



Universidad
de La Laguna



GOBIERNO
DE ESPAÑA

MINISTERIO
DE AGRICULTURA, ALIMENTACIÓN
Y MEDIO AMBIENTE



Eubrewnet QA / QC

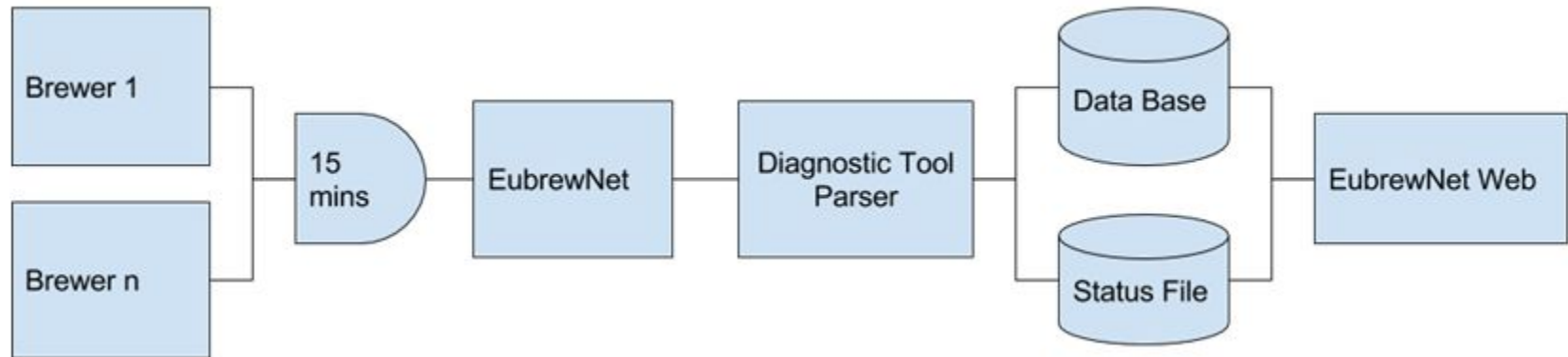
B. Hernández-Cruz, Alberto Berjón, Virgilio Carreño,
Sergio F. León-Luis, Javier López-Solano, Daniel Santana,
M. Rodríguez Valido & Alberto Redondas



Background of QC

- Deployment of a Brewer Diagnostic Tool
- Founded by Kipp & Zonen
- Development: AEMET, ULL, FGULL
- Based on the recommendations of FMI (IDEAS)

- **Brewer Diagnostic Tool:**
 - Python
 - B and D files
 - Three minutes after file reception



- Four types of messages (FMI, IDEAS)
 - Critical: Lamp not on, Hg test failed, jammed micrometer...
 - Error: Manual sighting
 - Warning: UV scan aborted, illegal command...
 - Info: number HG test, DS, ZS...
- Control parameters
 - Fixed or depend on brewer/date/config
 - Based on statistics, range, max/min value

- Integration in the Eubrewnet Interface
 - Graphic Information in map
 - Anonymous user
 - Logged user
- Graphic Information in Brewer information view
 - Only for registered users

- Colour based diagnostic tool
 - CRITICAL
 - ERROR
 - WARNING
 - INFO / TODAY
 - YESTERDAY
 - FIFTEEN DAYS AGO

Anonymous User



Registered User



Brewer view

Status Messages from brewer 126

Date	Time	File	Line	Code	Count	Value	Message
2015-11-09	04:29:20	B31315.126	45	31	2	None	co 04:29:20 hs: hs scan started at 04:29:20
2015-11-09	16:30:00	D31315.126	1809	31	19	None	uv timed scan started at 16:30:00
2015-11-09	16:33:51	D31315.126	1811	32	19	None	uv timed scan finished at 16:33:51
2015-11-09	16:24:21	B31315.126	930	54	21	0.0	co 16:24:21 td: time correction 0 seconds
2015-11-09	13:48:24	B31315.126	690	96	3	None	summary 13:48:24 nov 09/ 15 75.211 3.751 16 sl 0 1232 197 -361 -1014 4478 2102 628866 663657.3 3 4 4 4 15 8 387 316
2015-11-09	14:52:07	B31315.126	808	98	41	None	summary 14:52:07 nov 09/ 15 80.102 5.292 16 zs 0 17468 9429 3482 356 16330 7083 -42.3 301 3 147 46 19 35 115 66 3 5 9

