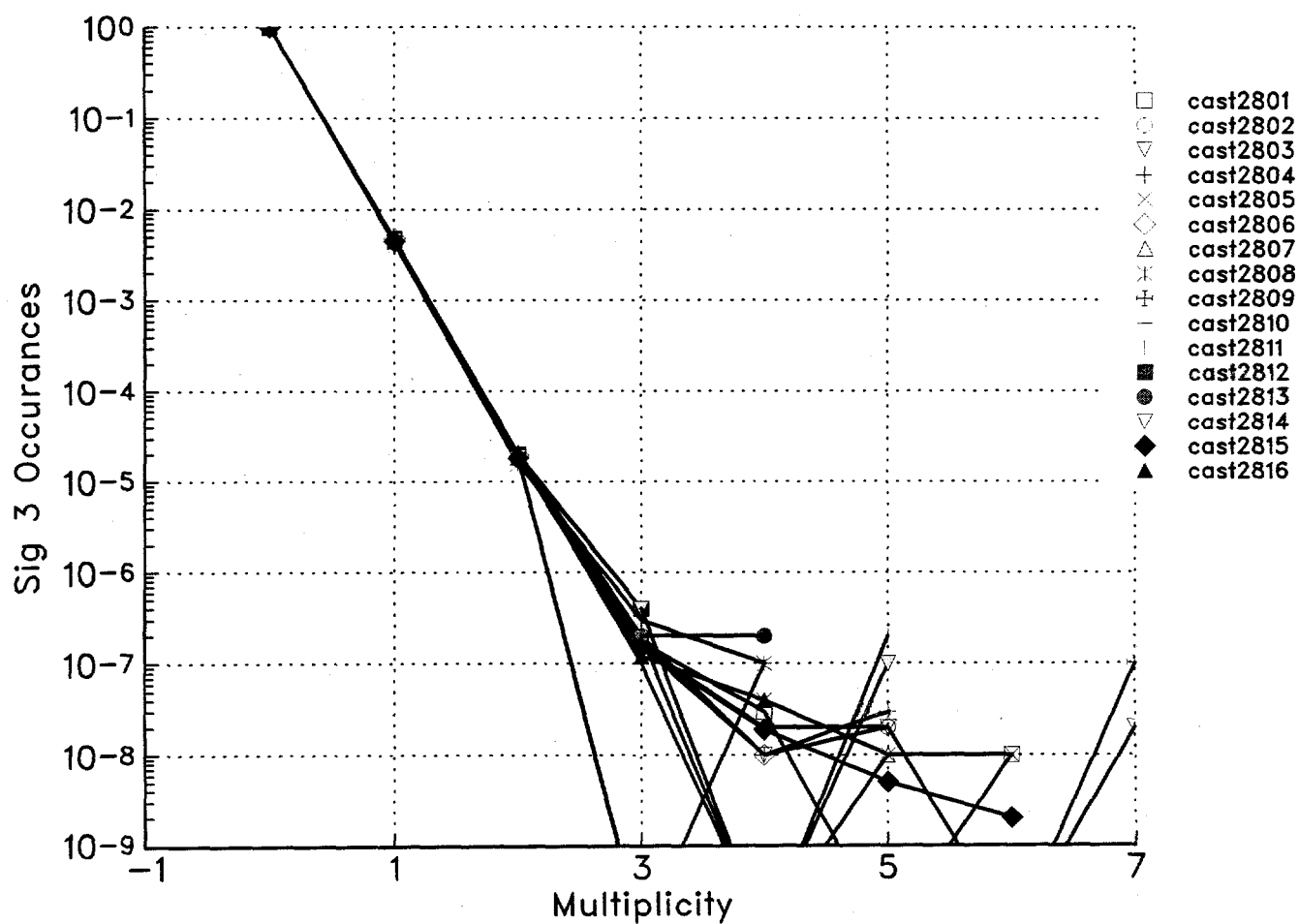


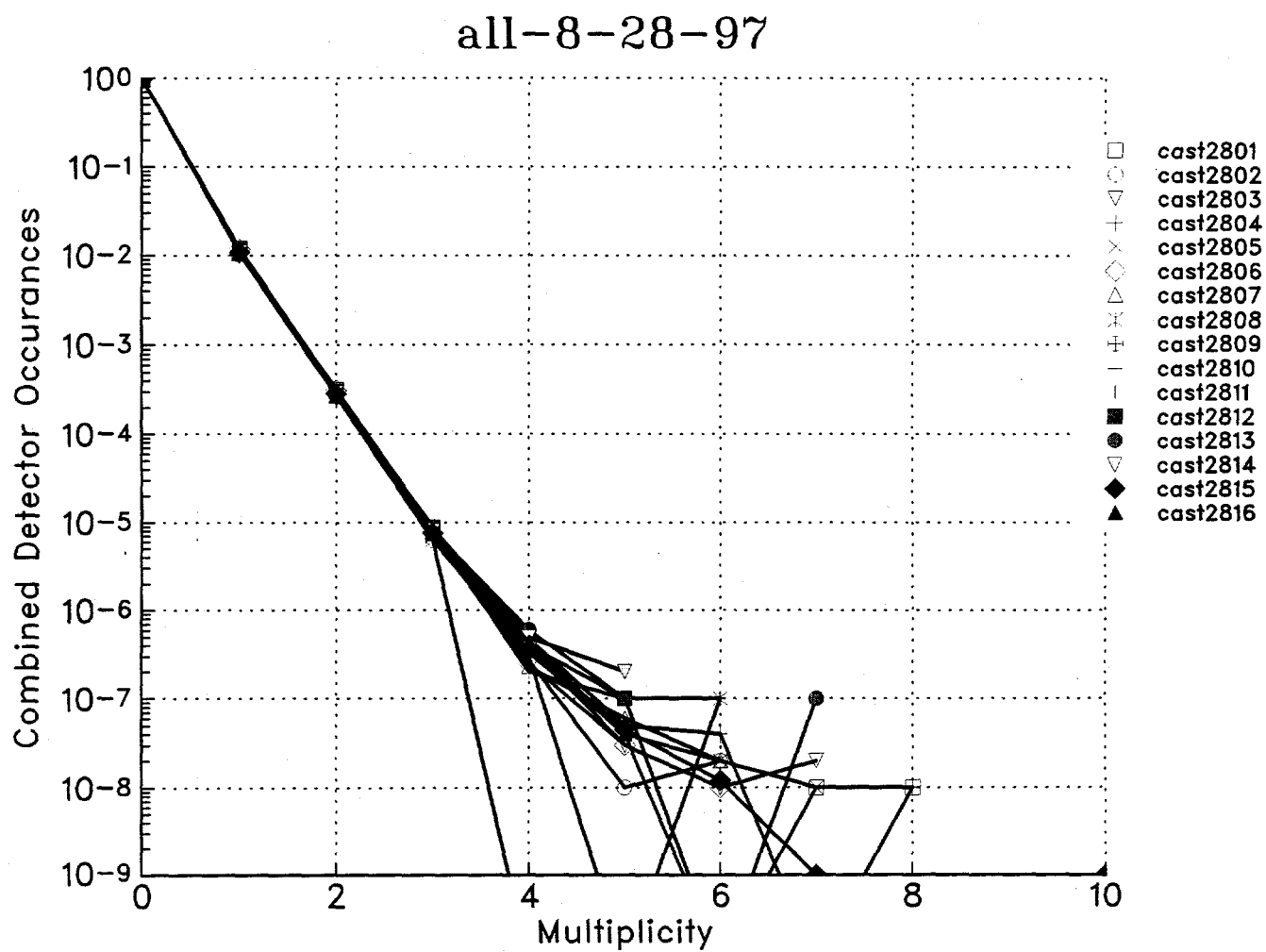


