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**SUBMITTED ABSTRACT**

<b>0.</b>	<b>Paper Number</b>	65
	<b>Session Name</b>	1. Characterization and standardization of environmental measurements - traceability assurance
<b>1.</b>	<b>Title of the paper</b>	Experiences with the CIMO siting classification in the Dutch meteorological observation network

<b>2.</b>	<b>Institution</b>	Royal Netherlands Meteorological Institute (KNMI)			
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<b>4.</b>	<b>Abstract of the paper</b>
	<p>The surroundings of meteorological observing stations have to be monitored continuously to assess their compliance to (inter)national requirements regarding measurement quality. This helps to ensure the representativeness of the measurements and the homogeneity of data sets, which is essential for applications like climate monitoring. The CIMO siting classification for surface observing stations on land (cf. WMO No.8) has been implemented at KNMI for the Dutch observation network by the end of 2014. Experiences from this project and new tooling used in the field to facilitate the classification will be presented in this paper, as well as the development of the AWS (Automatic Weather Station) network characteristics between 2014 and 2018. Nowadays, the classification of stations is performed by experts visiting the stations periodically and checking whether the siting satisfies end user requirements. However, besides the reference network, there is an increasing demand for classification of third party and citizen stations, which requires a more efficient inspection process as their volume is large. We present the first results of a study on (partial) automatization of the classification process. Data coming from several sources of information are combined (e.g., land use map, satellite images, height maps, vegetation maps, camera pictures) to create a classifier that mimics the classification protocol. Additionally, previous classifications made by experts provide a reference set which makes it possible to provide a first estimate on the quality and practical usability of such a “desk approach” for inspection of stations.</p>