PROJECT

SPOTIFY MUSIC ANALYSIS

DATE

14/11/2019

CLIENT

ASHRAY SHETTY & FADI SARRAF

STAKEHOLDERS

RECORD LABEL EXECS

SOURCES

- SPOTIFY
- BILLBOARD END OF YEAR HOT 100 CHARTS 1969 - 2018

HYPOTHESIS

1.HYPOTHESIS 1:

NULL: THERE IS NO CHANGE IN THE ENERGY OF SONGS WHEN THE ECONOMY IS DOWN
ALTERNATIVE: SONGS BECOME MORE ENERGETIC WHEN THE ECONOMY IS DOWN.

2.HYPOTHESIS 2:

NULL: THERE IS NO CHANGE IN ENERGY OF SONGS BETWEEN SUMMER AND WINTER
ALTERNATIVE: SONGS HAVE MORE ENERGY DURING THE SUMMER SEASONS.

3.HYPOTHESIS 3:

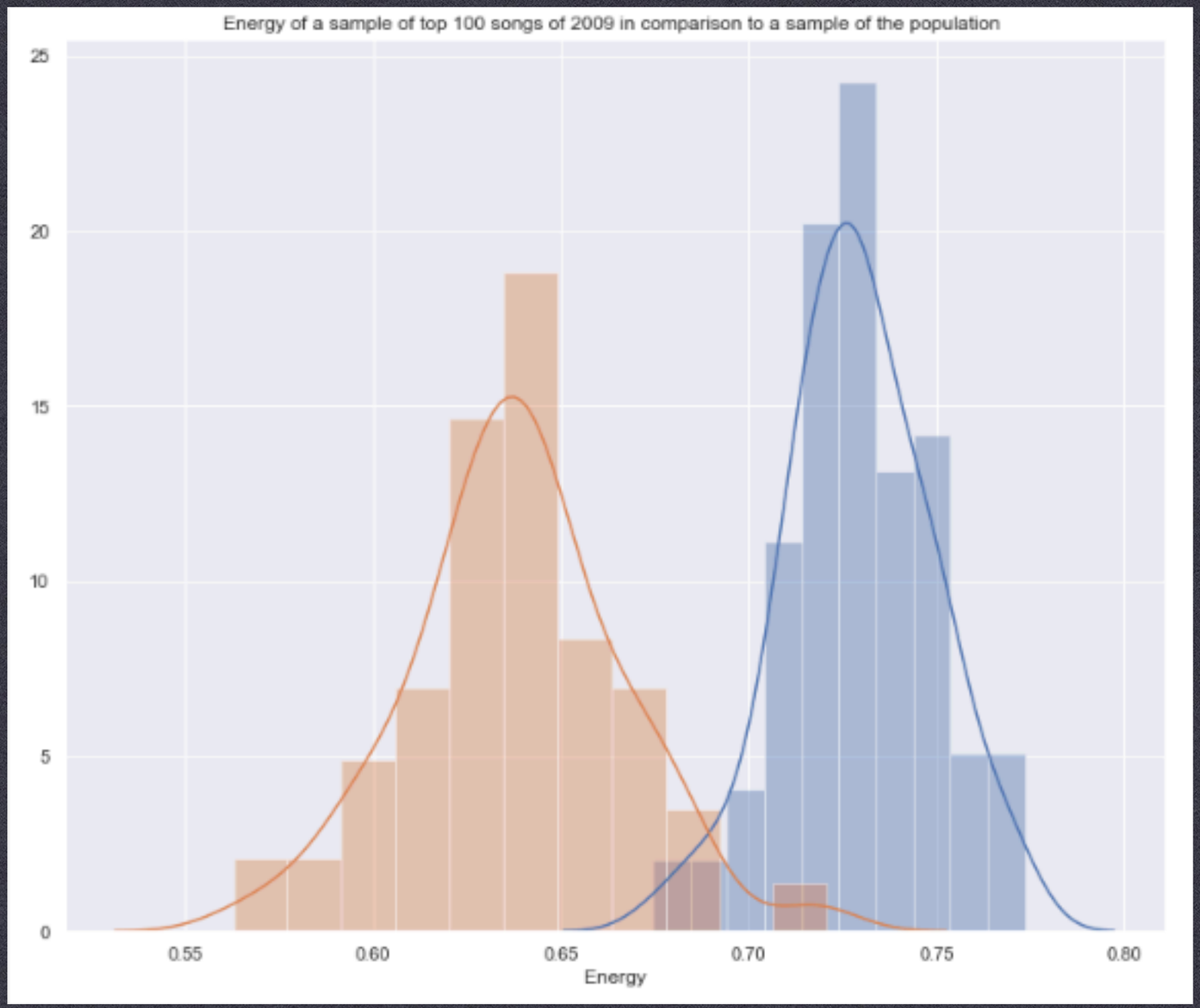
NULL: THE SEASON HAS NO AFFECT ON THE RELEASE OF MORE ACOUSTIC SONGS
ALTERNATIVE: ARTIST RELEASE MORE ACOUSTIC SONGS DURING WINTER.

