# Tema 6


## Bucur Dan-Alexandru (243/2)

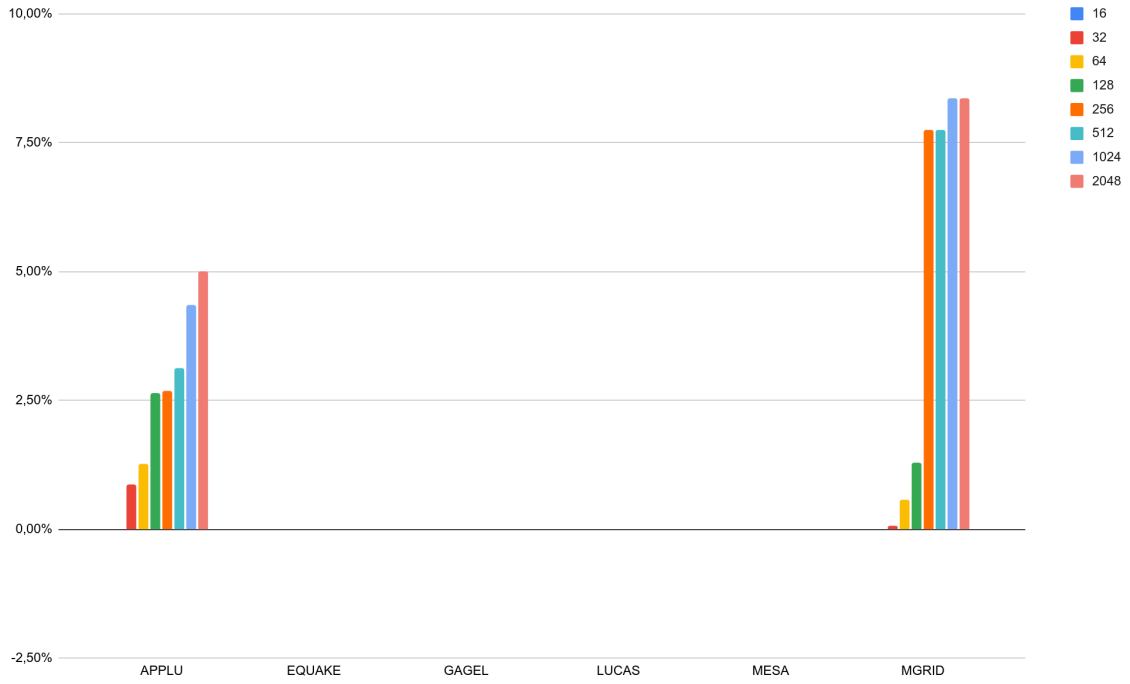
## Timar Cosmin(243/1)


Partea I

Simularea si determinarea Speedup-ului (datorita faptului ca am intampinat eroarea : ERROR: cannot open argument file: gagel.arg am inlocuit locurile in care ar fi venit statistica lui gagel cu 0)

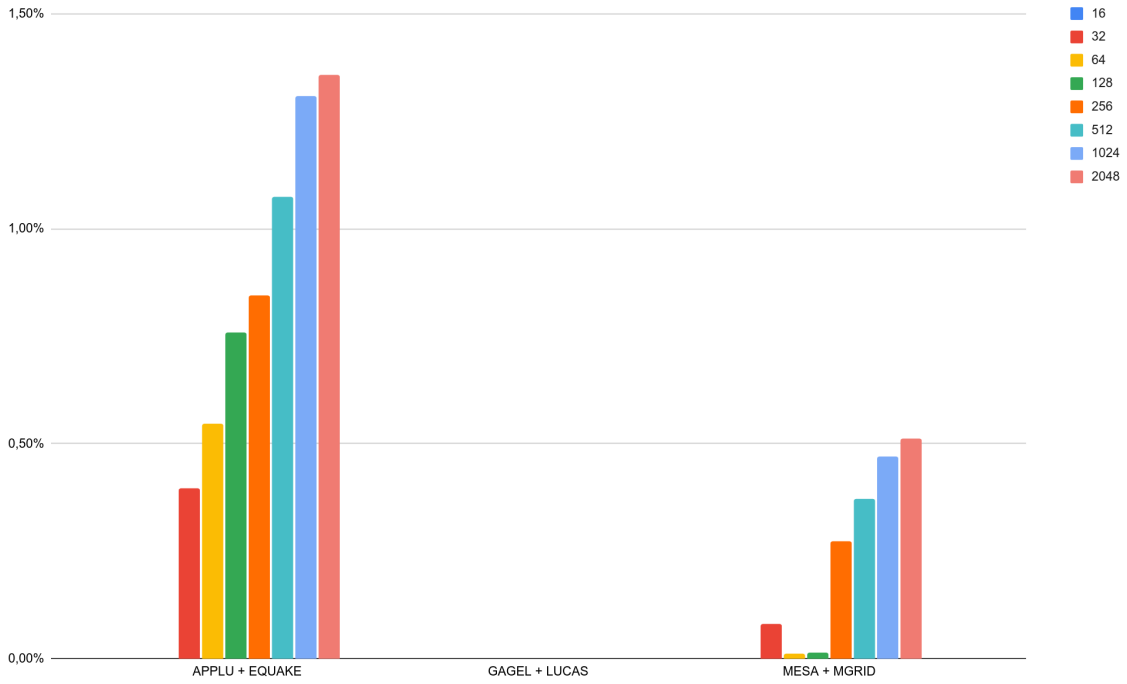
| | LVPT size | | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | APPLU | 0,00% | 0,86% | 1,27% | 2,63% | 2,68% | 3,14% | 4,36% | 5,01% |
| | | EQUAKE | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% |
| | | GAGEL | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% |
| | | LUCAS | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% |
| | | MESA | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% |
| Benchmarks | [Speed-up%] | MGRID | 0,00% | 0,07% | 0,57% | 1,29% | 7,74% | 7,74% | 8,36% | 8,37% |

| | LVPT size | | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | APPLU | 2,7866 | 2,8108 | 2,8224 | 2,862 | 2,8633 | 2,8768 | 2,9136 | 2,9336 |
| | | EQUAKE | 2,1277 | 2,1277 | 2,1277 | 2,1277 | 2,1277 | 2,1277 | 2,1276 | 2,1276 |
| | | GAGEL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | LUCAS | 3,1667 | 3,1667 | 3,1667 | 3,1667 | 3,1667 | 3,1667 | 3,1667 | 3,1667 |
| | | MESA | 2,3261 | 2,3262 | 2,3262 | 2,3262 | 2,3262 | 2,3262 | 2,3262 | 2,3262 |
| Benchmarks | IPC | MGRID | 2,1344 | 2,1359 | 2,1467 | 2,1624 | 2,3134 | 2,3135 | 2,3292 | 2,3293 |



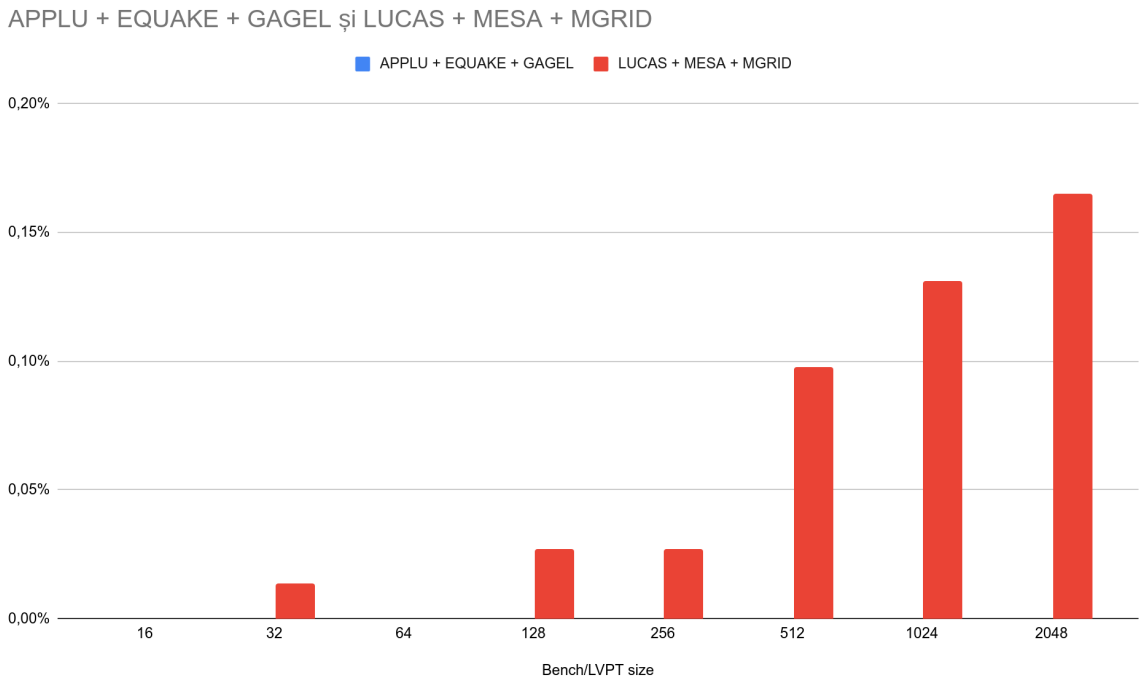

| | LVPT size | | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | APPLU + EQUAKE | 0,00% | 0,40% | 0,55% | 0,76% | 0,84% | 1,08% | 1,31% | 1,36% |
| | | GAGEL + LUCAS | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% |
| Bench | [Speed-up%] | MESA + MGRID | 0,00% | 0,08% | 0,01% | 0,01% | 0,27% | 0,37% | 0,47% | 0,51% |

| | LVPT size | | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | APPLU + EQUAKE | 2,7697 | 2,7807 | 2,7849 | 2,7909 | 2,7933 | 2,7998 | 2,8064 | 2,8078 |
| | | GAGEL + LUCAS | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| Bench | IPC | MESA + MGRID | 2,7022 | 2,7000 | 2,7019 | 2,7018 | 2,7096 | 2,7123 | 2,7150 | 2,7161 |




| | LVPT size | | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 |
|---|---|---|---|---|---|---|---|---|---|---|
| Bench | [Speed-up%] | APPLU + EQUAKE + GAGEL | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% | 0,00% |
| | | LUCAS + MESA + MGRID | 0,00% | 0,01% | 0,00% | 0,03% | 0,03% | 0,10% | 0,13% | 0,16% |

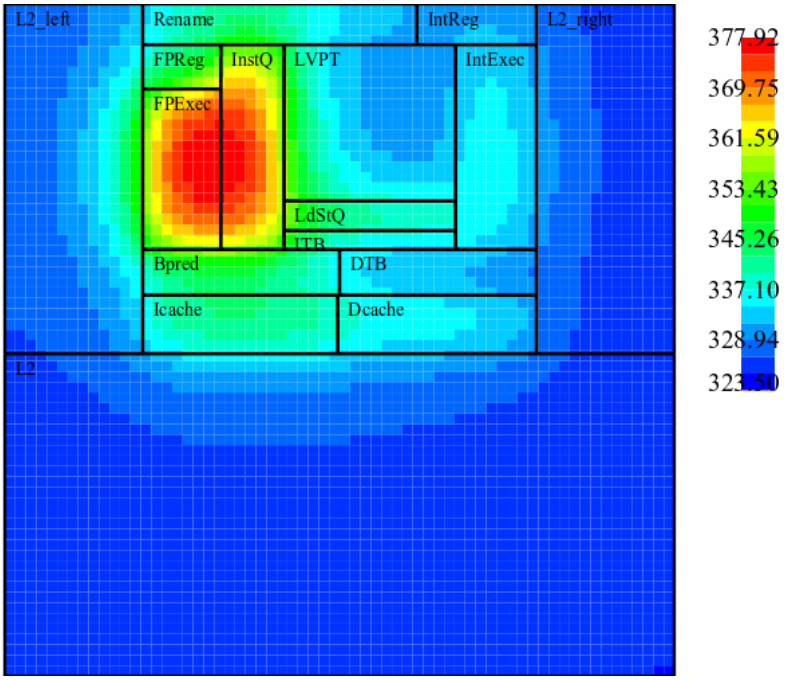
| | LVPT size | | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 |
|---|---|---|---|---|---|---|---|---|---|---|
| Bench | IPC | APPLU + EQUAKE + GAGEL | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| | | LUCAS + MESA + MGRID | 2,9651 | 2,9647 | 2,9651 | 2,9659 | 2,9659 | 2,9680 | 2,9690 | 2,9700 |



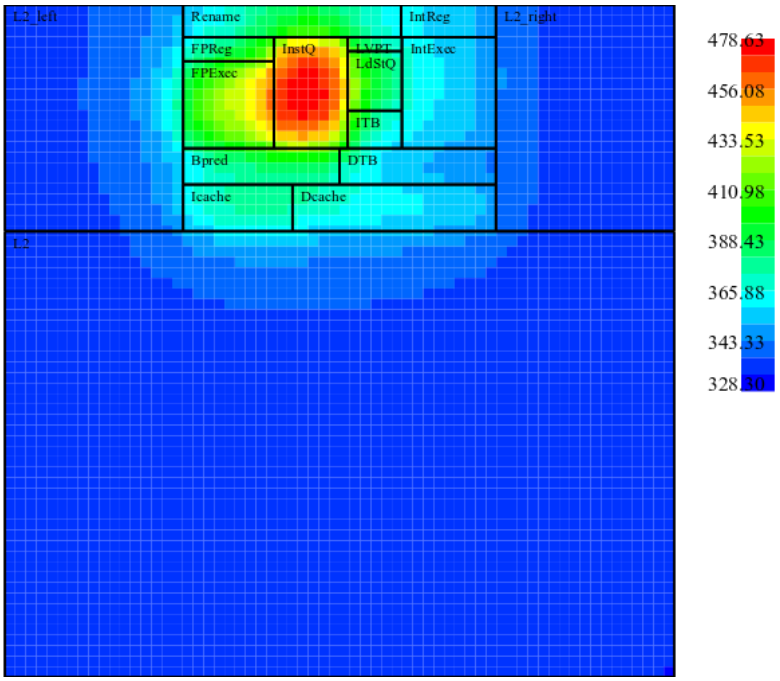

Simularile bazate pe 6 bench-mark-uri nu sunt disponibile datorita aceleiasi erori (ERROR: cannot open argument file: gagel.arg)

Partea II
Simularea unor benchmark-uri si determinarea impactului termic asupra unui tip de arhitectura.

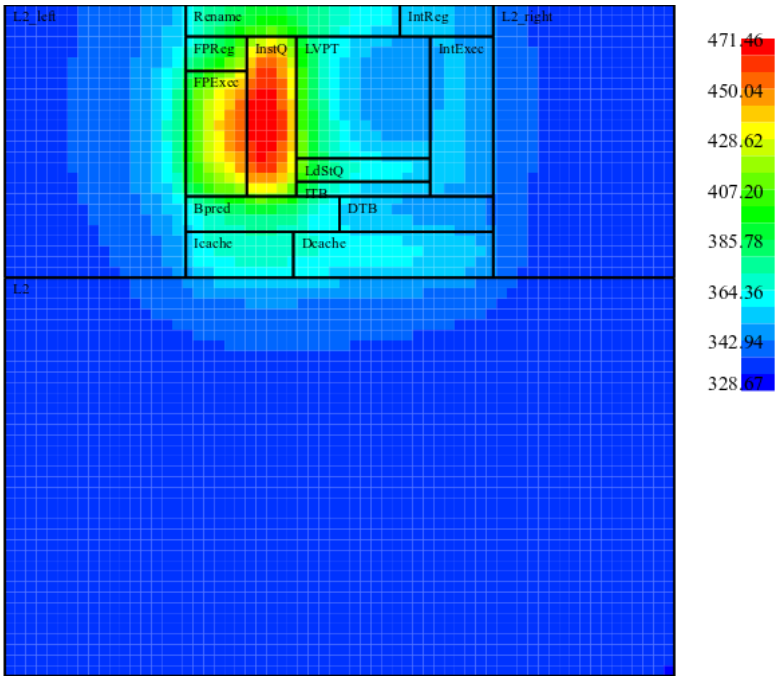
APPLU with LVPT C1 (max temp 377.92)



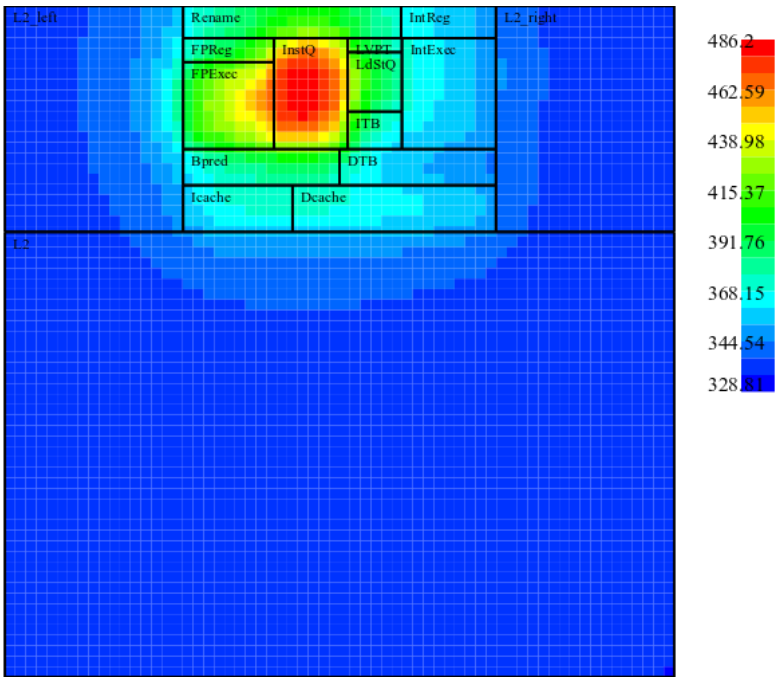
APPLU with LVPT C2(max temp 478.63)



