Document title: **Re-calculate the Wave Length Monitor offset on a PICARRO G2000 Serie (G2301, G2401)**

Document History:

Date	Version	Revision	Authors	Comments
27/07/2023	1	0	Carole Philippon	Creation

Diffusion:

☐ ATC internal ☒ ICOS Community ☐ Public

Repository:

1. ATC Document Management System:

Directory "DOCUMENTATION_ICOS\ATC-Network Support (NS)\PR-Procedure"

2. Webobs Documents:

Equipments > Model > CO/CO2/CH4/H2O Picarro Analyzer G2401 or CO2/CH4/H2O Picarro Analyzer G2301 > Documents

Document approved by:	Approval date:	Signature:
C. Philippon	27/07/2023	

Introduction

When a G2301 or G2401 reports negative or fixed (like 0.00) values, even after the procedure to reload the factory calibration of the Wave Length Monitor (wait at least 1 hour to see if the concentrations are still impacted), it may be necessary to re-calculate the Wave Length Monitor offset.

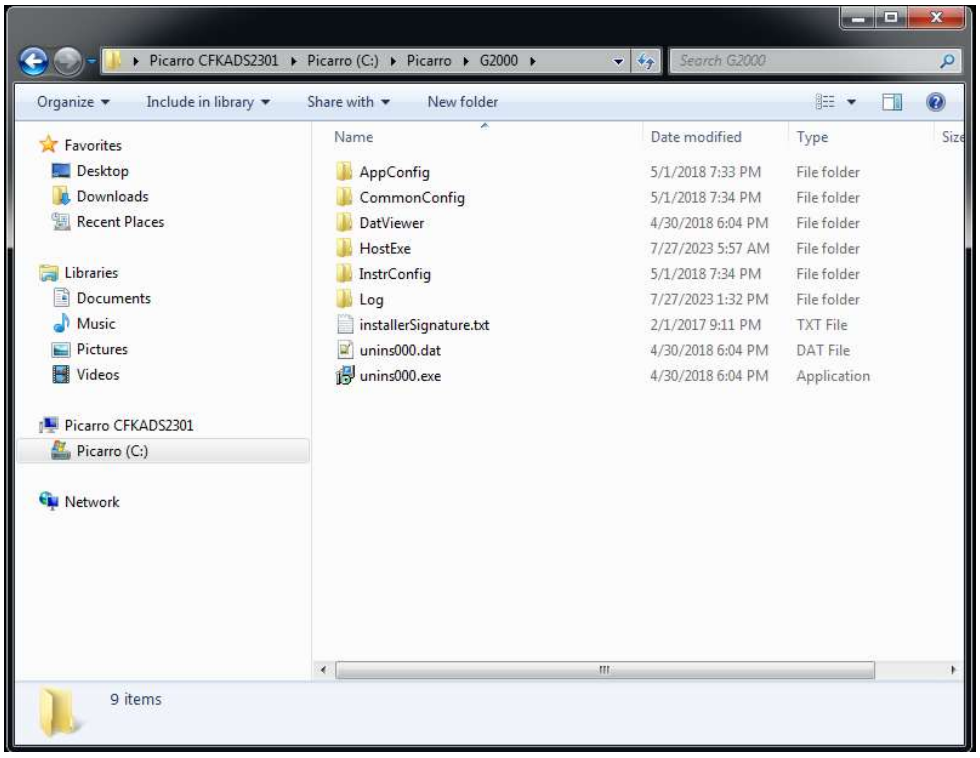
The following procedure concerns **only** the Picarro G2000 serie.

Procedure

1. Make sure the instrument is measuring ambient air. This means the inlet of the analyzer open to room air and nothing connected to it (no dryer, no water trap…).

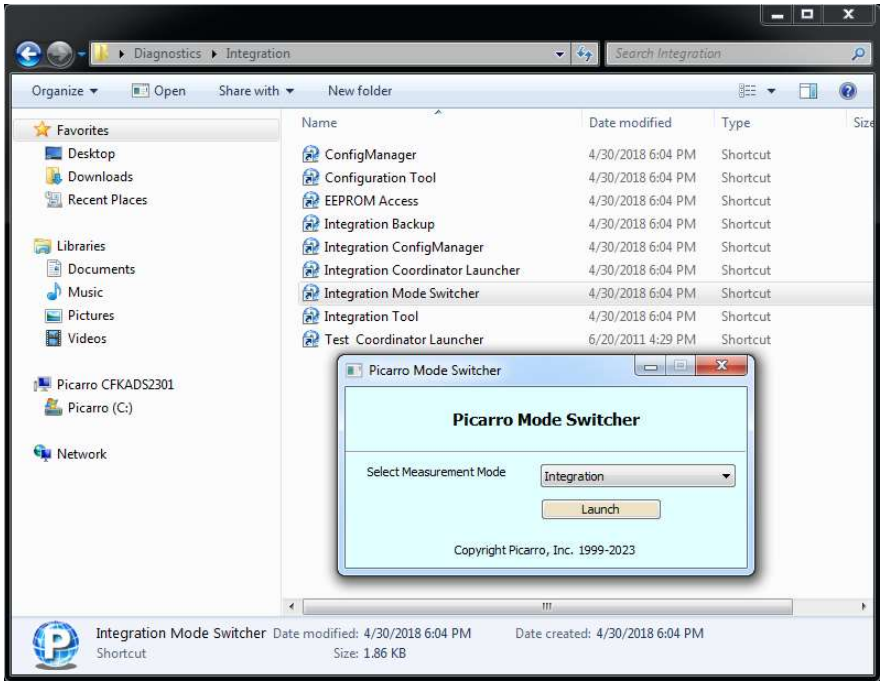
2. Make sure the instrument is warmed up, and measuring (doesn't matter if the values are off).