4.HYPOTHESIS 3:

NULL: SONGS ARE NOT BECOMING MORE DANCEABLE
ALTERNATIVE: SONGS IN 2018 ARE MORE DANCEABLE THAN SONGS IN 1999.

HYPOTHESIS 1:

NULL: THERE IS NO CHANGE IN THE ENERGY OF SONGS WHEN THE ECONOMY IS DOWN
ALTERNATIVE: SONGS BECOME MORE ENERGETIC WHEN THE ECONOMY IS DOWN.

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p-value 5.870779433419815e-67
we reject null hypothesis
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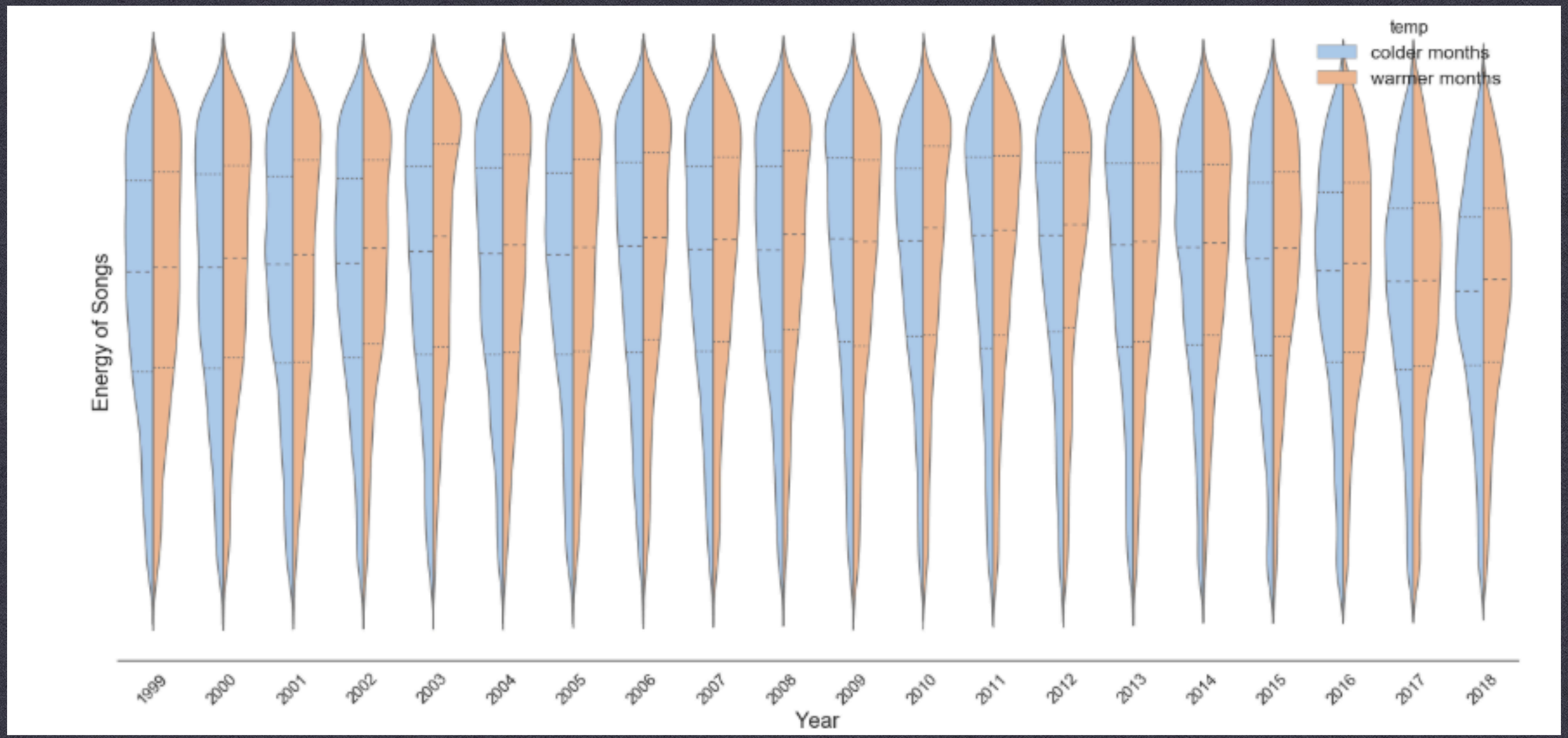
HYPOTHESIS 2:

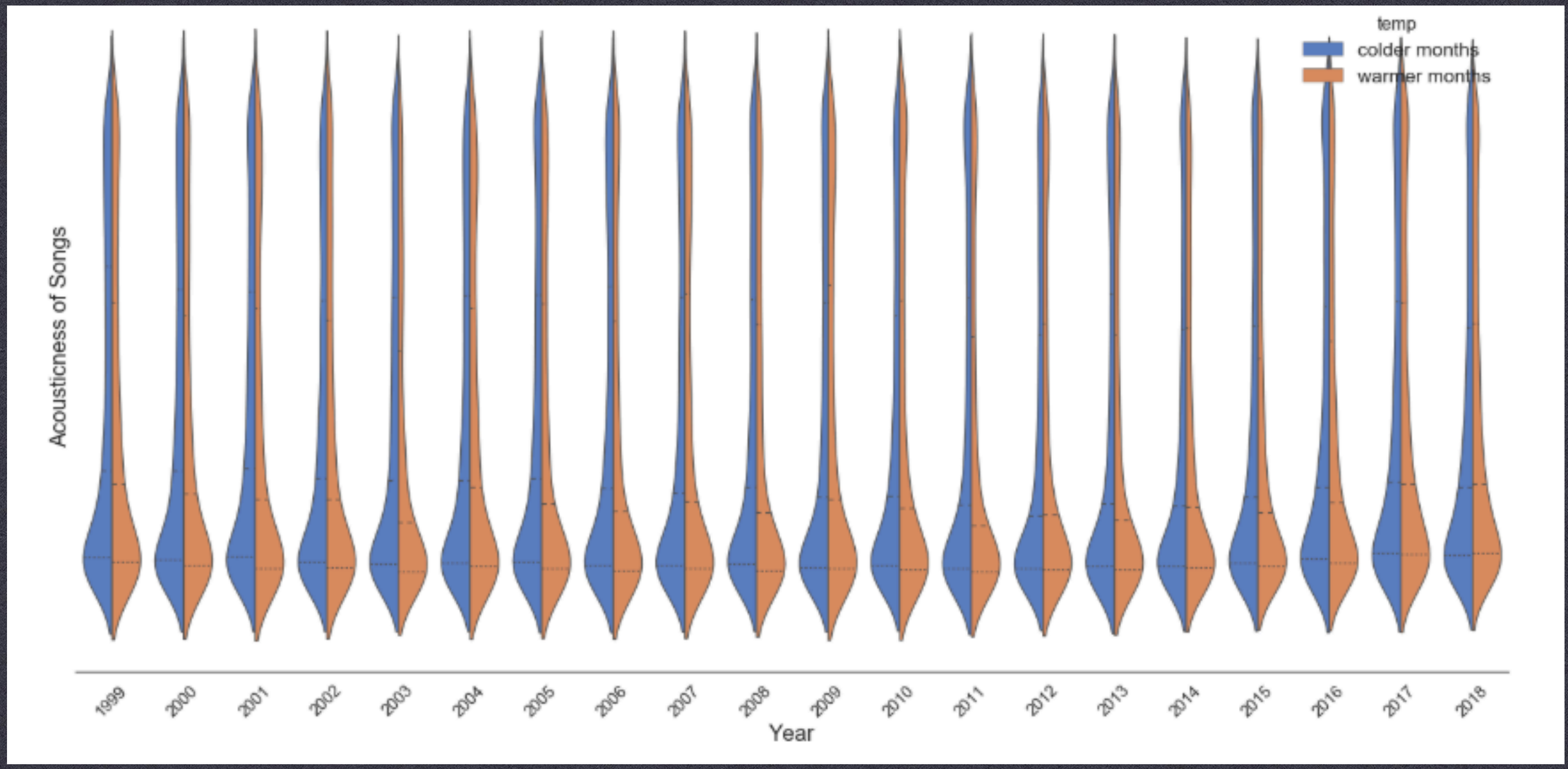
NULL: THERE IS NO CHANGE IN ENERGY OF SONGS BETWEEN SUMMER AND WINTER
ALTERNATIVE: SONGS HAVE MORE ENERGY DURING THE SUMMER SEASONS.



	sum_sq	df	mean_sq	F	PR(>F)	eta_sq	omega_sq
ANOVA of Energy against Seasons	0.209553	3.0	0.069851	1.113284	0.342672	0.003342	0.000340
ANOVA of Acousticness against Seasons	0.121308	3.0	0.040436	0.388336	0.761432	0.001168	-0.001838