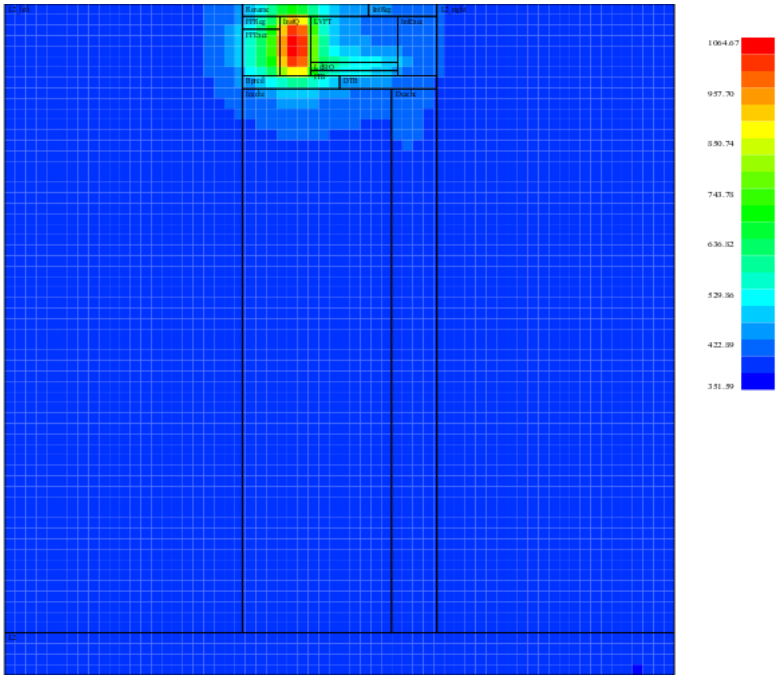

APPLU with LVPT C3(max temp 471.46)



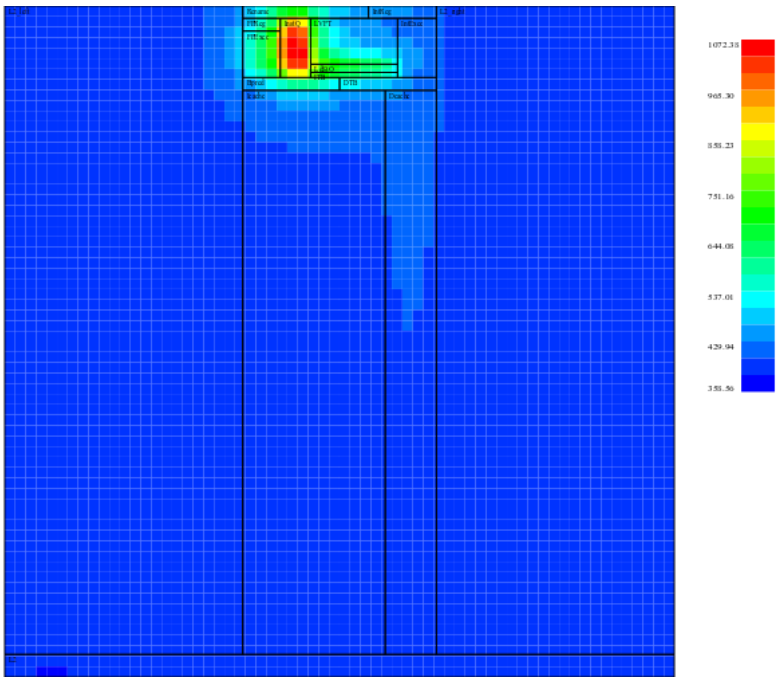

APPLU with LVPT C4(max temp 486.2)



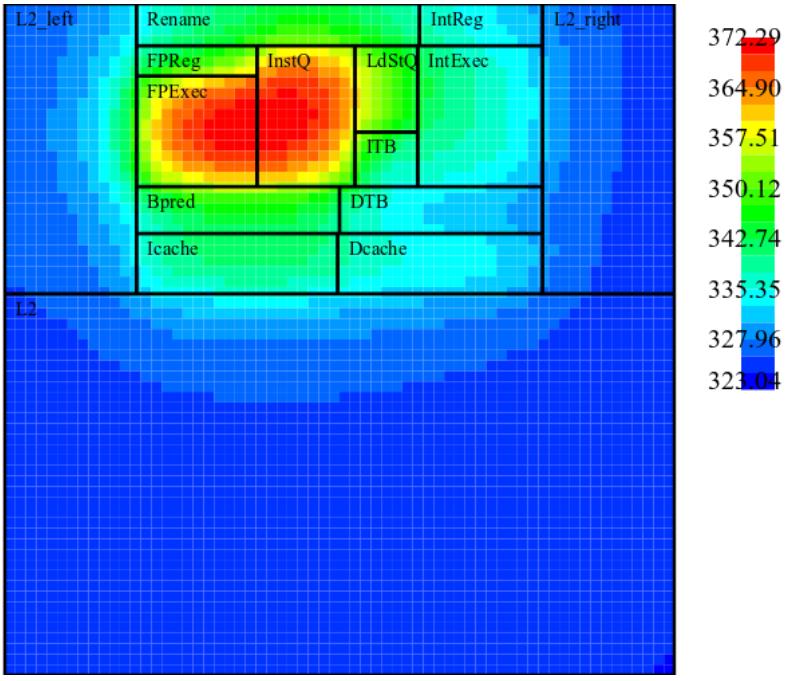

APPLU with LVPT C5(max temp 1064.67)



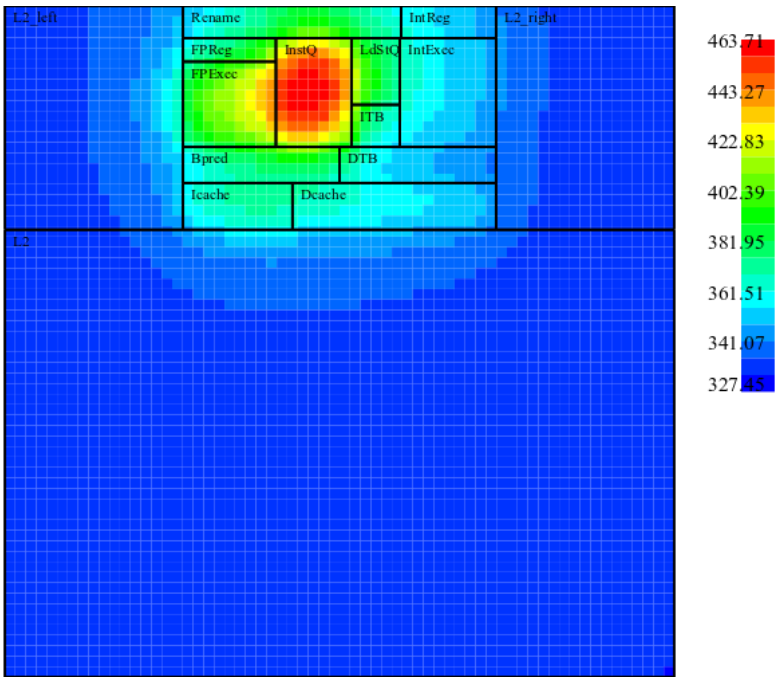
APPLU with LVPT C6(max temp 1072.38)



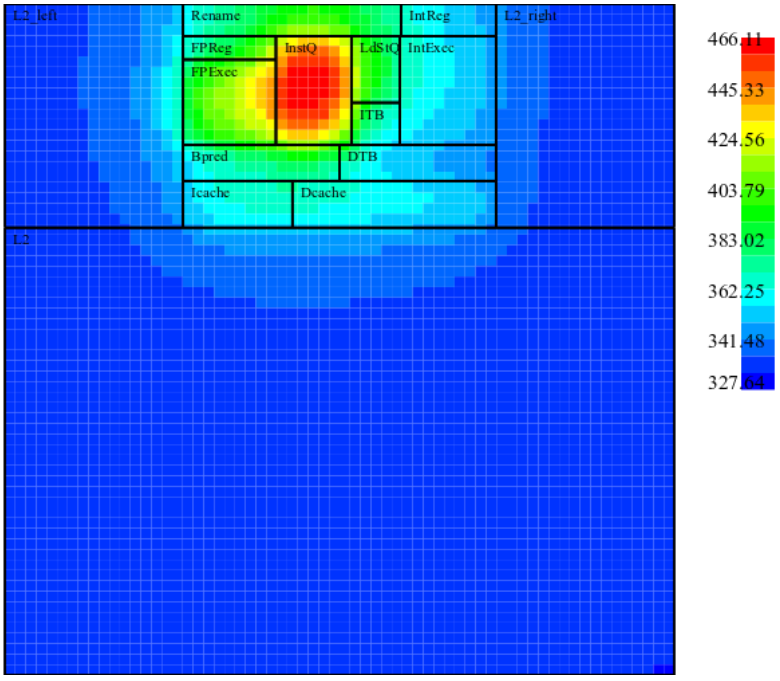
APPLU without LVPT C1(max temp 372.29)



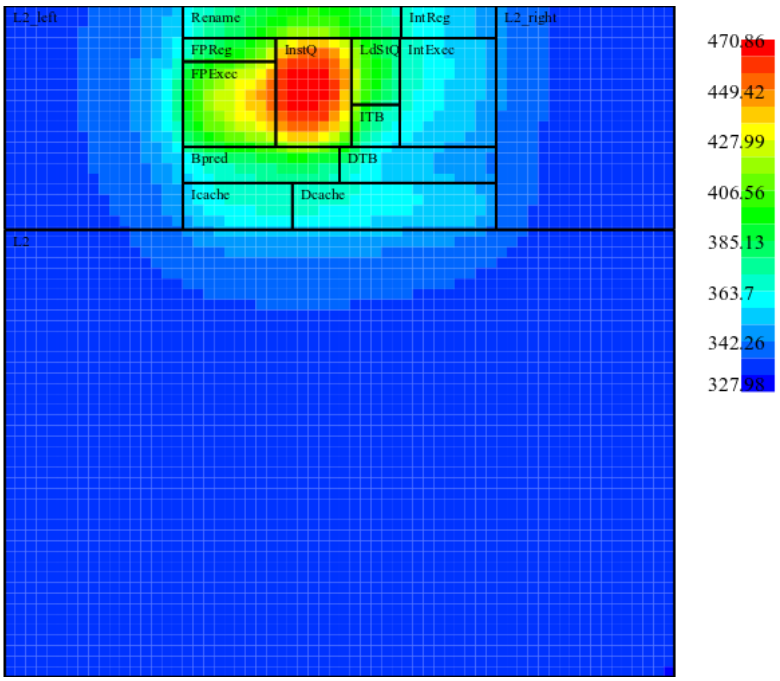

APPLU without LVPT C2(max temp 463.71)



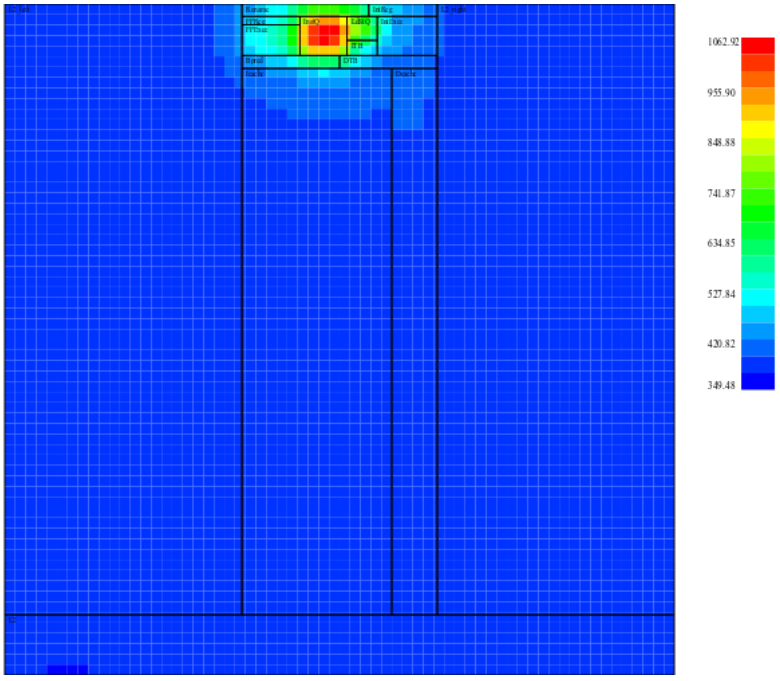

APPLU without LVPT C3(max temp 466.11)



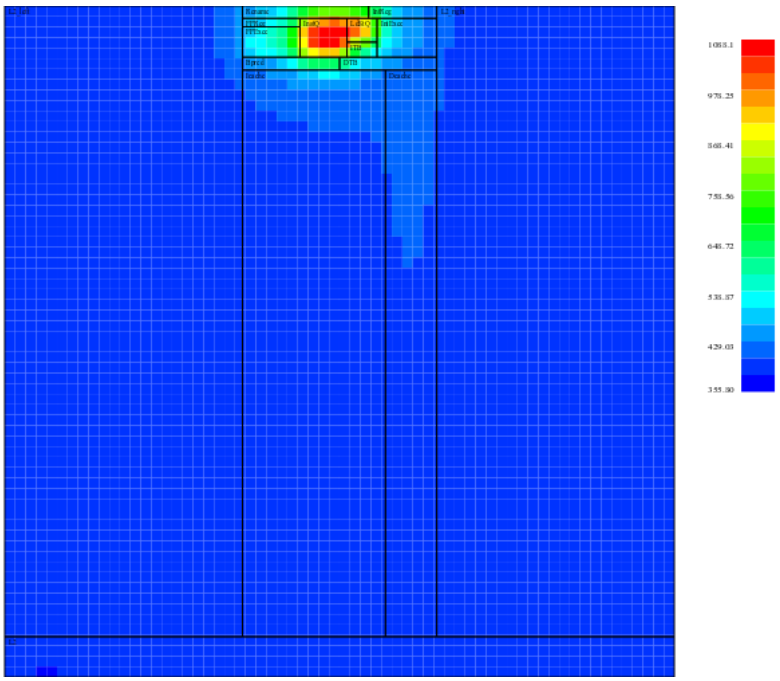

APPLU without LVPT C4(max temp 470.86)



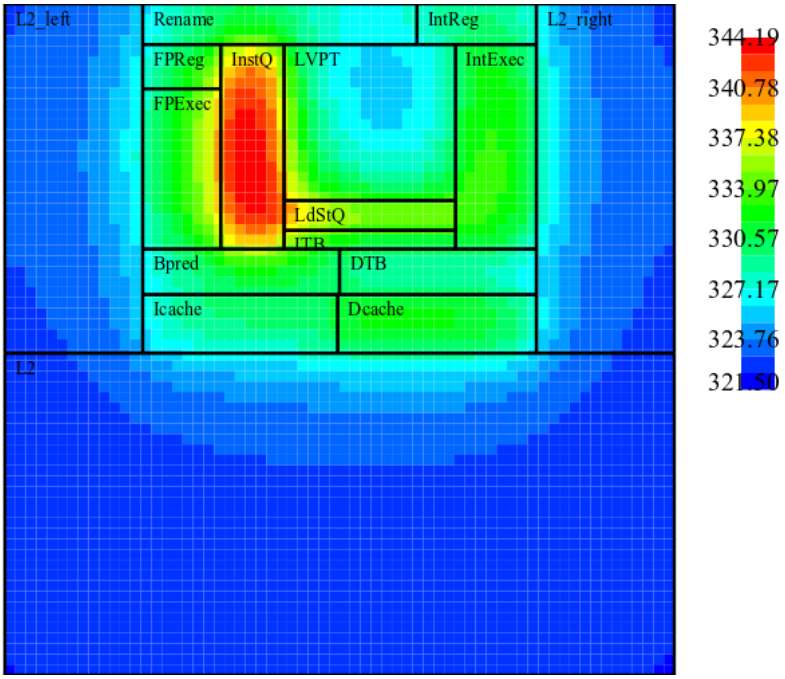

APPLU without LVPT C5(max temp 1062.92)



