Custom .xyy Topas output format for Reel

The following is a guide to the custom .xyy output format intended for Reel.

The header is separated in several parts. It starts with a *mandatory* filename on the first line. Then follows a section of *keywords* ending on a colon and followed by a value. There are (currently) three keywords of special significance: " $R_{-}wp$:", "Temperature (K):", and "*Wavelength* (Å):". Any additional keywords will still be read by the program, but no further treatment is implemented yet. The *keyword* section is terminated by the beginning of the comments section. The comment section is started with *COMMENTS*, and any additional lines will be ignored by the program, until the *END OF HEADER* line.

The data columns start with a column label, followed by the data. Reel expects the following mandatory columns: "tth Y_obs Y_calc Y_res Background". Any additional columns will be plotted with their corresponding label. Although "Background" is considered mandatory, it is not actually used in the current version of Reel, meaning that any arbitrary placeholder value can be used.

1	File name	Э		Mandato	ory					
2	R_wp: 4.702 Special									
3	Temperature (K): 373.500									
4	Wavelength (Å): 2.52098									
5	Counts: 834837.00									
6	COMMENTS									
7	Any additional comments or metadata provided by the user									
8	END OF H	EADER				_				
9	tth	Y_obs	Y_calc	Y_res	Backgrou	nd 1	Phase	1 Phase	2 Phase	3 Phase_4
10	9.970	8039.000	8305.591	-266.591	8287.333	8294	.666	8298.258	8287.333	8287.333
11	10.070	7999.000	8283.805	-284.805	8264.862	8272	.764	8275.903	8264.862	8264.862
12	10.170	8045.000	8262.288	-217.288	8242.581	8251	.130	8253.740	8242.581	8242.581
13	10.270	7960.000	8241.055	-281.055	8220.490	8229	.776	8231.768	8220.490	8220.490
14	10.370	8221.000	8220.122	0.878	8198.587	8208	.722	8209.986	8198.587	8198.587
15	10.470	8110.000	8199.512	-89.512	8176.871	8187	.989	8188.394	8176.871	8176.871
16	10.570	7990.000	8179.257	-189.257	8155.342	8167	.607	8166.992	8155.342	8155.342
17	10.670	8104.000	8159.391	-55.391	8133.999	8147	.613	8145.777	8133.999	8133.999
18	10.770	7990.000	8139.962	-149.962	8112.840	8128	.054	8124.748	8112.840	8112.840
19	10.870	7894.000	8121.036	-227.036	8091.865	8108	.997	8103.905	8091.865	8091.865
20	10.970	8187.000	8102.705	84.295	8071.073	8090	.531	8083.246	8071.073	8071.073