Custodial Storage Overview

WLCG Collaboration Workshop 7-9 July 2010
CMS Experiment Jamboree

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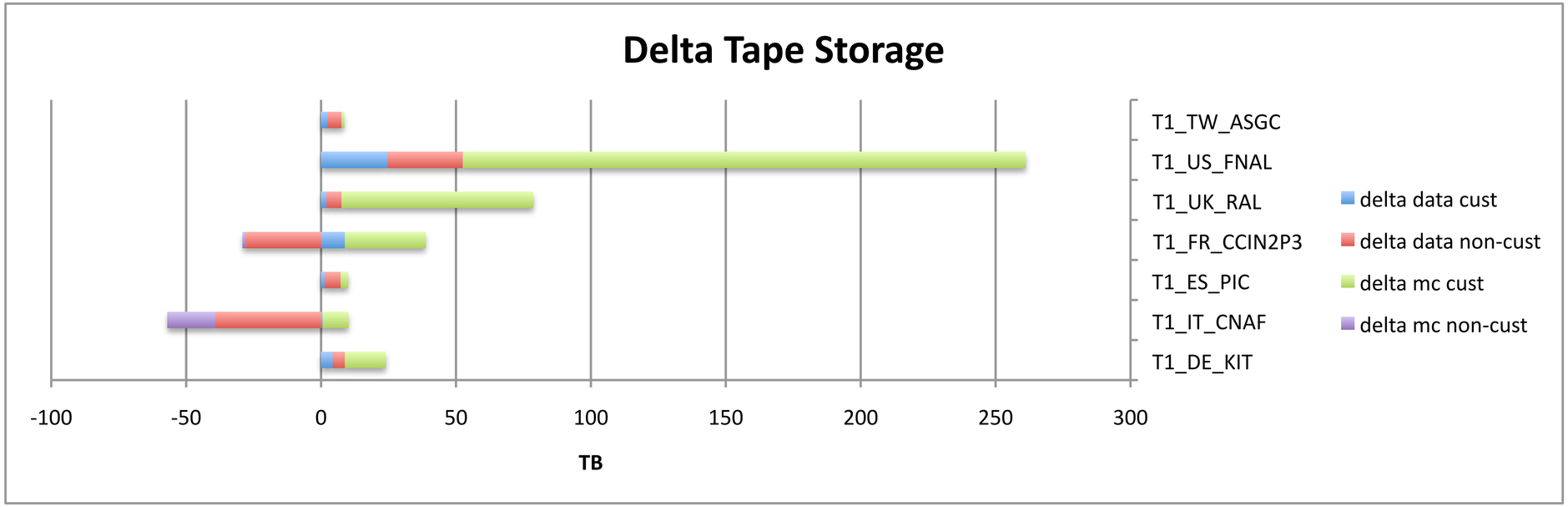
for
CMS Data Operations

Details

- Snapshot from PhEDEX / TMDB
  - Tape storage at T1 sites (MSS) for all combinations of
    - Acq era + data tier + cust/non-cust
    - Separately for data & MC
  - Plan: produce snapshot every week
- Following plots
  - Previous week from 6/28/2010
  - This week from 7/5/2010

