Report of the FPS Working Group

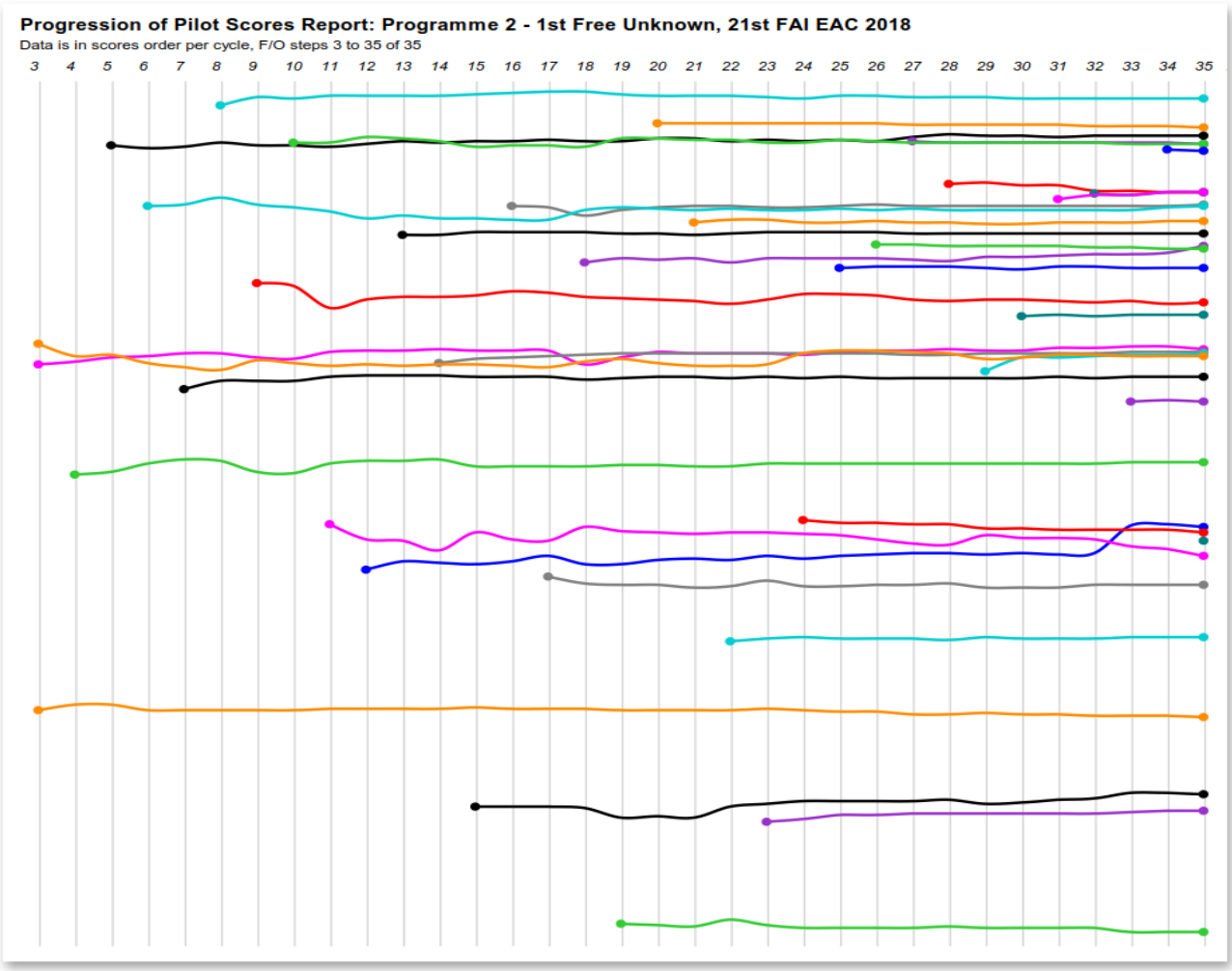
Nick Buckenham

As reported in the Contest Scoring Programme Report (agenda item 15.2), the bulk of the work required of the FPS Working Group to develop a proportional "FPS-2" outlier substitution method when assessing the judges' grades and subsequently when looking for bias in the calculated scores was carried out in 2017, and last year's report covered that process.

