

VOWEL SEQUENCES

REX GOOCH

Letchworth Garden City, Herts, England

rexgooch@ntlworld.com

This article examines “runs” of the vowels a, e, i, o, and u, in words and phrases. An example is *præuius* (modern previous), which is counted as a run of six vowels. To save space, the level of detail given diminishes as the number of examples increases. Where the words themselves are not given, the results are unverified, and it may be assumed that a few instances will be of poor transliterations, or be otherwise unacceptable. This will not greatly affect the conclusions.

In selecting examples, priority as usual has been given to words over phrases, ordinary nouns over proper nouns, familiar words over obscure words, solid words over hyphenated ones, and so on. However, the perennial problem then arises of excluding a very familiar word at the expense of an obscure one merely because it has a hyphen. An extreme example is IEEE (I-triple-E), an acronym for the world’s leading institution for electrical and electronic engineering, responsible for millions of references on the Web, and for over 100 quotes in the OED. To prefer some obscure Yugoslavian place, or a distorted “acid house” word, seems to me to be perverse, just as preferring a legal technicality to justice. I often attempt to cater for different tastes by offering a choice.

A particular problem arises with place names. “Cambridge” and “Hebden Bridge” have exactly the same role syntactically and semantically: they both name towns. The space in the middle of Hebden Bridge is adventitious: it must be ignored in making sense of a sentence in which it occurs. If you erroneously try to treat it as two words, you start by getting Hebden, which is another town altogether. “Hebden bridge” has yet another meaning. If asked to name a town whose name contains both a *b* and an *r*, I see no particular reason to favour one over the other.

Dmitri Borgmann has a relevant section “Vowel Concentrations” on pps. 156-7 of *Language on Vacation* (hereafter LoV). Other relevant material may be found in various past articles on AEIOU words, and in W77-223 (includes two places with 8 consecutive vowels).

French North African words often start with an (unfair) advantage, as the French transliteration of the Arabic uses *ou* instead of *w*, a letter that the French scarcely acknowledge. Thus what we normally call *wadi* is rendered *ouadi*, which gets some place names off to a flying start. The French version, however, is often the official one for countries like Algeria and Morocco in English gazeteers.

Runs of 1, 2, and 3 vowels

These require respectively 5, 25, and 125 words. All exist.

Runs of 4 vowels

This subject was treated in detail in Susan Thorpe’s Vowel Tetragrams (Nov 2003). [By the way, will she produce pentagrams next, and if so, to what use will she put them?]. Her thorough work left just 102 holes in the 625 permutations, and inevitably these holes will tend to be filled with words or phrases of less than average quality. We can fill most of these (65) as follows:

AAEO	rustya aeolis, Ia	Caleta Aeolian, Ecuador, -0°26, -90°17
AI II	“Valium (LAIII) (diazepam)”, OED diazepam 1961q	
	Wai’ii, Papua New Guinea, -9°07, 148°34	
AO II	Dao II, Central African Republic, 6°41, 18°15	Houraoi Island, Solomon Islands, -9°27, 161°14
AOOA	Ngao Oama, Cameroon, 7°55, 12°52	Darya-i- Daood, Afghanistan, 37°17,

