

# *Geography and Horsepower on the Planet of the Apes (California 3085AD)*



*A belated primer for the producers*

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# *Geography and Horsepower on the Planet of the Apes*

## *(California 3085AD)*

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### Project

This project is to develop a plausible map of episode sequence and locations, underpinned by realistic geography and travel times identified within each 1974 TV series episode.

Walt Disney was a master of making the impossible plausible.

***"We cannot do the fantastic things, based on the real, unless we first know the real."***

[https://theopolisinstitute.com/leithart\\_post/plausible-impossibility/](https://theopolisinstitute.com/leithart_post/plausible-impossibility/)

Spatial orientation is an important component of the internal consistency necessary for good story telling (<https://rachellemnshaw.com/blog/2013/02/why-good-writing-matters-internal-consistency>) which in turn imparts credibility and direction to the narrative. This is especially true when travel in the story is entirely pedestrian or horse based.

It is plausibility, grounded in geography and travel, which this project aims to deliver.

### The Background

#### Air dates

The air date sequence of the 1974 TV series episodes (Map 1) was:

1	"Escape from Tomorrow"
2	"The Gladiators"
3	"The Trap"
4	"The Good Seeds"
5	"The Legacy"
6	"Tomorrow's Tide"
7	"The Surgeon"
8	"The Deception"
9	"The Horse Race"
10	"The Interrogation"
11	"The Tyrant"
12	"The Cure"
13	"The Liberator"
14	"Up Above the World So High"

Of these *Escape from Tomorrow*, *The Gladiators*, *The Surgeon*, *The Interrogation* and *Up above the world so high* all took place in or within a day's journey of Central City.

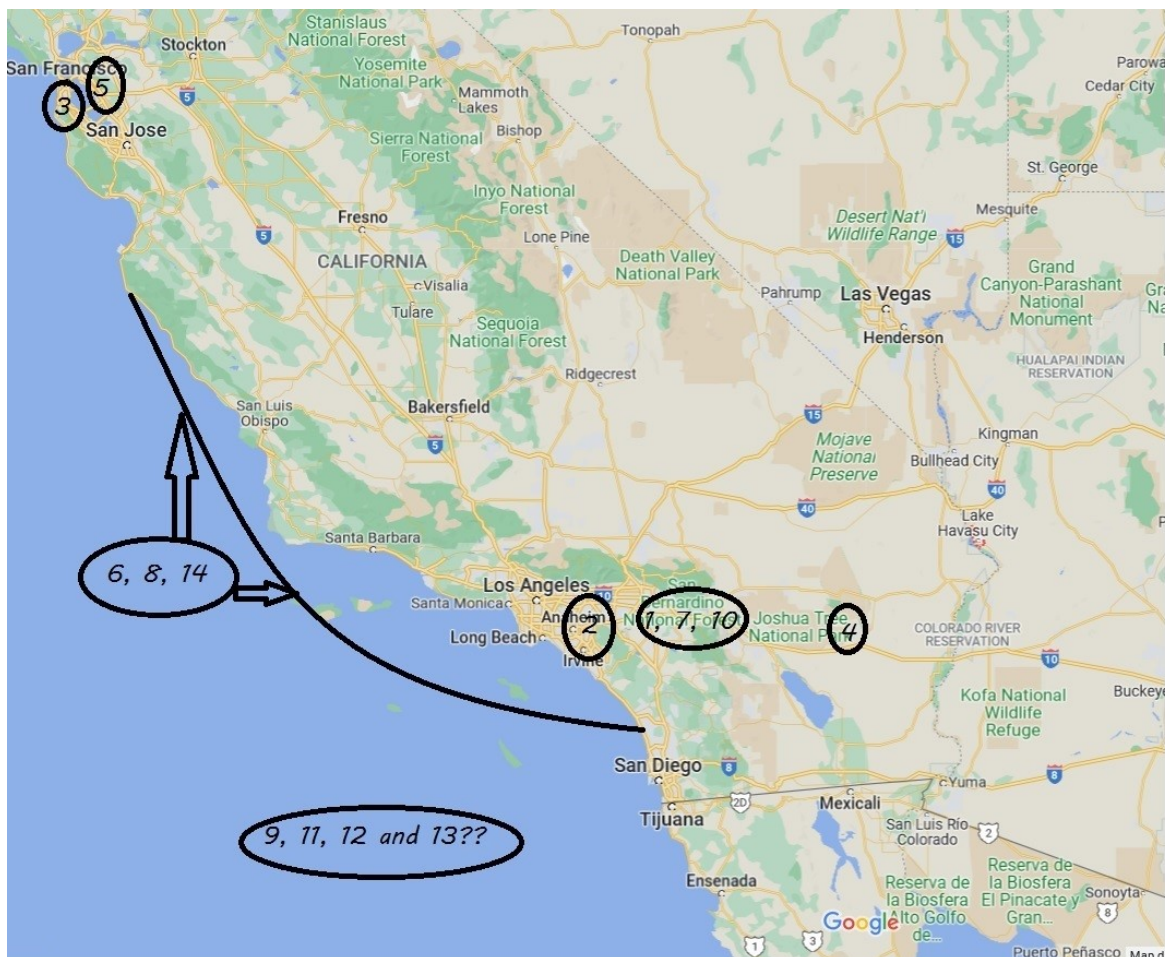
*The Horse Race*, *The Tyrant* and *The Cure* took place at some undetermined distance from Central City while *Tomorrow's Tide*, *The Deception* and *Up above the world so high* took place along the coast.