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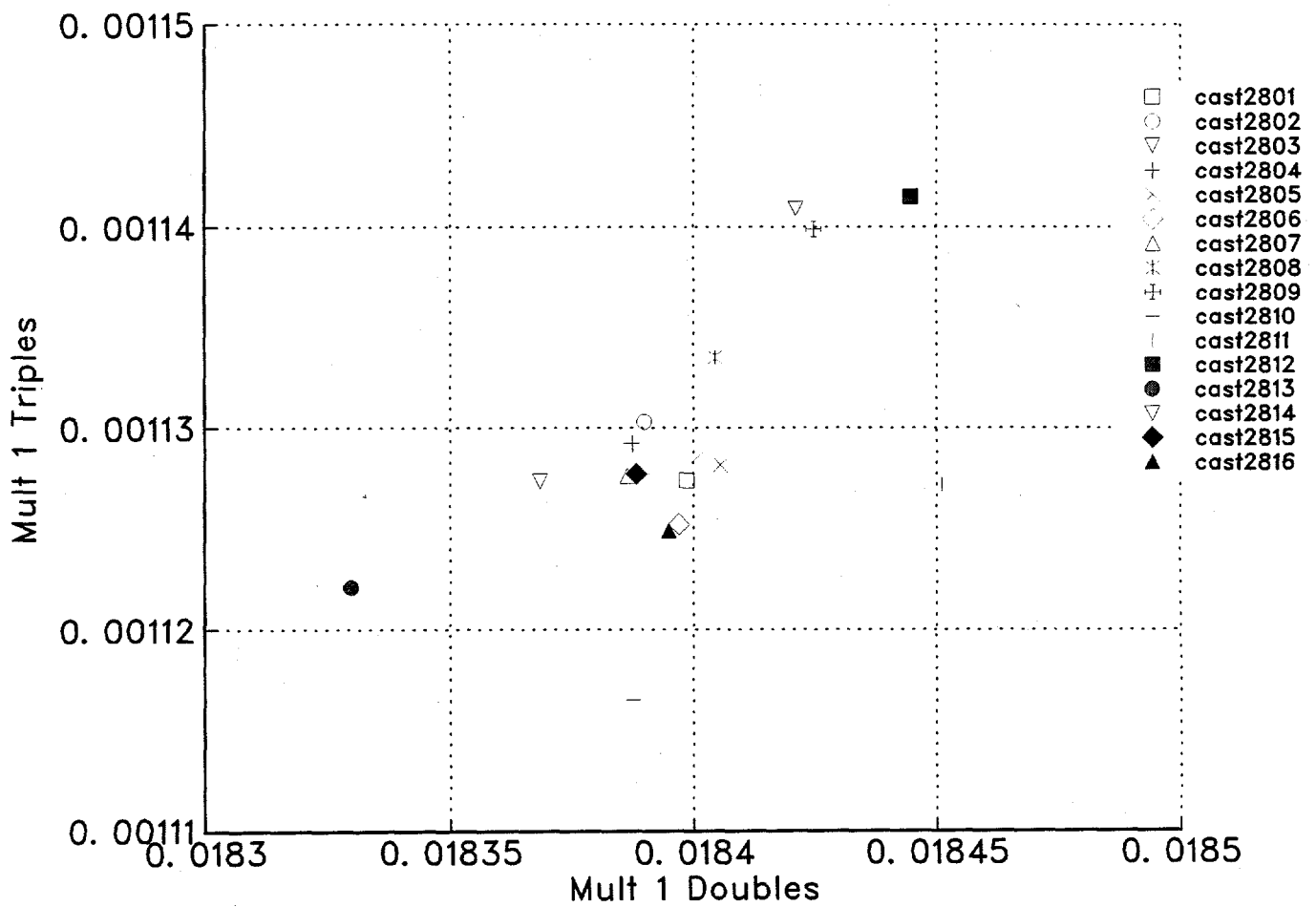


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