

SUPPLEMENTARY INFORMATION

The influence of riverine barriers, climate and topography on the biogeographic regionalization of Amazonian anurans

Marcela Brasil de Castro Godinho and Fernando Rodrigues da Silva

Scientific Reports

APPENDIX S1 – List of anuran species to Amazonia download from IUCN version 2015.2 and the number of grid cells that each species occurred.

Anuran species	Nº of grid cells	Anuran species	Nº of grid cells
<i>Adelastes hylonomos</i>	1	<i>Leptodactylus validus</i>	215
<i>Adelophryne adiastrata</i>	98	<i>Leptodactylus vastus</i>	30
<i>Adelophryne gutturosa</i>	121	<i>Leptodactylus wagneri</i>	100
<i>Adelophryne patamona</i>	3	<i>Lithobates catesbeianus</i>	6
<i>Adelphobates castaneoticus</i>	24	<i>Lithobates palmipes</i>	1862
<i>Adelphobates galactonotus</i>	180	<i>Metaphryniscus sosai</i>	2
<i>Adelphobates quinquevittatus</i>	493	<i>Minyobates steyermarki</i>	1
<i>Adenomera andreae</i>	1722	<i>Myersiohyla aromatica</i>	1
<i>Adenomera heyeri</i>	83	<i>Myersiohyla inparquesi</i>	2
<i>Adenomera hylaedactyla</i>	1859	<i>Myersiohyla kanaima</i>	3
<i>Adenomera lutzi</i>	9	<i>Myersiohyla loveridgei</i>	2
<i>Adenomera martinezi</i>	90	<i>Noblella lochites</i>	4
<i>Agalychnis buckleyi</i>	28	<i>Noblella myrmecoides</i>	179
<i>Agalychnis hulli</i>	22	<i>Nyctimantis rugiceps</i>	22
<i>Allobates brunneus</i>	624	<i>Nymphargus chancas</i>	1
<i>Allobates caeruleodactylus</i>	4	<i>Nymphargus cochranae</i>	4
<i>Allobates conspicuus</i>	152	<i>Nymphargus laurae</i>	1
<i>Allobates crombiei</i>	12	<i>Nymphargus mariae</i>	3
<i>Allobates femoralis</i>	1679	<i>Nymphargus megacheirus</i>	2
<i>Allobates fuscus</i>	254	<i>Nymphargus posadae</i>	8
<i>Allobates gasconi</i>	49	<i>Nymphargus siren</i>	2
<i>Allobates granti</i>	21	<i>Nymphargus wileyi</i>	1
<i>Allobates insperatus</i>	13	<i>Oreobates cruralis</i>	19
<i>Allobates kingsburyi</i>	4	<i>Oreobates quixensis</i>	509
<i>Allobates marchesianus</i>	1160	<i>Oreobates saxatilis</i>	5
<i>Allobates masniger</i>	8	<i>Oreophrynella cryptica</i>	2
<i>Allobates melanolaemus</i>	6	<i>Oreophrynella dendronastes</i>	1
<i>Allobates myersi</i>	36	<i>Oreophrynella huberi</i>	4
<i>Allobates nidicola</i>	1	<i>Oreophrynella macconnelli</i>	1