*The Good Seeds* took place "4 days hard ride" from Central City and *The Liberator* also took place at some undetermined but apparently long distance from Central City, possibly south towards the Forbidden Zone.

*The Legacy* and *The Trap* took place in the greater San Francisco area.



Virgon, Burke and Galen, *The Legacy*



Map 1: Air date sequence map (as far as can be derived from information contained in the episodes).



### Episode location details

A close examination of the location details provided in each episode (in air date order) is provided below.

"Escape from Tomorrow"— spaceship crash lands in a valley with a tropical songbird, the Venezuelan troupiel, in residence. Nearby settlement of Chalo under prefect Veska is about 30 miles south of Central City.

"The Gladiators" – Urko said they had been reported halfway to the coast heading west from Central City (conversation with Jason). Kaymak was one day's ride from Central City for Jason. Burke's comment about being "north of San Francisco" has to be disregarded.



"The Trap" – Only Urko was involved, not Zaius. Initially they were within 1 hour of capture, high in mountains. Signalled to Urko they were heading south so they were not heading south, but possibly east? Numai was later said to be half an hour to the south. Urko went south east through a forest and on to Numai. From Numai they were intending 2 hours walk (10 miles?) to the city (to the north?), and then on to hide in the hills to the north.

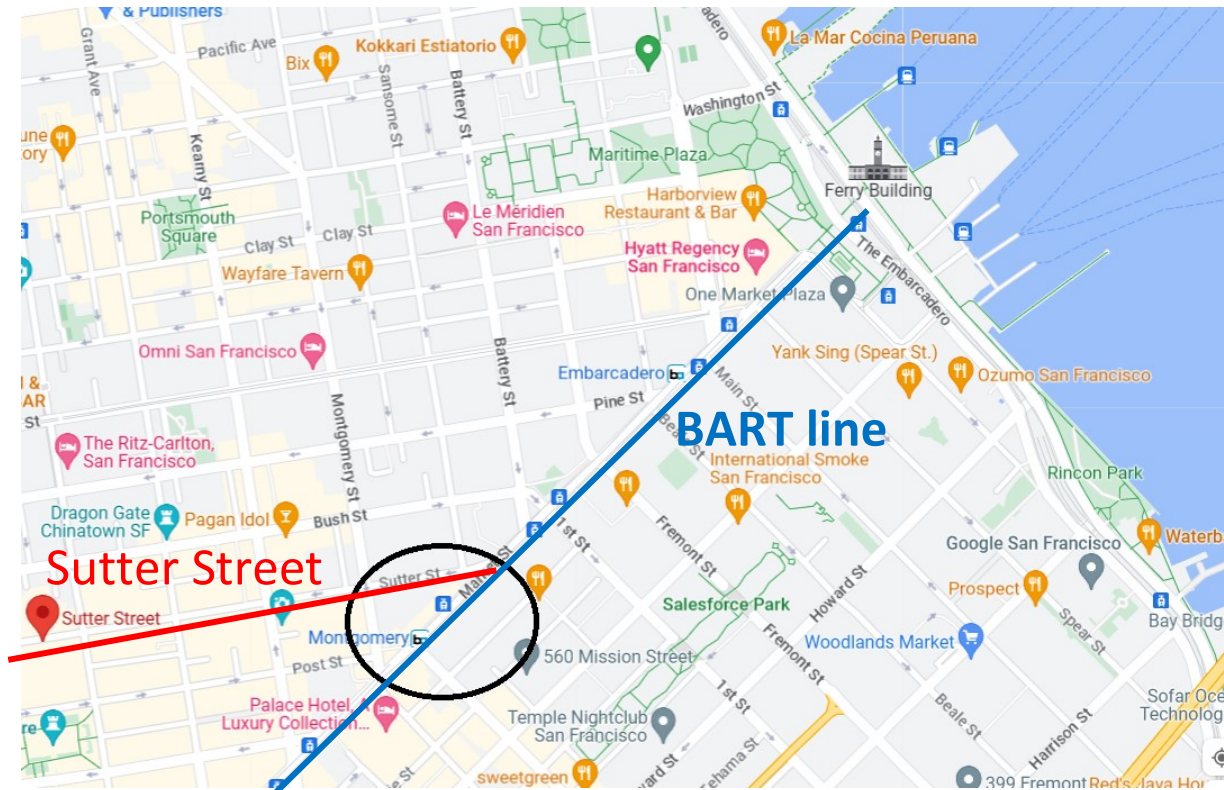
The subway station was on the BART line with an exit to Sutter Street (Map 2).