Status Messages from brewer 178

Date	Time	File	Line	Code	Count	Value	Message
2015-11-09	23:27:36	b31315.178	13	53	1	-16.0	co 23:27:36 re: zenith discrepancy = -16
2015-11-09	11:17:01	b31315.178	241	102	9	None	summary 11:17:01 nov 09/ 15 67.624 2.579 19 aode 0 0 0 2845 2874 2905 2936 2962 6 0 0 0 111 86 84 81 79 7 0
2015-11-09	23:27:38	b31315.178	14	51	1	-1.0	co 23:27:38 re: azimuth discrepancy = -1
2015-11-09	11:17:01	b31315.178	240	95	9	None	summary 11:17:01 nov 09/ 15 67.63201 2.579 19 ds 0 9564 5721 1796 507 7943 3961 2 256.5 119 87 72 50 258 109 6 2 12 3
2015-11-09	23:44:40	b31315.178	37	96	1	None	summary 23:44:40 nov 08/ 15 127.319 1.639 19 sl 0 1865 1288 478 368 687 424 300958 7 502681 2 4 4 6 3 11 3 353 3 612
2015-11-09	11:00:39	b31315.178	218	98	6	None	summary 11:00:39 nov 09/ 15 67.832 2 6 19 zs 0 11211 6711 2339 944 8190 3936 -3 7 269 3 60 24 13 13 34 16 1 1 2 1

Brewer View

Status Messages from brewer 201

Date	Time	File	Line	Code	Count	Value	Message
2015-11-09	05:35:06	B31315.201	33	35	4	None	co 05:35:06 hg: lamp not detected - resending micrometer(s) f1= 2.14= 72
2015-11-09	05:38:35	D31315.201	165	35	4	None	lamp not detected - resending micrometer(s) f1= 2.14= 72
2015-11-09	05:39:35	D31315.201	164	36	0	None	lamp not on - hg test terminated
2015-11-09	23:22:17	B31315.201	5	53	1	-92.0	co 23:22:17 re: zenith discrepancy = -92
2015-11-09	12:18:15	D31315.201	2123	31	11	None	uv extended scan started at 12:18:15
2015-11-09	12:23:15	D31315.201	2125	32	11	None	uv extended scan finished at 12:23:15
2015-11-09	23:22:20	B31315.201	6	51	1	0.0	co 23:22:20 re: azimuth discrepancy = 0
2015-11-09	07:19:50	D31315.201	652	61	1	None	running schedule tm31315a
2015-11-09	12:46:26	B31315.201	573	95	63	None	summary 12:46:26 nov 09/ 15 44 729 1.403 29 ds 3 6798 4783 1339 720 4493 2889 -8.3999999 275.1 16 10 4 3 14 12 9 2 5
2015-11-09	11:08:02	B31315.201	448	96	3	None	summary 11:08:02 nov 09/ 15 39 754 1.297 27 sl 0 1730 1173 399 371 544 344 32203 52190.6 7 17 12 6 24 24 79 120.1
2015-11-09	11:02:59	B31315.201	440	98	4	None	summary 11:02:59 nov 09/ 15 39 875 1.299 26 zs 0 6481 4451 1168 633 4455 2791 -12.9 303.3 10 9 5 5 20 13 8 2 9

- Links
 - Code at [Monitor Repository](#)
 - Documentation at [wiki](#)
- Future
 - Operator oriented view
 - Status
 - Statistics
 - Automatic mail sending

Example

Log in (if you have no user u: azores, p: azowork)

The RBCC-E Team



- Alberto Redondas (AEMET)
- Alberto Berjon (ULL, ATMOZ)
- Javier López Solano (ULL, IDEAS)
- Bentorey Hernández (ULL, PANDONIA)
- Virgilio Carreño (AEMET)
- Manuel Rodríguez Valido (ULL)
- Daniel Santana (ULL, PANDONIA)
- Sergio Fabián León Luis (AEMET)

The RBCC-E Team

- Alberto Redondas Marrero, RBCC-E site manager, Izaña Atmospheric Research Centre, State Meteorological Agency of Spain.
- Manuel Rodríguez Valido, Department of Industrial Engineering, University of La Laguna, Spain
- Virgilio Carreño Corbella , RBCC-E researcher, Izaña Atmospheric Research Centre, State Meteorological Agency of Spain.
- Alberto Berjón Arroyo, RBCC-E researcher, University of La Laguna, Spain.
- Sergio Fabián Luis León, RBCC-E researcher, Izaña Atmospheric Research Centre, State Meteorological Agency of Spain
- Javier López Solano, RBCC-E researcher, University of La Laguna, Spain
- Bentorey Hernández Cruz, RBCC-E researcher, University of La Laguna, Spain

Thank you