THE GAZETTEER OF SOUTHERN VOWELS

(joeystanley.com/gsv)

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JOIN ME!

This presentation includes a live demonstration of an online interface at
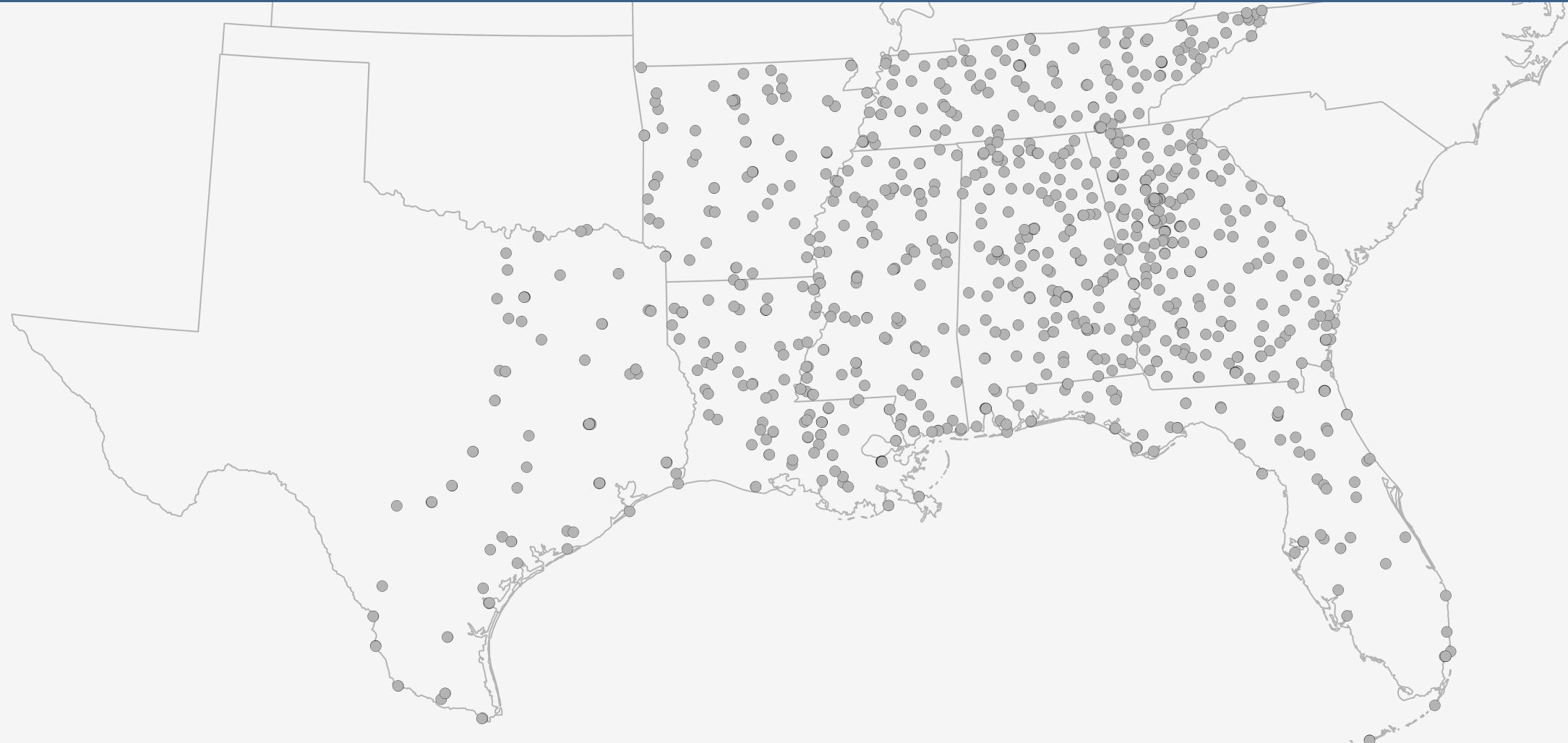
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which is a redirect to
http://lap3.libs.uga.edu/u/jstanley/vowelcharts/
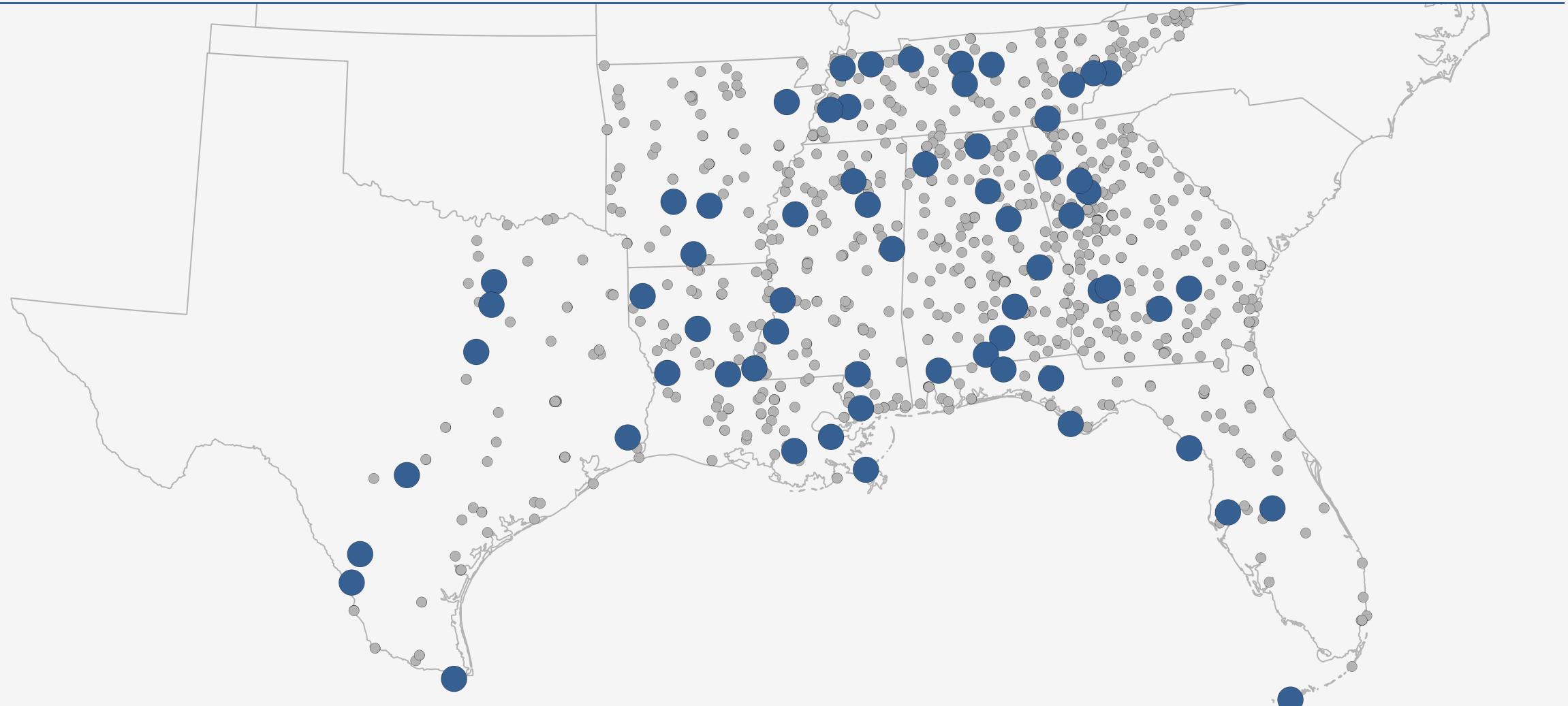
Linguistic Atlas of the Gulf States (LAGS)

