Citation, rights and access

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This work wouldn’t have been possible without the help of the Royal Berkshire Hospital and its staff.

Key aims

To investigate and obtain information and values for the overheating causing concerns for patient and staff safety in the Maternity and Gynaecology building at the Royal Berkshire Hospital, Reading, UK.

Methods

Temperature measurements were undertaken in the locations highlighted in figure2, with the labels being shown in sensor\_labels. External reference measurements were taken from the University of Reading’s Atmospheric Observatory (in UoR\_Data).

Data is stored in the format coming off the Tinytag sensors directly in the zip file sensor\_data.zip. The format may appear to have the units in it, but the cell values are numbers. Temperature and humidity within the internal environment were measured using nine Gemini Tinytag Ultra 2 TGU-4017 temperature loggers (temperature range -40 to 85 °C). Temperature logging commenced on the 26/07/2018 at 13:00 with all sensors being programmed to measure temperature and humidity every five minutes (accuracy: 0.1 °C, 5 %). Three hours of calibration was undertaken beforehand. Measurements in-situ were stopped on 30/08/2018 at 13:00, with a calibration being undertaken between 13:00 to 17:00. Calibration on the instruments involved placing all the instruments into a controlled temperature space and intercomparing results. All data included here has undergone correction in line with the results of the start and end calibrations. Data\_split\_diff\_ways.xlsx has all the data in one place and split by different weeks.