<i>Allobates ornatus</i>	2	<i>Oreophrynella nigra</i>	2
<i>Allobates paleovarzensis</i>	8	<i>Oreophrynella quelchii</i>	1
<i>Allobates subfolionidificans</i>	2	<i>Oreophrynella vasquezi</i>	3
<i>Allobates sumtuosus</i>	84	<i>Oreophrynella weiassipuensis</i>	1
<i>Allobates trilineatus</i>	222	<i>Osornophryne bufoniformis</i>	3
<i>Allobates undulatus</i>	2	<i>Osornophryne guacamayo</i>	1
<i>Allobates vanzolinus</i>	46	<i>Osornophryne sumacoensis</i>	1
<i>Allobates zaparo</i>	24	<i>Osteocephalus alboguttatus</i>	10
<i>Allophryne ruthveni</i>	1010	<i>Osteocephalus buckleyi</i>	1390
<i>Amazophrynella bokermanni</i>	18	<i>Osteocephalus cabrerai</i>	566
<i>Amazophrynella minuta</i>	1637	<i>Osteocephalus castaneicola</i>	11
<i>Ameerega bassleri</i>	14	<i>Osteocephalus deridens</i>	29
<i>Ameerega bilinguis</i>	18	<i>Osteocephalus fuscifacies</i>	8
<i>Ameerega cainarachi</i>	1	<i>Osteocephalus heyeri</i>	11
<i>Ameerega flavopicta</i>	73	<i>Osteocephalus leoniae</i>	14
<i>Ameerega hahneli</i>	1309	<i>Osteocephalus leprieurii</i>	1204
<i>Ameerega ingeri</i>	1	<i>Osteocephalus mimeticus</i>	63
<i>Ameerega macero</i>	30	<i>Osteocephalus mutabor</i>	25
<i>Ameerega parvula</i>	79	<i>Osteocephalus oophagus</i>	349
<i>Ameerega petersi</i>	52	<i>Osteocephalus planiceps</i>	247
<i>Ameerega picta</i>	502	<i>Osteocephalus subtilis</i>	60
<i>Ameerega pongoensis</i>	9	<i>Osteocephalus taurinus</i>	1730
<i>Ameerega pulchripecta</i>	8	<i>Osteocephalus verruciger</i>	13
<i>Ameerega rubriventris</i>	7	<i>Osteocephalus yasuni</i>	61
<i>Ameerega silverstonei</i>	2	<i>Otophryne pyburni</i>	171
<i>Ameerega trivittata</i>	1456	<i>Otophryne robusta</i>	15
<i>Anomaloglossus ayarzaguenai</i>	4	<i>Otophryne steyermarki</i>	17
<i>Anomaloglossus baeobatrachus</i>	243	<i>Phyllomedusa atelopoides</i>	168
<i>Anomaloglossus beebei</i>	1	<i>Phyllomedusa azurea</i>	4
<i>Anomaloglossus breweri</i>	1	<i>Phyllomedusa baltea</i>	2
<i>Anomaloglossus degranvillei</i>	71	<i>Phyllomedusa bicolor</i>	1571
<i>Anomaloglossus guanayensis</i>	2	<i>Phyllomedusa boliviana</i>	111
<i>Anomaloglossus kaiei</i>	10	<i>Phyllomedusa camba</i>	200
<i>Anomaloglossus murisipanensis</i>	2	<i>Phyllomedusa coelestis</i>	35
<i>Anomaloglossus parimae</i>	1	<i>Phyllomedusa hypochondrialis</i>	1182
<i>Anomaloglossus parkerae</i>	4	<i>Phyllomedusa palliata</i>	301
<i>Anomaloglossus praderioi</i>	1	<i>Phyllomedusa tarsius</i>	944
<i>Anomaloglossus roraima</i>	1	<i>Phyllomedusa tomopterna</i>	1662
<i>Anomaloglossus rufulus</i>	2	<i>Phyllomedusa vaillantii</i>	1490
<i>Anomaloglossus shrevei</i>	10	<i>Physalaemus albonotatus</i>	1
<i>Anomaloglossus stepheni</i>	13	<i>Physalaemus centralis</i>	5

<i>Anomaloglossus tamacuarensis</i>	2	<i>Physalaemus cuvieri</i>	716
<i>Anomaloglossus tepuyensis</i>	4	<i>Physalaemus ephippifer</i>	668
<i>Anomaloglossus triunfo</i>	1	<i>Physalaemus fischeri</i>	40
<i>Anomaloglossus wothuja</i>	1	<i>Physalaemus nattereri</i>	36
<i>Aparasphenodon venezolanus</i>	46	<i>Phyzelaphryne miriamae</i>	434
<i>Atelopus andinus</i>	4	<i>Pipa arrabali</i>	396
<i>Atelopus epikeisthos</i>	1	<i>Pipa aspera</i>	36
<i>Atelopus flavescens</i>	1	<i>Pipa pipa</i>	1665
<i>Atelopus franciscus</i>	11	<i>Pipa snethlageae</i>	675
<i>Atelopus palmatus</i>	1	<i>Pleurodema brachyops</i>	125
<i>Atelopus planispina</i>	5	<i>Pristimantis aaptus</i>	38
<i>Atelopus pulcher</i>	10	<i>Pristimantis acuminatus</i>	244
<i>Atelopus pyrodactylus</i>	1	<i>Pristimantis altamazonicus</i>	531
<i>Atelopus seminiferus</i>	4	<i>Pristimantis altamnis</i>	6
<i>Atelopus siranus</i>	2	<i>Pristimantis ardalonychus</i>	7
<i>Atelopus spumarius</i>	349	<i>Pristimantis aureolineatus</i>	40
<i>"Centrolene" azulae</i>	1	<i>Pristimantis aureoventris</i>	1
<i>Centrolene bacatum</i>	2	<i>Pristimantis avius</i>	1
<i>Centrolene buckleyi</i>	2	<i>Pristimantis bearsei</i>	4
<i>Centrolene hybrida</i>	1	<i>Pristimantis buccinator</i>	18
<i>Centrolene lemniscatum</i>	1	<i>Pristimantis buckleyi</i>	2
<i>"Centrolene" medemi</i>	1	<i>Pristimantis cantitans</i>	4
<i>Ceratophrys cornuta</i>	1562	<i>Pristimantis carvalhoi</i>	397
<i>Ceuthomantis aracamuni</i>	2	<i>Pristimantis chiastonotus</i>	115
<i>Ceuthomantis cavernibardus</i>	1	<i>Pristimantis chloronotus</i>	3
<i>Ceuthomantis duellmani</i>	2	<i>Pristimantis citriogaster</i>	2
<i>Chiasmocleis albopunctata</i>	78	<i>Pristimantis colonensis</i>	1
<i>Chiasmocleis anatis</i>	43	<i>Pristimantis conspicillatus</i>	269
<i>Chiasmocleis antenori</i>	132	<i>Pristimantis corrugatus</i>	1
<i>Chiasmocleis avilapiresae</i>	397	<i>Pristimantis croceinguinis</i>	116
<i>Chiasmocleis bassleri</i>	606	<i>Pristimantis delius</i>	1
<i>Chiasmocleis carvalhoi</i>	56	<i>Pristimantis dendrobatoides</i>	4
<i>Chiasmocleis devriesi</i>	1	<i>Pristimantis devillei</i>	1
<i>Chiasmocleis hudsoni</i>	372	<i>Pristimantis diadematus</i>	170
<i>Chiasmocleis magnova</i>	3	<i>Pristimantis eriphus</i>	2
<i>Chiasmocleis shudikarensis</i>	990	<i>Pristimantis ernesti</i>	1
<i>Chiasmocleis tridactyla</i>	104	<i>Pristimantis eurydactylus</i>	137
<i>Chiasmocleis ventrimaculata</i>	214	<i>Pristimantis exoristus</i>	3
<i>Chimerella mariaelenae</i>	4	<i>Pristimantis fenestratus</i>	1027
<i>"Cochranella" duidaeana</i>	3	<i>Pristimantis frater</i>	2
<i>"Cochranella" geijskesi</i>	2	<i>Pristimantis galdi</i>	7
<i>Cochranella resplendens</i>	48	<i>Pristimantis gutturalis</i>	76

