Libpll sequential benchmarks

February 24, 2017

- node : node index (post order traversal)

- psize : number of unique (not repeating) sites on the current node

- lsize : number of unique (not repeating) sites on the left child node

- rsize : number of unique (not repeating) sites on the right child node

- repeats : runtime for 500 updatepartials on the node

- TCLV opt : runtime for 500 updatepartials on the node with left and right TCLV

- SR opt : bclv si repeats qqpart, gros if dans la boucle

- SR opt2 : bclv si repeats qqpart, boucle qui gere aussi les non repeats

- SR opt3 : tip pattern, bclv si repeats qqpart, boucle qui gere aussi les non repeats

- SR opt4 ; bclv si repeats qqpart, gros if dans la boucle, prebuffer, unroll

1 dataset 404 hits avx

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node0	24	5	6	64ms	17ms
node1	21	5	7	65ms	16ms
node2	28	5	21	180ms	18ms
node3	65	28	8	175ms	19ms
node4	98	65	7	176ms	22ms
node5	17	6	5	65ms	16ms
node6	18	5	17	180ms	17ms
node7	23	5	18	173ms	16ms
node8	13	5	5	62ms	16ms
node9	11	5	5	62ms	16ms
node10	20	5	11	171ms	16ms
node11	38	13	20	278ms	19ms
node12	51	5	38	175ms	18ms
node13	83	23	51	284ms	21ms
node14	194	98	83	273ms	28ms
node15	246	24	194	277ms	28ms
node16	267	6	246	184ms	28ms
node17	273	6	267	175ms	28ms
node18	273	5	273	173ms	28ms
node19	22	5	5	63ms	17ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node20	23	5	5	62ms	17ms
node21	25	5	5	66ms	17ms
node22	120	23	25	277ms	23ms
node23	272	22	120	280ms	32ms
node24	341	5	272	172ms	34ms
node25	22	5	5	61ms	17ms
node26	63	5	22	173ms	19ms
node27	76	5	63	174ms	19ms
node28	17	6	5	62ms	17ms
node29	37	5	17	175ms	18ms
node30	24	5	6	63ms	17ms
node31	35	24	5	175ms	17ms
node32	131	37	35	275ms	23ms
node33	23	6	5	62ms	16ms
node34	43	6	23	173ms	19ms
node35	55	5	43	174ms	18ms
node36	16	5	5	63ms	17ms
node37	29	16	5	176ms	17ms
node38	111	55	29	275ms	23ms
node39	120	5	111	175ms	21ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node40	281	131	120	277ms	33ms
node41	421	76	281	285ms	40ms
node42	927	341	421	278ms	73ms
node43	21	6	5	64ms	16ms
node44	46	5	21	176ms	18ms
node45	17	5	5	63ms	16ms
node46	10	5	5	64ms	17ms
node47	25	5	5	64ms	16ms
node48	69	5	25	173ms	19ms
node49	179	10	69	276ms	25ms
node50	185	5	179	175ms	24ms
node51	215	17	185	279ms	25ms
node52	25	5	5	63ms	17ms
node53	466	215	25	281ms	37ms
node54	704	46	466	277ms	52ms
node55	796	6	704	172ms	53ms
node56	25	5	5	62ms	17ms
node57	22	5	5	62ms	16ms
node58	57	5	22	177ms	19ms
node59	14	6	5	64ms	16ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node60	23	5	5	63ms	17ms
node61	69	14	23	281ms	19ms
node62	9	5	5	62ms	17ms
node63	35	5	9	177ms	18ms
node64	87	5	35	172ms	20ms
node65	212	69	87	273ms	27ms
node66	228	5	212	173ms	29ms
node67	29	9	5	64ms	17ms
node68	19	5	5	63ms	18ms
node69	106	29	19	273ms	23ms
node70	15	5	5	62ms	17ms
node71	146	106	15	272ms	24ms
node72	434	228	146	274ms	41ms
node73	449	5	434	172ms	40ms
node74	522	57	449	278ms	48ms
node75	555	5	522	173ms	44ms
node76	638	5	555	179ms	44ms
node77	24	5	5	63ms	17ms
node78	23	5	5	63ms	18ms
node79	60	5	23	175ms	20ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node80	212	24	60	278ms	30ms
node81	17	6	5	61ms	17ms
node82	33	5	17	178ms	18ms
node83	24	5	5	62ms	18ms
node84	17	5	5	62ms	17ms
node85	27	17	5	177ms	17ms
node86	40	5	27	174ms	19ms
node87	56	40	5	172ms	18ms
node88	20	5	5	61ms	17ms
node89	82	56	20	272ms	20ms
node90	8	5	5	62ms	16ms
node91	18	5	5	62ms	16ms
node92	37	8	18	275ms	18ms
node93	13	5	5	62ms	16ms
node94	16	5	5	62ms	16ms
node95	9	5	5	61ms	17ms
node96	38	16	9	274ms	17ms
node97	54	5	38	176ms	19ms
node98	73	5	54	177ms	18ms
node99	96	13	73	275ms	21ms