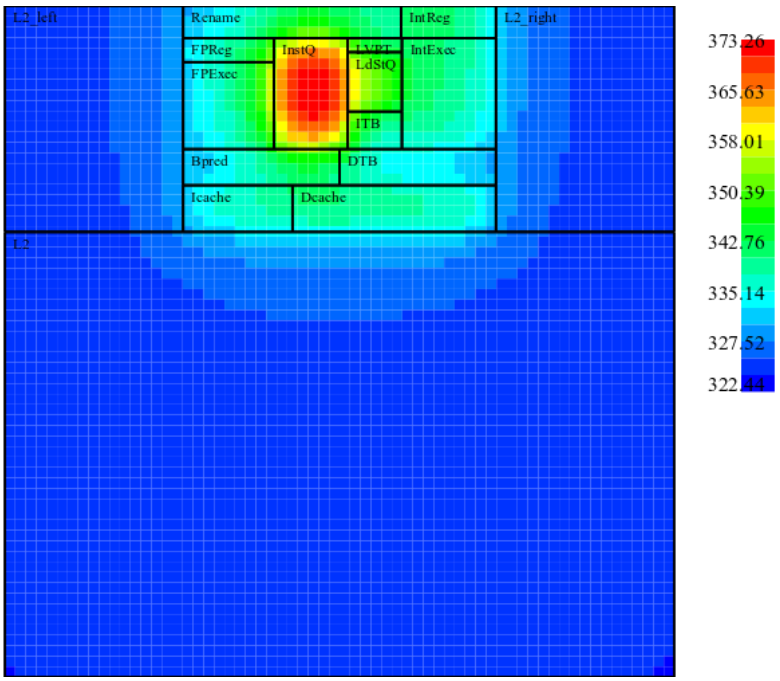

APPLU without LVPT C6(max temp 1088.1)



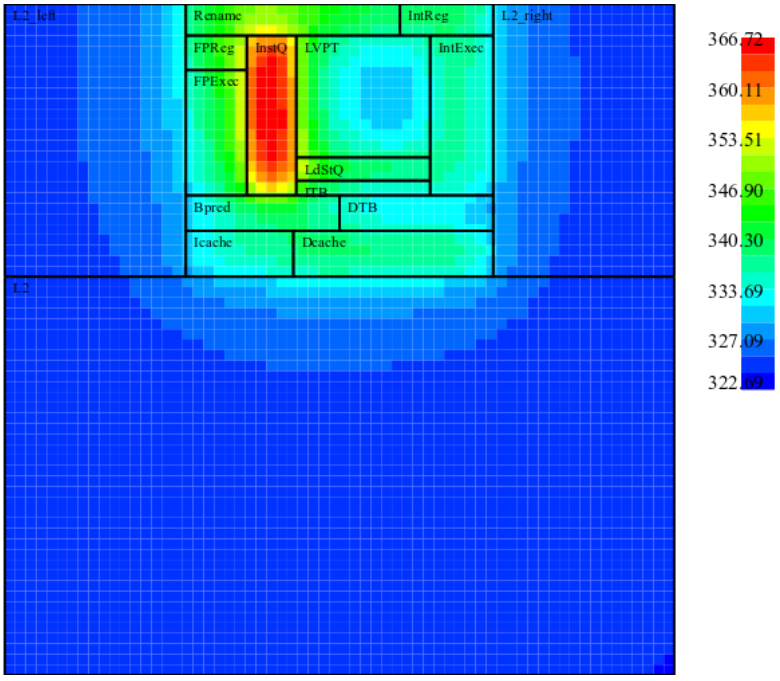
BZIP2 with LVPT C1(max temp 344.19)



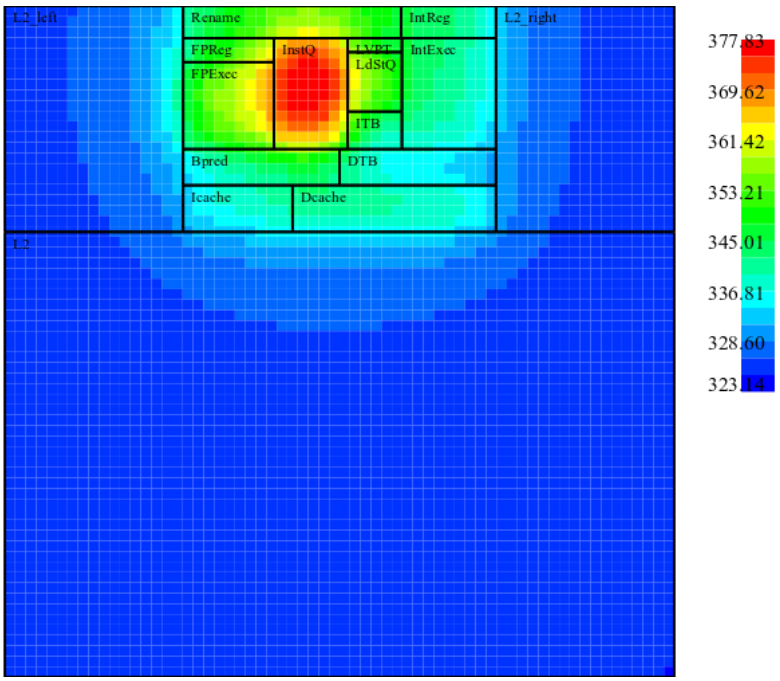

BZIP2 with LVPT C2(373.26)



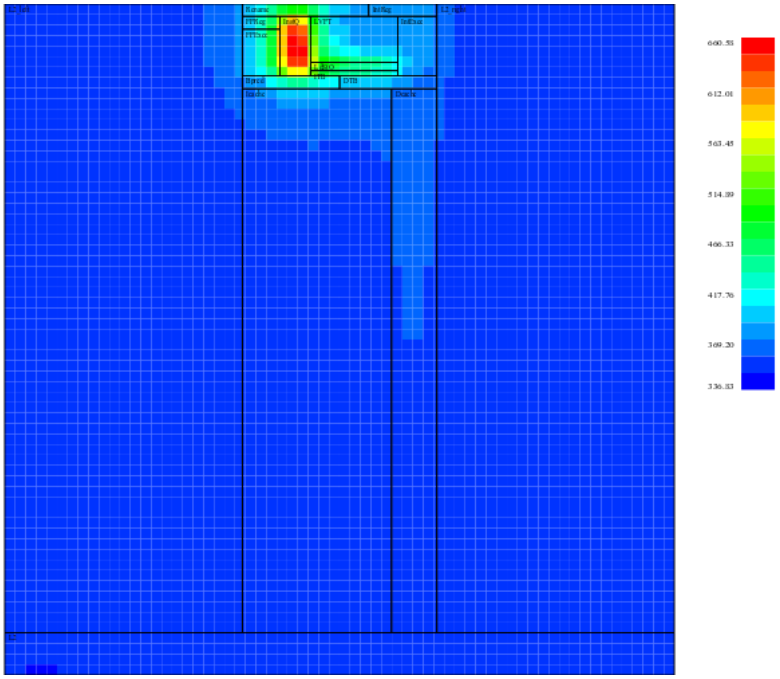

BZIP2 with LVPT C3(366.72)



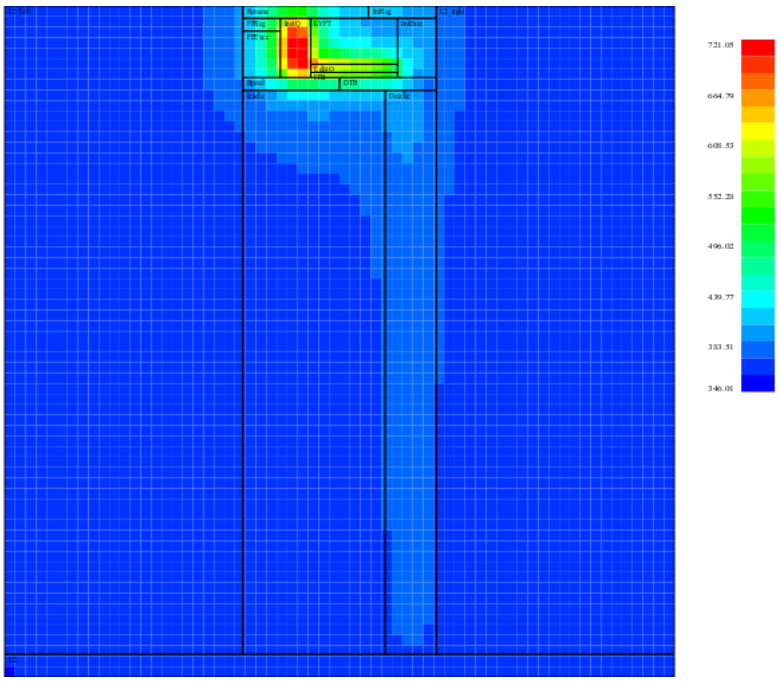

BZIP2 with LVPT C4(377.83)



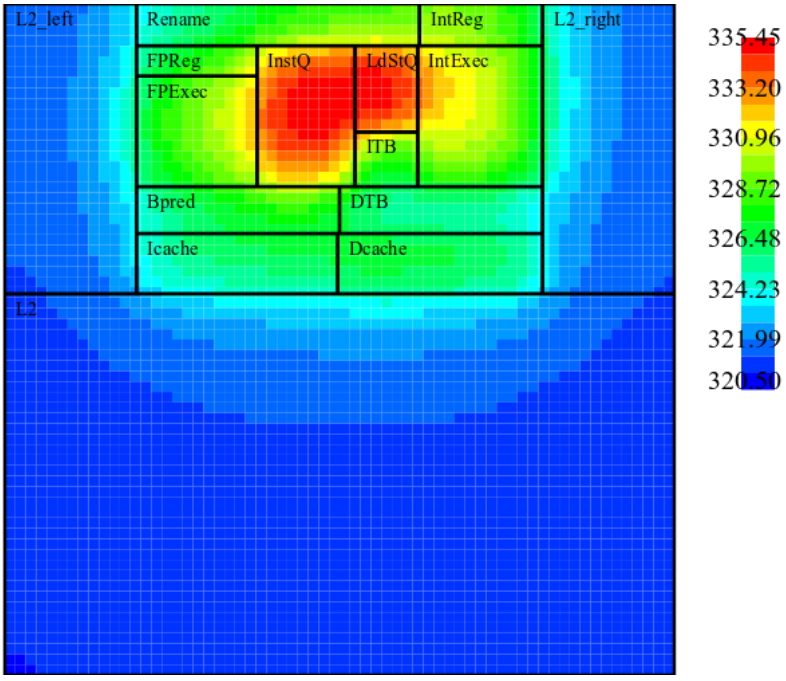

BZIP2 with LVPT C5(660.58)



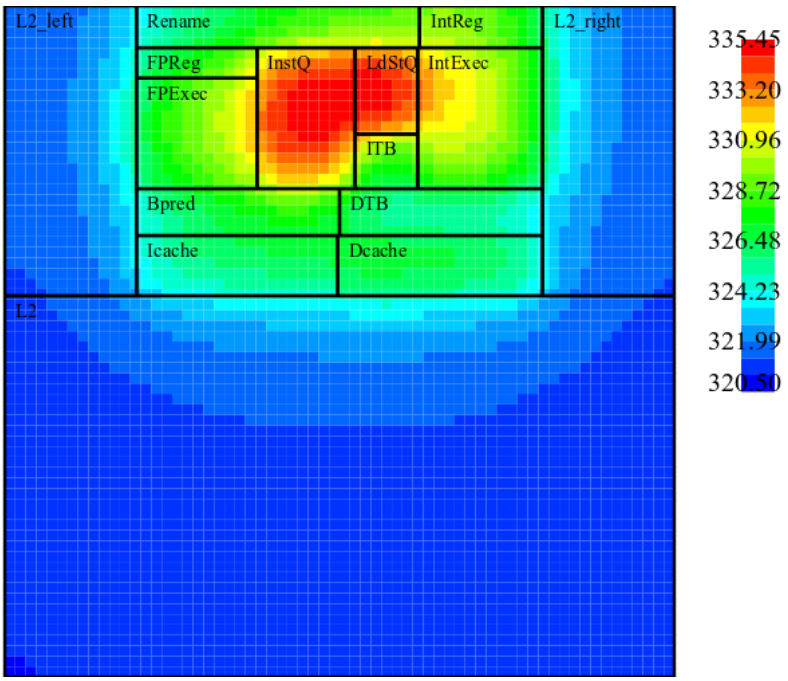
BZIP2 with LVPT C6(721.05)



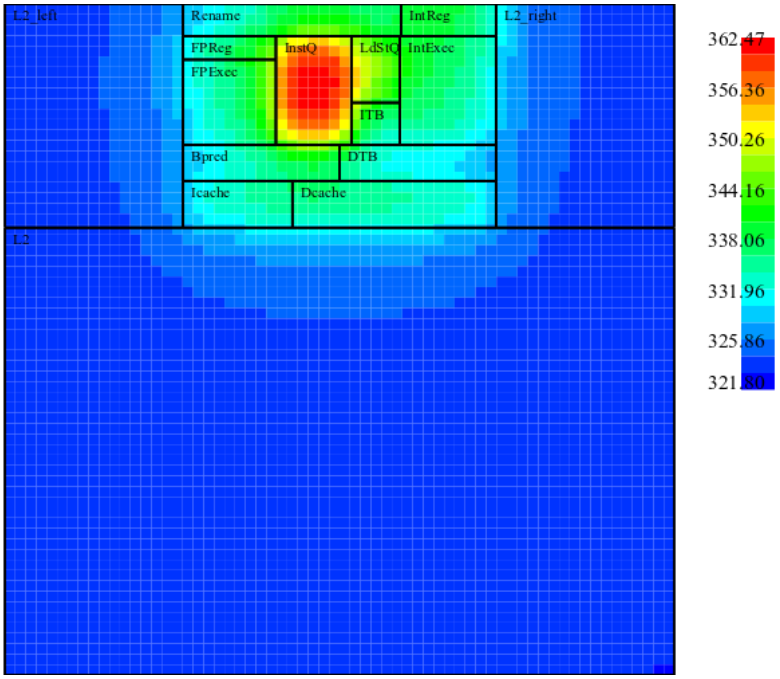
BZIP2 without LVPT C1(335.45)



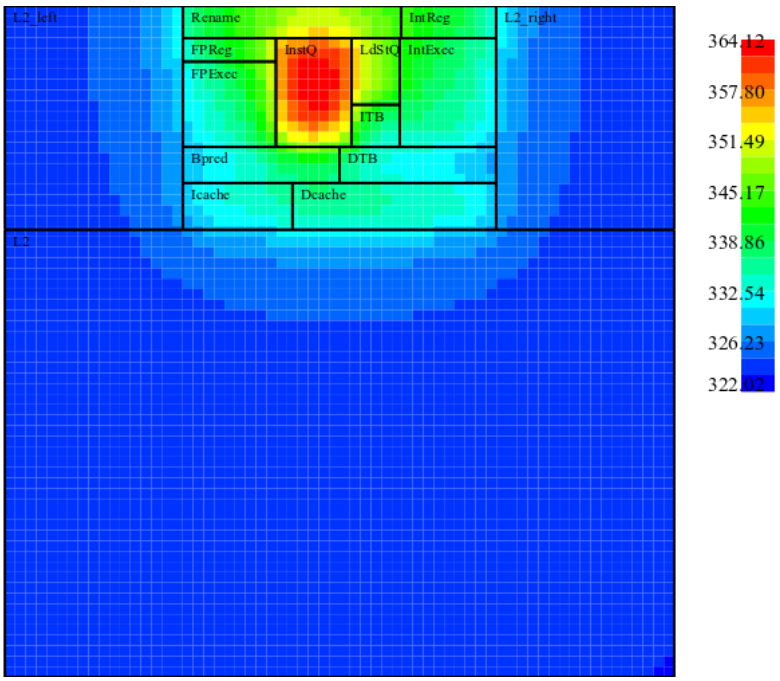

BZIP2 without LVPT C1(335.45)



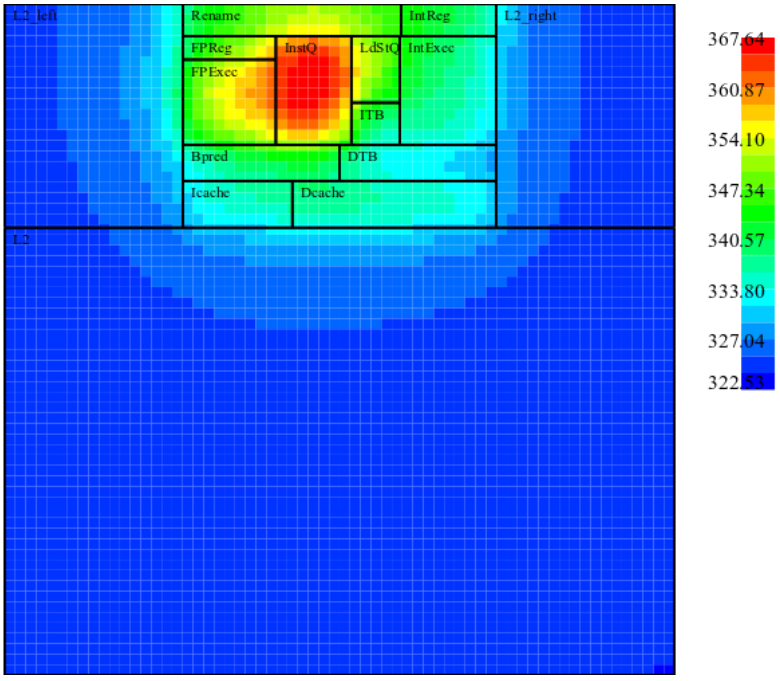

BZIP2 without LVPT C2(362.47)