After rescue, they presumably went on to the hills in the north, assuming either the Golden Gate Bridge still stands or the San Andreas fault has thrown up a land bridge (Map 3).

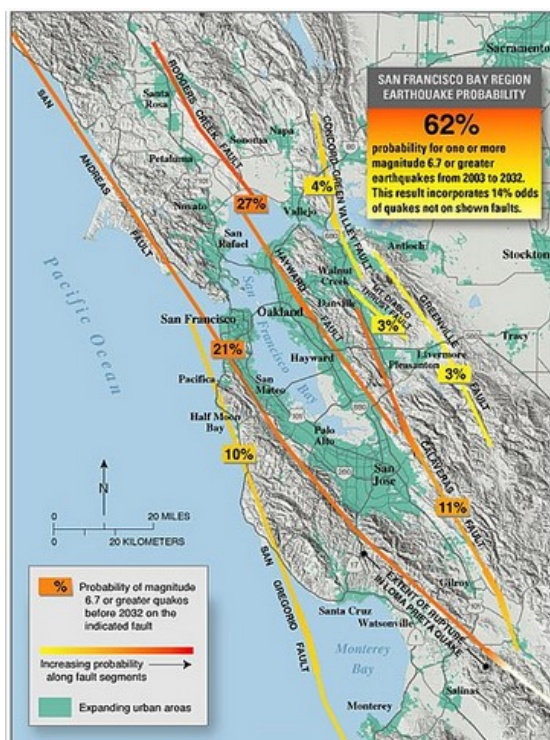
Injured Urko was taken away to medical assistance and Zako fired 3 shots in the air to fake his execution of the three fugitives.



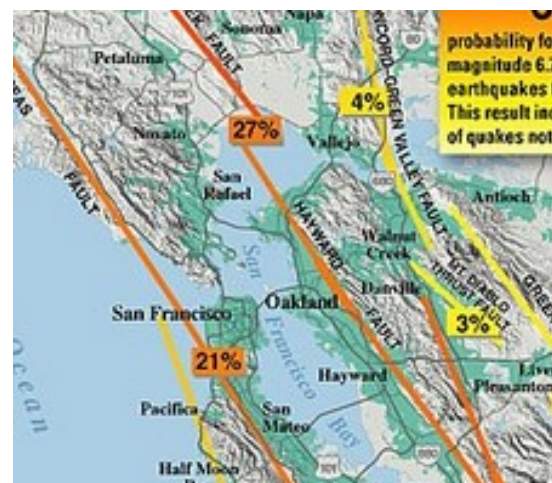




Map 2: Location of Sutter Street within San Francisco.



Map 3: Location of San Andreas fault in relation to Oakland, San Francisco and Golden Gate Bridge : [https://en.wikipedia.org/wiki/San\\_Andreas\\_Fault](https://en.wikipedia.org/wiki/San_Andreas_Fault)