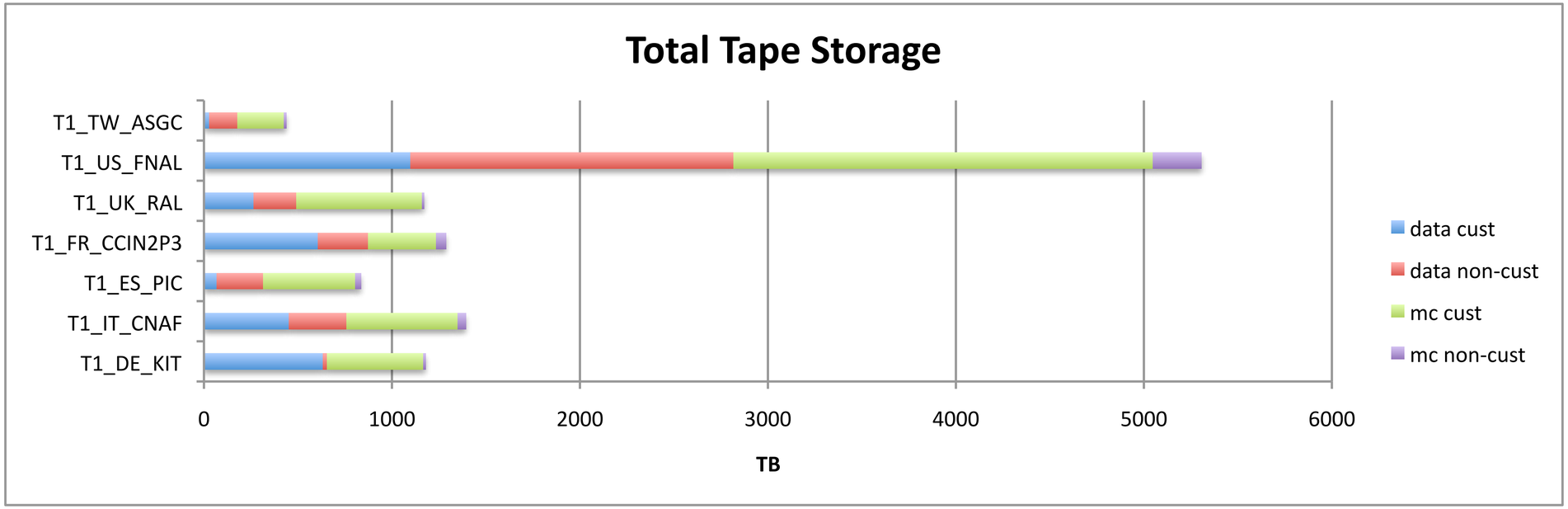
Delta: 7/5/2010 - 6/28/2010



	T1_DE_KIT	T1_IT_CNAF	T1_ES_PIC	T1_FR_CCIN2P3	T1_UK_RAL	T1_US_FNAL	T1_TW_ASGC	All sites
delta data cust	4.385	0.67	1.492	8.949	2.009	24.775	2.393	67.961
delta data non-cust	4.46	-39.264	5.795	-28.065	5.635	27.774	5.257	-18.408
delta mc cust	15.148	9.475	2.738	29.827	70.936	208.635	0.28	337.039
delta mc non-cust	0	-17.668	0	-0.964	0	0	0	-18.632
delta cust	19.533	10.145	4.23	38.776	72.945	233.41	2.673	405
delta non-cust	4.46	-56.932	5.795	-29.029	5.635	27.774	5.257	-37.04
delta	23.993	-46.787	10.025	9.747	78.58	261.184	7.93	367.96

