This screenshot shows a traditional application (not using dsC) displaying the current data set as originally presented in a spreadsheet.

We include this example to show several lacunae in spreadsheet applications' functionality that can be improved by using a customized Dataset Application. The following screenshots will highlight three limitations in particular:

- The spreadsheet does not store information in a format amenable to reuse by other projects or by production deployments of the author's method. By contrast, the dsC version models all data as standalone, cross-platform C++ classes that can be reused for any new project.
- The spreadsheet does not have an obvious mechanism for researching individual modeling elements. For instance, there is no explanation near the column labels "WithFlow" or "Against" which explain what these parameters mean and how they are used.
- The spreadsheet will not be suitable for large-scale or commercial deployment. For example, the touchscreen interface to a device monitoring airflow needs a UI specific to its cyberphysical data — it is not feasible for medical devices to run spreadsheet software!
- The spreadsheet groups all statistical parameters (i.e., column headers) together, without representing their internal organization. For example, the spreadsheet does not structurally distinguish between raw cyberphysical inputs, intermediate calculated values, and the important computed values which the cyberphysical system is designed to produce. In this case, as the original article explains, Oxygenated air flow and Oxygen concentration levels are the significant derived values, and the research presents a method for computing these values given a specific cyberphysical and algorithmic setup.

	B	C	D	E	F	G	H	I
4	Concentration		Time (Seconds)					
5	%O2	Flow (Lpm)	WithFlow	Against	Temperature (°C)	avgTime	Delta Time	Temperature (°K)
6	93	0.561	0.000219892800	0.000220328700	49.60	0.000220110750	0.000000435900	322.7499
7	93	1.170	0.000219764300	0.000220614400	49.70	0.000220189350	0.000000850100	322.85
8	93	5.133	0.000218866400	0.000221751100	49.70	0.000220308750	0.000002884700	322.85
9	93	10.890	0.000218222600	0.000223191400	48.90	0.000220707000	0.000004968800	322.05
10	80	0.473	0.000218394100	0.000218854200	49.50	0.000218624150	0.000000460100	322.65
11	80	1.033	0.000218310700	0.000219005600	49.60	0.000218658150	0.000000694900	322.7499
12	80	5.200	0.000217227400	0.000220173500	49.70	0.000218700450	0.000002946100	322.85
13	80	10.220	0.000216661100	0.000221369300	48.90	0.000219015200	0.000004708200	322.05

System Overview | Data

Sheet 2 of 2 | 1 rows, 3 columns selected | PageStyle_Data | Average: ; Sum: 0 | 100%