<i>"Cochranella" riveroi</i>	2	<i>Pristimantis imitatrix</i>	20
<i>Colostethus argyrogaster</i>	10	<i>Pristimantis incanus</i>	2
<i>Colostethus fugax</i>	5	<i>Pristimantis incomptus</i>	1
<i>Cruziohyla craspedopus</i>	624	<i>Pristimantis infraguttatus</i>	1
<i>Ctenophryne carpish</i>	3	<i>Pristimantis inguinalis</i>	65
<i>Ctenophryne geayi</i>	1767	<i>Pristimantis inusitatus</i>	5
<i>Dendrobates leucomelas</i>	280	<i>Pristimantis jester</i>	4
<i>Dendrobates nubeculosus</i>	1	<i>Pristimantis kichwarum</i>	16
<i>Dendrobates tinctorius</i>	201	<i>Pristimantis lacrimosus</i>	141
<i>Dendropsophus acreanus</i>	252	<i>Pristimantis lanthanites</i>	226
<i>Dendropsophus anataliasiasi</i>	95	<i>Pristimantis leoni</i>	2
<i>Dendropsophus aperomeus</i>	4	<i>Pristimantis librarius</i>	3
<i>Dendropsophus bifurcus</i>	368	<i>Pristimantis lirellus</i>	4
<i>Dendropsophus bokermanni</i>	381	<i>Pristimantis luscombei</i>	14
<i>Dendropsophus branneri</i>	16	<i>Pristimantis lythodes</i>	7
<i>Dendropsophus brevifrons</i>	583	<i>Pristimantis malkini</i>	304
<i>Dendropsophus cachimbo</i>	1	<i>Pristimantis marahuaka</i>	1
<i>Dendropsophus delarivai</i>	9	<i>Pristimantis marmoratus</i>	320
<i>Dendropsophus gaucheri</i>	5	<i>Pristimantis martiae</i>	444
<i>Dendropsophus haraldschultzi</i>	308	<i>Pristimantis melanogaster</i>	2
<i>Dendropsophus joannae</i>	2	<i>Pristimantis memorans</i>	1
<i>Dendropsophus juliani</i>	4	<i>Pristimantis mendax</i>	28
<i>Dendropsophus koechlini</i>	352	<i>Pristimantis muscosus</i>	2
<i>Dendropsophus leali</i>	575	<i>Pristimantis nephophilus</i>	4
<i>Dendropsophus leucophyllatus</i>	1627	<i>Pristimantis nigrogriseus</i>	4
<i>Dendropsophus marmoratus</i>	1494	<i>Pristimantis ockendeni</i>	300
<i>Dendropsophus mathiassoni</i>	8	<i>Pristimantis orcus</i>	80
<i>Dendropsophus melanargyreus</i>	504	<i>Pristimantis orphnolaimus</i>	14
<i>Dendropsophus microcephalus</i>	1395	<i>Pristimantis paululus</i>	24
<i>Dendropsophus minimus</i>	1	<i>Pristimantis percnopterus</i>	3
<i>Dendropsophus minusculus</i>	79	<i>Pristimantis peruvianus</i>	446
<i>Dendropsophus minutus</i>	1795	<i>Pristimantis petersi</i>	6
<i>Dendropsophus miyatai</i>	489	<i>Pristimantis prolatus</i>	4
<i>Dendropsophus nanus</i>	959	<i>Pristimantis pruinatus</i>	2
<i>Dendropsophus parviceps</i>	1384	<i>Pristimantis pseudoacuminatus</i>	22
<i>Dendropsophus pauiniensis</i>	125	<i>Pristimantis pugnax</i>	3
<i>Dendropsophus reichlei</i>	7	<i>Pristimantis pulvinatus</i>	102
<i>Dendropsophus rhodopeplus</i>	435	<i>Pristimantis quaquaversus</i>	38
<i>Dendropsophus riveroi</i>	721	<i>Pristimantis rhabdolaemus</i>	4
<i>Dendropsophus rossalleni</i>	495	<i>Pristimantis rhodostichus</i>	1
<i>Dendropsophus rubicundulus</i>	194	<i>Pristimantis rubicundus</i>	4
<i>Dendropsophus sarayacuensis</i>	609	<i>Pristimantis rufiocularis</i>	2