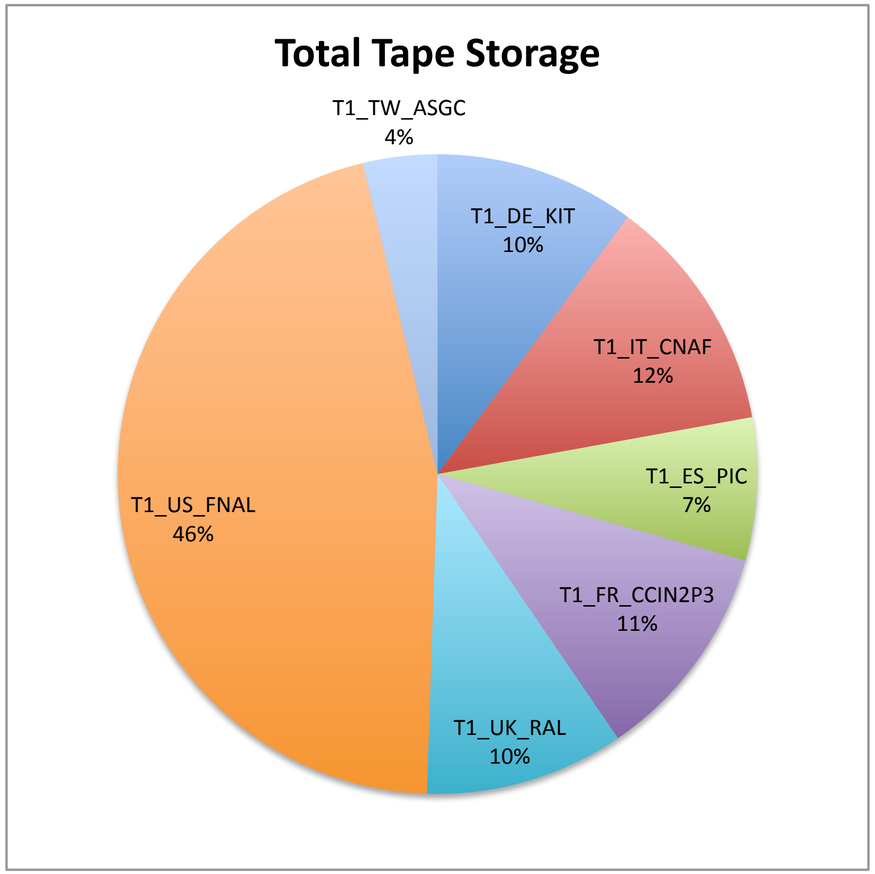
- Deletions still take effect

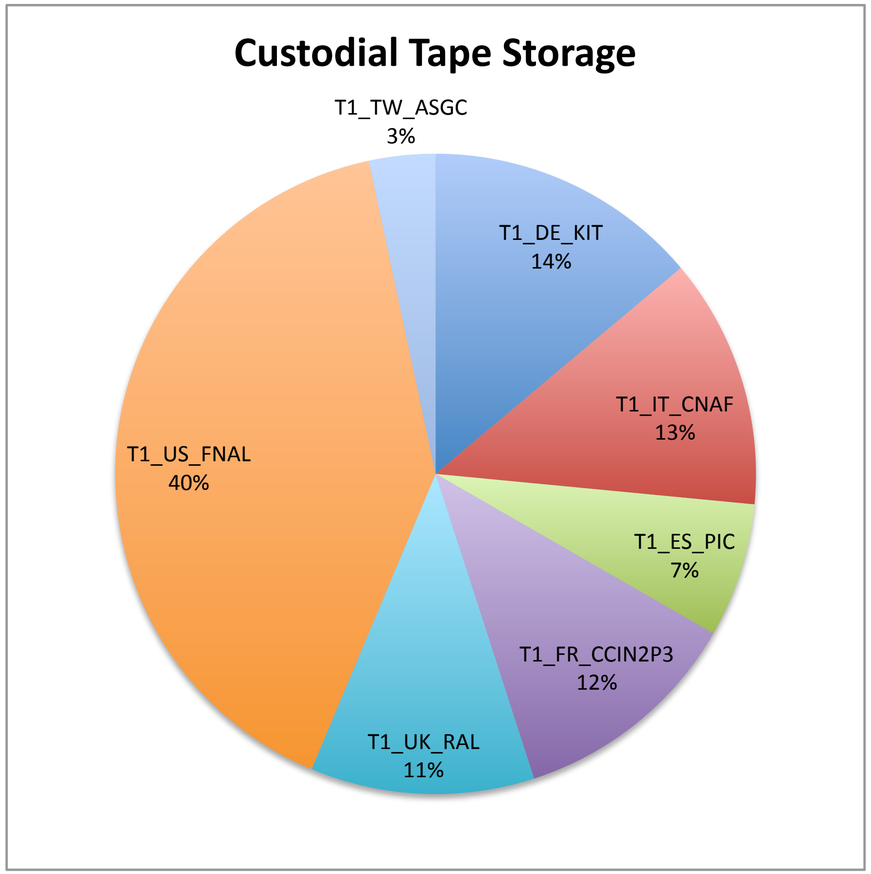
Total Tape Storage



	T1_DE_KIT	T1_IT_CNAF	T1_ES_PIC	T1_FR_CCIN2P3	T1_UK_RAL	T1_US_FNAL	T1_TW_ASGC	All sites
data cust	631.992	451.506	68.577	605.727	265.438	1097.359	27.92	4476.129
data non-cust	22.799	306.337	246.323	266.856	227.148	1719.664	150.131	3748.559
mc cust	513.131	592.174	491.092	362.351	667.248	2231.165	248.221	5110.117
mc non-cust	9.502	43.143	30.74	53.962	8.889	258.197	8.889	422.906
cust	1145.123	1043.68	559.669	968.078	932.686	3328.524	276.141	9586.246
non-cust	32.301	349.48	277.063	320.818	236.037	1977.861	159.02	4171.465
total	1177.424	1393.16	836.732	1288.896	1168.723	5306.385	435.161	13757.711

