## Supplementary

1. US Geological Survey, Water Resources Data for Great Salt Lake Water Levels # US Geological Survey, Water Resources Data # retrieved: 2017-12-02 10:06:48 EST (sdww01) # This file contains USGS Surface-Water Annual Statistics # Note: The statistics generated from this site are based on approved daily-mean data and may not match those published by the USGS in official publications. # The user is responsible for assessment and use of statistics from this site. # For more details on why the statistics may not match, visit https://waterdata.usgs.gov/ut/nwis/?dv\_statistics\_disclaimer. # \*\* Incomplete data have been used for statistical calculation # This file includes the following columns: # agency\_cd agency code # site\_no USGS site number # parameter\_cd # ts id # year\_nu Calendar year for value # mean\_va annual-mean value. if there is not complete record # # for a year this field is blank # Sites in this file include: # USGS 10010000 GREAT SALT LAKE AT SALTAIR BOAT HARBOR, UT

## 2. Precipitation, Temperature, and Snowfall data

Precipitation, Temperature, and Snowfall are processed based on the annual records filed as ISSN 0198-5280 and signed by the US National Climate Data Center.

The Data were available with three separated files when I downloaded them on December 5, 2017. The first file covers the period from 1900 to 1959, the second file covers the period from 1959 to 1988, and the third file covers the period from 1987 to 2016. The three data files indicate the site is at latitude 40°46′ N, longitude 111° 58′ W, but with ground elevations of 4220 feet, 4221 feet, and 4225 feet, respectively, for the three periods.

Given the snowfall data started from 1904, the meteorological records from year 1904 were analyzed in this short communication.