(Pederson, McDaniel & Adams 1986)
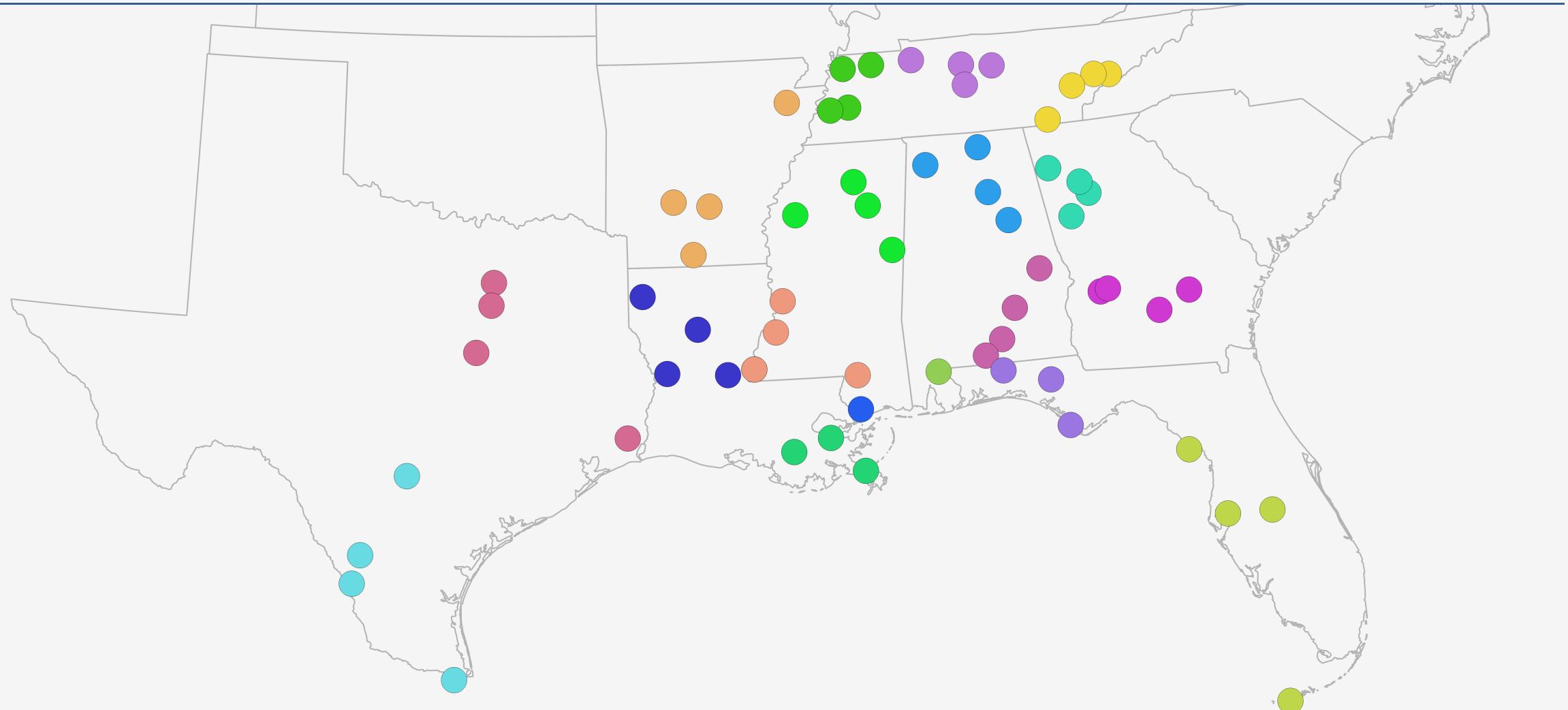
Digital Archive of Southern Speech (DASS)