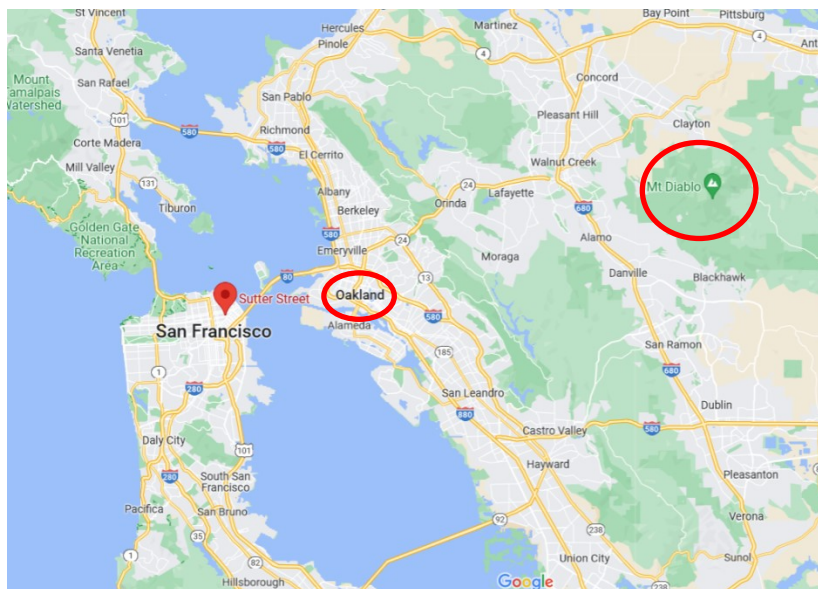


Enlarged excerpt from Map 3

"The Good Seeds" – A farming district 4 days hard ride east of Central City, according to Urko's indication on the wall map and the conversation with his trooper.



"The Legacy" – The trio had supposedly not seen a city, despite this episode airing after The Trap. City ruins were seen from high in hills, presumably around Mt Diablo (Map 4). City was found to be Oakland. Urko and Zaius were heliographed in, but must have been in the proximity because Central City would be at least 10 days hard ride away and only a day elapsed between Viridon's capture and Urko's and Zaius's arrival. Trio took Arn and Kraik out of town to Durlin's farm.



Map 4: Location of Sutter Street in relation to Oakland and Mt Diablo.



"Tomorrow's Tide" – on the coast, a permitted area/labor centre, around today's San Clemente. Landscape of cliffs, headland and rocks near mountains with Torrey Pines (*Pinus torreyana*). Trio travelling either south or east leading into and at the end of the episode.

"The Surgeon" – trio had been seen heading north but had circled back towards Central City. They were about a day's walk away from Central City when Virdon was shot. Urko cancelled a planned trip away to find the trio.



"The Deception" – this took place along the coast, travelling north before and after.

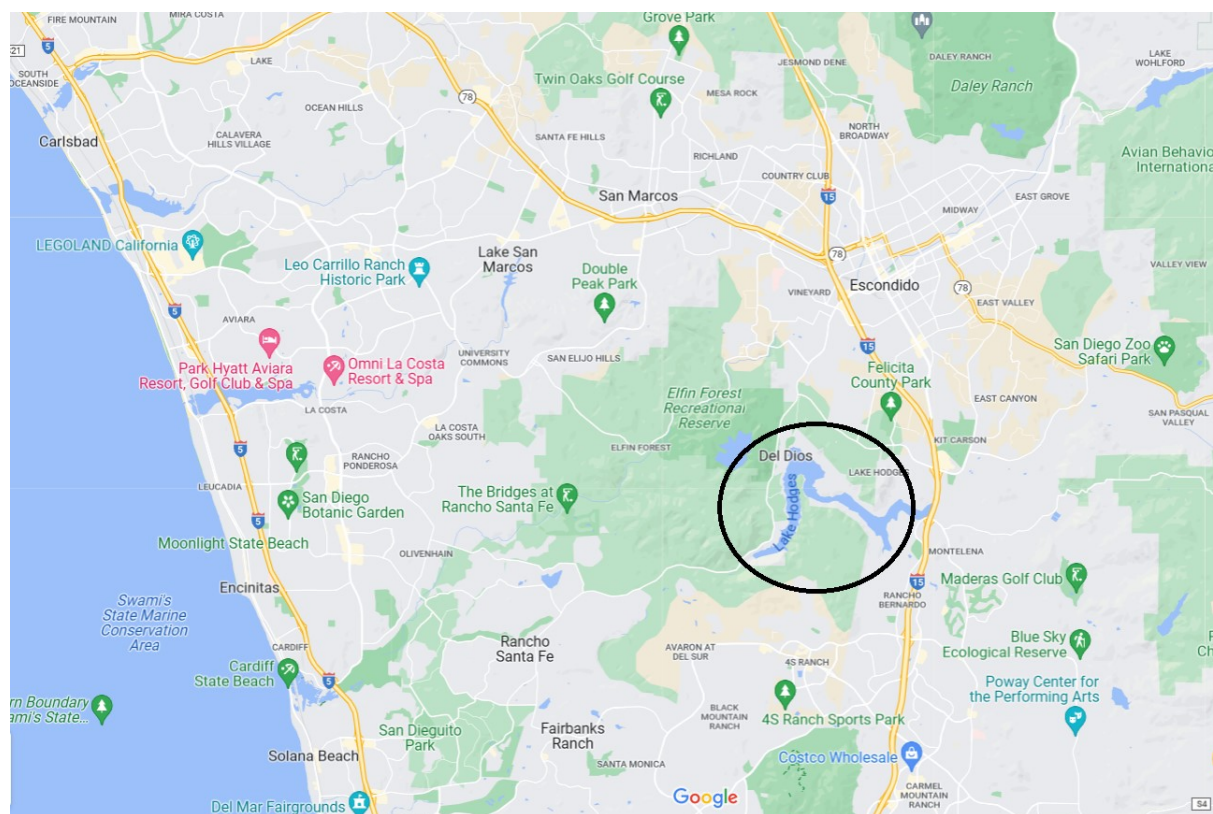
"The Horse Race" – no location details but somewhere less desirable than Kaymak, since Barlow wanted to return to Kaymak.