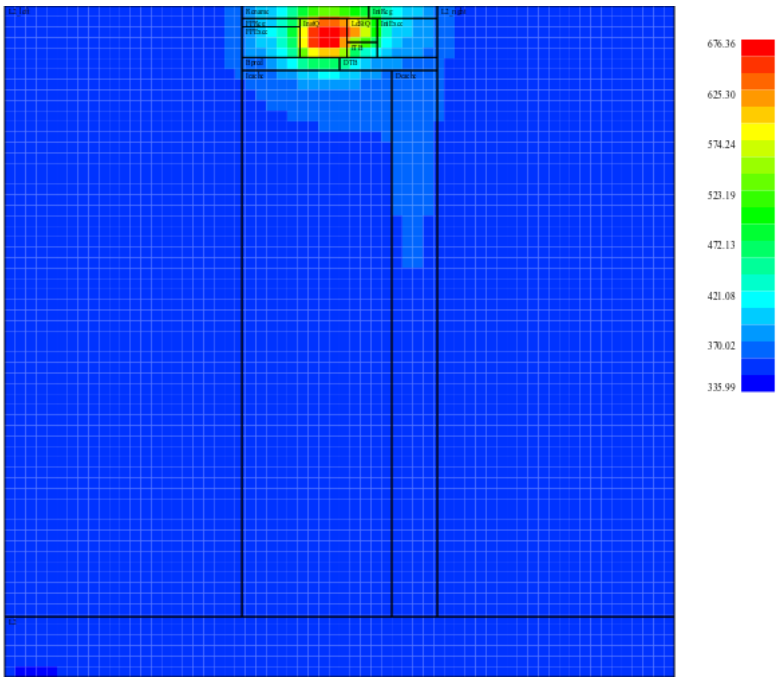

BZIP2 without LVPT C3(364.12)



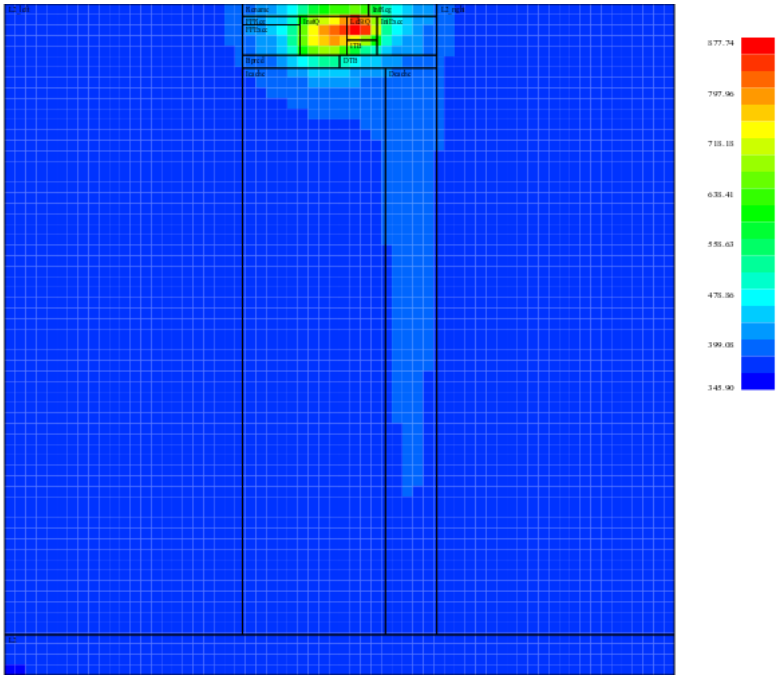

BZIP2 without LVPT C4(367.64)



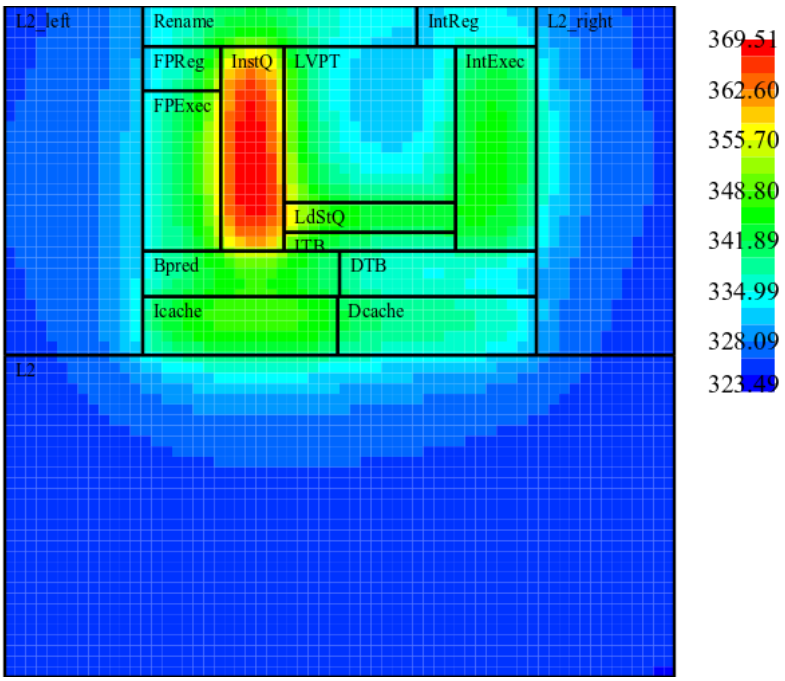

BZIP2 without LVPT C5(676.36)



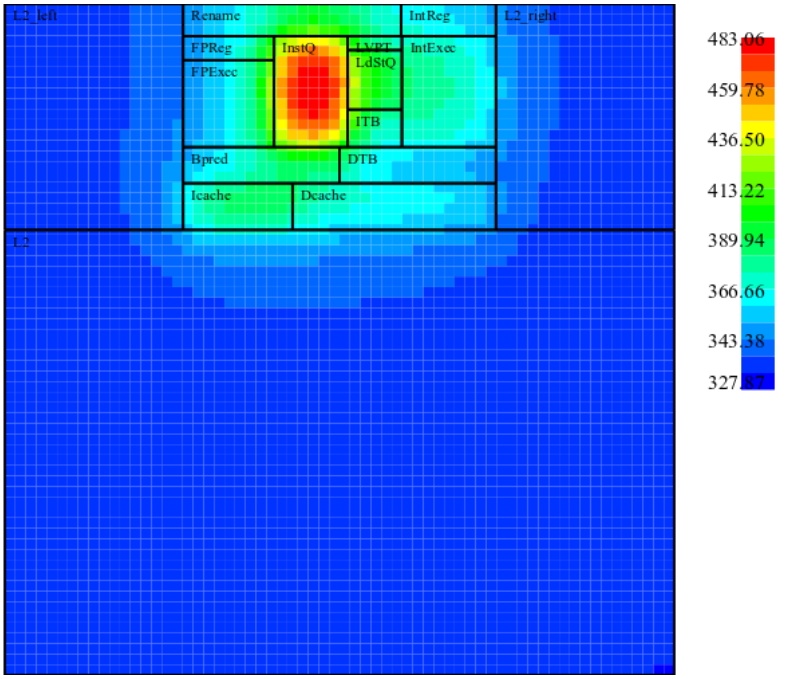

BZIP2 without LVPT C6(877.74)



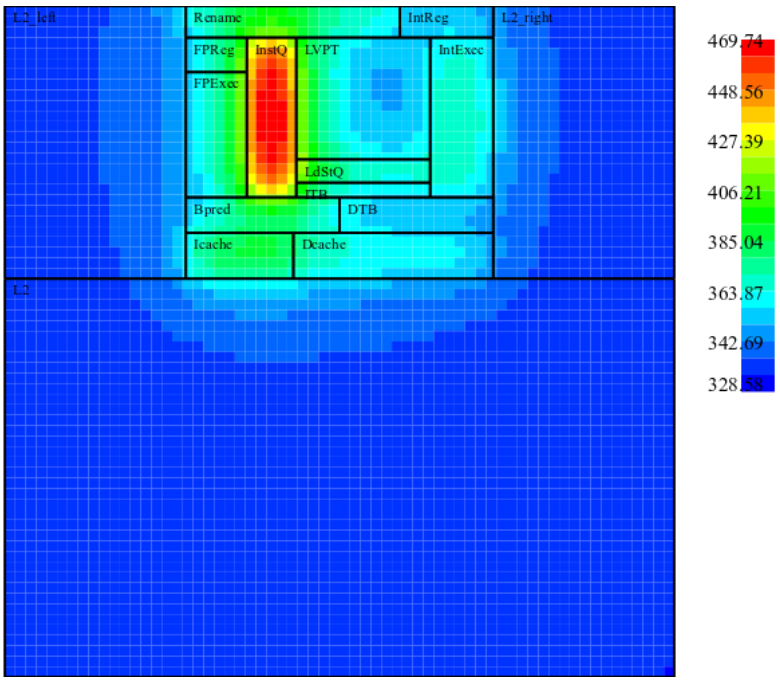

EQUAKE with LVPT C1(369.51)



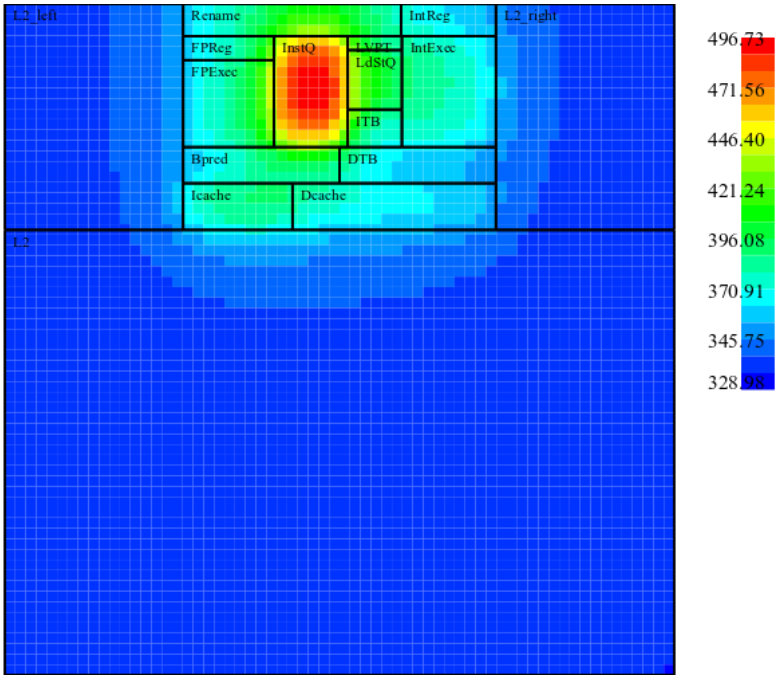

EQUAKE with LVPT C2(483.06)



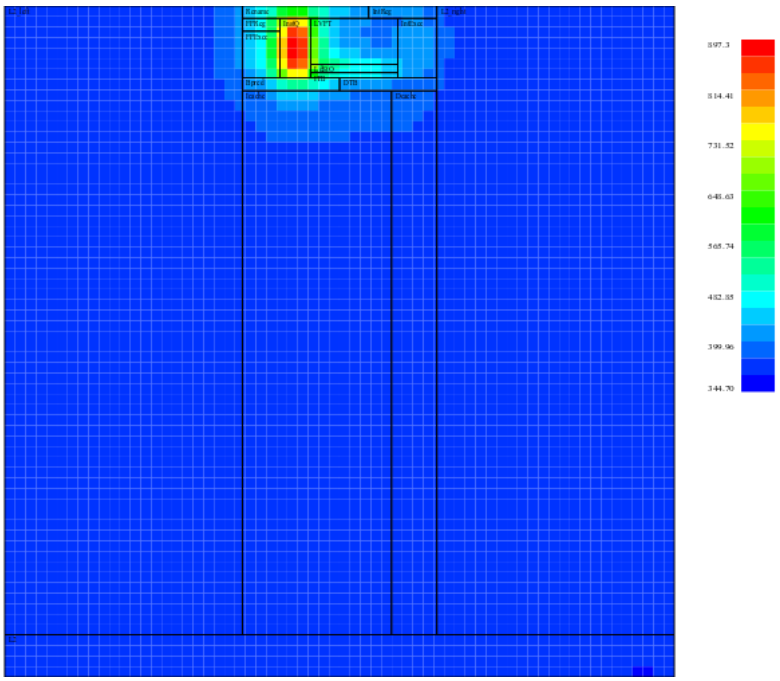

EQUAKE with LVPT C3(469.74)



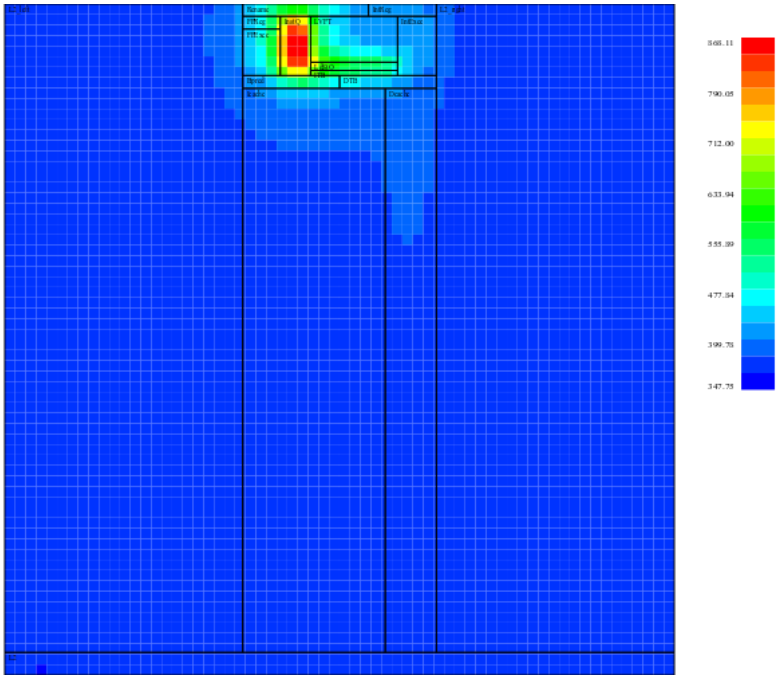

EQUAKE with LVPT C4(496.73)



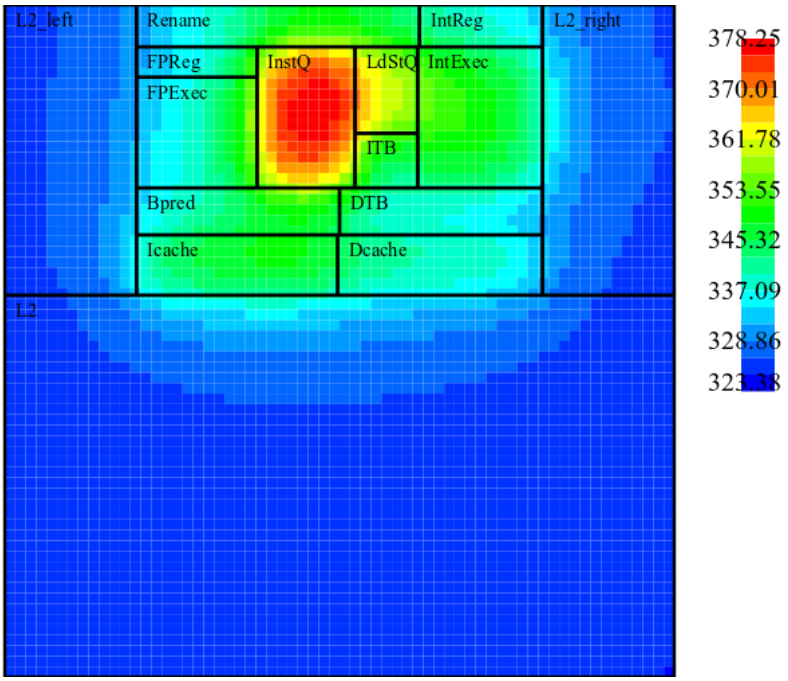

EQUAKE with LVPT C5(897.3)



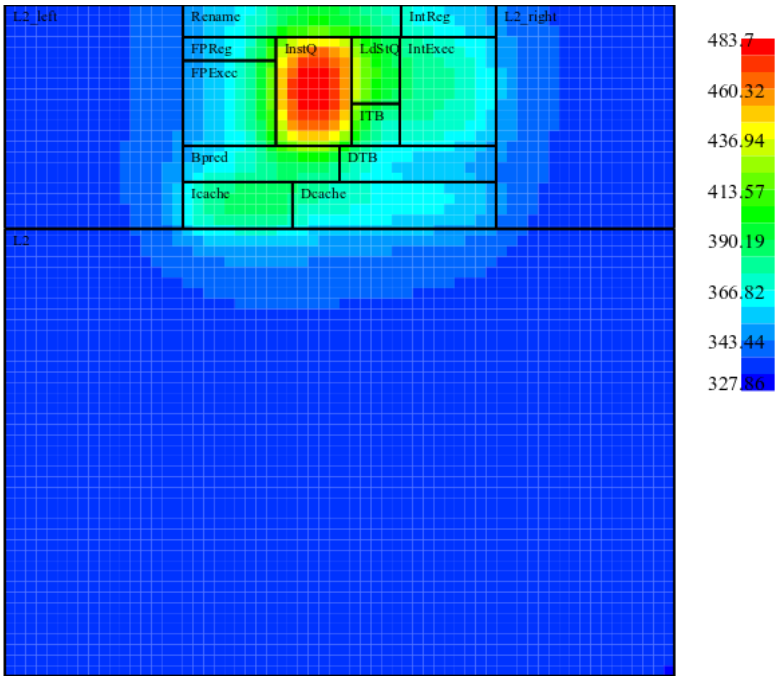

EQUAKE with LVPT C6(868.11)