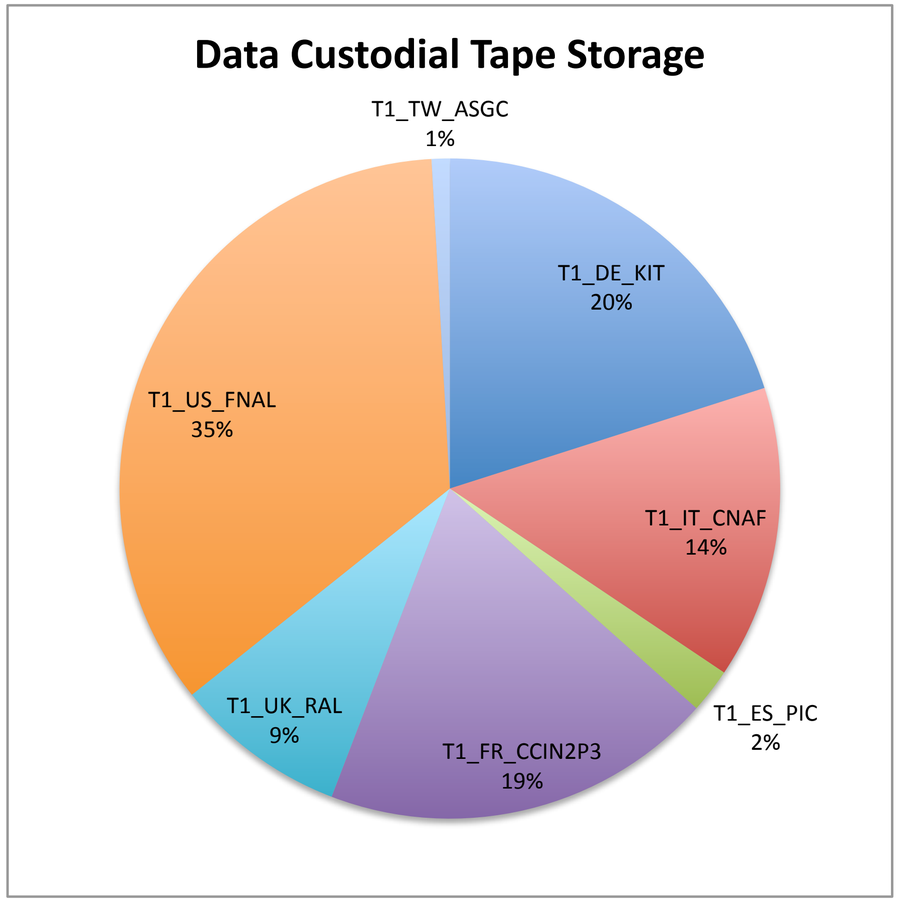
Total Tape Storage

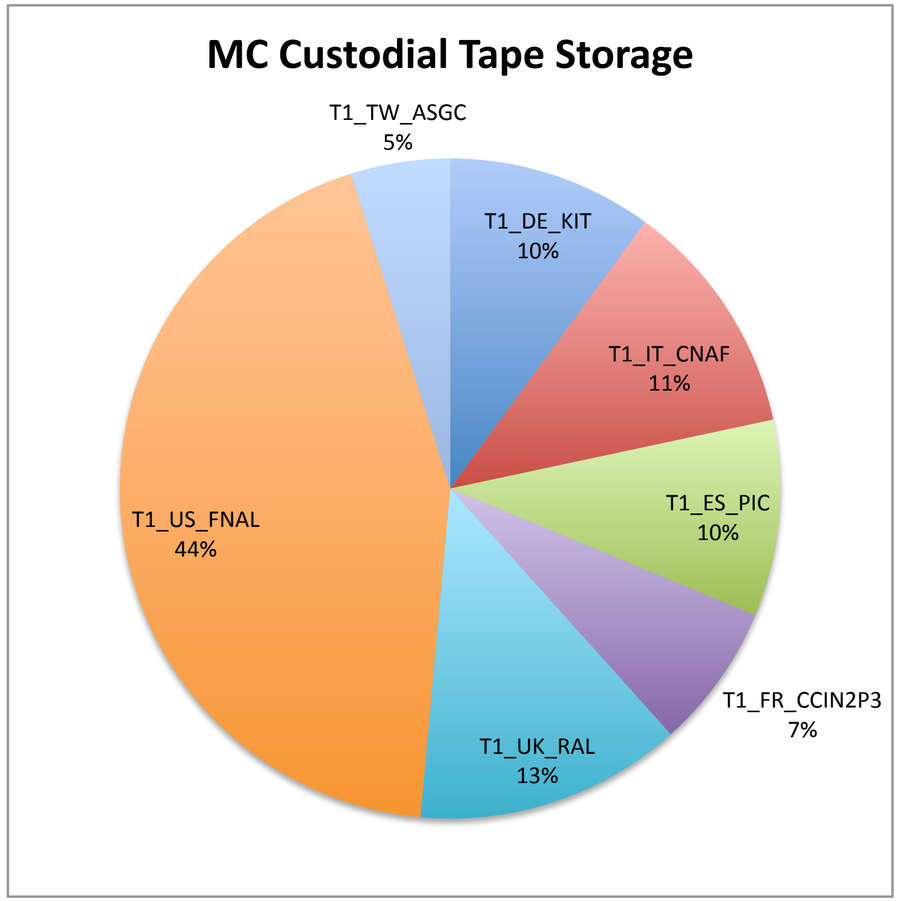




- Distribution amongst T1 sites looks good

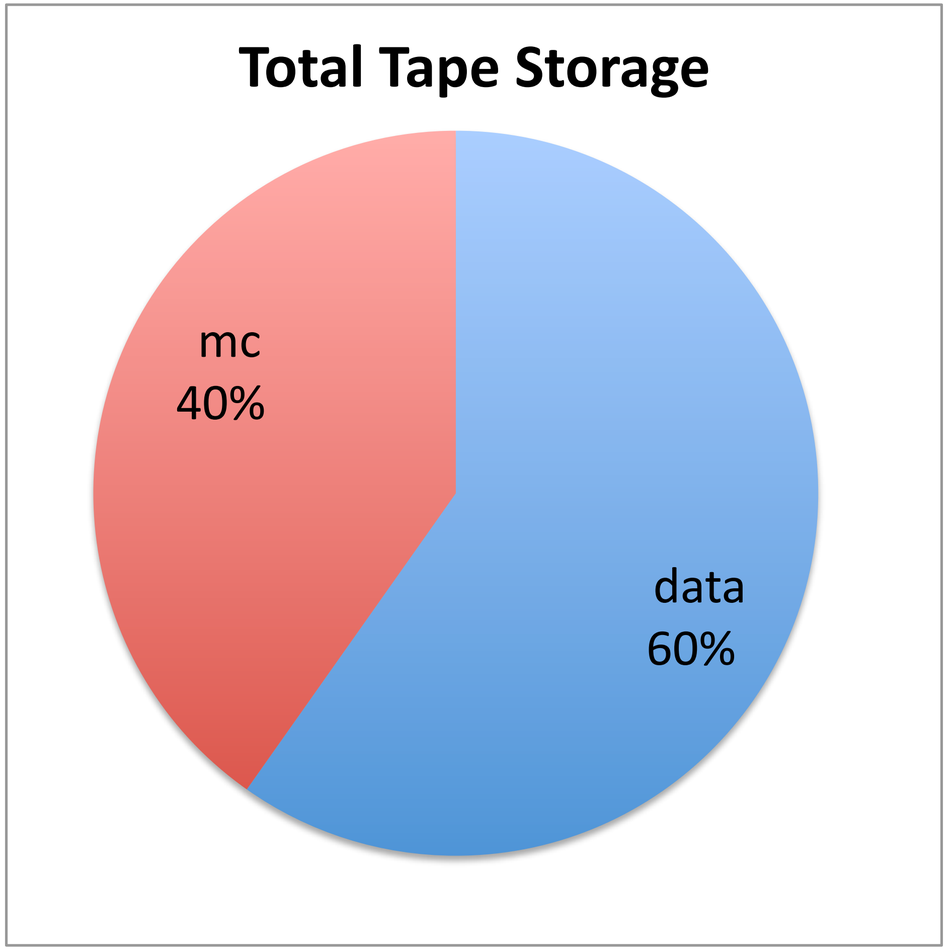
Custodial Tape Storage