<i>Dendropsophus schubarti</i>	135	<i>Pristimantis saltissimus</i>	8
<i>Dendropsophus soaresi</i>	3	<i>Pristimantis savagei</i>	2
<i>Dendropsophus timbeba</i>	68	<i>Pristimantis schultei</i>	1
<i>Dendropsophus tintinnabulum</i>	20	<i>Pristimantis skydmainos</i>	66
<i>Dendropsophus triangulum</i>	867	<i>Pristimantis stictoboubonus</i>	2
<i>Dendropsophus walfordi</i>	450	<i>Pristimantis tamsitti</i>	3
<i>Dendropsophus xapuriensis</i>	60	<i>Pristimantis toftae</i>	44
<i>Dermatonotus muelleri</i>	58	<i>Pristimantis trachyblepharis</i>	2
<i>Dischidodactylus colonnelloi</i>	2	<i>Pristimantis unistrigatus</i>	1
<i>Dischidodactylus duidensis</i>	1	<i>Pristimantis variabilis</i>	295
<i>Dryaderces inframaculata</i>	1	<i>Pristimantis ventrimarmoratus</i>	135
<i>Dryaderces pearsoni</i>	28	<i>Pristimantis vilarsi</i>	579
<i>Ecnomiohyla tuberculosa</i>	135	<i>Pristimantis wagteri</i>	2
<i>Edalorhina nasuta</i>	3	<i>Pristimantis waoranii</i>	2
<i>Edalorhina perezi</i>	454	<i>Pristimantis w-nigrum</i>	7
<i>Elachistocleis carvalhoi</i>	9	<i>Pristimantis yaviensis</i>	2
<i>Elachistocleis helianneae</i>	385	<i>Pristimantis zeuctotylus</i>	274
<i>Elachistocleis ovalis</i>	1684	<i>Pristimantis zimmermanae</i>	24
<i>Elachistocleis surinamensis</i>	19	<i>Pristimantis zoilae</i>	3
<i>Elachistocleis surumu</i>	3	<i>Proceratophrys concavitympanum</i>	1
<i>Eleutherodactylus johnstonei</i>	2	<i>Pseudis boliviana</i>	319
<i>Engystomops freibergeri</i>	652	<i>Pseudis caraya</i>	263
<i>Engystomops petersi</i>	148	<i>Pseudis laevis</i>	24
<i>Engystomops pustulosus</i>	25	<i>Pseudis paradoxa</i>	1518
<i>Espadarana audax</i>	1	<i>Pseudopaludicola boliviana</i>	875
<i>Espadarana durrellorum</i>	8	<i>Pseudopaludicola canga</i>	10
<i>Excidobates captivus</i>	2	<i>Pseudopaludicola ceratophryes</i>	182
<i>Gastrotheca andaquiensis</i>	9	<i>Pseudopaludicola llanera</i>	33
<i>Gastrotheca longipes</i>	32	<i>Ranitomeya amazonica</i>	9
<i>Gastrotheca monticola</i>	1	<i>Ranitomeya benedicta</i>	9
<i>Gastrotheca nicefori</i>	2	<i>Ranitomeya fantastica</i>	6
<i>Gastrotheca testudinea</i>	39	<i>Ranitomeya flavovittata</i>	9
<i>Gastrotheca weinlandii</i>	13	<i>Ranitomeya imitator</i>	9
<i>Hamptophryne boliviana</i>	1617	<i>Ranitomeya reticulata</i>	60
<i>Hemiphractus bubalus</i>	32	<i>Ranitomeya sirensis</i>	34
<i>Hemiphractus helioi</i>	50	<i>Ranitomeya summersi</i>	1
<i>Hemiphractus johnsoni</i>	11	<i>Ranitomeya uakarii</i>	119
<i>Hemiphractus proboscideus</i>	138	<i>Ranitomeya vanzolinii</i>	55
<i>Hemiphractus scutatus</i>	423	<i>Ranitomeya variabilis</i>	4
<i>Hyalinobatrachium cappellei</i>	79	<i>Ranitomeya ventrimaculata</i>	871
<i>Hyalinobatrachium fleischmanni</i>	1	<i>Rhaebo glaberrimus</i>	196