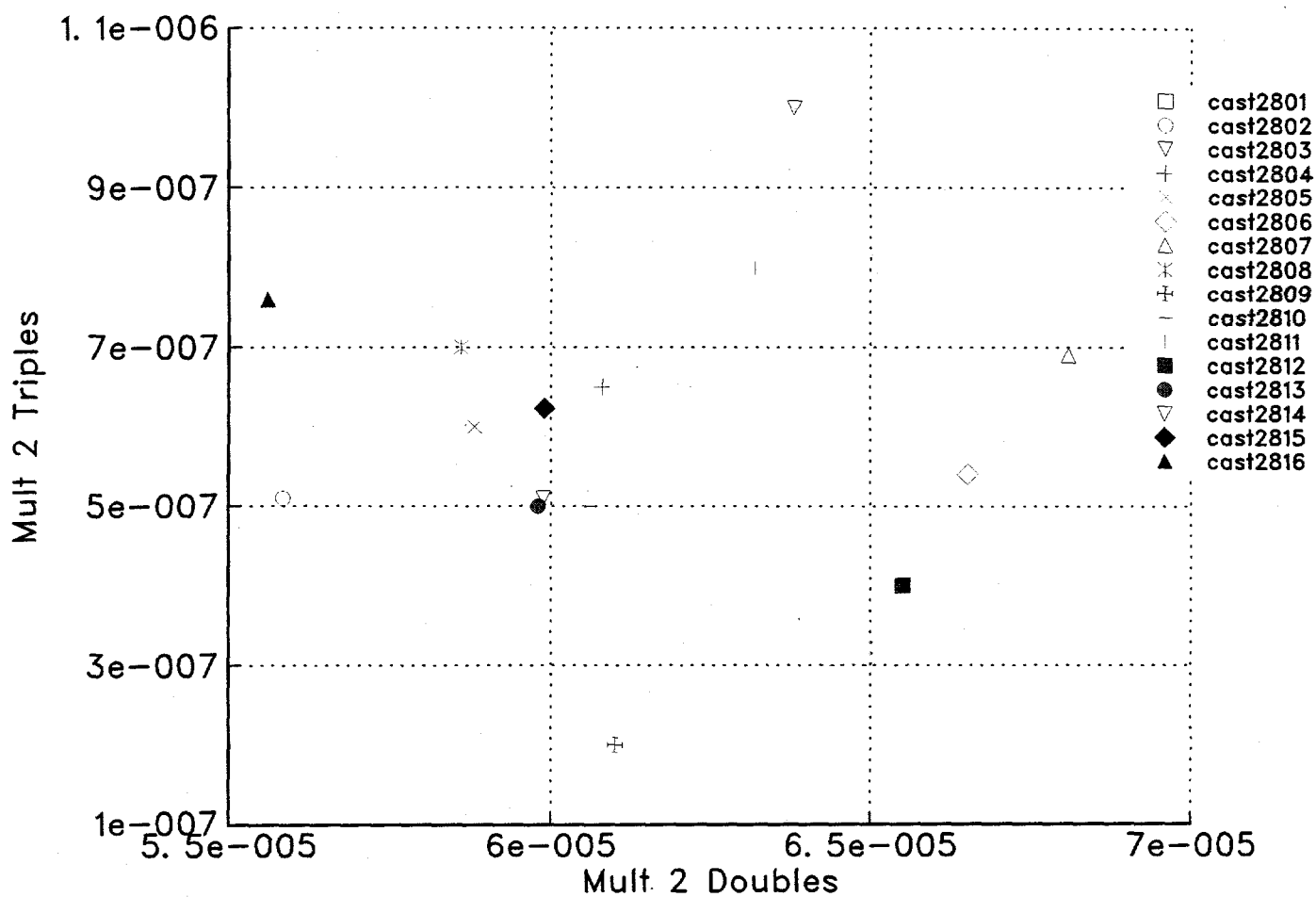




