

Table 2. Comparison of divergence time estimates calculated in MULTIDIVTIME (see methods). Values represent mya, and minimum and maximum values correspond to the 95% confidence interval of time estimation. Two of the several combinations tested in the analyses are shown, one with maximum divergence times constrained in the nodes Aves - Squamata and Aves - Alligatoridae, and the other without these constraints using only the minimum age proposed by Müller & Reisz¹. Hedges *et al.*², in response to Müller & Reisz¹, proposed not to use maximum divergences on these nodes because they could underestimate divergence times in the whole tree. However, our analyses suggest that whether or not one constrains those nodes has no effect on the estimated ages in the rest of the tree. Nevertheless, without the maximum constraints, the ages of the bird - crocodylian split under the two estimates overlap, while the bird - squamate split without the maximum divergence is ca. 30 mya older. This suggests that the most conservative scenario is to follow Hedges *et al.*² in this case, not constraining this node, which should be tested in the future with a robust and comprehensive tetrapod phylogeny.

Taxonomic content	With maximum fossil constraints				Without maximum fossil constraints			
	Mean	SD	Min	Max	Mean	SD	Min	Max
<i>H.brunus</i> - <i>H.platicephalus</i>	4	3	0	11	4	3	0	11
<i>H.shastae</i> - (<i>H.brunus</i> + <i>H.platicephalus</i>)	8	4	2	16	8	4	2	17
<i>Atylodes</i> - <i>Speleomantes</i>	16	3	14	24	17	3	14	24
Small - Big Eastern <i>Plethodon</i>	17	5	8	29	18	6	8	30
Central - Western <i>Aneides</i>	26	6	15	39	26	7	15	41
<i>Stereochilus</i> - <i>Pseudotriton</i>	31	7	18	47	32	8	19	49
Eastern- Central <i>Aneides</i>	35	7	22	50	36	8	22	52
Eastern - Western <i>Plethodon</i>	39	8	25	56	40	8	26	59
<i>Gyrinophilus</i> - (<i>Pseudotriton</i> + <i>Stereochilus</i>)	40	8	27	57	42	8	27	60
<i>Hydromantes</i> - (<i>Speleomantes</i> + <i>Atylodes</i>)	41	7	28	57	41	8	28	58
<i>Desmognathus</i> - <i>Phaeognathus</i>	46	8	31	62	47	8	32	65
<i>Eurycea</i> - <i>Gyrinophilus</i>	48	9	33	66	50	9	34	69
<i>Pleurodeles</i> - <i>Tylotriton</i>	49	4	44	60	49	5	44	61
<i>Aneides</i> - (<i>Desmognathus</i> - <i>Phaeognathus</i>)	51	8	36	68	52	9	37	71

<i>Ensatina</i> - (<i>Aneides</i> , <i>Phaeognathus</i> + <i>Desmognathus</i>)	61	9	45	80	63	9	46	83
<i>Plethodon</i> - <i>Ensatina</i>	67	9	50	86	69	10	51	89
<i>Karsenia</i> – Sg. <i>Hydromantes</i>	67	9	50	87	69	10	51	90
<i>Bolitoglossa</i> - <i>Batrachoseps</i>	73	11	53	96	75	11	55	99
(<i>Karsenia</i> + <i>Hydromantes</i>) - other Plethodontinae	74	10	57	95	77	10	58	98
<i>Hemidactylum</i> - (<i>Batrachoseps</i> + <i>Bolitoglossa</i>)	84	11	64	107	87	11	67	110
Spelerpinae - (<i>Bolitoglossinae</i> + <i>Hemidactylum</i>)	88	11	68	111	91	11	70	114
Plethodontinae – Hemidactylinii	94	11	74	117	96	11	76	120
<i>Dicamptodon</i> - <i>Ambystoma</i>	134	15	106	164	137	15	109	168
<i>Amphiuma</i> - Plethodontidae	146	14	120	176	150	15	122	180
<i>Hynobiidae</i> - <i>Cryptobranchidae</i>	167	10	155	192	169	11	156	195
Rhyacotritonidae - (<i>Amphiumidae</i> + Plethodontidae)	168	14	141	197	172	14	145	201
Pipidae - Ascaphidae	179	19	146	218	181	19	146	220
Salamandridae - (<i>Ambystomatidae</i> + <i>Dicamptodontidae</i>)	188	15	160	218	192	15	163	222
(<i>Hynobiidae</i> + <i>Cryptobranchidae</i>) - other salamanders	227	13	203	254	230	13	206	258
Aves - Alligatoridae	246	2	243	250	251	7	243	268
Aves - Squamata	255	1	252	257	283	12	261	307
Anura - Caudata	322	14	293	349	324	14	295	350
Theropsida - Sauropsida	328	9	312	344	333	8	315	344
Amniota - Amphibia	350	6	336	359	351	6	337	360