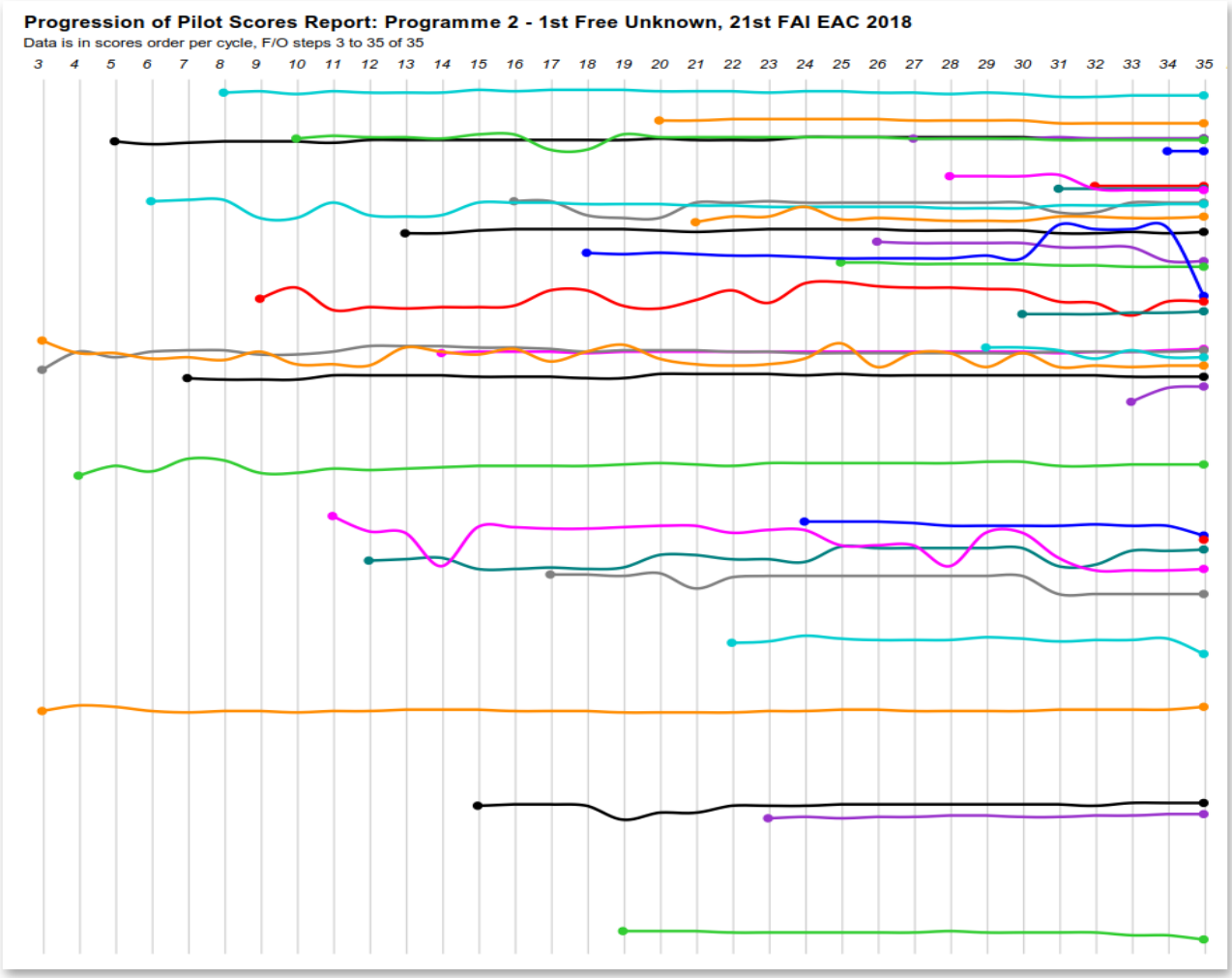
The required development of ACRO (by me) and of ACMS (by Michel Dupont) was undertaken over the 2017-8 winter period, guidance to Michel for development of the French software being helpfully provided by FPS W/G member Gilles Guillemarde. As far as can be established both applications now provide the same result, though each has a different output style.

To illustrate the improved stability that is achieved by the new proportional methodology, here are some graphic representations of the pilot rankings where the results are created initially after three sets of pilots marks have been entered (the minimum acceptable for calculation) and then re-calculated following entry of every successive pilot's marks until the end, using the 2018 EAC 1st Free Unknown: a) with the original FPS engaged, and b) with the newer FPS2 in place.

a) FPS-2 proportional code output as used throughout 2018:



b) Original FPS output as used until the end of 2017:



When the new FPS-2 process is employed to create the results it is quite clear that that stability of the output is significantly improved during the course of the re-calculations from the 3rd to the last pilot in the Flying Order when compared to the original FPS process. This improvement will vary from programme to programme in response to the extent of agreement of the grades from the whole judging panel – the more consistent the marks the less scope there will be for FPS-2 to offer an advantage of over FPS.

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