"The Interrogation" – just outside Central City but the initial capture took place 2 days run from Central City (possibly the San Fernando Valley?)



"The Tyrant" – Urko was on an inspection tour of garrisons in the district but no details of where in relation to Central City or the coast. Prefect Augustus and District Chief Aboro were at Hathor, Augustus being reassigned to Dovado upon Aboro's promotion to prefect.

"The Cure" – took place in an isolated location ideal for quarantine, involving an outbreak of malaria. This episode could be located near Escondido because that is the last recorded local outbreak of malaria (August 2, 1988, a migrant worker who lived in a canyon near the Lake Hodges reservoir {25 miles north of San Diego}). Surrounding hill country matches the scenes in the episode. Notably it's also close to the coast, about 20 miles inland (Map 5.).



Map 5: Location of last recorded local outbreak of malaria (August 1988)

"The Liberator" – there was no prefect, just the humans of Borak. The Meadow people lived nearby and the location was dry, in proximity to mines. It appeared to be in a valley of granite hills, and the temple had a Spanish influence, as did the masks. Possibly near Yuma given the Mexican/Spanish style influence; there are also mines currently around Yuma.

"Up Above the World So High" – settlement with nearby decaying mansion, but primarily a gorilla garrison, not a town with a prefect. The settlement can only have been at most a day and a half travel away from Central City as Konag rode to report the capture of the hang

glider personally to the High Council and returned quickly, and Carsia travelled there from Central City in less than 2 days. Zaius and Urko knew about the flight attempt but were not present. Events would have been reported back to the Council so the involvement of Galen would have been known. Ended with trio on a raft, heading to the north.

### Decision rules

Horseback and horse drawn travel is limited to about 30 miles a day, even when hard pushed. Today's endurance horses – bred, conditioned and tacked for long distance racing – can cover more miles but the heavier built, garrison horses carrying gorillas would not be able to cover as much ground. Hence, it is the time taken for horse travel that determines how far from Central City some episodes can take place and at least partly drives the selection of episode sequence.

### **Location of Central City**

The map on Urko's office wall (Map 6) is the largest 'ape lands' map and is reflected in similar smaller maps on Prefects walls. It appears to be an accurate representation of the southern Californian coast line and inland rivers and ranges. This topography may have been copied from an earlier human-era map, such as a tourist map.



Map 6: Map of ape lands from Urko's office wall. <http://www.potamediaarchive.com/WestCoast.htm>

From Urko's references to the wall map, it can be safely assumed that Central City is the largest settlement, depicted with the large flag in the upper left quadrant.

Note that Urko's wall map can not be considered accurate regarding the locations of ape settlements. Accuracy refers to how close a measurement is to the true value. According to

the overlay (Map 7) by Greg Champy, Central City would be located close to Lake Havasu City on the border with Arizona, which is eight days ride from the Pacific Coast. This does not match with apparent proximity to the Pacific Coast (eg *Up above the world so high*).

Additionally using the Champy overlay, Polar's farm would be located approximately near Quemado, New Mexico, according to Urko's indication on the wall map. Quemado is about 9 day's hard ride from Lake Havasu City, not the four days stated by the trooper.