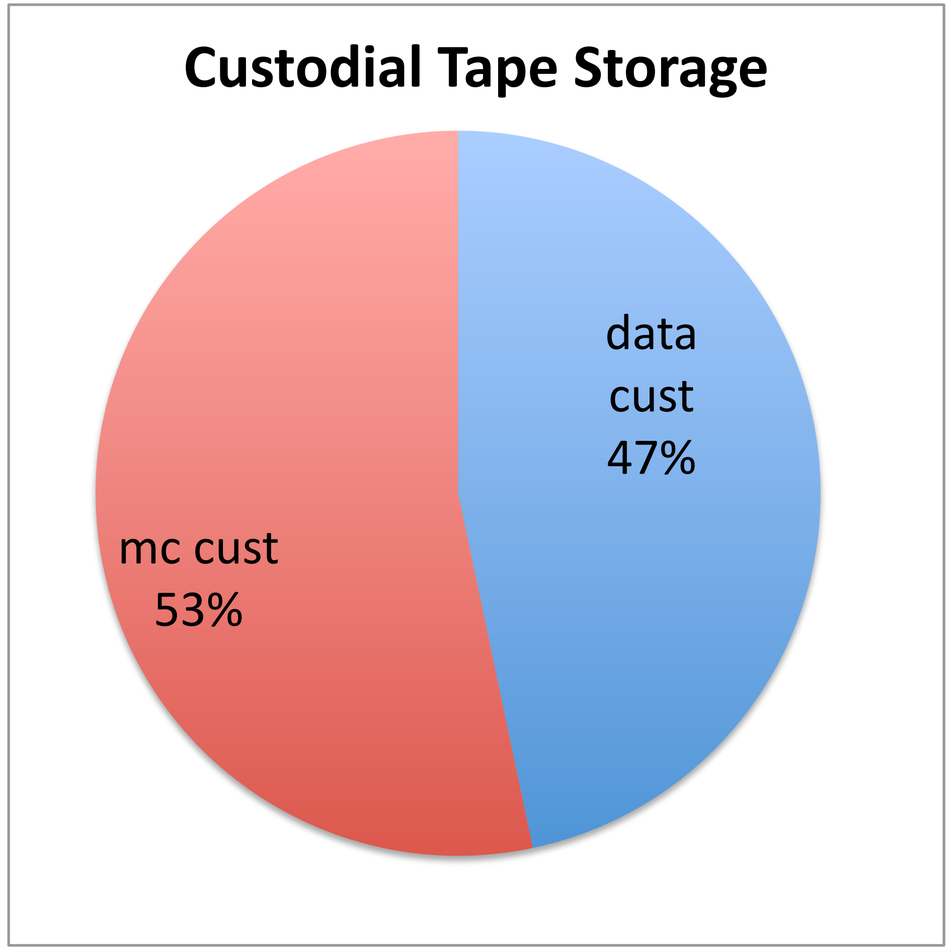




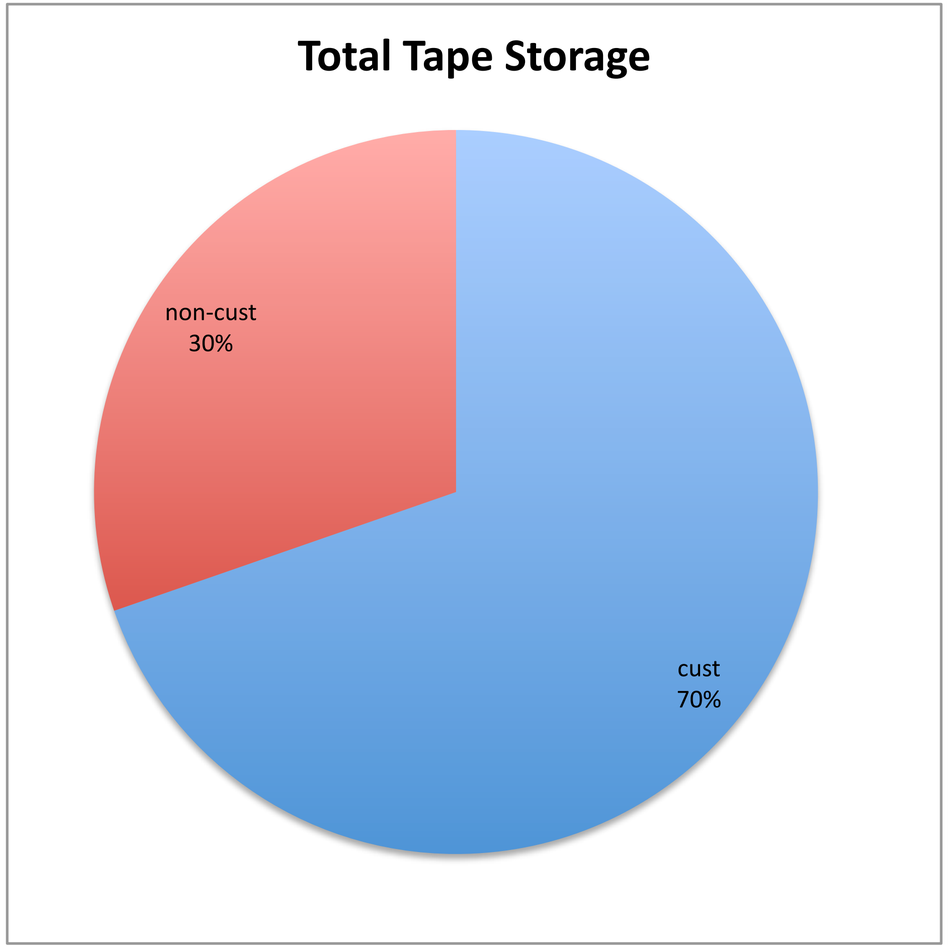
- Differences in custodial storage of data and MC
  - Due to size of datasets and usefulness for analysis