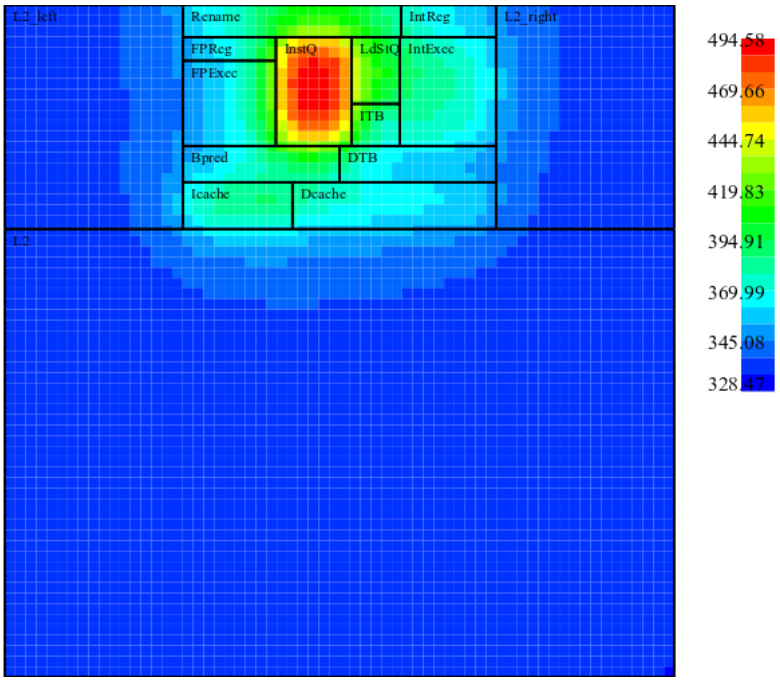
EQUAKE without LVPT C1(378.25)



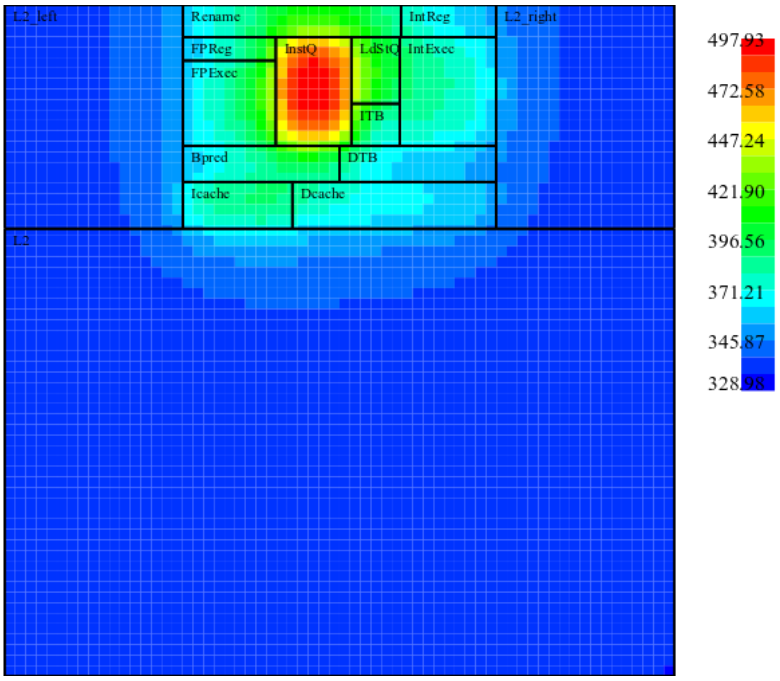

EQUAKE without LVPT C2(483.7)



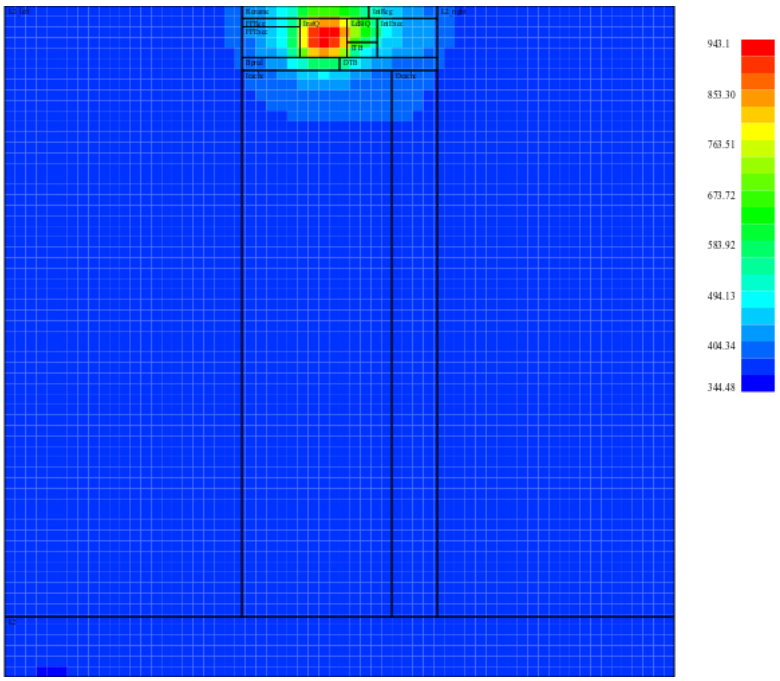
EQUAKE without LVPT C3(494.58)



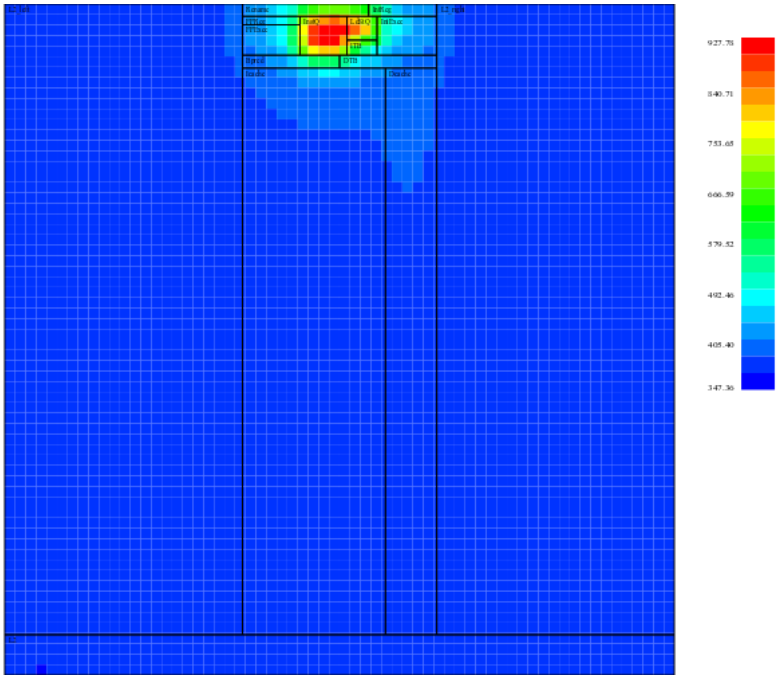

EQUAKE without LVPT C4(497.93)



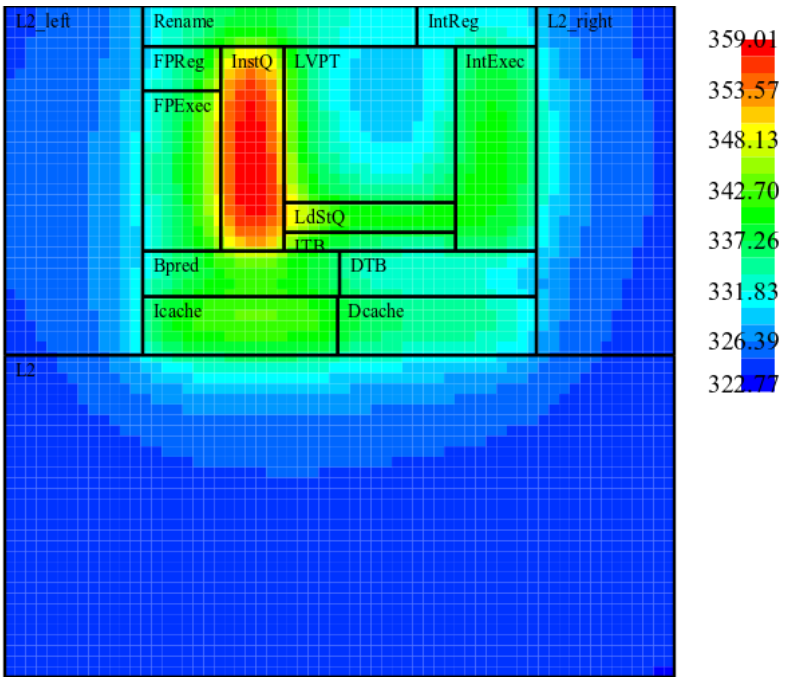

EQUAKE without LVPT C5(943.1)



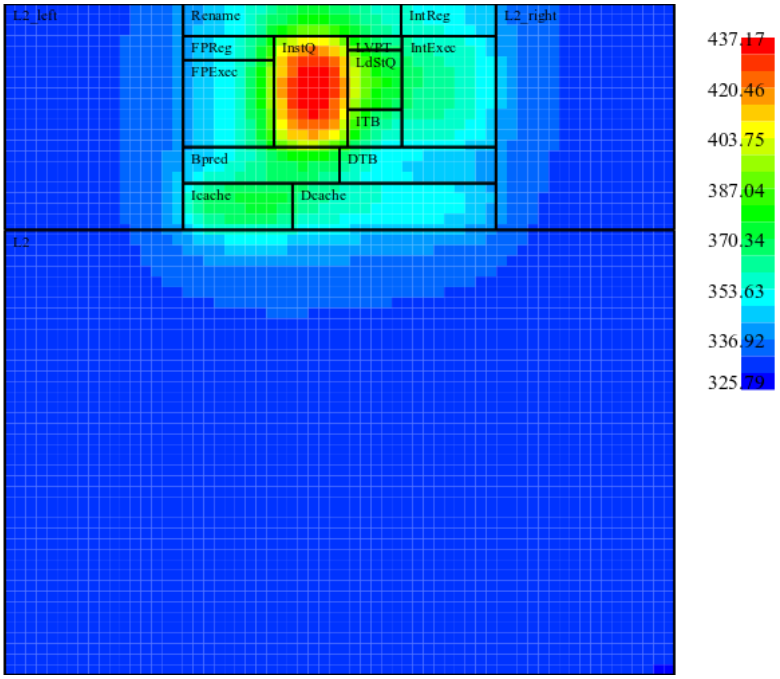

EQUAKE without LVPT C6(927.78)



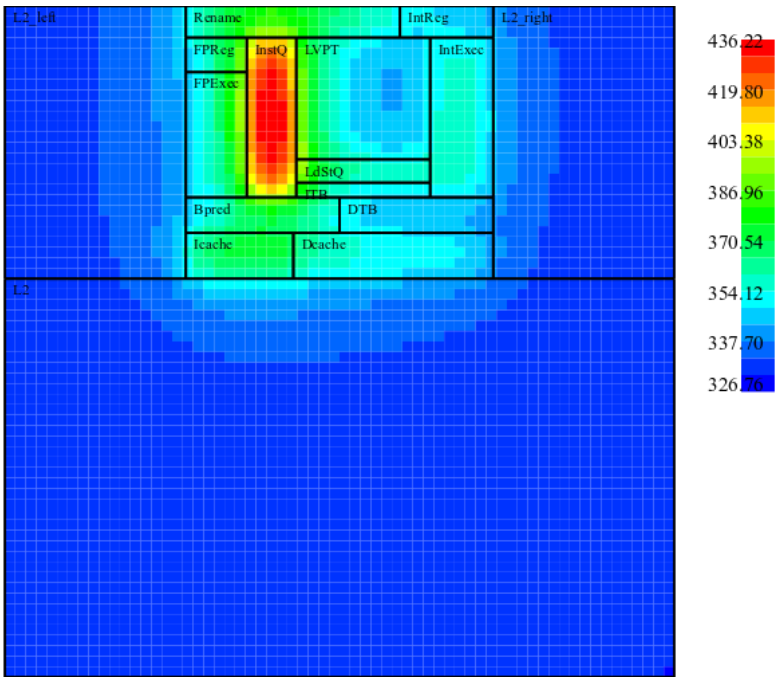

GCC with LVPT C1(359.01)



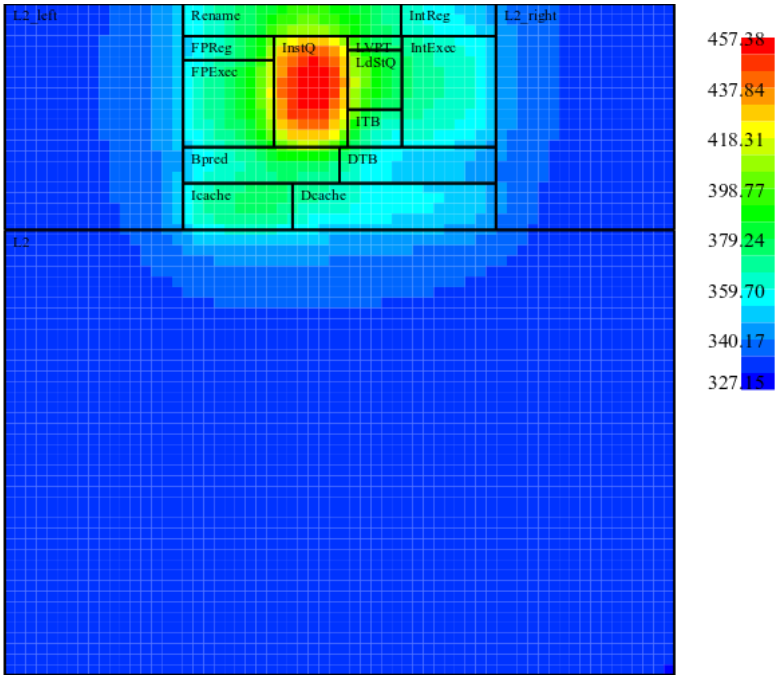

GCC with LVPT C2(437.17)



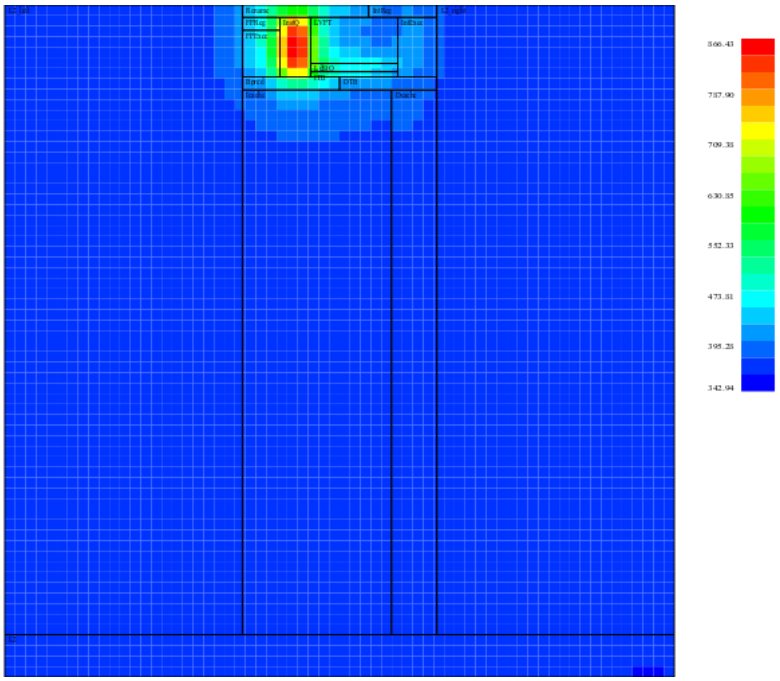

GCC with LVPT C3(436.22)



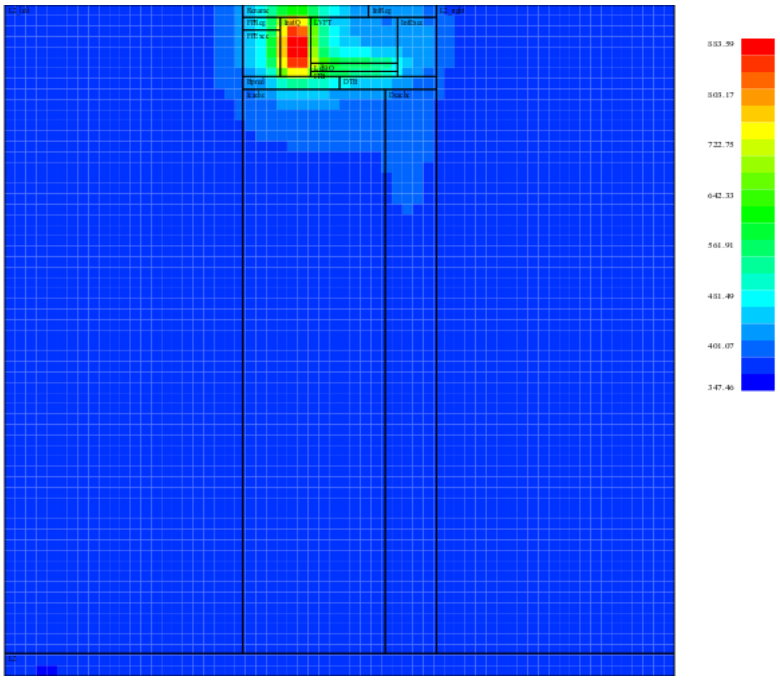

GCC with LVPT C4(457.38)