Notably Quemado is grazing country, not cropping country.

[https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/County\\_Profiles/New\\_Mexico/cp35003.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/New_Mexico/cp35003.pdf)



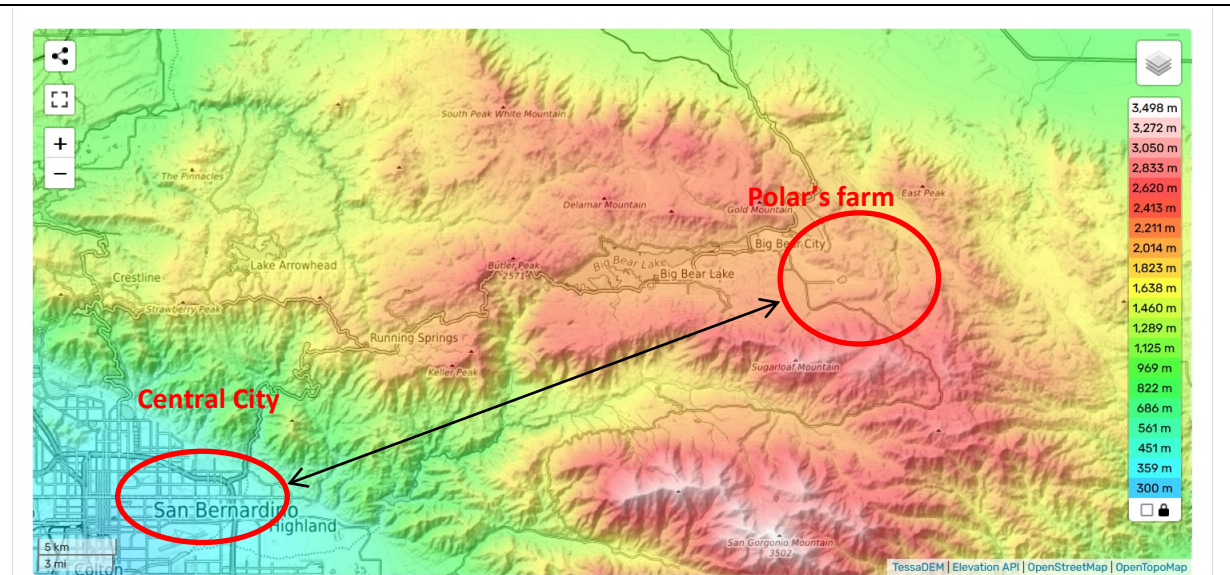
Map 7: Map of ape lands overlaying State borders map, courtesy of Greg Champy.

<http://www.potamediaarchive.com/WestCoast.htm>

Hence the location of Central City must be closer to the Pacific Coast than portrayed on the wall map. The simplest explanation of the location of Central City is that it is on roughly the same latitude as Lake Havasu City but within 2 day's ride from the coast. A likely prospect is the vicinity of 1980's San Bernardino.

This additionally provides a farming district that is 'four days hard ride' east of Central City while not being in the Mojave Desert or further inland (Map 8).





Map 8: Four days hard riding up and across the mountains from Central City to Polar's farm.  
 From <https://en-gb.topographic-map.com/>

## Travel

The air date sequence is impossible for all intents and purposes, as it is unable to accommodate the travel time limits within the episodes, and imposes unrealistic travel movements between episodes.

Horseback and horse drawn travel is limited to about 30 miles a day, even when hard pushed. For example, in *The Legacy* Central City would be at least 10 days hard ride away from Oakland and only a day elapsed between Virdon's capture and Urko's and Zaius's arrival, hence Urko and Zaius could not have ridden up from Central City in a day. Another explanation for their sudden arrival will need to be found.

Additionally it would require a minimum 1,380 miles of walking to cover the first five episodes in air date sequence (Central City to San Francisco is about 380 miles and Central City to Polar's farm is about 120 miles, hence  $380 \times 3 + 120 \times 2 = 1380$  miles total.) Refer to Map 1 (Central City to Oakland to CC to Polar's Farm to CC to Sutter Street subway).

*The Legacy* aired after *The Trap*, despite according to the script *The Legacy* being their first sighting of a city. Hence the air date sequence imposes unnecessary travel between those two episodes, as well as disjointed sequencing.

## Episode sequencing

In terms of the episode sequencing, *The Gladiators* needs to follow quickly after *Escape from Tomorrow*, and *The Horse Race* needs to follow *The Gladiators* but with a considerable time lag (number of episodes).