<i>Hyalinobatrachium iaspidiense</i>	28	<i>Rhaebo guttatus</i>	1834
<i>Hyalinobatrachium pellucidum</i>	1	<i>Rhaebo nasicus</i>	34
<i>Hyalinobatrachium ruedai</i>	9	<i>Rhinella acutirostris</i>	151
<i>Hyalinobatrachium taylori</i>	192	<i>Rhinella arborescandens</i>	1
<i>Hydrolaetare dantasi</i>	66	<i>Rhinella castaneotica</i>	997
<i>Hydrolaetare schmidtii</i>	884	<i>Rhinella ceratophrys</i>	354
<i>"Hyla" imitator</i>	1	<i>Rhinella cristinae</i>	1
<i>Hyloscirtus albopunctulatus</i>	30	<i>Rhinella dapsilis</i>	93
<i>Hyloscirtus lindae</i>	5	<i>Rhinella festae</i>	13
<i>Hyloscirtus phyllognathus</i>	18	<i>Rhinella granulosa</i>	1416
<i>Hyloscirtus psarolaimus</i>	1	<i>Rhinella humboldti</i>	28
<i>Hyloscirtus staufferorum</i>	1	<i>Rhinella lescurei</i>	14
<i>Hyloscirtus torrenticola</i>	6	<i>Rhinella magnussoni</i>	4
<i>Hyloxalus azureiventris</i>	3	<i>Rhinella margaritifera</i>	1876
<i>Hyloxalus bocagei</i>	24	<i>Rhinella marina</i>	1876
<i>Hyloxalus cevallosi</i>	3	<i>Rhinella martyi</i>	103
<i>Hyloxalus chlorocraspedus</i>	1	<i>Rhinella nesiotes</i>	2
<i>Hyloxalus craspedocephalus</i>	1	<i>Rhinella ocellata</i>	117
<i>Hyloxalus eleutherodactylus</i>	1	<i>Rhinella poeppigii</i>	38
<i>Hyloxalus faciopunctulatus</i>	4	<i>Rhinella proboscidea</i>	176
<i>Hyloxalus fuliginosus</i>	1	<i>Rhinella roqueana</i>	176
<i>Hyloxalus idiomelus</i>	2	<i>Rhinella rubescens</i>	37
<i>Hyloxalus insulatus</i>	1	<i>Rhinella schneideri</i>	177
<i>Hyloxalus maculosus</i>	2	<i>Rulyrana flavopunctata</i>	18
<i>Hyloxalus mittermeieri</i>	1	<i>Rulyrana saxiscandens</i>	2
<i>Hyloxalus nexipus</i>	23	<i>Scarthyla goinorum</i>	515
<i>Hyloxalus patitae</i>	1	<i>Scinax baumgardneri</i>	3
<i>Hyloxalus peruvianus</i>	200	<i>Scinax blairi</i>	17
<i>Hyloxalus pulchellus</i>	4	<i>Scinax boesemani</i>	1413
<i>Hyloxalus sauli</i>	19	<i>Scinax chiquitanus</i>	43
<i>Hyloxalus shuar</i>	6	<i>Scinax cruentommus</i>	858
<i>Hyloxalus sordidatus</i>	6	<i>Scinax danae</i>	4
<i>Hypodactylus dolops</i>	4	<i>Scinax eurydice</i>	8
<i>Hypodactylus elassodiscus</i>	2	<i>Scinax exiguus</i>	9
<i>Hypodactylus nigrovittatus</i>	309	<i>Scinax funereus</i>	284
<i>Hypsiboas albopunctatus</i>	203	<i>Scinax fuscomarginatus</i>	254
<i>Hypsiboas boans</i>	1827	<i>Scinax fuscovarius</i>	181
<i>Hypsiboas calcaratus</i>	1440	<i>Scinax garbei</i>	1154
<i>Hypsiboas cinerascens</i>	1793	<i>Scinax ictericus</i>	30
<i>Hypsiboas crepitans</i>	245	<i>Scinax iquitum</i>	25
<i>Hypsiboas dentei</i>	58	<i>Scinax karenanneae</i>	4
<i>Hypsiboas fasciatus</i>	1526	<i>Scinax kennedyi</i>	6