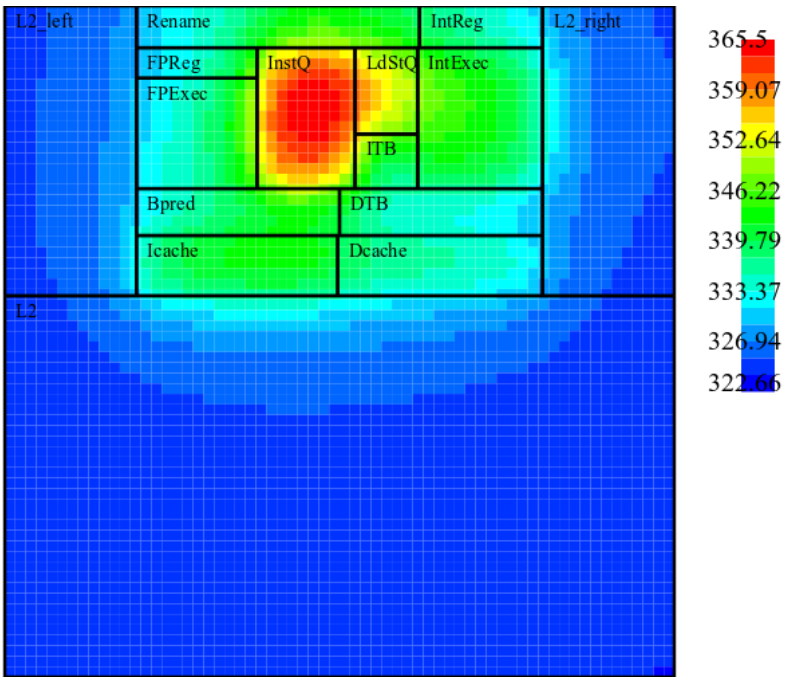
GCC with LVPT C5(866.43)



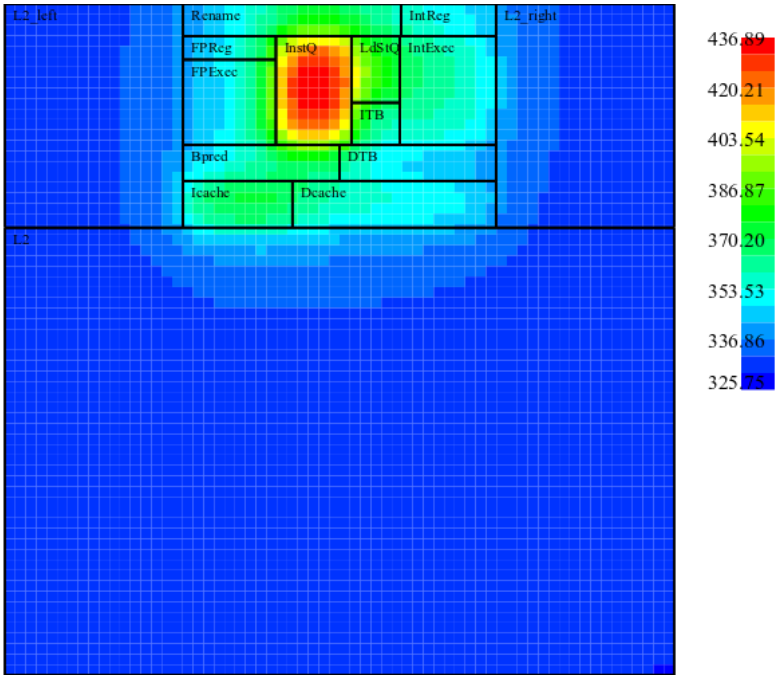

GCC with LVPT C6(883.59)



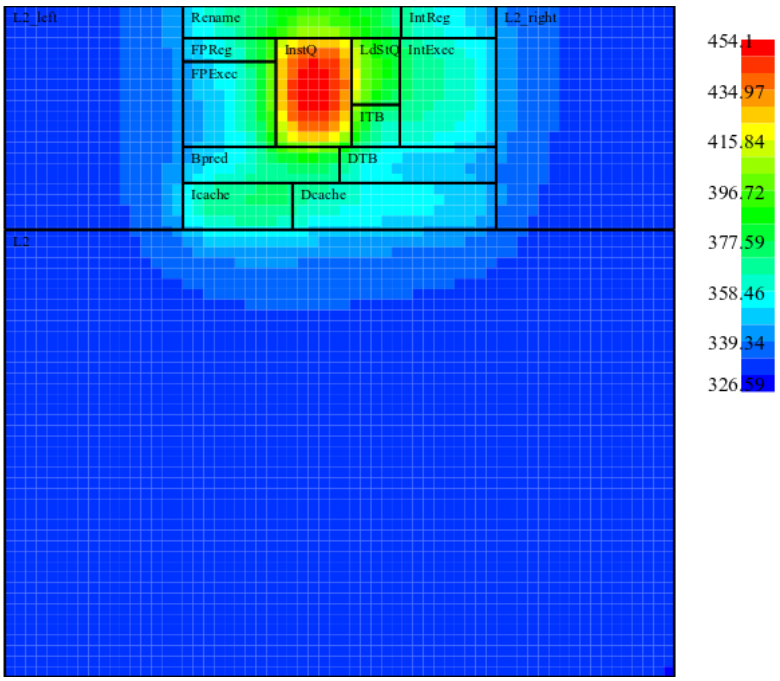

GCC without LVPT C1(365.5)



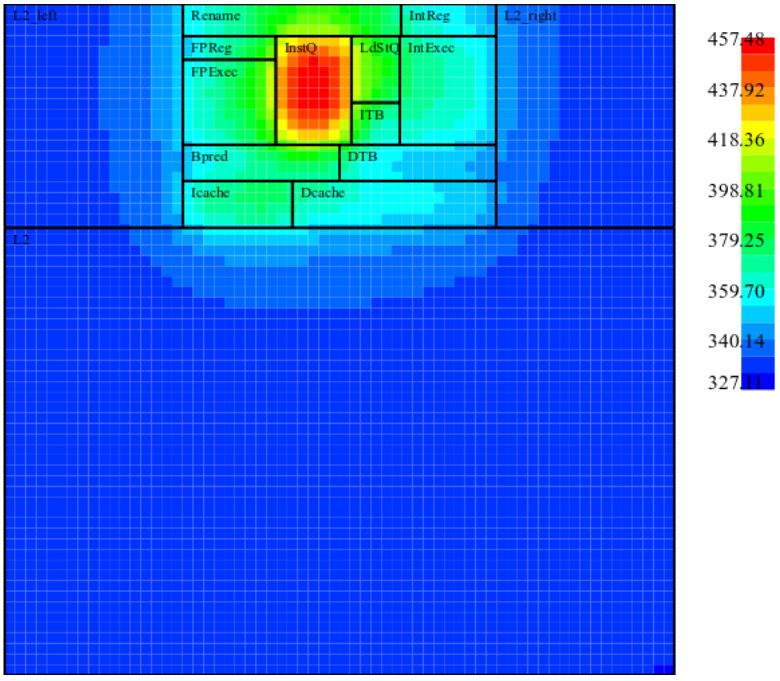

GCC without LVPT C2(436.89)



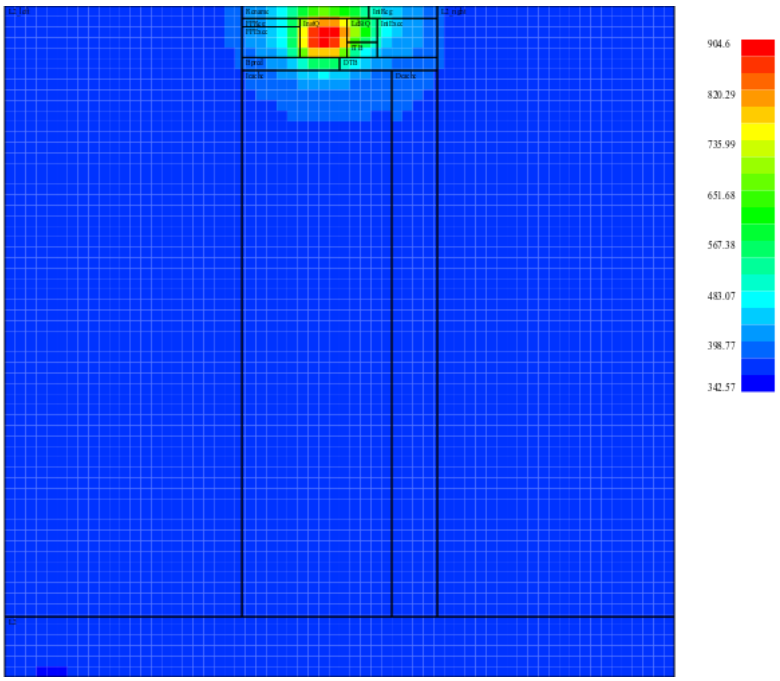

GCC without LVPT C3(454.1)



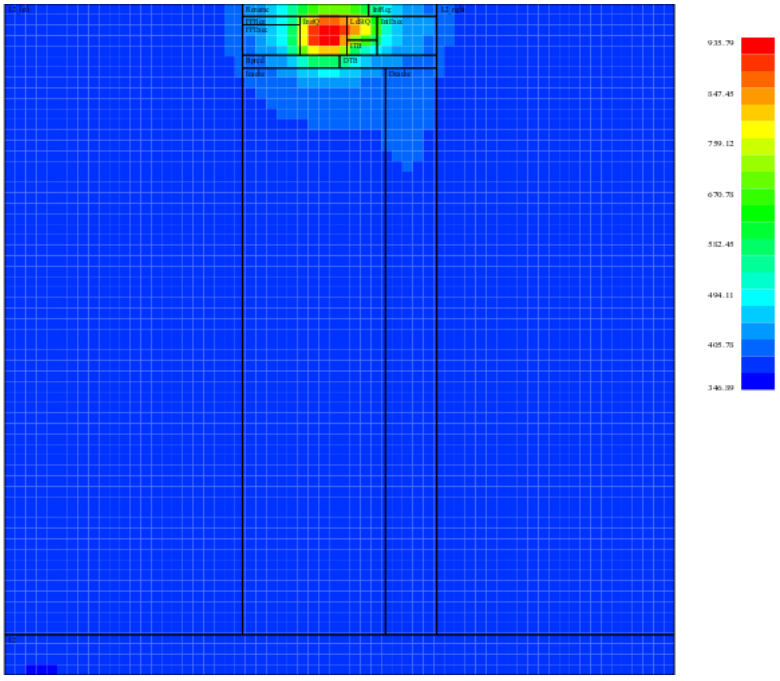

GCC without LVPT C4(457.48)



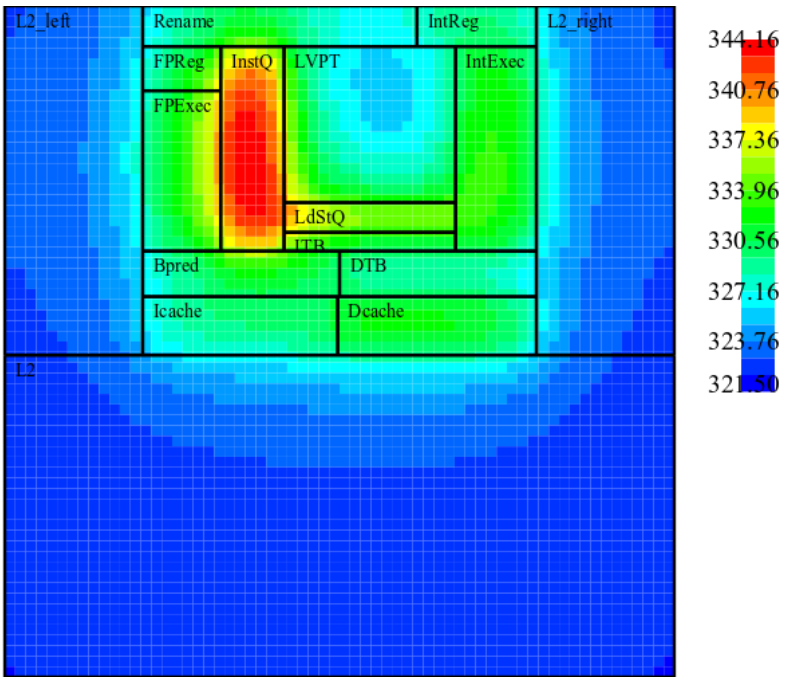

GCC without LVPT C5(904.6)



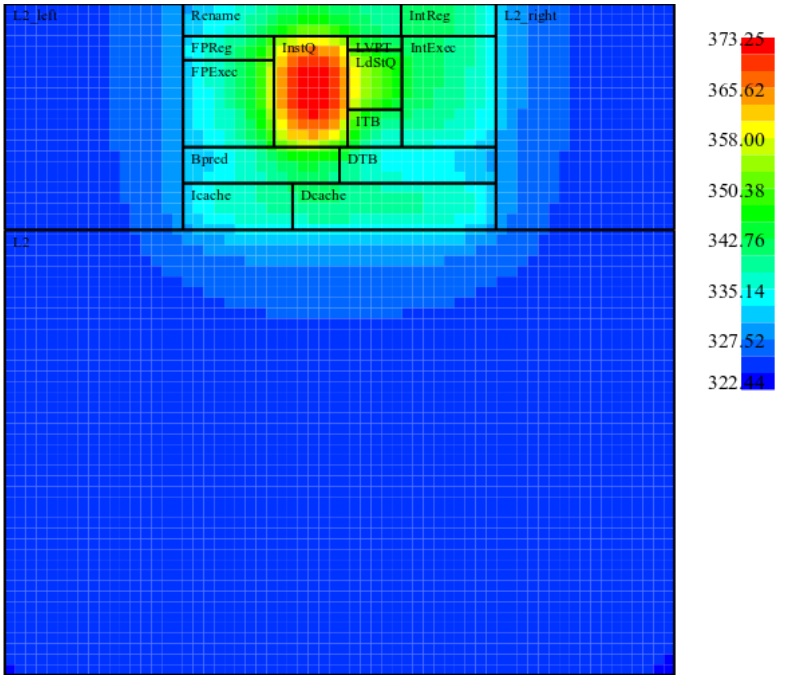

GCC without LVPT C6(935.79)



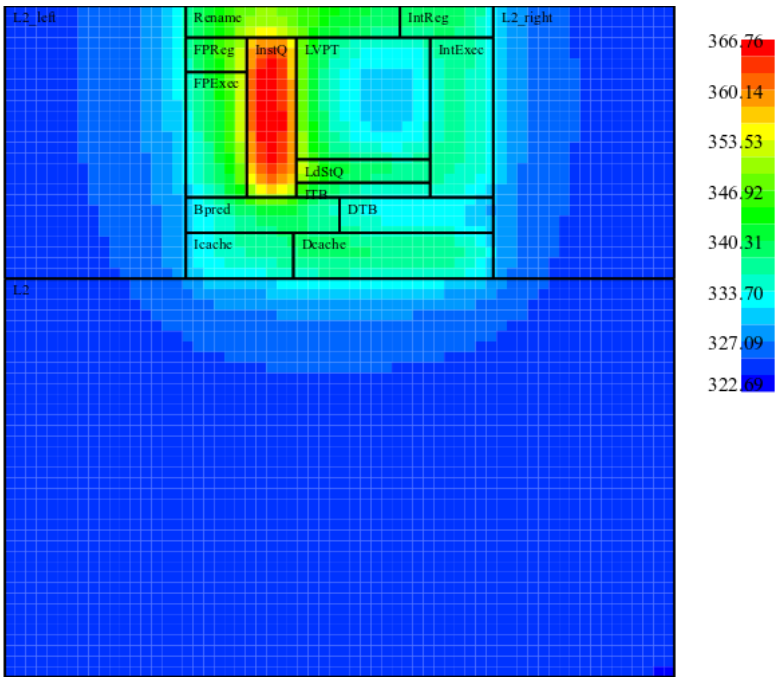

GZIP with LVPT C1(344.16)