*The Legacy* must pre-date *The Trap*. Those two San Francisco centred episodes should be at the end of the sequence, given the distance between Central City and San Francisco.

Other episodes can be moved up and down sequence as desired.

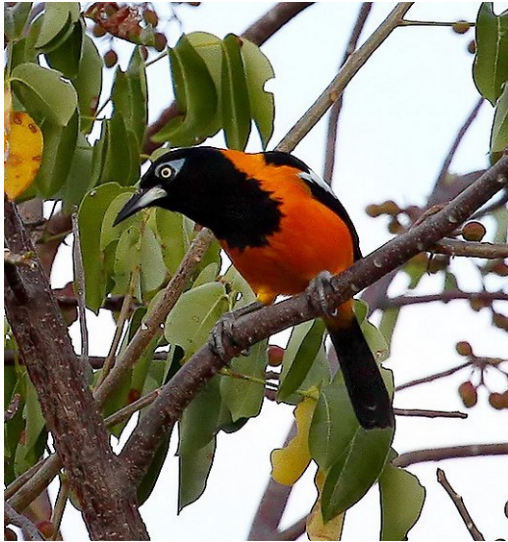
## Biodiversity and the Forbidden Zone

Early in the premier episode a songbird, the Venezuelan troupial, is present in the dry woodland. The Venezuelan troupial lives in scrub, brushland, dry forest, gallery forest, and woodland edges. It is a distinctive species; a large, vividly orange-and-black oriole. It has a black head and upper breast. The feathers on the front of the neck and upper breast stick outward, making an uneven boundary between the black and the orange of the bird's lower breast and underside. Striking facial features give it a formidable countenance: bold white irises framed by bare blue skin patches, and a pale blue triangle at the base of the bill.

In 1980 the species was found in gallery forests and other semi-open and edge habitats of the Llanos from northeastern Colombia to the Orinoco Delta (Map 9). This is approximately 2,000 miles south east of southern California, and was additionally restricted by unsuitable habitats such as dense tropical rainforests on the Isthmus of Panama. The collapse of the Gulf Stream in the 21<sup>st</sup> century reduced rainfall on the northern coast of South America, and led to habitat expansion (loss of dense tropical rainforests / expansion of dry woodlands), and hence range expansion of the Venezuelan troupial.



Above: screenshots from *Escape From Tomorrow*



Venezuelan troupial, (February 2, 2010.) <https://birdfinding.info/venezuelan-troupial/>



Map 9: Clipped from <https://birdfinding.info/venezuelan-troupial/>, current range in purple



The Venezuelan troupial would have expanded west and then north across the Isthmus of Panama, into the area known as southern California. However the later development of the Forbidden Zone would have again fragmented the habitat and hence left a residual population isolated in the area of southern California.

Their long-term persistence indicates the habitat is suitable for the species. As Venezuelan troupial inhabit semi-arid areas like woodlands, dry scrub, plains, and open savanna, and consume insects, a wide variety of fruit, small birds and eggs, we can conclude the area of the ape lands around Central City can be described in these terms.

## Conclusion

Spatial awareness is a key to human experience and understanding. It is so important that maps are drawn of fictional landscapes so that the audience can comprehend the physical setting of the stories (<https://geoawesomeness.com/top-10-maps-of-your-favourite-fictional-worlds/>). In stories set in a real landscape the audience will include that real landscape in how they interpret the story. Spatial orientation is an important component of the internal consistency necessary for good story telling (<https://rachellemnshaw.com/blog/2013/02/why-good-writing-matters-internal-consistency>) and imparts credibility and direction to the narrative.