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node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node100	145	37	96	268ms	23ms
node101	220	82	145	272ms	28ms
node102	331	24	220	274ms	31ms
node103	19	5	5	62ms	16ms
node104	17	5	5	62ms	17ms
node105	22	5	5	64ms	18ms
node106	14	5	5	66ms	16ms
node107	33	5	14	186ms	18ms
node108	46	5	33	183ms	18ms
node109	12	5	5	63ms	17ms
node110	15	5	5	64ms	16ms
node111	46	15	5	180ms	19ms
node112	62	12	46	290ms	19ms
node113	108	46	62	278ms	24ms
node114	146	5	108	181ms	22ms
node115	149	5	146	192ms	23ms
node116	189	5	149	199ms	26ms
node117	20	5	5	70ms	16ms
node118	256	189	20	284ms	30ms
node119	336	22	256	279ms	35ms

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node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node120	344	5	336	176ms	34ms
node121	372	17	344	286ms	37ms
node122	15	5	5	67ms	17ms
node123	20	5	15	179ms	17ms
node124	18	5	5	66ms	18ms
node125	49	20	18	289ms	19ms
node126	66	5	49	189ms	20ms
node127	480	372	66	275ms	40ms
node128	535	19	480	283ms	44ms
node129	948	331	535	291ms	69ms
node130	1004	33	948	308ms	64ms
node131	1041	5	1004	190ms	61ms
node132	1379	212	1041	273ms	98ms
node133	24	5	5	62ms	18ms
node134	50	5	24	175ms	18ms
node135	70	5	50	176ms	19ms
node136	16	5	5	62ms	16ms
node137	13	5	5	63ms	17ms
node138	39	16	13	276ms	19ms
node139	56	39	5	174ms	19ms

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node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node140	159	70	56	293ms	25ms
node141	24	5	5	69ms	17ms
node142	250	159	24	304ms	29ms
node143	1768	1379	250	278ms	108ms
node144	1774	5	1768	174ms	99ms
node145	1863	5	1774	175ms	101ms
node146	2448	638	1863	279ms	165ms
node147	21	8	5	63ms	17ms
node148	43	21	6	174ms	17ms
node149	82	43	5	172ms	20ms
node150	2574	2448	82	271ms	140ms
node151	21	5	5	62ms	17ms
node152	62	21	5	174ms	18ms
node153	125	5	62	176ms	22ms
node154	226	5	125	173ms	26ms
node155	25	5	5	63ms	18ms
node156	14	5	5	62ms	16ms
node157	58	25	14	273ms	20ms
node158	26	6	5	62ms	18ms
node159	25	11	5	62ms	18ms