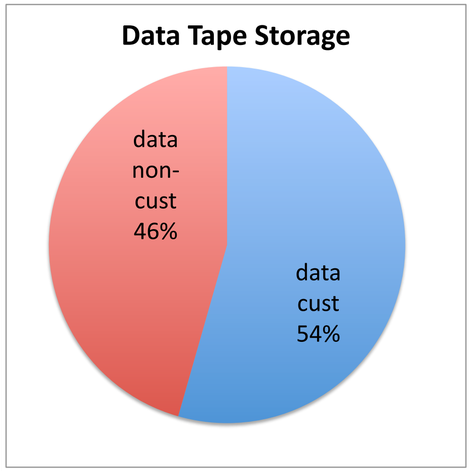
Data vs. MC

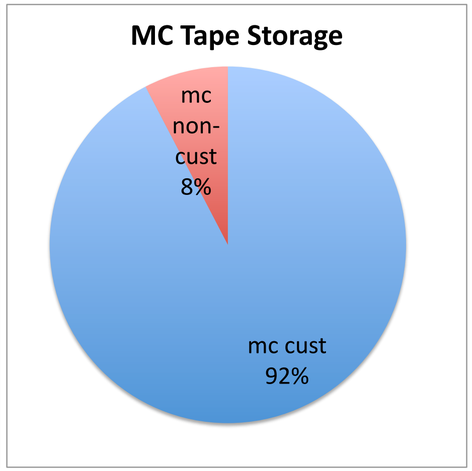

Total Tape Storage
mc
40%
data
60%

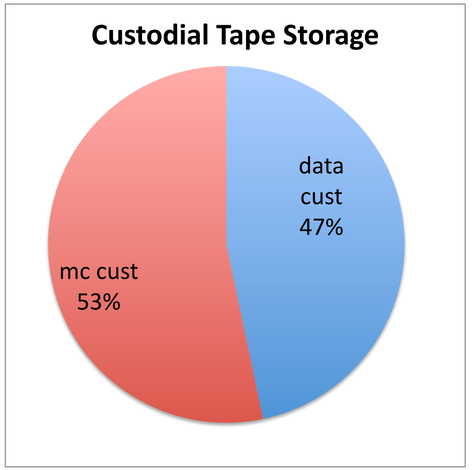

Custodial Tape Storage
data
cust
47%
mc cust
53%