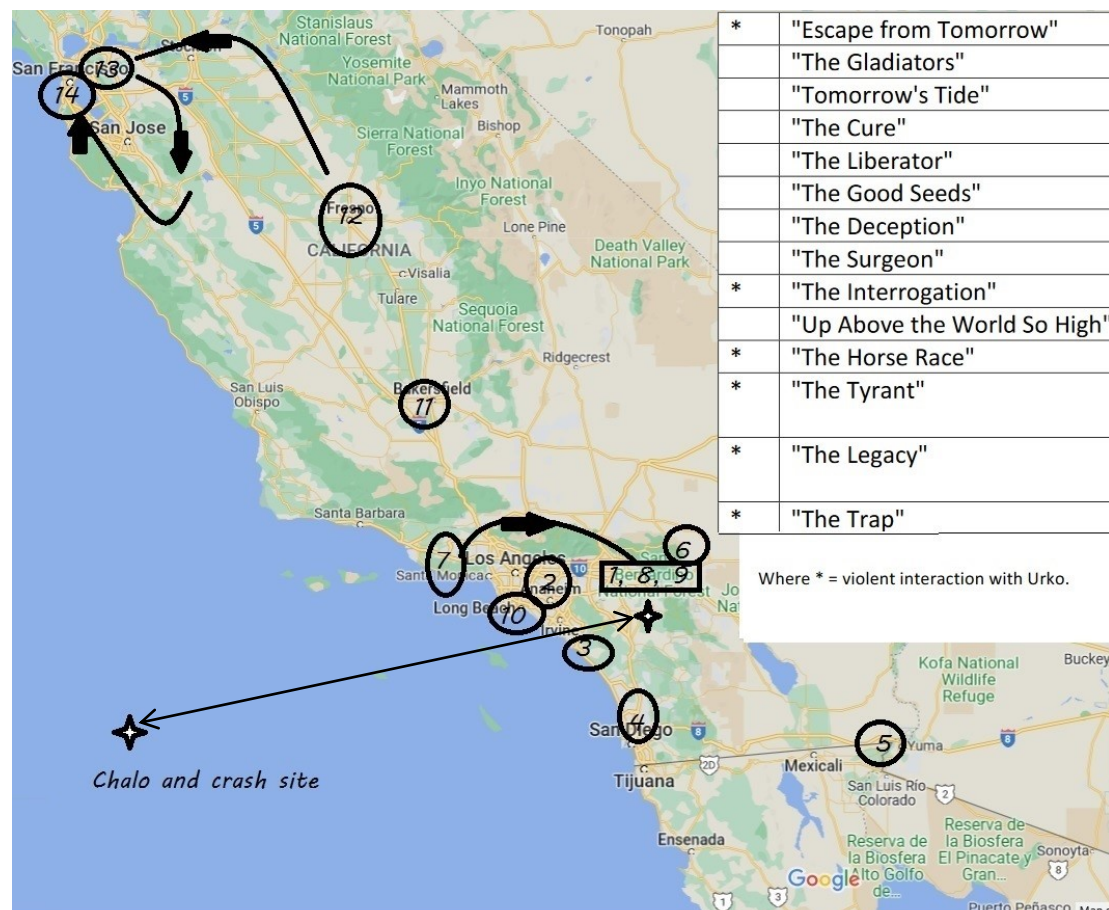
The simplest and easiest episode sequence is :

1	*	"Escape from Tomorrow"	
2		"The Gladiators"	Heading towards the coast
3		"Tomorrow's Tide"	Heading south along the coast
4		"The Cure"	Still heading south, near the coast
5		"The Liberator"	Heading inland but country is semi-arid
6		"The Good Seeds"	Heading north towards softer country
7		"The Deception"	Coast, with trio heading north afterwards
8		"The Surgeon"	Urko cancels his trip away
9	*	"The Interrogation"	Trio haven't got far enough away yet
10		"Up Above the World So High"	Coast, with trio heading north afterwards
11	*	"The Horse Race"	Urko is on his inspection trip/racing circuit
12	*	"The Tyrant"	Urko is still on his inspection trip and takes Aboro in custody back to Central City
13	*	"The Legacy"	Urko and Zaius travel north in pursuit of the trio (their known direction of travel)
14	*	"The Trap"	Urko continues the hunt and closes the gap
Concludes with Urko injured and taken south for medical assistance, 3 faked executions and their escape north to the mountains.			

Where \* = violent interaction with Urko.

This sequence is congruent with the landscape and habitat details in the episodes, assuming Central City is in the vicinity of San Bernardino. It speculates an anti-clockwise route around southern California, followed by travel north through the Central California Valley and then on to San Francisco. It requires only a minimum walking distance of about 1,000 miles for the whole 14 episodes. See Map 10, below.

It leaves the trio (after their executions were faked by Zako) located near the northern mountains, which appear to be an insurmountable barrier to the apes. Urko is injured and removed south for medical assistance.



Map 10: Proposed sequence map (combination of derivation and speculation)

### Credits:

Maps from Google Earth unless otherwise indicated.

Screenshots taken from 20<sup>th</sup> Century Fox DVD unless otherwise indicated.

Images as indicated.

Special thanks to unofficial reference websites :

<https://archives-of-the-apes.blogspot.com/>

<https://pota.goatley.com/>

<http://www.potamediaarchive.com/TV.htm>