	69°27	
AOOI	Wan Kao-oi, Burma, 20°11, 98°21	
AUII	Ribeirao Auiia, Brazil, -12°09, -53°20	Melicope mauii minor, Ip
AUUU	Vau Uugui, Guinea Bissau, 11°41, -14°48	
EAIU	Me Aiu, New Caledonia, -21°29, 165°52	
EEAO	Kurleea Out Station, Australia, -23°00, 143°12	
EEEE	Afe'e'eo, Solomon Islands, -8°59, 160°59	
EEII	Barleeiidae jayakari jayakari, Ia	
EEOA	Three Oaks, East Sussex, Autostreet Lite	
EEUI	weeuil, OED weevil 1, 1598q	
EEUU	Shivee Uul, Mongolia, 44°18, 111°24	
EIII	OED exempli gratia "Freq. abbreviated to e.g. (see EIII)"	
	Due III, Democratic Republic of the Congo, -4°20, 18°50, or George III!	
	grade-III reflux, OED uretero- 1913q	
EIIIO	Houei Io, Laos, 21°59, 101°52	Kouei Ioum, Vietnam, 22°11, 105°49
EIIU	Kondei'iu, Papua New Guinea, -7°07, 143°27	
EOAA	Noe Oaanaumu, Indonesia, -9°20, 124°48	
EOII	Leo-II, Democratic Republic of the Congo, -4°20, 15°15	
	Huleoi Island, Solomon Islands, -8°21, 159°30	Store Oiingen, Norway, 64°12, 12°43
EUAA	Neu-Aalesund, Svalbard, 78°56, 11°57	
EUOA	Ile Uoa, New Caledonia, -21°16, 167°36	Igarape Uoacai, Brazil, 1°07, -69°45
EUOO	Titoleuoo, OED annual A 1 b, 1502q	
IAAO	Weijia'ao, China, 32°20, 119°08	Ma-chih-chia-ao-she, Taiwan, 22°20, 120°41
IAAU	Baie Vaiaau, French Polynesia, -16°52, -151°28 (5 vowels solid)	
IAAU	Tania Australis, Web2, below line	
IAAU	Leavenworthia aurea var. texan, Ip	
IAEO	Shijimiaeoides battoides allyni, Ia (5 vowels solid)	
IAOO	Tiao-o-pao, China, 40°42, 115°54	
	Ch'ien-nan-pu-i-tsu-miao-o-tsu Tzu-chih-chou, China, 26°16, 107°31	
IEAA	Die Aar se Loop, South Africa, -32°56, 23°08	
IEEE	The Eye-triple-E (see text)	
	"Various - We Call It Acieeed!" (Warner Music UK Ltd), 2xCD	
	pinkie een, OED pinkie	Miradie e Eperme, Yugoslavia, 42°35, 21°05
IEEU	Dommarie-Eulmont, France, 48°26, 6°02	
IEII	Kie III, Gabon, 1°46, 12°11	
IEOE	Sectie Oeest, Suriname, 5°19, -55°16	
IEOI	Bieo Island, Marshall Islands, 10°18, 169°59	cicinie oil, OED cicinie
IIAU	Funii'au, Solomon Islands, -8°54, 161°02 (also Furii'au)	
IIEO	Mai'ieo, Papua New Guinea, -6°17, 149°50	
IIIA	transcription factor IIIA, OED zinc	Cerburenii-Iasi, Romania, 45°11, 24°42
IIIO	Alexander III of Macedon, Longmans	
IIOE	Rai Ioe Creek, Papua New Guinea, -7°56, 147°48	
IIOO	hawaii 'o'o (common name of species Moho nobilis), Ia	
IIUI	Irii-ui, Japan, 26°43, 127°47	
IIUU	Tsetsii Uul, Mongolia, 43°31, 105°40	
IOEE	Soengai Oeewano, Indonesia, -2°14, 119°52	
IOOA	Rio Oaya, Colombia, 1°57, -75°08	
IOOI	Rio Oi, Panama, 8°29, -81°22 (many such with Rio, also with Sitio in Brazil)	
IUAO	Jiu'ao, China, 22°07, 113°35	