<i>Hypsiboas fuentei</i>	1	<i>Scinax lindsayi</i>	51
<i>Hypsiboas geographicus</i>	1876	<i>Scinax nebulosus</i>	1236
<i>Hypsiboas hobbsi</i>	86	<i>Scinax oreites</i>	11
<i>Hypsiboas hutchinsi</i>	39	<i>Scinax pedromedinae</i>	52
<i>Hypsiboas jimenezi</i>	2	<i>Scinax proboscideus</i>	71
<i>Hypsiboas lanciformis</i>	1351	<i>Scinax rostratus</i>	115
<i>Hypsiboas lemai</i>	20	<i>Scinax ruber</i>	1832
<i>Hypsiboas leucocheilus</i>	3	<i>Scinax wandae</i>	31
<i>Hypsiboas liliae</i>	7	<i>Scinax x-signatus</i>	1714
<i>Hypsiboas microderma</i>	127	<i>Sphaenorhynchus carneus</i>	559
<i>Hypsiboas multifasciatus</i>	486	<i>Sphaenorhynchus dorisae</i>	508
<i>Hypsiboas nympha</i>	88	<i>Sphaenorhynchus lacteus</i>	1589
<i>Hypsiboas ornatissimus</i>	136	<i>Stefania ackawaio</i>	4
<i>Hypsiboas pulidoi</i>	2	<i>Stefania ayangannae</i>	4
<i>Hypsiboas punctatus</i>	1875	<i>Stefania breweri</i>	1
<i>Hypsiboas raniceps</i>	1275	<i>Stefania coxi</i>	4
<i>Hypsiboas rhythmicus</i>	4	<i>Stefania evansi</i>	24
<i>Hypsiboas roraima</i>	2	<i>Stefania ginesi</i>	4
<i>Hypsiboas sibleszi</i>	68	<i>Stefania goini</i>	2
<i>Hypsiboas tepuianus</i>	36	<i>Stefania marahuaquensis</i>	2
<i>Hypsiboas wavrini</i>	838	<i>Stefania oculosa</i>	4
<i>Leptodactylus bolivianus</i>	1629	<i>Stefania percristata</i>	4
<i>Leptodactylus chaquensis</i>	24	<i>Stefania riae</i>	2
<i>Leptodactylus colombiensis</i>	4	<i>Stefania riveroi</i>	2
<i>Leptodactylus didymus</i>	7	<i>Stefania roraimae</i>	6
<i>Leptodactylus diedrus</i>	269	<i>Stefania satelles</i>	6
<i>Leptodactylus discodactylus</i>	412	<i>Stefania scalae</i>	14
<i>Leptodactylus elenae</i>	88	<i>Stefania schuberti</i>	2
<i>Leptodactylus fragilis</i>	6	<i>Stefania tamacuarina</i>	1
<i>Leptodactylus furnarius</i>	9	<i>Stefania woodleyi</i>	5
<i>Leptodactylus fuscus</i>	1550	<i>Strabomantis cornutus</i>	12
<i>Leptodactylus knudseni</i>	1567	<i>Strabomantis sulcatus</i>	393
<i>Leptodactylus labyrinthicus</i>	106	<i>Synapturanus mirandaribeiroi</i>	488
<i>Leptodactylus latrans</i>	1227	<i>Synapturanus rabus</i>	69
<i>Leptodactylus leptodactyloides</i>	1438	<i>Synapturanus salseri</i>	166
<i>Leptodactylus lineatus</i>	1576	<i>Tepuihyla aecii</i>	1
<i>Leptodactylus lithonaetes</i>	56	<i>Tepuihyla edelcae</i>	9
<i>Leptodactylus longirostris</i>	276	<i>Tepuihyla exophthalma</i>	2
<i>Leptodactylus myersi</i>	103	<i>Tepuihyla luteolabris</i>	2
<i>Leptodactylus mystaceus</i>	1768	<i>Tepuihyla rodriguezi</i>	8
<i>Leptodactylus mystacinus</i>	2	<i>Tepuihyla warreni</i>	2
<i>Leptodactylus paraensis</i>	213	<i>Teratohyla ameliae</i>	1
<i>Leptodactylus pentadactylus</i>	1401	<i>Teratohyla midas</i>	501

