Validation WG								
Co-Chairs	Chris Kidd and Marielle Gosset							
Action Id	Item	Summary	Lead	What to Do	Expected Completion	Actual Completion	Status (open, in progress, closed)	**STATUS AS OF DECEMBER 2019**
A.VWG.2018.1	Extend IPWG GV analysis to new regions	IPWG has currently extended GV analysis to the Indian Region; Korea has expressed interest in developing new site over Korea	R. Ramsankaran, C. Kidd, J. Park	IPWG to develop letter of thanks to IMD for their support; C. Kidd to work with J. Park on new site over Korea.	2020-06-01		In progress	The Korean site seems to be up and 'pre-operational': the initial results/analysis look good, with only a few minor tweeks needed. The Indian site a somewhat more problematic: I need to try and contact them again (I did offer to send a PC to them to do it all, but got no response). Will try again in 2020!
A.VWG.2018.2	Extend IPWG GV analysis to instantaneous precipitation	Near real-time GV analysis has been developed over Europe and is somewhat under development in the U.S.	C. Kidd	Exend to other regions, where and when data available	2020-06-01		In progress	European analysis for instantaneous precipitation is continuing. Only issue is that due to the new NASA security regime the web pages cannot be hosted on a NASA machine. No resources at the moment to port to another machine (e.g., Univ. of Maryland)
A.VWG.2018.3	Explore Ocean Data Sets	Encourage the coordinated effort to explore the OceanRAIN data set for ocean validation, particularly at the instantaneous scale, as well as for 'climate' scale verification: useful for characterizing the precipitation rather then 'validation' per se.	R. Ferraro, C. Klepp, C. Kidd	Letter to whom it may concern regarding community concern for continuing financial and logistical support for the OceanRAIN program and data sets.	2019-02-01	2019-03-01	Closed	Letter was sent by F. Belda, WMO, but apparently, had no impact.
A.VWG.2018.4	Make better use of non-traditional data sets	Indirect validation via river flow gauges; exploitation of MW celluar links, etc.	M. Gossett; V. Magionni	Continue testing of these data sets; develop endorsement letters (as needed) for access to cellular data sets, etc.	2020-06-01		In progress	Work is being done by several EU teams to test CML data as GV (Europe ; Africa) - Some progress has been done with operators to access data in real time (M Gosset/IRD) or with GSMA for archived data (KNMI) but there is not yet a guarateed flux of data. At this point going on demonstrating the usage with pilote sites is the best stategy to build up a strong case.
A.VWG.2018.5	Error and uncertainties	There is ongoing work investigating errors and uncertainties in ground-based precipitation products.		(1) Develop standard scores for errors and uncertainties: Consideration of standards for both ground and satellite data sets. (2) Explore implications of error and uncertainty scores upon IPWG validation – how to implement precipitation values that include these scores. (3) 'Prediction' of errors and uncertainties in regions beyond that of the normal validation regions through characterisation of key precipitation parameters.	2020-06-01		In progress	