IUEO	Sonchus flore niueo, OED sow-thistle 2, 1597
OAEU	Poaeui Passage, Papua New Guinea, -2°02, 147°21 (5 vowels solid)
OIIIO	Koi'ioro, Papua New Guinea, -7°49, 146°51
OIIU	Perroi i Unjes, Albania, 41°42, 19°53
OOOU	Pardoo Out Camp, Australia, -19°59, 119°55
UAOE	Poelau Aoer, Indonesia, -3°00, 107°15
UAOO	Olemurua Oolmongi, Kenya, 0°15, 37°02
UAUU	Pulau Auun, Malaysia, 1°59, 113°15
UEEO	Methyl Blue-Eosin solution for Negri bodies, www.gccdiagnostics.com/Histology.htm
UEEU	Crique Euleupousing, French Guiana, 2°17, -52°51
UEOO	Graigeeooly, Ireland, 52°34, -7°23
UEUU	Crique Uusua, Honduras, 15°13, -84°39
UIII	Candjangu I, Angola, -12°37, 15°26
UIOO	Nui Oog, Vietnam, 18°32, 105°46
UOAO	Luo'ao, China, 28°01, 108°36
UOEA	Tubu Oeapun, Indonesia, -9°23, 124°02
UOII	Luoii Hill, Zambia, -13°59, 32°51
UUA	Lua Asundus, Estonia, 58°39, 26°35
UUUE	Voidu Uue, Estonia, 58°24, 25°36

588/625 = 94%

Runs of 5 vowels

There are words for each of the following 709 sequences, 22.7% of the possible 3125:

AAAAA	AAAAI	AAAIA	AAAIE	AAAIO	AAUA	AAEAE	AAIAE	AAIAI	AAIEA	AAIEE	AAIEI
AAIEU	AAIII	AAIOO	AAIOU	AAIUE	AAIUI	AAOUA	AAOUE	AAOUI	AAUAA	AAUAI	AAUAU
AAUEI	AAUIA	AAUOA	AAUUE	AEAEA	AEAEI	AEAIA	AEAI	AEAE	AEUE	AEIAA	AEIOI
AEIUE	AEOIU	AEOUA	AEOUE	AEUAU	AEUIA	AEUIE	AEUIO	AEUUA	AEUUI	AIAAA	AIAAE
AIAAI	AIAAU	AIAEA	AIAIA	AIAIE	AIAII	AIAIU	AIAOE	AIAOI	AIAOU	AIAUA	AIAUE
AIAUI	AIAUU	AIEAI	AIEAO	AIEAU	AIEEI	AIEIA	AIEIE	AIEIO	AIEIU	AIEOU	AIEUA
AIEUE	AIEUI	AIEUU	AIIAA	AIIAI	AIIEO	AIIII	AIIOA	AIIOE	AIIOO	AIIOU	AIOAI
AIOEA	AIOEE	AIOEI	AIOEO	AIOIA	AIOII	AIOIO	AIOIU	AIOUA	AIOUE	AIOUI	AIUAI
AIUAU	AIUEA	AIUEI	AIUOI	AIUUE	AOAAO	AOAAU	AOAIA	AOAIE	AOAIU	AOAOA	AOAUI
AOEAO	AOEIA	AOEOE	AOEUI	AOIAE	AOIII	AOOIE	AOOUA	AOOUE	AOOUI	AOUAA	AOUAE
AOUAI	AOUAO	AOUAU	AOUEA	AOUUE	AOUUI	AOUEO	AOUUE	AOUUA	AOUUI	AOUII	AOUIO
AOUOE	AOUOU	AOUUA	AUAEU	AUAIA	AUAIE	AUAI	AUAIO	AUAIU	AUAOE	AUAOI	AUAOU
AUAUA	AUAUE	AUAUI	AUAUO	AUAUU	AUEAE	AUEAI	AUEAU	AUEEA	AUEIA	AUESOU	AUEUA
AUEUE	AUEUI	AUIAE	AUIAI	AUIAO	AUIAU	AUIIA	AUIII	AUIOI	AUIOU	AUIUE	AUIUI
AUOAE	AUOAI	AUOIE	AUOOU	AUOUA	AUOUE	AUOUO	AUUA	AUUA	AUUA	AUUEA	AUUEI
AUUEU	AUUIA										
EAAIU	EAAOU	EAAUA	EAEAU	EAEOI	EAEUA	EAI	EAI	EAI	EAI	EAI	EAI
EAOAO	EAOIE	EAOUA	EAOUE	EAOUI	EAOUO	EAUAE	EAUAI	EAUAO	EAUUA	EAUUA	EAUUA
EAUEO	EAUEU	EAUIA	EAUIE	EAUII	EAUIO	EAUOA	EAUOI	EAUOU	EAUUA	EAUUI	EAUOO
EEAIO	EEAOU	EEAUA	EEEE	EEEE	EEIAO	EEIOU	EEOIE	EEOUE	EEUAU	EEUEA	EEUEI
EEUOU	EIAAE	EIAAI	EIAEI	EIAIA	EIAIE	EIAOI	EIAOU	EIAUA	EIAUE	EIAUI	EIEIA
EIEIE	EIEOU	EIEUI	EIIAO	EIIII	EIIIOU	EIOEA	EIOEI	EIOIE	EIOII	EIOIO	EIOOU
EIOUA	EIOUE	EIOUI	EIOUO	EIUUA	EIUEI	EIUIA	EIUOU	EOAI	EOAIO	EOAIU	EOAOU
EOEUA	EOEUI	EOOAI	EOOUA	EOOUE	EOUAI	EOUAO	EOUAU	EOUEA	EOUEI	EOUEO	EOUEU
EOUIA	EOUIE	EOUIO	EOUITU	EOUOU	EOUUA	EOUUE	EUA	EUA	EUA	EUA	EUA
EUAUE	EUAUI	EUEAA	EUEAI	EUEAU	EUEIE	EUEOU	EUEUA	EUEUE	EUIAU	EUIOU	EUIUA