3. Create a backup of the following folders (located in C:\Picarro\G2000)
   - AppConfig
   - InstrConfig
   - HostExe
   - CommonConfig



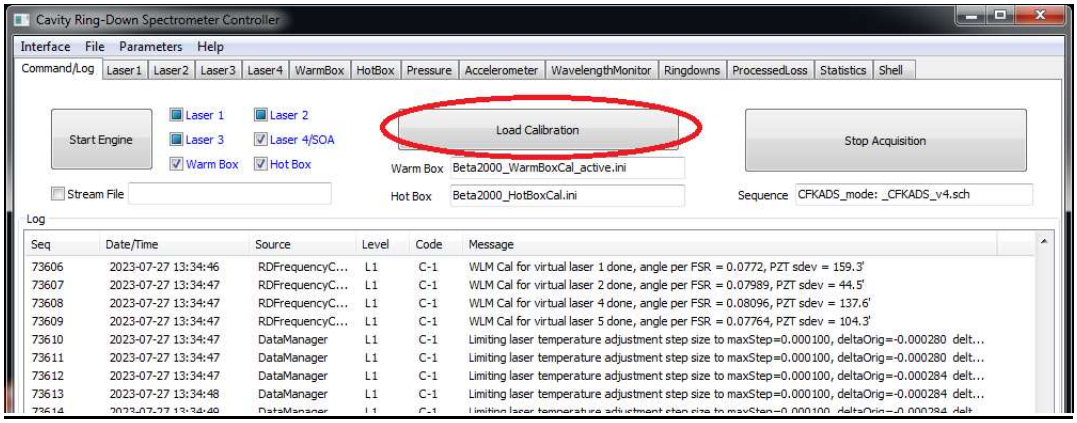
4. Go to the folder 'Diagnostics' on the Desktop, followed by the folder 'Integration'.

5. Launch the 'Integration Mode Switcher', make sure 'Integration' is selected. One of the Windows launched is the Picarro Controller.



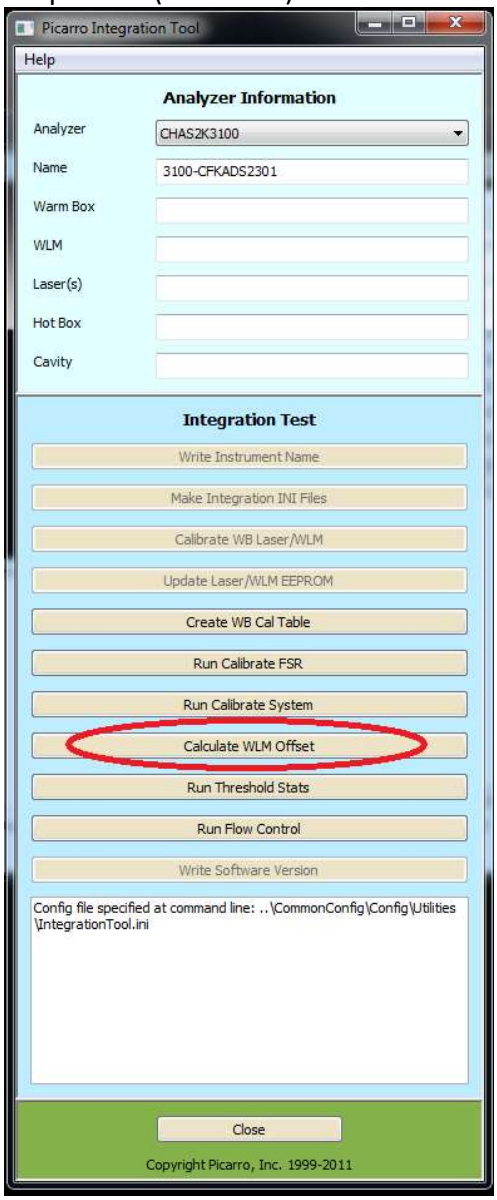
6. In the Cavity Ring-Down Spectrometer Controller, go to 'Interface' (top left), select 'Full' and enter the password: picarro

7. Click on 'Load Calibration', and select the following files:
   Warmbox: Beta2000_WarmBoxCal_active.ini
   Hotbox: Beat2000_HotboxCal.ini
   Both files are located in C:\Picarro\G2000\InstrConfig\Calibration



8. In the 'Integration' folder (see step 4), launch the 'Integration Tool'. Launching/starting this tool can take some time.

9. After the Picarro Integration Tool has launch, select 'Calculate WLM Offset'. The system now starts this procedure, depending on the instrument it can take up to 30 minutes. After completion, in the Picarro Integration Tool, in the white box is a message "WLM Offset Completed" (or similar).



10. Close the Picarro Integration Tool.

11. Launch again the normal Picarro Gui, by using the 'Picarro Mode Switcher' on the desktop.