<i>Leptodactylus petersii</i>	1645	<i>Trachycephalus coriaceus</i>	727
<i>Leptodactylus podicipinus</i>	333	<i>Trachycephalus hadroceph</i>	91
<i>Leptodactylus pustulatus</i>	177	<i>Trachycephalus resinifictrix</i>	1465
<i>Leptodactylus rhodomystax</i>	1602	<i>Trachycephalus typhoni</i>	1874
<i>Leptodactylus rhodonotus</i>	111	<i>Vitreorana gorzulae</i>	5
<i>Leptodactylus riveroi</i>	324	<i>Vitreorana helenae</i>	1
<i>Leptodactylus rugosus</i>	67	<i>Vitreorana ritae</i>	7
<i>Leptodactylus sabanensis</i>	8		
<i>Leptodactylus stenodema</i>	1450		
<i>Leptodactylus syphax</i>	20		

APPENDIX S2 – Determining biogeographical regions considering different presence-absence matrix.

To understand the effects of anuran species that were described recently or whose range size distribution is underpredicted, we delimited biogeographical regions using four different datasets: i) all anuran species downloaded from IUCN - containing 577 species; ii) excluding small-ranged species that occurred in only one grid cell - containing 501 species; iii) excluding small-ranged species that occurred in only two grid cells - containing 440 species; and iv) excluding small-ranged species that occurred in only three grid cells - containing 418 species. Independently of the matrix analyzed, we found seven biogeographical regions with similar distributions (Figure S2, Table S2).

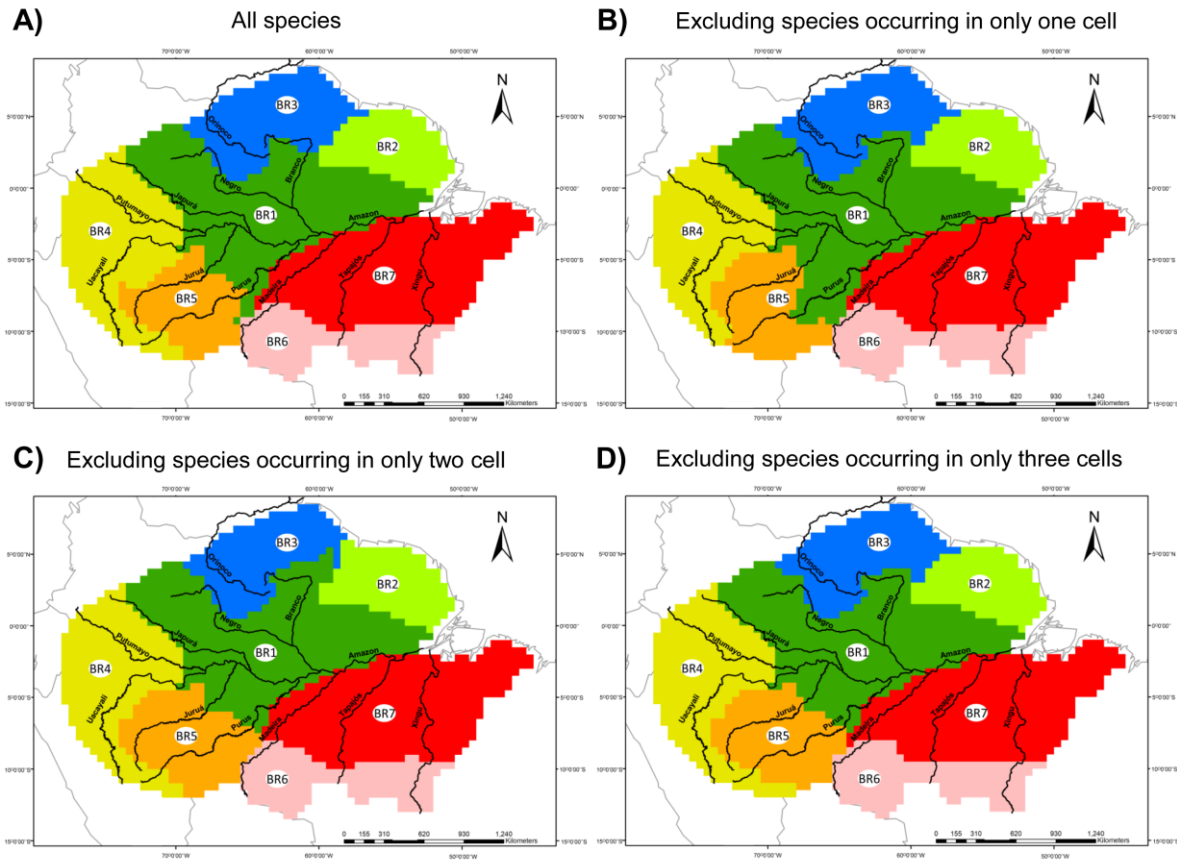


Figure S2. Regionalization of anuran dissimilarity into seven biogeographical regions (BR) in the Amazonia considering different datasets. A) all anuran species downloaded from IUCN - containing 577 species ; B) dataset excluding small-ranged species that occurred in only one grid cell - containing 501 species; C) dataset excluding small-ranged species that occurred in only two grid cells - containing 440 species; and D) dataset excluding small-ranged species that occurred in only three grid cells - containing 418 species. Black lines represent the ten major rivers in Amazonia. Map generated using ESRI ArcMap 9.2.