EUIUE	EUIUI	EUIUO	EUOIE	EUOUA	EUOUÉ	EUOUI	EUOUO	EUUAE	EUUIE		
IAAIA	IAAOU	IAAUA	IAAUE	IAAUI	IAEAE	IAEIA	IAEOI	IAIAA	IAIAE	IAIAI	IAIAU
IAIIA	IAIII	IAIOU	IAIUA	IAOAI	IAOAO	IAOAU	IAOIA	IAOOU	IAOUA	IAOUE	IAOUI
IAOUO	IAUAE	IAUAI	IAUAU	IAUEA	IAUEI	IAUIA	IAUII	IAUOE	IAUUA	IEAOU	IEAUE
IEAUI	IEEOU	IEIAO	IEIAU	IEIEI	IEIII	IEOEE	IEOUA	IEOUE	IEOUI	IEOUO	IEUAI
IEUAU	IEUEA	IEUEE	IEUIA	IEUIE	IEUOU	IEUUI	IIAIA	IIAII	IIAOA	IIIII	IIIOU
IIUAA	IOAAE	IOAAU	IOAEO	IOAIA	IOAIU	IOAUA	IOAUE	IOEOE	IOIAE	IOIAI	IOIAO
IOIAU	IOIEU	IOIII	IOIOI	IOIOO	IOIUA	IOIUO	IOOIA	IOOUA	IOOUE	IOUAA	IOUAE
IOUAI	IOUAO	IOUAU	IOUEA	IOUEE	IOUEI	IOUEU	IOUIA	IOUII	IOUIO	IOUIU	IOUOA
IOUOO	IOUOU	IOUUA	IUA EI	IUAIA	IUAIE	IUAII	IUAIU	IUAUA	IUAUE	IUEAU	IUEIA
IUEIE	IUEIO	IUIAU	IUIOU	IUIUI	IUOIE	IUUAE					
OAAEA	OAAIA	OAAIE	OAAOA	OAAOO	OAAOU	OAAUA	OAEIA	OAEOI	OAEUI	OAI AE	OAI AI
OAI AO	OAI EI	OAI UA	OAO AE	OAO AI	OAO AO	OAO AU	OAO EU	OAO UA	OAO UE	OAO UI	OAU AI
OAU AO	OAU AU	OAE EI	OAU IA	OAU II	OAU UI	OAE EI	OEA II	OEA IO	OEA OE	OEA UE	OEE AI
OEE IE	OEE UE	OEI AE	OEI EA	OEI EI	OEI OE	OEI OI	OEI OU	OEO AA	OEO EE	OEO EI	OEO EO
OEO OI	OEO UA	OEO UE	OEUA E	OEUE A	OIA IA	OIA IO	OIA OI	OIA UA	OIA UE	OIA UI	OIE AU
OIE EI	OIE IA	OIE IE	OII OU	OIO AE	OIO EI	OIO IO	OIO OU	OIO UA	OIO UE	OIO UO	OIU AI
OIU AU	OIU IU	OOA AO	OOA II	OOE EI	OOE OI	OOE UE	OOI AA	OOI EE	OOI EI	OOI OE	OOI OI
OOI UI	OOO EE	OOO OE	OOO OO	OOO OU	OOU AI	OOU AO	OOU EA	OOU EI	OOU IA	OOU OU	OUA AE