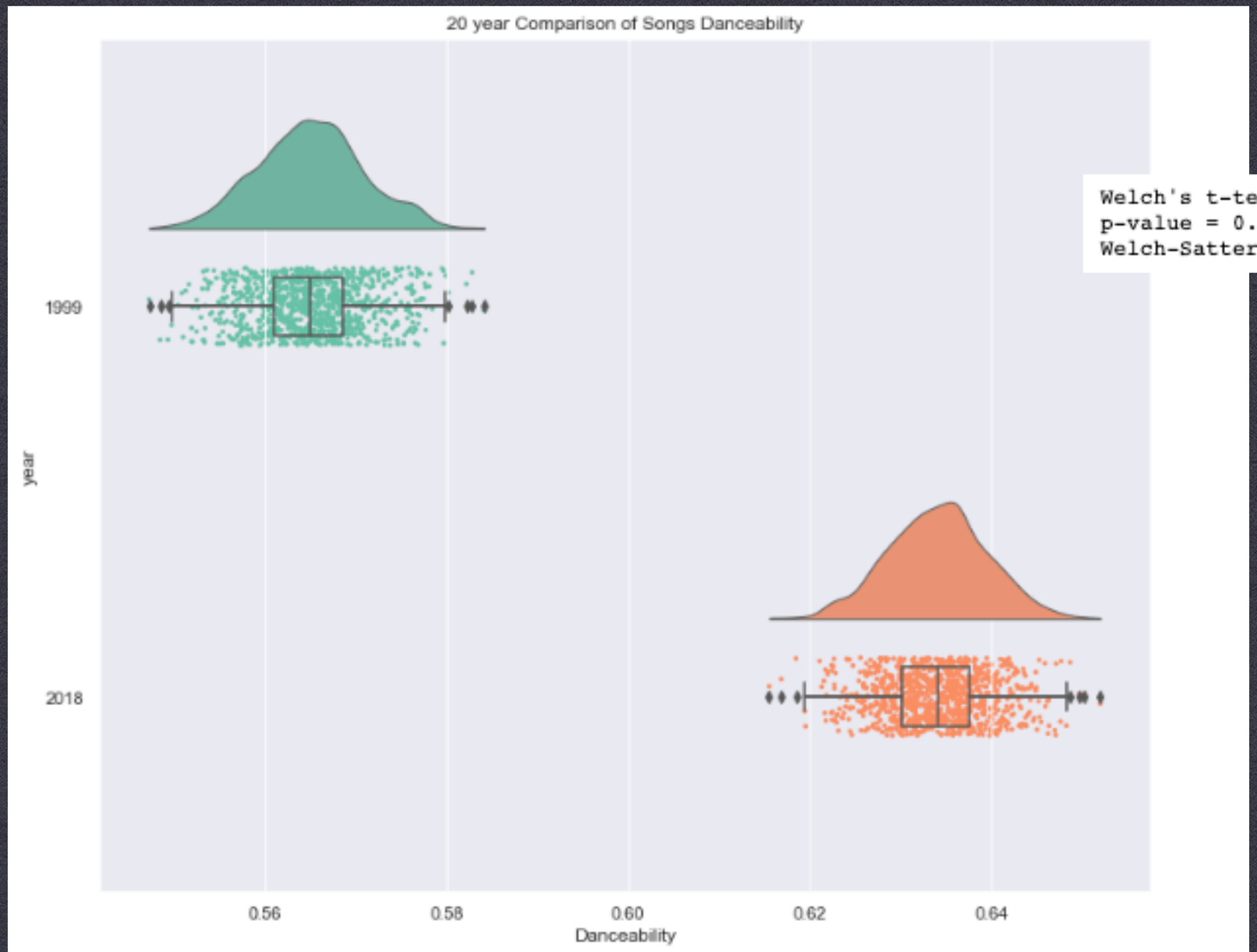
HYPOTHESIS 3:

NULL: THE SEASON HAS NO AFFECT ON THE RELEASE OF MORE ACOUSTIC SONGS
ALTERNATIVE: ARTIST RELEASE MORE ACOUSTIC SONGS DURING WINTER.



HYPOTHESIS 4:

NULL: SONGS ARE NOT BECOMING MORE DANCEABLE
ALTERNATIVE: SONGS IN 2018 ARE MORE DANCEABLE THAN SONGS IN 1999.

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Welch's t-test= -271.1529
p-value = 0.0000
Welch-Satterthwaite Degrees of Freedom= 1987.9808
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CONCLUSIONS

- IF THE ECONOMY DIPS INCREASE THE ENERGY OF THE SONGS PRODUCED
- ENERGY OF SONGS ARE NOT SEASONAL
- ACOUSTICNESS OF SONGS IS NOT DEPENDANT ON THE TEMPERATURE
- SONGS ARE MORE DANCEABLE NO THAN THEY WERE IN 1999

THANK YOU