

COURSE PROJECT Due Final Exam Day (Please submit Hard Copy on the Final Exam day)

From the following website you can download the **central England temperature series** from year **1659 to 2019**:

[http://www.metoffice.gov.uk/hadobs/hadcet/ssn\\_HadCET\\_mean.txt](http://www.metoffice.gov.uk/hadobs/hadcet/ssn_HadCET_mean.txt)

You can apply methods and techniques learnt from the course and analyze the above dataset, and **address the warming trend pattern**.

See the papers below for more background of this dataset. The following papers are only for your reference. You can also search Internet for other related materials.

1 **Gayathri Vaidyanathan (February 25, 2016)** Did Global Warming Slow Down in the 2000s, or Not?  
Scientists clarify the recent confusion.

<http://www.scientificamerican.com/article/did-global-warming-slow-down-in-the-2000s-or-not/>

2 **MANLEY, G. (1974)**. Central England temperatures: monthly means 1659 to 1973. Quart. J. R. Meteorol. Soc. 100, 389&#257;405.

3 **JONES, P. D. & HULME, M. (1997)**. The changing temperature of Central England. **In** Climates of the British Isles, 460 Present, Past and Future, Ed. M. Hulme and E. Barrow, London: Routledge. pp. 173&#257;95. **book**

4 **JONES, P. D. & BRADLEY, R. S. (1992a)**. Climatic variations in the longest instrumental records. **In** Climate Since A.D. 1500, Ed. R. S. Bradley and P. D. Jones, London: Routledge. pp. 246&#257;68.

5 **BENNER, T. C. (1999)**. Central England temperatures: Long-term variability and teleconnections. Int. J. Climatol. 19, 391&#257;403.

6 **HARVEY, D. I. & MILLS, T. C. (2003)**. Modelling trends in central England temperatures. J. Forecasting 22, 35&#257;47.

7 **JONES, P. D. & BRADLEY, R. S. (1992b)**. Climatic variations over the last 500 years. **In** Climate Since A.D. 1500, Ed. R. S. Bradley and P. D. Jones, London: Routledge. pp. 649&#257;65. **book**

Please use the techniques you learnt from the class and **model this dataset**. Can you **justify** with time series techniques the **claims** made in **Jones & Bradley (1992a)**, **Benner (1999)** and **Vaidyanathan (2016)**?  
1 4 5

Note: Collaboration is not allowed. Due Final Exam Day.