OUA AI	OUA AO	OUA AU	OUA EA	OUA EI	OUA EO	OUA IA	OUA IE	OUA II	OUA IO	OUA IU	OUA OI
OUA OU	OUA UA	OUA UE	OUA UO	OU E AE	OU E AI	OU E AO	OU E AU	OU E IA	OU E IE	OU E II	OU E IO
OU E IU	OU E OA	OU E OU	OU E UA	OU E UE	OU E UI	OU E UO	OUI AA	OUI AE	OUI AI	OUI AO	OUI AU
OUI EE	OUI EI	OUI EU	OUI IA	OUI IE	OUI II	OUI IO	OUI OI	OUI OU	OUI UE	OUI UI	OUI OA
OUI I	OUI O	OUI OU	OUI UA	OUI UE	OUI UI	OUI UO	OUI AI	OUI EA	OUI IE	OUI OI	OUI OU
UAA IO	UAA OU	UAE AU	UAE IE	UAE OU	UAE UA	UAE UE	UA I AA	UA I AE	UA I AI	UA I AU	UA I EA
UA I EU	UA I IA	UA I II	UA I IU	UA I OI	UA I OO	UA I OU	UA I UA	UA I UE	UA I UO	UA O UA	UA O UE
UA O UI	UA O UO	UA U AE	UA U AI	UA U EI	UA U IA	UA U IE	UA U IO	UA U IU	UA U OI	UE A IO	UE A OU
UE A UA	UE A UE	UE A UI	UEE AI	UEE AU	UEE IE	UE I AA	UE I AI	UE I AO	UE I AU	UE I EI	UE I EU
UE I IA	UE I II	UE I IO	UE I OI	UE I OU	UE I UA	UE O AI	UE O IA	UE O II	UE O UA	UE O UE	UE O UI
UE U AE	UE U AU	UE U EA	UE U EE	UE U EI	UE U EU	UE U IA	UE U II	UI A AI	UI A AO	UI A IA	UI A II
UI A IO	UI A OI	UI A OU	UI A UA	UI A UI	UI A UO	UI E AE	UI E AO	UI E IA	UI E IE	UI E OA	UI E UA
UI E UE	UI E UI	UI I II	UI I OA	UI O EU	UI O IO	UI O UA	UI O UE	UI O UI	UI O UO	UI U AI	UI U IA
UI U IO	UI U IU	UI U OU	UI U UA	UOE UI	UO I AE	UO I AI	UO I AU	UO I EI	UO I OI	UO I UO	UOO UE
UOO UI	UOO UO	UOU AA	UOU AE	UOU AI	UOU AO	UOU EA	UOU EI	UOU IA	UOU IE	UOU OA	UOU OU
UUA IA	UUA II	UUE AU	UUE EI	UUE OU	UUI OU						