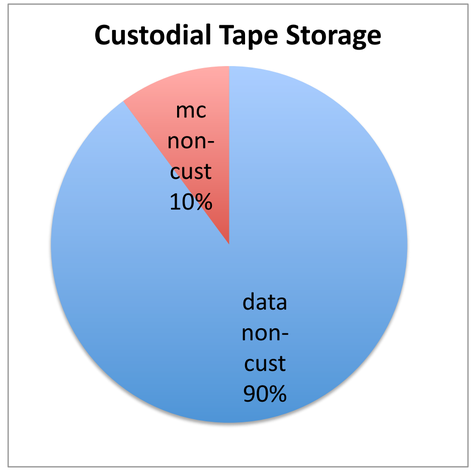
Custodial vs. Non-Custodial



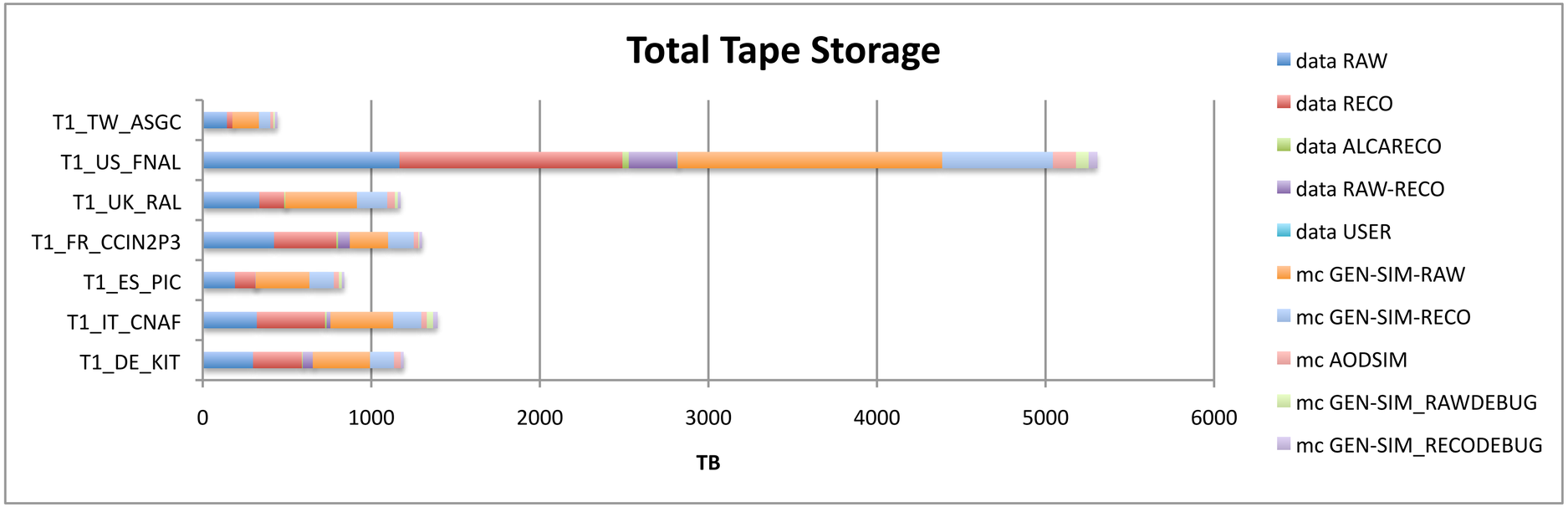






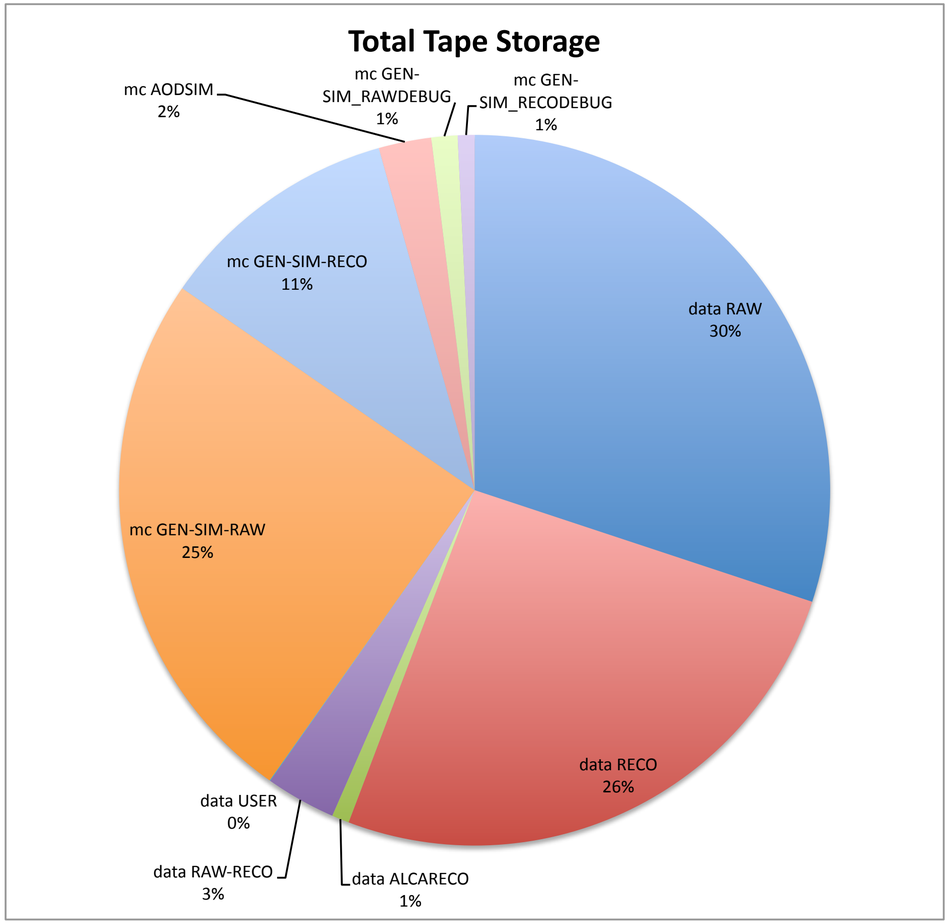


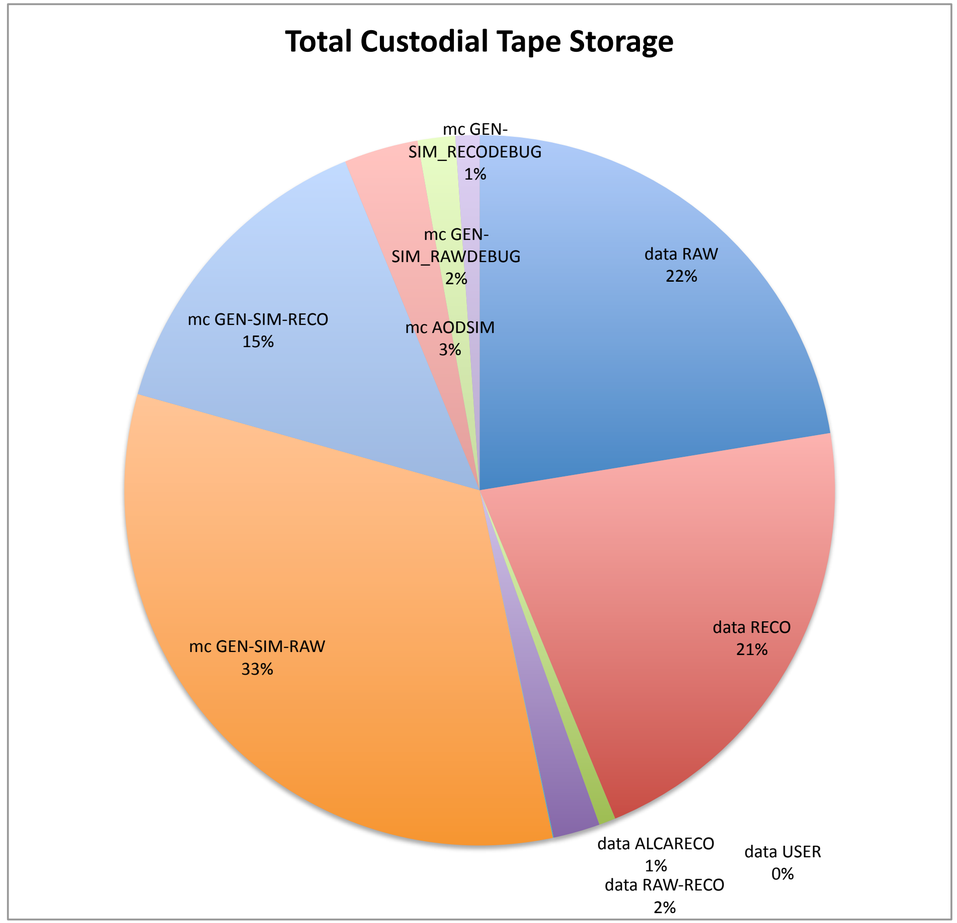