(Kretzschmar *et al.* 2013)

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Ongoing Work on DASS

DASS is currently being processed at the University of Georgia (Olsen *et al.* 2017)

  Undergraduates do an orthographic transcription.

  Grad students or experienced workers spot-check transcriptions.

  Forced alignment using DARLA (Reddy & Stanford 2015)

  Formants extracted using in-house modified FAVE (Rosenfelder *et al.* 2011)

Progress

  28 speakers fully transcribed (44%) + 25 more partially transcribed

  179 hours of audio processed (49%)

  732,212 vowel measurements

DATA AVAILABILITY

Since the beginning, Linguistic Atlas data is intended to be freely available.

8500 hours of audio and tens of thousands of scanned pages are available online at www.lap.uga.edu.

Currently difficult to use.

But we need a format appropriate for modern analysis: spreadsheets and visualizations.

Shiny

Shiny is a web application framework for R (Chang *et al.* 2017)

    Combines the analysis/visualizations from R with the interactivity of a web browser.

    Works even on devices without R

    Mobile-friendly

    shiny.rstudio.com

Other linguistics tools use Shiny:

    Rbrul (Johnson 2009)

    Language Variation Suite (Scriver *et al.* 2015)

Live Demonstration

DRAWBACKS

Only monophthongs are represented

    Practical explanation:

        It's hard to get clean trajectory data from this audio (though see Renwick & Stanley 2017)

        Need another way to visualize it without looking like spaghetti

    Thus /ay/-monophthongization etc. is not represented here.

Data download

    The plots are downloadable, but only as images.

        Future updates will improve this.

    Eventually, we'll have the data available for download.

Summary

The side-by-side plots allow for comparison across many subsets of data:

Demographic groups: genders, ethnicities, states, social classes, age groups

Language-internal factors: *pin-pen* merger, pre-lateral mergers, etc.

Methodological differences: inclusion of stop words, normalization, filtering

The interface allows flexibility in how the plot is displayed

points vs. words, centers, ellipses

transcription system, zoom, aspect ratio

CONCLUSION

The *Gazetteer of Southern Vowels* lets you analyze Linguistic Atlas data right now.

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This slideshow available at
joeystanley.com/ads2018