<https://www.esri.com>

TABLE S2. Values of the mean silhouette width (Silh) and the explained dissimilarity (ex.diss) for delimitation of biogeographical regions using four different datasets: i) all anuran species downloaded from IUCN - containing 577 species; ii) excluding small-ranged species that occurred in only one grid cell - containing 501 species; iii) excluding small-ranged species that occurred in only two grid cells - containing 440 species; and iv) excluding small-ranged species that occurred in only three grid cells -containing 418 species. The mean silhouette width measures the strength of any of the partitions of objects from a dissimilarity matrix. The explained dissimilarity maximizes between-cluster variation relative to within-cluster variation. In bold the number of clusters selected.

N° of clusters	All anuran species		Excluding anuran species in only 1 grid		Excluding anuran species in only 2 grids		Excluding anuran species in only 3 grids	
	Silh	ex.diss	Silh	ex.diss	Silh	ex.diss	Silh	ex.diss
2	0.410	0.384	0.407	0.392	0.384	0.474	0.391	0.458
3	0.291	0.707	0.292	0.712	0.281	0.691	0.315	0.745
4	0.314	0.841	0.316	0.839	0.314	0.833	0.316	0.839
5	0.298	0.876	0.292	0.879	0.306	0.877	0.309	0.869
6	0.313	0.909	0.307	0.909	0.319	0.907	0.312	0.906
7	0.336	0.925	0.335	0.924	0.333	0.919	0.332	0.906
8	0.334	0.937	0.323	0.938	0.328	0.938	0.330	0.938
9	0.346	0.942	0.304	0.943	0.346	0.943	0.332	0.944
10	0.321	0.953	0.331	0.952	0.314	0.953	0.307	0.952
11	0.319	0.961	0.301	0.962	0.308	0.963	0.302	0.962
12	0.321	0.966	0.301	0.967	0.307	0.968	0.301	0.968
13	0.335	0.968	0.314	0.971	0.321	0.971	0.314	0.970
14	0.355	0.971	0.335	0.973	0.324	0.972	0.329	0.973
15	0.341	0.975	0.348	0.976	0.342	0.975	0.351	0.976
16	0.341	0.979	0.341	0.978	0.336	0.978	0.360	0.978
17	0.344	0.981	0.355	0.981	0.344	0.981	0.368	0.980
18	0.348	0.981	0.345	0.982	0.356	0.981	0.370	0.981
19	0.337	0.983	0.359	0.983	0.357	0.983	0.361	0.982
20	0.354	0.984	0.351	0.984	0.345	0.984	0.346	0.984

APPENDIX S3.

Table S3. Pearson correlations (r) between environmental variables and the two axes of principal components analyses (PCA) used in the manuscript. The highest correlation values for each axis are in bold.

	FIRST AXIS PCA		SECOND AXIS PCA	
	r	p	r	p
CONTEMPORARY CLIMATE				
Average annual maximum temperature	0.39	<0.001	-0.52	<0.001
Average annual minimum temperature	-0.61	<0.001	-0.88	<0.001
Temperature seasonality	0.81	<0.001	-0.15	<0.001
Annual precipitation	0.95	<0.001	-0.04	0.05
Precipitation range	0.81	<0.001	0.05	0.01
Precipitation seasonality	0.95	<0.001	0.07	0.01
TOPOGRAPHIC VARIABLES				
Minimum elevation	-0.01	0.44	-0.96	<0.001
Maximum elevation	-0.90	<0.001	-0.12	<0.001
Elevational standard deviation	-0.80	<0.001	0.48	<0.001
Slope range	0.76	<0.001	0.17	<0.001
Slope standard deviation	0.70	<0.001	0.15	<0.001
Aspect standard deviation	0.10	<0.001	0.14	<0.001
VEGETATION STRUCTURE				
Moist forests	0.99	<0.001	-0.06	0.005
Dry forests	-0.82	<0.001	-0.53	<0.001
Várzea	-0.43	<0.001	0.90	<0.001
Savannas and Shrublands	-0.002	0.93	-0.02	0.22
Mangroves	-0.07	0.002	-0.02	0.33
Montane forest	-0.10	<0.001	-0.08	0.002