182 + 130 + 115 + 156 + 126, each out of 625 possible. In total, 709/3125 = 22.7%

Runs of 6 vowels

There are about 660 examples (4.2% of the 15625 possible). First, (mainly single) words with no consonants:

Rio Aauaua, Brazil, 3°45, -61°21

Ai Aoua, Lebanon, 33°55, 35°59

AOAAOA, Pcon

Tamourt Mint Aouaou, Mauritania, 17°28, -12°59

EUOUAE Ch, Gregorian doxology

iuæie, OED i-vee

Oia-Oia, Mozambique, -17°55, 33°57

aiaiai, Web2, below line

Aiouea crispa forbesii, Ip

Guern Bel Aouaia, Algeria, 30°50, 2°31

Dar Aouioi, Tunisia, 35°47, 10°34

IAIIAI, Pcon

Iu-ai-iu River, Papua New Guinea, -9°24, 149°11

OO-AA-OO, Pcon

Ouaoua, Central African Rep, 5°47, 19°38
 Tell Aarid el Ouaoui, Lebanon, 33°20, 35°28
 Oue-Oue, Chad, 18°28, 20°35
 Ouou-Oou, Vanuatu, -15°53, 167°12

Oua-Oue, New Caledonia, -21°37, 165°35
 Oueioi, Tuscan city, LoV 156
 oui-oui, OED wi-wi
 Igarape Uaiaue, Brazil, 4°14, -60°28

Next, we accept successively 1, 2, 3, and 4 extraneous consonants and vowels, but exclude about 220 place names:

Coo-oo-ee, 1916 work by J B Cooper
 Guaiaua, OED guava 1, 1555q
 luue~eie, OED love 16a, 1225q
 nouveau, OED newly 3, 1530q
 Zouaoua, Ch Zouave

coo-oo-oo, OED kim 2, 1866q -
 kauai 'o'o, Ia
 maaaaa, OED maa, 1922q (James Joyce)
 too-oo-oo, OED camelious, 1902q (Kipling)

Beauuais, OED vidame, 1614q
 Quaiuer, OED viver, 1611q
 sauueour, OED saviour 1a, 1300q

Proauuia, OED mother 1e, 1050q
 reuiuour, OED revivor

Ai-ai-ai-yah, OED coo, 1934q
 OED previous 2a, 1625q

Giouéuole, OED availful, 1598q
 seoueuald, OED sevenfold B1, 1225q

sirree-e-e-e-e, OED no siree, 1861q

At this point, the old usage of *u* in lace of modern *v* has been responsible for most of the examples. Longer examples are all place names.

Runs of 7 vowels

Words with seven consecutive vowels proliferate (there are about one gross of them, out of the 78125 possible = 0.18%). Those with no extra letters are:

Tell Aaouiaa, Syria, 34°42, 36°08

Aoueoua, Mauritania, 20°41, -15°31

Aoueoue, Togo, 6°42, 1°18

OIOUEAE, W93-085 (a trope)

UOIAUAI, WW77-222 International Journal of American Linguistics (14:47)

The first and last (alphabetically) of 18 words with a single added letter are:

aiaouais, LoV p156/7 Iowa Indian tribe

Zouaouia, Morocco, 28°51, -10°47

Of the 11 9-letter words, the first below might possibly be regarded as a pure 9-vowel word, and the second is not a place:

Ouadi el Aouaouiye, Syria, 34°38, 36°24

Whee-eee-ee, OED 1944q (Erle Stanley Gardner)

There are 12, 14, 9, 15, 13, and 10 words of lengths 10 to 15 respectively, plus another 35 longer words. Examples which are not place names are:

Piouaiuolo, OED rainish, 1598q

Whee-ee-ee-errump, OED Whee, 1918q

Runs of 8 vowels (24 out of 390625 = 0.006%)

We may add 18 8-vowel sequences to Susan's six 'contiguous tetragrams': of these 18, just those with one or no consonants are shown, along with an example that is not a place:

Ouai Ouai, Djibouti, 11°25, 43°09

Oua Ouiaia, New Caledonia, -21°18, 164°57

Oua Ouiou, New Caledonia, -21°38, 166°07

Koue Aioue, New Caledonia, -21°23, 165°46

Kouei Ouei, Vietnam, 22°54, 105°46

Rio Aauaia, Brazil, 3°45, -61°21

wo-oo-oo-oo-osh, OED whoosh, 1909q (H G Wells)

Runs of 9 or more vowels (3 out of 1953125 = 0.00015%)

The following are sanctioned by the Palindromicon: 9, 10, 11, 12 and 23 consecutive As; 10, 12, 15 and 18 Os; 18 Es (this is the only time in this article when such items will be mentioned).