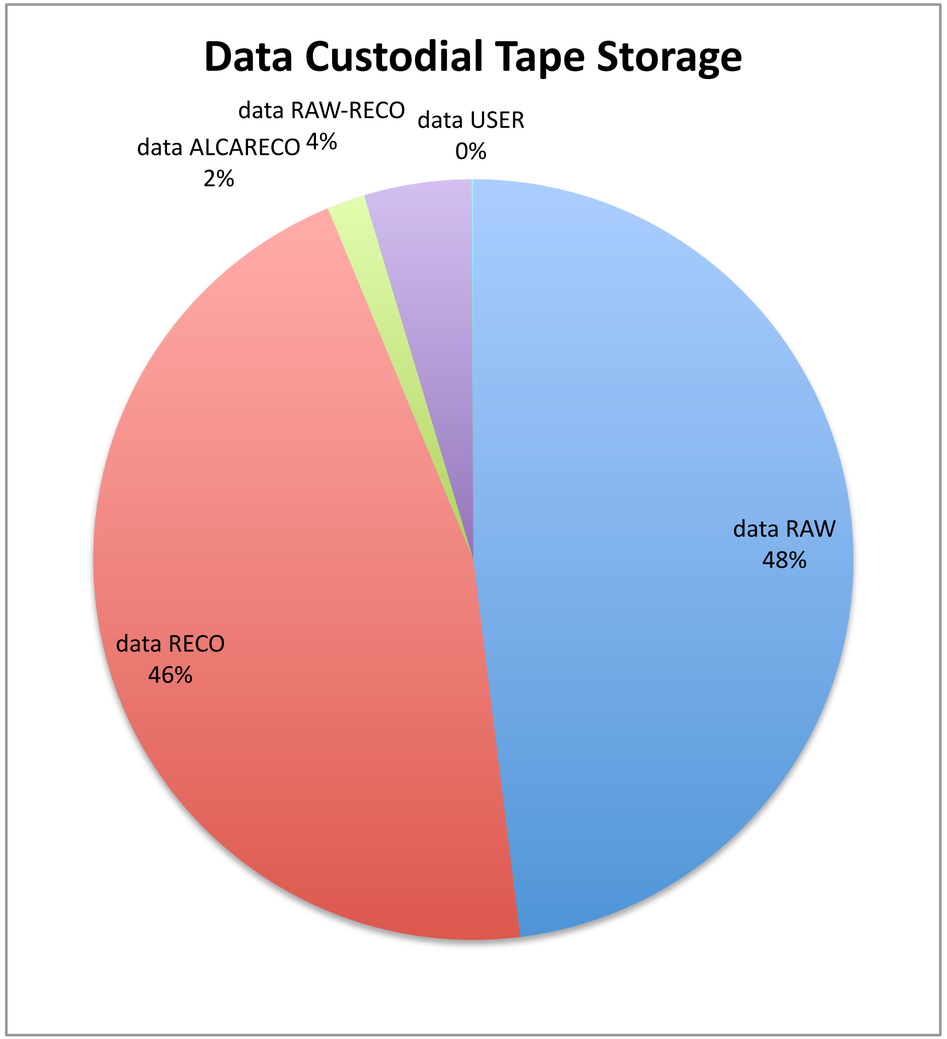
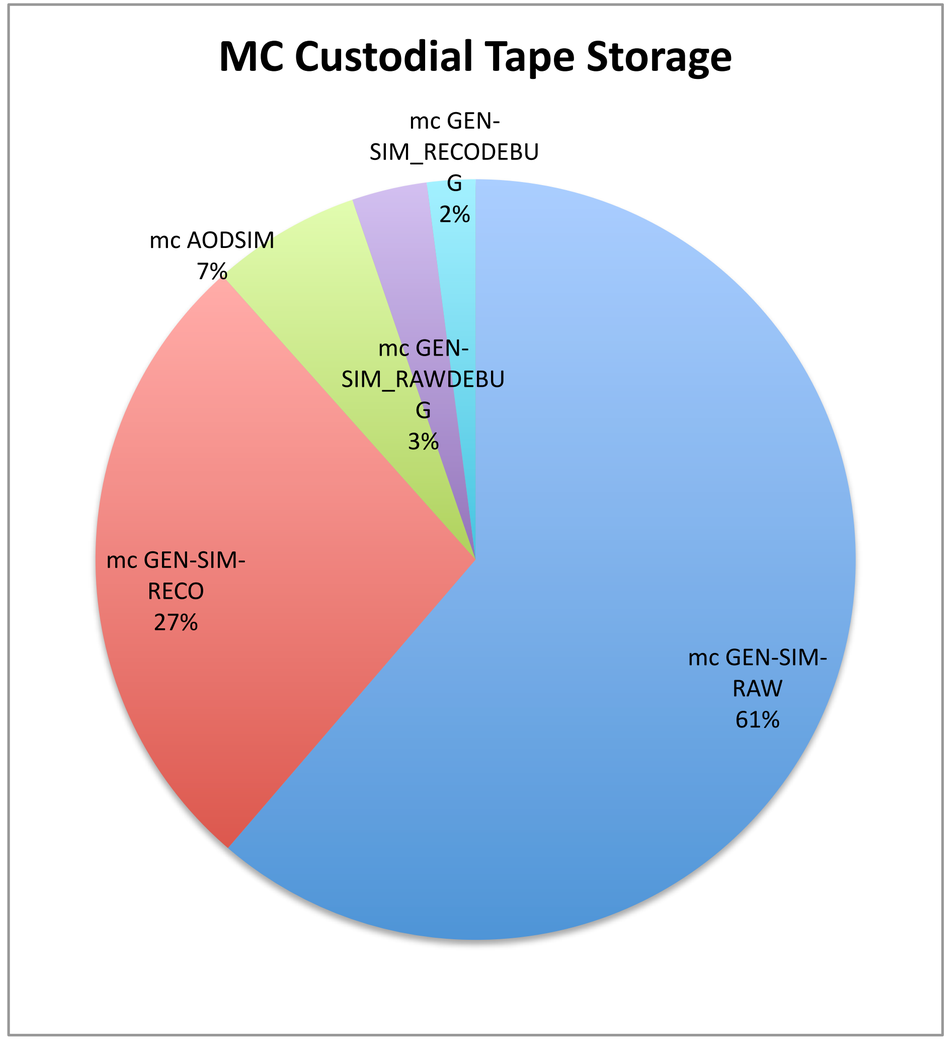
Total Tape Storage by Data Tier



- MC GEN-SIM-RAW biggest contributor

Total Tape Storage by Data Tier

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