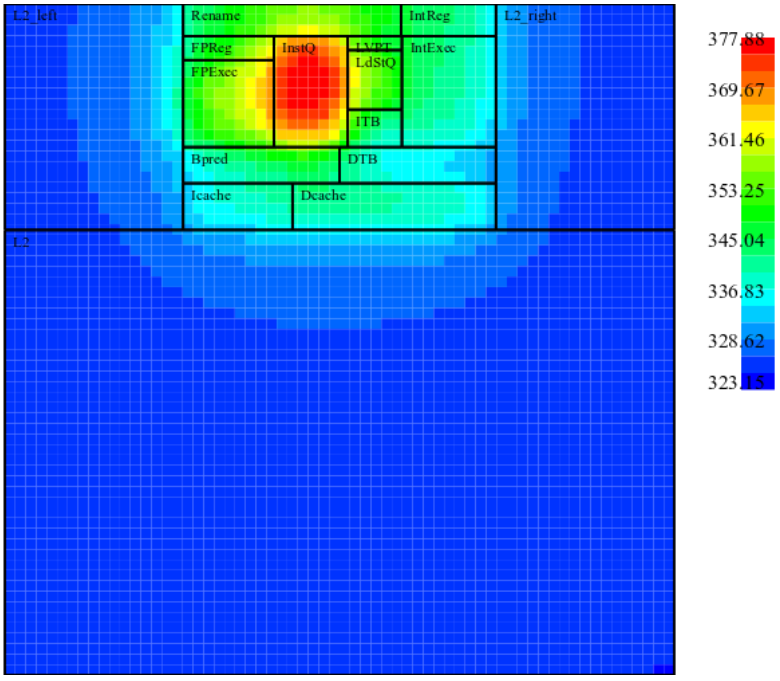

GZIP with LVPT C2(373.25)



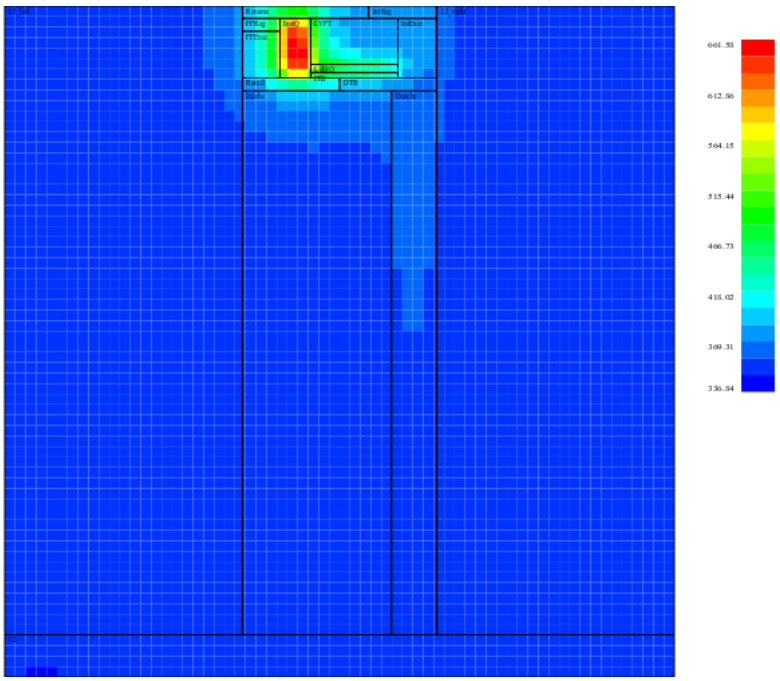

GZIP with LVPT C3(366.76)



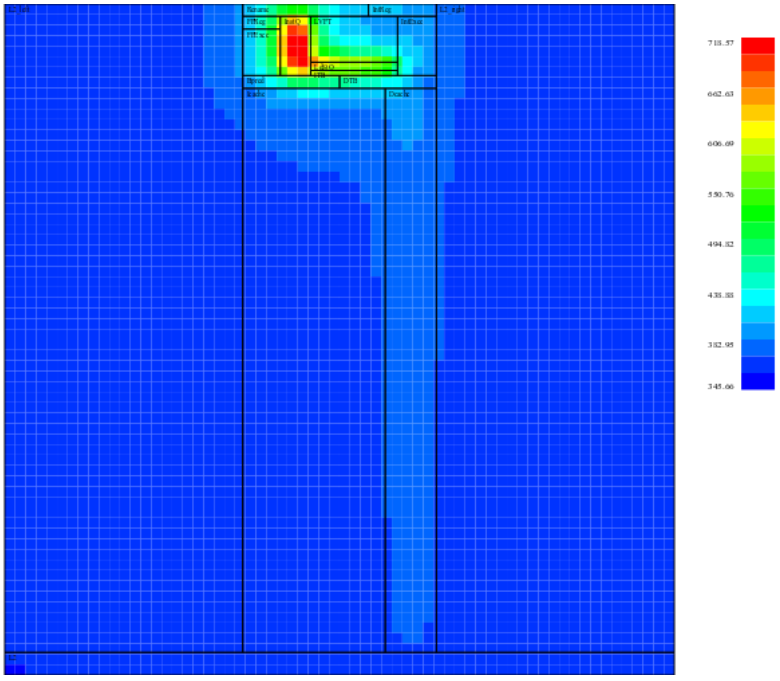

GZIP with LVPT C4(377.88)



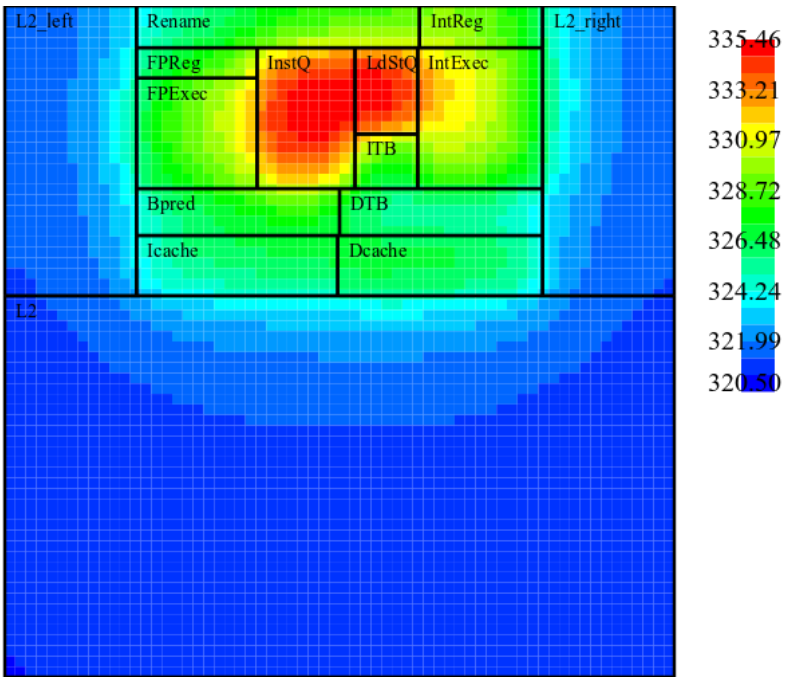

GZIP with LVPT C5(661.58)



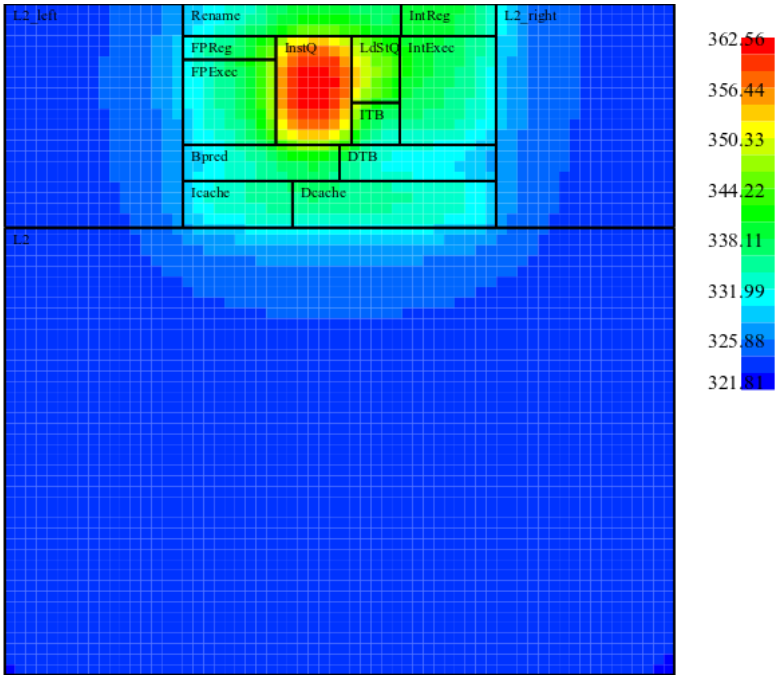
GZIP with LVPT C6(718.57)



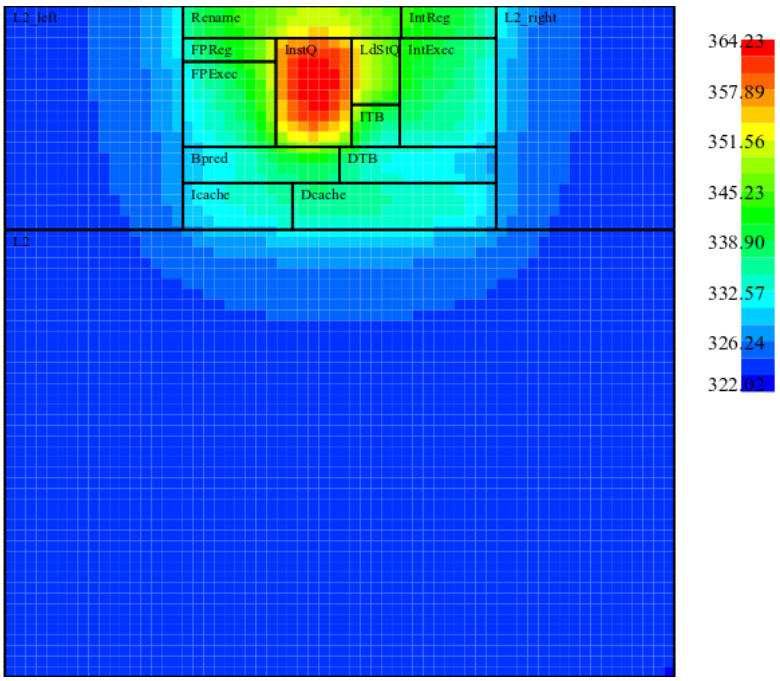
GZIP without LVPT C1(335.46)



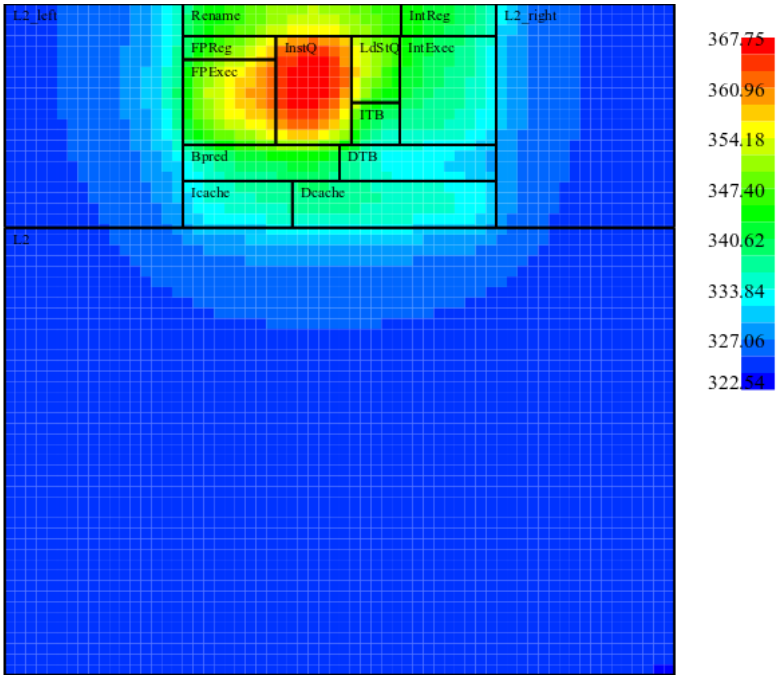

GZIP without LVPT C2(362.56)



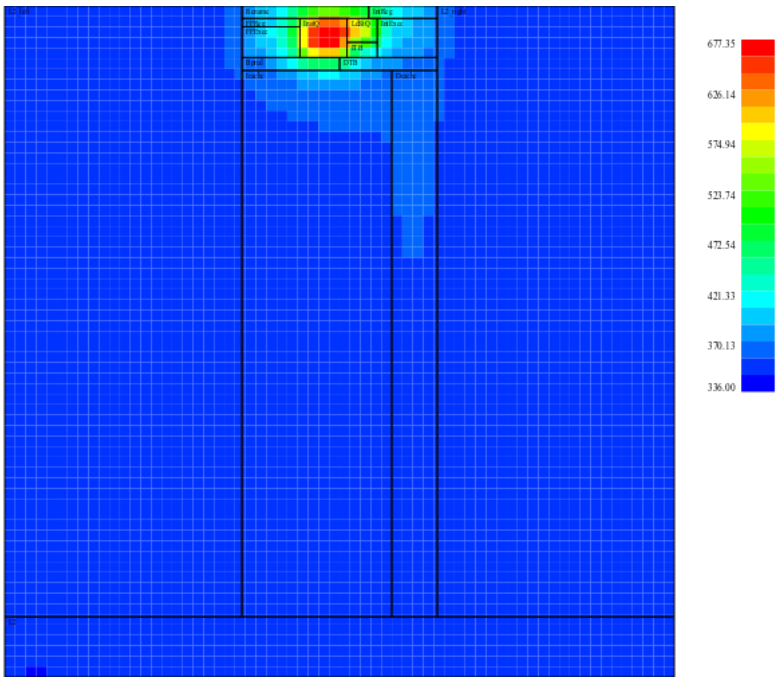

GZIP without LVPT C3(364.23)



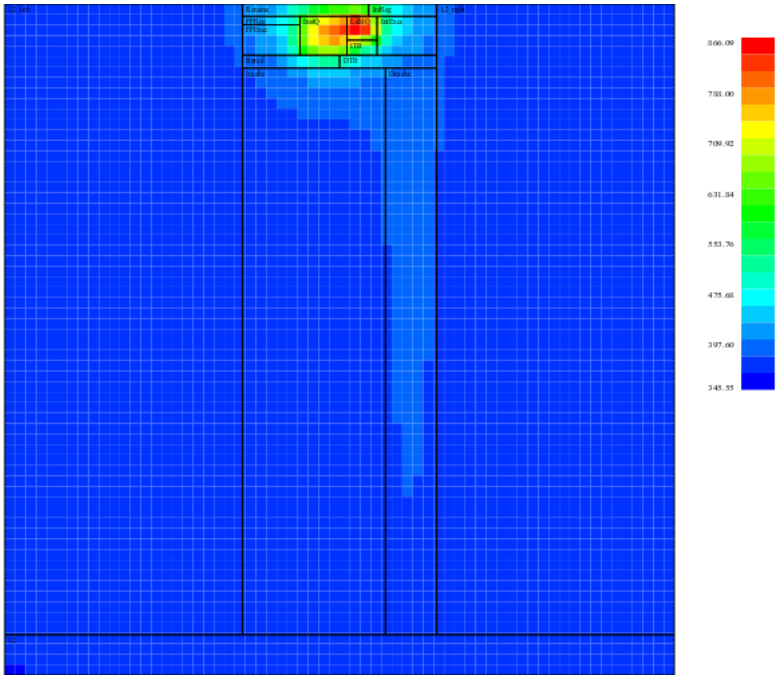

GZIP without LVPT C4(367.75)



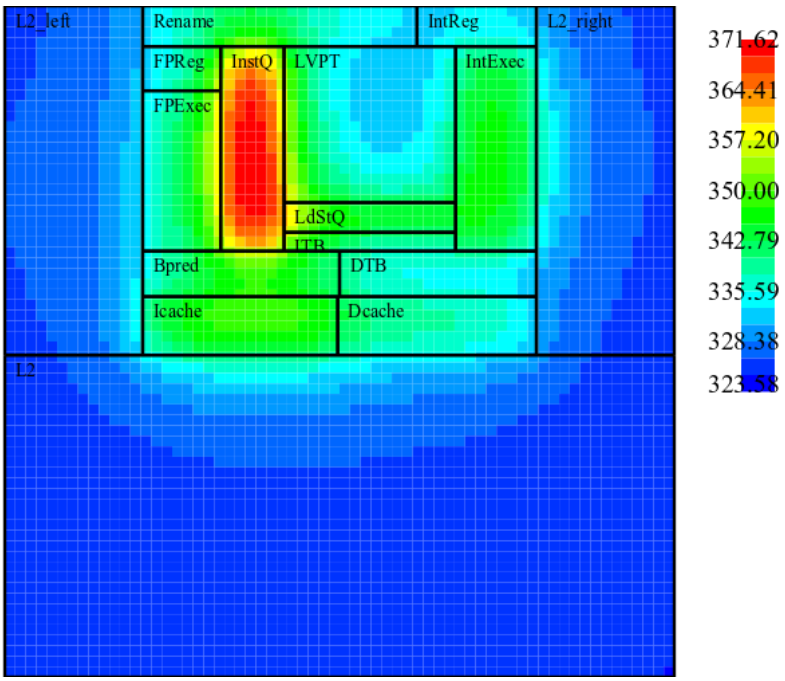

GZIP without LVPT C5(677.35)