The following may be added to Susan's two 9-vowel sequences:

Et Terni ou Ouaouerni, Morocco, 34°34, -3°35

Longest word consisting purely of vowels

If we admit Y as a vowel, (Ouadi el) Aouaouiye, Syria, has 9 vowels. If we permit 2-word place names, then the first three entries under "Runs of 8 vowels" are candidates. For single words consisting solely of vowels, the winners are the first five entries in "Runs of 7 vowels" above, plus aiaouai if this be the singular of Borgman's aiaouais.

Multiple runs, each of 4 or more vowels

There are 101 examples of words having separate two separate runs of 4 vowels (Susan Thorpe's "discrete tetragrams"). Virtually all are places. In 27 cases, the tetragrams are the same. Here are all the single-word examples, identical tetragrams being marked with =:

Aiounouea, LoV 157 (Iowa Indian tribe)	Ambouiamouai, New Caledonia, -21°39, 166°06
Baie Obouai, New Caledonia, -22°36, 167°33	Haouiriouirat, Mali, 17°15, -1°13
=Ndiouin-Diou, Comoros, -12°18, 43°40	Siouimououssi, Burkina Faso, 13°15, -1°26
=Sizaouagzaouagan(e), Niger, 16°11, 4°40	Souaigouia, Mauritania, 19°42, -12°39
Tiaourdiouine, Algeria, 21°59, 6°58	Tioualaoualene, Mali, 19°54, 0°10
Tiouerdiouine, Morocco, 31°12, -7°44	=Tiouidiouine, Algeria, 36°51, 4°20

There are 26 cases in which a run of 4 and a run of 5 occur (in either order). Fourteen of these start with *Zaouia*. All are places: the only solid example (as noted by Susan Thorpe) is the first on this list, with some other samples following. Note that many are rich in vowels (9v3c means 9 vowels, 3 consonants).

9v4c: Assif n' Quaourguioual, Morocco, 31°24, -5°27
 11v3c: Anou oua Lelioua, Algeria, 24°28, 9°04
 9v3c: Dar Bdaoua Zaouia, Morocco, 34°55, -6°05
 9v3c: Zaouia Maouas, Morocco, 30°12, -7°11
 10v4c: Zaouia Sidi Aiad, Morocco, 30°20, -9°13
 9v4c: Zaouia Taouert, Morocco, 30°51, -8°41

The following have a sum of runs greater than 9, the runs being shown as 4-6 etc. Note the examples with three runs.

4-6 Douair el Aaouainiye, Syria, 34°54, 36°11
 6-4 Oue Ouenjaoui, New Caledonia, -20°37, 164°19
 6-4 Zaouia el Haouari, 31°32, -5°01, Zaouia el Mekraoui, 34°37, -4°48, and Zaouia Imi Ouanziz, 31°07, -8°51 (all Morocco)
 5-5 Zaouia Laraouiine, Morocco, 31°28, -8°32, and similarly Zaouia Sidi Aaiad, 30°20, -9°13
 4-4-5 Rougou Oudou Oudououol, Guinea, 11°33, -10°42, with just 5 consonants for 15 vowels
 6-4-4 Khallet ed Douaouir oua el Khaouaniq, Lebanon, 33°30, 35°29

Summary

The number of extant permutations increases from run lengths 1 to 5, then decreases to zero at length 10. The percentage of potential vowel permutations that actually exists is 100% or near until run length 5, when it decreases sharply from 22% to zero. Few sequences beyond run length 5 are contained in other than place names.

Place names are from the NIMA database (same as Susan's BGN). Latitude and longitude are in degrees and minutes. Ch = Chambers. Pcon = Palindromicon. Ia and Ip are respectively animals and plants from ITIS.