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node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node160	25	5	5	62ms	16ms
node161	24	5	5	64ms	16ms
node162	24	5	5	63ms	17ms
node163	40	5	24	173ms	17ms
node164	101	40	5	175ms	21ms
node165	189	6	101	197ms	27ms
node166	23	5	5	70ms	18ms
node167	64	23	5	191ms	20ms
node168	364	189	64	294ms	39ms
node169	399	364	5	204ms	34ms
node170	431	5	399	199ms	39ms
node171	524	24	431	346ms	44ms
node172	560	5	524	205ms	42ms
node173	675	25	560	294ms	51ms
node174	729	25	675	288ms	53ms
node175	740	5	729	186ms	51ms
node176	25	5	5	64ms	17ms
node177	68	25	5	183ms	19ms
node178	24	5	5	62ms	18ms
node179	54	24	5	175ms	20ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node180	236	68	54	306ms	31ms
node181	1009	740	236	300ms	86ms
node182	1021	1009	5	177ms	85ms
node183	25	5	5	63ms	30ms
node184	82	25	5	173ms	29ms
node185	1197	1021	82	277ms	87ms
node186	1240	26	1197	282ms	89ms
node187	1279	5	1240	175ms	78ms
node188	1295	1279	5	193ms	79ms
node189	1334	8	1295	173ms	90ms
node190	1389	5	1334	174ms	89ms
node191	27	5	8	63ms	18ms
node192	22	5	5	62ms	18ms
node193	27	5	9	63ms	18ms
node194	58	6	27	177ms	20ms
node195	104	6	58	173ms	21ms
node196	23	5	6	65ms	19ms
node197	39	5	23	176ms	20ms
node198	59	7	39	180ms	21ms
node199	88	59	5	194ms	22ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node200	25	5	6	69ms	18ms
node201	65	25	5	194ms	19ms
node202	250	88	65	308ms	29ms
node203	29	11	6	71ms	17ms
node204	65	6	29	178ms	19ms
node205	386	250	65	286ms	35ms
node206	417	5	386	191ms	33ms
node207	538	104	417	292ms	48ms
node208	584	22	538	278ms	47ms
node209	645	27	584	283ms	49ms
node210	28	5	9	67ms	18ms
node211	34	12	6	64ms	17ms
node212	182	28	34	285ms	26ms
node213	29	10	5	62ms	18ms
node214	59	6	29	178ms	20ms
node215	93	59	6	194ms	20ms
node216	151	7	93	197ms	25ms
node217	169	5	151	186ms	24ms
node218	23	5	5	61ms	17ms
node219	46	6	23	195ms	19ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node220	29	8	6	72ms	17ms
node221	90	5	29	199ms	20ms
node222	245	46	90	277ms	31ms
node223	17	5	5	69ms	18ms
node224	56	5	17	176ms	20ms
node225	28	5	8	61ms	20ms
node226	97	28	12	169ms	23ms
node227	297	56	97	268ms	36ms
node228	328	5	297	168ms	37ms
node229	663	245	328	275ms	64ms
node230	686	5	663	172ms	54ms
node231	877	169	686	265ms	83ms
node232	882	5	877	172ms	65ms
node233	1258	182	882	277ms	110ms
node234	1267	5	1258	184ms	76ms
node235	1744	645	1267	286ms	139ms
node236	7429	1389	1744	305ms	255ms
node237	7429	5	7429	196ms	189ms
node238	7429	58	7429	322ms	237ms
node239	7429	226	7429	345ms	224ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node240	7429	5	7429	194ms	296ms
node241	25	5	5	69ms	23ms
node242	37	5	25	202ms	19ms
node243	17	5	5	72ms	18ms
node244	71	37	17	339ms	23ms
node245	139	5	71	200ms	26ms
node246	7429	7429	139	320ms	225ms
node247	7429	2574	7429	329ms	262ms
node248	25	5	5	70ms	19ms
node249	83	25	5	193ms	20ms
node250	25	5	5	71ms	17ms
node251	264	83	25	294ms	27ms
node252	7429	7429	264	285ms	205ms
node253	7429	25	7429	276ms	196ms
node254	24	5	5	63ms	18ms
node255	41	8	12	64ms	18ms
node256	25	5	5	63ms	17ms
node257	26	9	5	64ms	17ms
node258	45	26	6	176ms	19ms
node259	75	45	5	178ms	21ms

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node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node260	14	7	6	64ms	17ms
node261	23	5	14	177ms	18ms
node262	14	5	5	62ms	17ms
node263	18	5	5	62ms	16ms
node264	36	14	18	285ms	18ms
node265	47	36	5	178ms	19ms
node266	66	23	47	289ms	19ms
node267	25	5	8	63ms	18ms
node268	92	66	25	280ms	20ms
node269	12	5	5	63ms	17ms
node270	20	5	12	201ms	17ms
node271	29	20	5	182ms	18ms
node272	32	5	29	184ms	17ms
node273	15	5	5	63ms	17ms
node274	50	32	15	287ms	18ms
node275	20	6	8	66ms	17ms
node276	14	6	5	63ms	17ms
node277	19	6	14	176ms	17ms
node278	33	19	9	176ms	18ms
node279	57	20	33	276ms	19ms