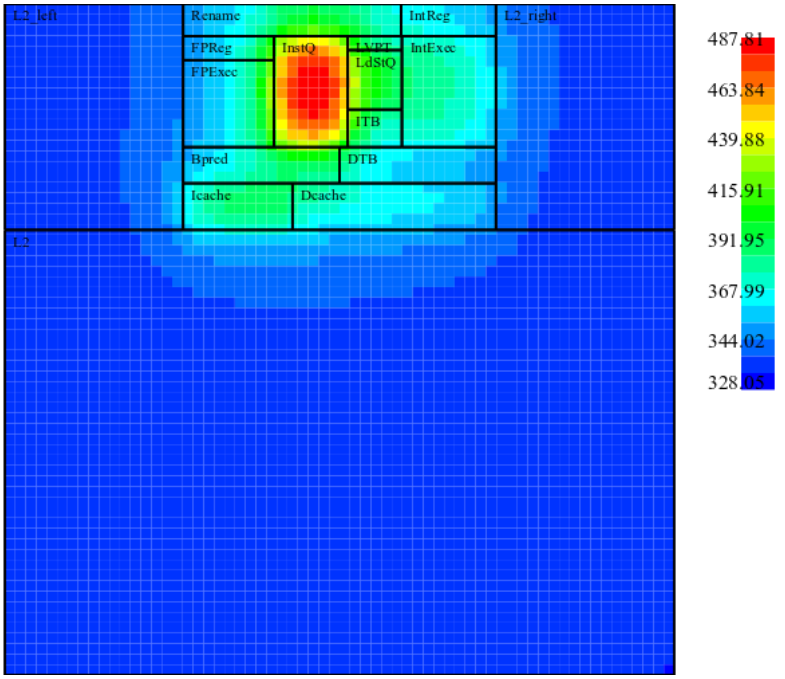

GZIP without LVPT C6(866.09)



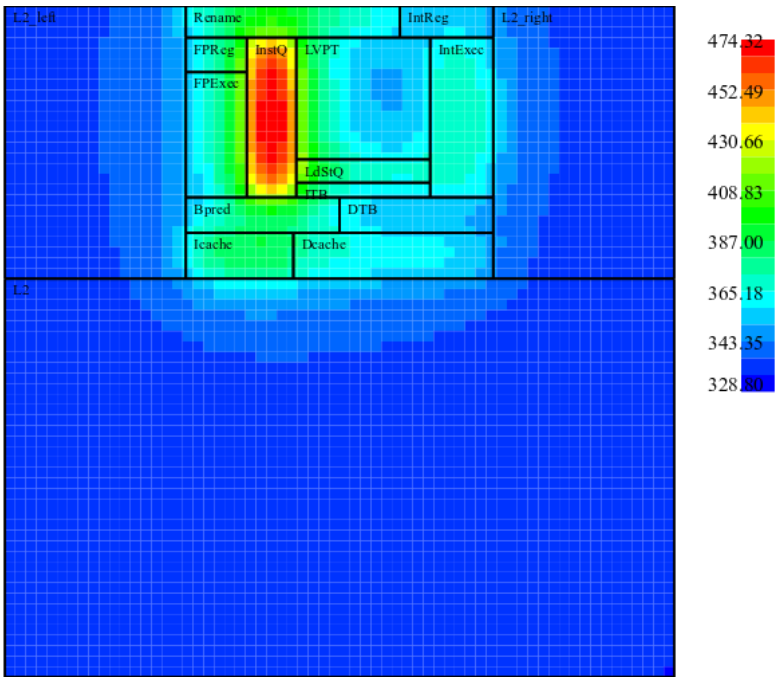

MESA with LVPT C1(371.62)



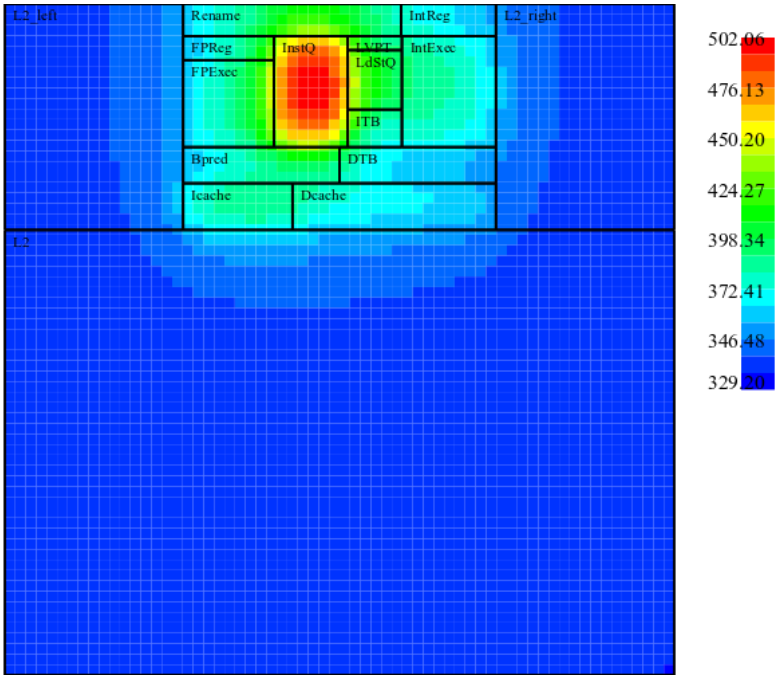

MESA with LVPT C2(487.81)



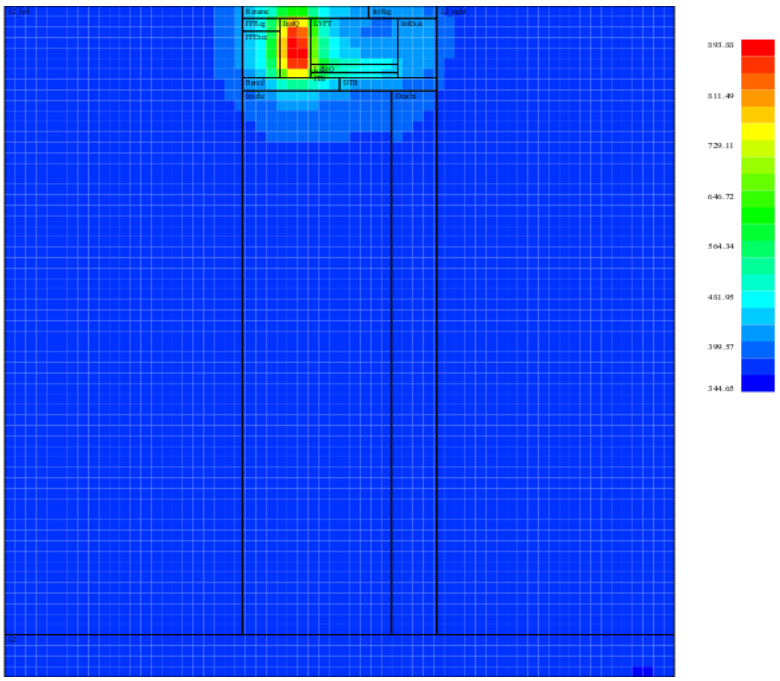

MESA with LVPT C3(474.32)



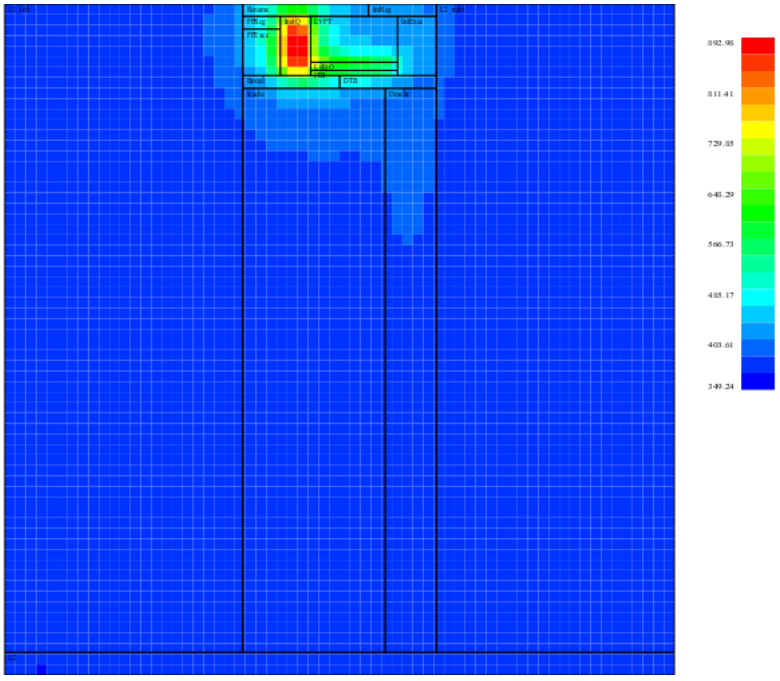

MESA with LVPT C4(502.06)



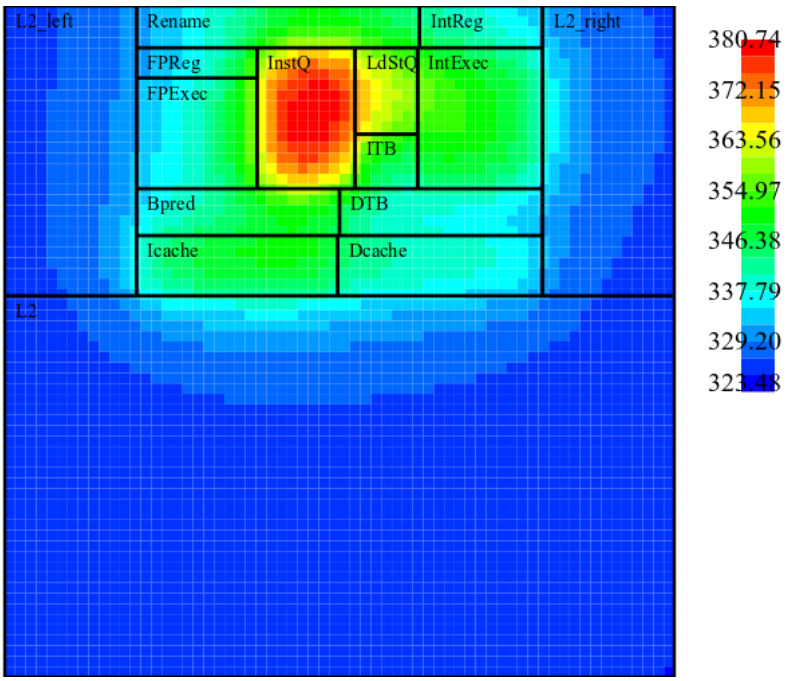

MESA with LVPT C5(893.88)



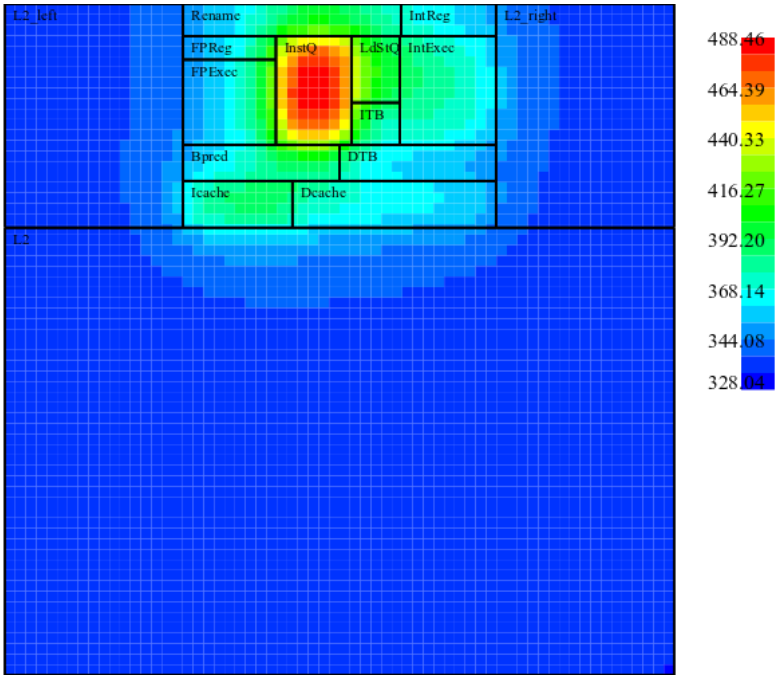
MESA with LVPT C6(892.98)



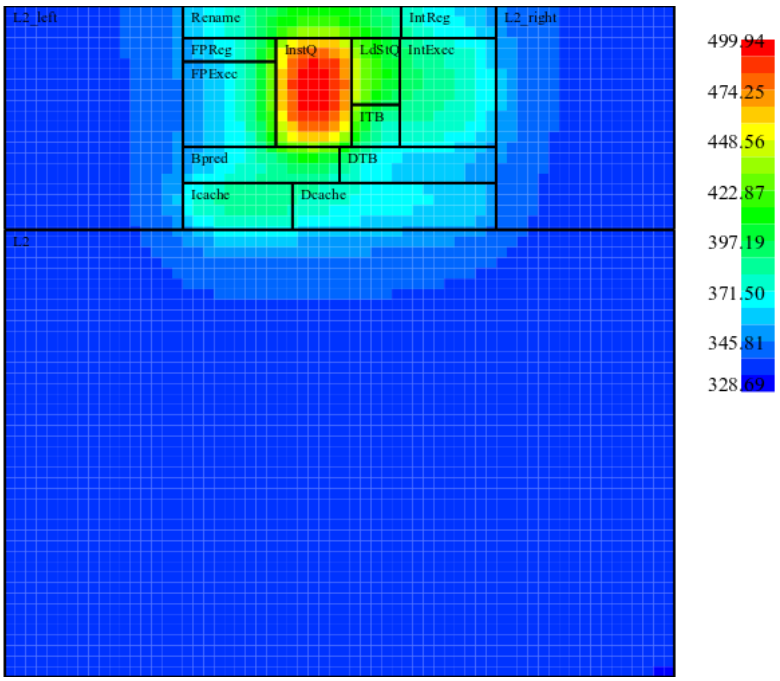
MESA without LVPT C1(380.74)



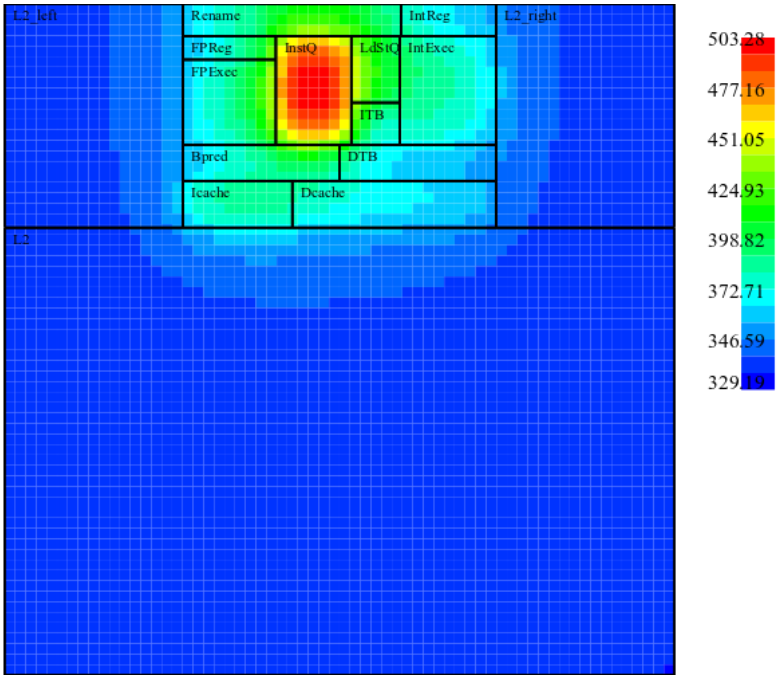

MESA without LVPT C2(488.46)



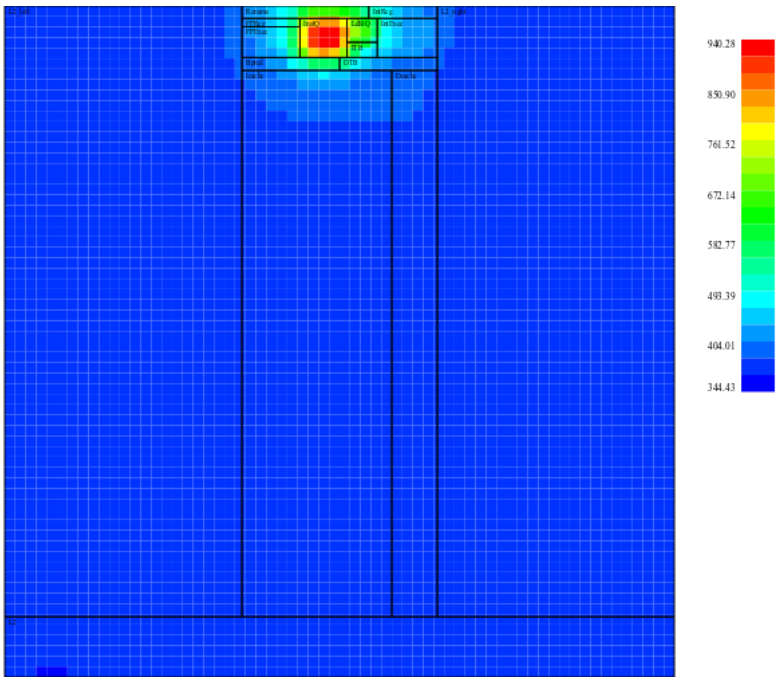

MESA without LVPT C3(499.94)




MESA without LVPT C4(503.28)




MESA without LVPT C5(940.28)




MESA without LVPT C6(961.42)