

Hacking the Dial for Different AQI Values

2023-04-05

INTRODUCTION

This is the procedure to hack the AirNow Dial page so that you can set the dial to any desired AQI value for testing the dial rollovers and the Plan your Day features. Updated for use with the Lando / Docker development environment.

Big Picture:

Use localhost copy of JSON Forecast data with a modified reportingArea.js to fiddle with the JSON data.

PROCEDURE

- 1) Change the AJAX code at around line 520 of /themes/anblue/js/airnowgov/reportingArea.js to use a test JSON file by using these values to the AJX call:
 - a. type: "GET",
 - b. url: "dialtest.json",
- 2) Build a dialtest.json file by using the examples below or capturing one with browser developer tools. Place it in the Lando "root" directory. This is the directory that contains .lando.yml
- 3) In the dialtest.json you can update the following values:
 - a. Required. Set Observed Date to <today>.
 - b. Required. Set Forecast Date to <tommorrow>.
 - c. "dataType" is "O" for Observed and "F" for Forecast.
 - d. Use these for the "Observed" or "Forecast" data:

```
"aqi": 25, "category": "Good",  
"aqi": 75, "category": "Moderate",  
"aqi": 125, "category": "Unhealthy for Sensitive Groups",  
"aqi": 175, "category": "Unhealthy",  
"aqi": 250, "category": "Very Unhealthy",  
"aqi": 400, "category": "Hazardous",  
"aqi": 600, "category": "Hazardous",
```
 - e. You should toggle the Parameter values, too. They are separate Terms in the Taxonomy.

```
"parameter": "PM2.5",  
"parameter": "OZONE",
```
 - f. If you add JSON structures (Pollutant values), then update the "recordSequence" value.
- 4) Go to any Dial page to load the new JSON data.
- 5) Observe the results.
- 6) Change values in the "dialtest.json" file as needed
- 7) Go to DIFFERENT geolocations to reload the JSON data. Back to step 5 until you're done.

Nota bene: The JSON test data is only good for one day. "Tomorrow" you'll need to advance the all the dates by one day.

Note: The text values for the Pop-ups are in the "Plan your Day Descriptions" taxonomy terms AND the pop-up (tippy) values are in "base.js".

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dialtest.json example

```
[
  {
    "issueDate": "10/07/19",
    "validDate": "10/07/19",
    "recordSequence": 0,
    "timezone": "EDT",
    "time": "14:00",
    "dataType": "O",
    "isPrimary": true,
    "reportingArea": "Raleigh-Durham-Chapel Hill",
    "stateCode": "NC",
    "latitude": 35.878,
    "longitude": -78.787,
    "parameter": "PM2.5",
    "aqi": 600, "category": "Hazardous",
    "isActionDay": false,
    "discussion": "",
    "reportingAgency": "North Carolina DEQ - Division of Air Quality"
  },
  {
    "issueDate": "10/07/19",
    "validDate": "10/07/19",
    "recordSequence": 1,
    "timezone": "EDT",
    "time": "14:00",
    "dataType": "F",
    "isPrimary": true,
    "reportingArea": "Raleigh-Durham-Chapel Hill",
    "stateCode": "NC",
    "latitude": 35.878,
    "longitude": -78.787,
    "parameter": "PM2.5",
    "aqi": 175, "category": "Unhealthy",
    "isActionDay": false,
    "discussion": "",
    "reportingAgency": "North Carolina DEQ - Division of Air Quality"
  },
  {
    "issueDate": "10/08/19",
    "validDate": "10/08/19",
    "recordSequence": 2,
    "timezone": "EDT",
    "time": "14:00",
    "dataType": "F",
    "isPrimary": true,
    "reportingArea": "Raleigh-Durham-Chapel Hill",
    "stateCode": "NC",
    "latitude": 35.878,
    "longitude": -78.787,
    "parameter": "PM2.5",
    "aqi": 676, "category": "Hazardous",
```

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```
"isActionDay": false,  
"discussion": "",  
"reportingAgency": "North Carolina DEQ - Division of Air Quality"  
}  
]
```

DOCUMENT VERSION HISTORY

2019-10-08 v1 Initial version by Chris Wilkes
2023-04-05 Updated for Lando & Docket development environment