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node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node280	98	50	57	280ms	21ms
node281	107	6	98	175ms	20ms
node282	178	92	107	293ms	25ms
node283	190	178	6	180ms	24ms
node284	196	5	190	181ms	23ms
node285	200	5	196	187ms	24ms
node286	293	75	200	319ms	31ms
node287	436	5	293	190ms	40ms
node288	559	5	436	180ms	49ms
node289	666	25	559	286ms	60ms
node290	1098	41	666	277ms	85ms
node291	1383	8	1098	177ms	95ms
node292	1565	24	1383	276ms	109ms
node293	7429	7429	1565	302ms	233ms
node294	7429	796	7429	302ms	215ms
node295	37	8	10	67ms	18ms
node296	26	5	7	65ms	18ms
node297	24	5	5	64ms	18ms
node298	41	5	24	176ms	19ms
node299	24	5	5	66ms	17ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node300	58	24	5	178ms	20ms
node301	174	41	58	276ms	27ms
node302	305	26	174	283ms	34ms
node303	21	5	6	63ms	19ms
node304	38	5	21	175ms	18ms
node305	16	6	5	62ms	17ms
node306	24	5	16	174ms	17ms
node307	34	5	24	175ms	17ms
node308	47	5	34	175ms	19ms
node309	13	5	5	62ms	16ms
node310	19	5	13	179ms	18ms
node311	27	7	7	62ms	18ms
node312	31	5	27	175ms	18ms
node313	73	5	31	181ms	19ms
node314	97	73	5	185ms	21ms
node315	151	6	97	183ms	24ms
node316	171	7	151	179ms	26ms
node317	236	19	171	285ms	30ms
node318	309	47	236	292ms	35ms
node319	18	5	5	67ms	17ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node320	30	5	18	179ms	18ms
node321	51	6	30	187ms	19ms
node322	65	51	5	180ms	20ms
node323	424	309	65	295ms	39ms
node324	464	5	424	185ms	42ms
node325	14	5	6	67ms	16ms
node326	25	5	14	185ms	17ms
node327	536	464	25	290ms	45ms
node328	569	6	536	184ms	48ms
node329	739	38	569	319ms	61ms
node330	23	5	5	68ms	18ms
node331	25	5	5	66ms	17ms
node332	24	5	6	66ms	17ms
node333	46	24	5	184ms	19ms
node334	72	5	46	189ms	20ms
node335	98	72	6	188ms	20ms
node336	212	25	98	296ms	27ms
node337	30	5	9	67ms	17ms
node338	76	30	5	188ms	20ms
node339	25	5	5	70ms	17ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node340	68	6	25	192ms	20ms
node341	26	6	5	67ms	16ms
node342	140	68	26	300ms	24ms
node343	244	76	140	307ms	32ms
node344	267	5	244	204ms	28ms
node345	22	5	6	71ms	19ms
node346	48	22	5	206ms	20ms
node347	65	48	6	207ms	22ms
node348	101	65	7	208ms	22ms
node349	416	267	101	313ms	39ms
node350	455	5	416	199ms	37ms
node351	701	212	455	323ms	59ms
node352	19	7	5	70ms	17ms
node353	35	5	19	188ms	19ms
node354	7	5	5	67ms	16ms
node355	25	6	7	196ms	18ms
node356	42	5	25	195ms	19ms
node357	47	5	42	202ms	19ms
node358	83	47	5	195ms	21ms
node359	15	6	5	65ms	17ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node360	122	83	15	290ms	23ms
node361	21	5	5	67ms	18ms
node362	51	21	6	200ms	18ms
node363	75	6	51	203ms	19ms
node364	101	75	5	184ms	22ms
node365	283	122	101	297ms	34ms
node366	373	35	283	276ms	37ms
node367	420	373	5	178ms	36ms
node368	473	5	420	177ms	39ms
node369	1117	701	473	313ms	85ms
node370	1195	23	1117	290ms	81ms
node371	9	5	5	71ms	18ms
node372	23	9	5	191ms	18ms
node373	17	5	5	69ms	17ms
node374	41	5	17	189ms	19ms
node375	81	41	5	181ms	20ms
node376	25	5	5	63ms	17ms
node377	182	81	25	273ms	26ms
node378	271	23	182	309ms	35ms
node379	25	5	5	67ms	18ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node380	69	6	25	200ms	20ms
node381	91	5	69	193ms	25ms
node382	466	271	91	331ms	46ms
node383	1553	1195	466	324ms	112ms
node384	1556	1553	6	193ms	83ms
node385	2211	739	1556	302ms	165ms
node386	2336	5	2211	190ms	128ms
node387	2372	5	2336	188ms	130ms
node388	2639	305	2372	299ms	200ms
node389	25	5	5	65ms	17ms
node390	2764	2639	25	299ms	151ms
node391	2963	37	2764	316ms	194ms
node392	3006	5	2963	186ms	159ms
node393	7429	7429	3006	280ms	260ms
node394	7429	927	7429	288ms	216ms
node395	7429	7429	6	178ms	195ms
node396	17	5	5	62ms	17ms
node397	25	5	17	176ms	17ms
node398	7429	7429	25	281ms	199ms
node399	7429	7429	5	173ms	191ms

node	psrsize	lsrsize	rsrsize	tippat	SR bclv
node400	7429	6	7429	173ms	186ms
node401	7429	7429	5	177ms	187ms