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Interactive comment on "Automatic procedures for submitting essential climate variables (ECVs) recorded at Italian Atmospheric Observatories to WMO/GAW data centers" by Luca Naitza et al.

Anonymous Referee #2

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This manuscript describes a suite routines to help data originators efficiently produce atmospheric variable data sets for submission to WMO/GAW Data Centers. The procedures are clearly described and well illustrated by the example of NO & NO2 data processing. It would be worth specifying if/how such a protocol facilitates the real time submission of data to the World Data Centers, since the demand for real time data is strongly increasing. Evidence that the "system" is working at the National level is also missing. This manuscript will be only marginally interesting to the scientific community until the routines described are not made available. The authors are warmly advised to ensure that this is done before the final version of the article is published.

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Specific comments:

p. 3, line 3: Horizon2020 is EU jargon which is not understandable by non-EU readers.

p. 4, line 7: evidence that the processing chain for reactive gas and aerosol data is operational should be provided.

p. 5, line 32: "when the molecules to be quantified are scrubbed from the gas mixture" is probably what the authors mean.

p. 7, line 25: it might be useful to specify that the titration rate ("about 80%") does not affect the determination of Sc.

p. 8, line 24: why aren't data completeness < 90, 75 and 66% also flagged accordingly?

p. 9, line 8: what happens if more than 3 different numflags are encountered within a single hour? Are there prioritization rules?

p. 12, line 14: it might be specified "atmospheric background observatory network".

p. 12, line 19: even real time submission requires properly data formatting.

p. 13, line 2: station operator judgment can still be needed to flag e.g. special events like local contamination, which is not always easy to define.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2018-245, 2018.