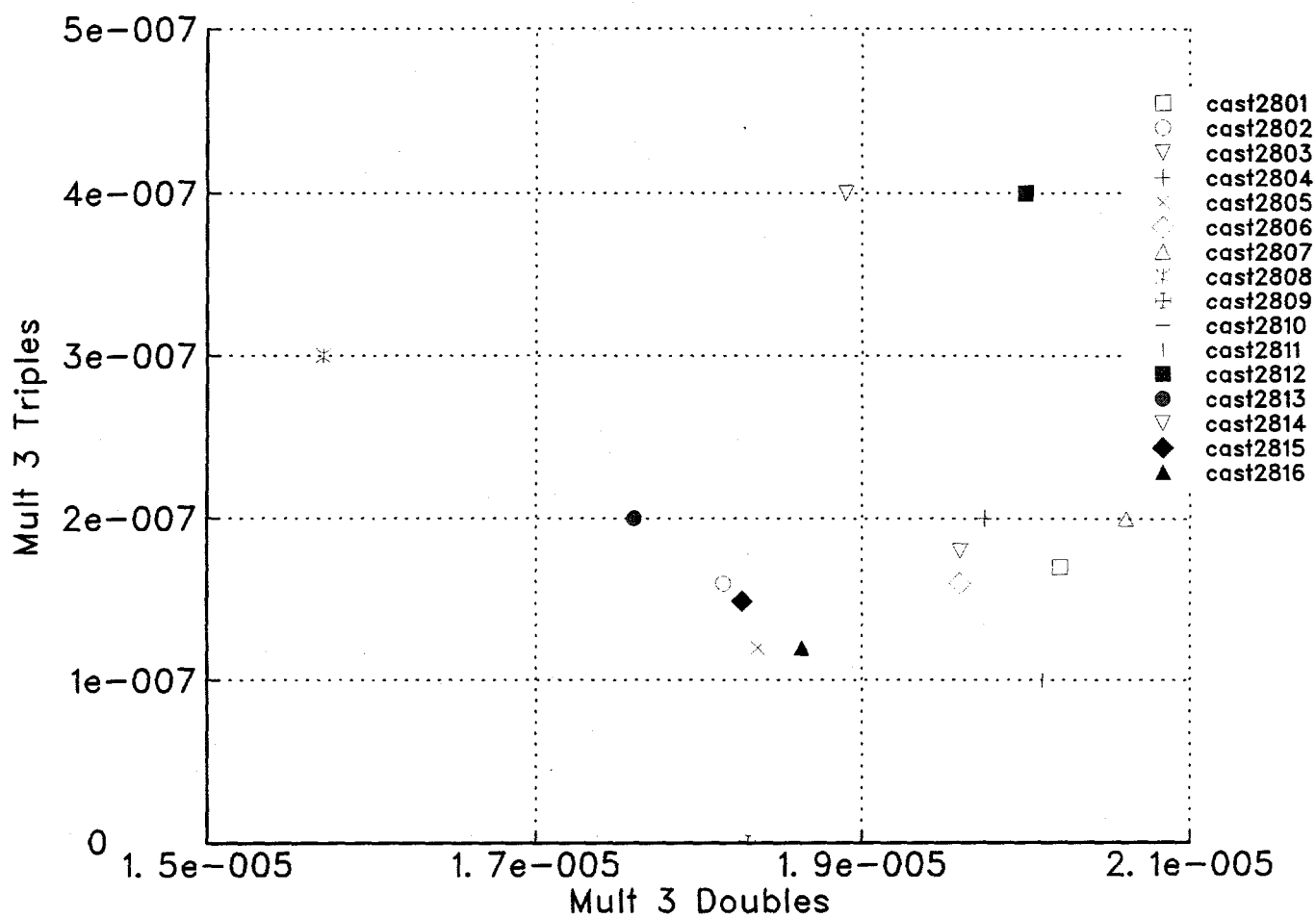
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