

# Module 1 is good

Mod 3:

- Only  $\text{CO}_2$

- Between  $\text{C}^{12}$  &  $\text{C}^{13}$

$$\begin{array}{ccc} 45 & 47 & 49 \\ & \diagdown & / \\ \text{C}^{13} & + & \text{O}^{16} + \text{O}^{18} \end{array}$$

1: Uses mass 44  
~~892~~  
 $(\text{CO}_2$   
~~&~~  $\text{O}_2)$

# from  
total

- System finds derivatives of these isotopes masses

- Plot masses (volts)

- + rates/derivatives  $\leftarrow$  func. req.
- + double<sup>(2nd)</sup>derivatives

- Calc's might be wrong.

- derirates ( $1^{\text{st}}$  &  $2^{\text{nd}}$ )

- Selection bars don't pop up  
 $\nwarrow$  isolation

- Bar relocation (11) is weird but not prob.

MS2 is const. stream

no discreet chunks

hexd

funn into chunks

conversion done

Mod 5 is good i

Mod 6:

builds on 1, looks at ratios

Licor (leaf-gas exchange sys)

Measures  $\text{CO}_2$  & transpiration

no isotopes

Tunable diode laser

- distinguishes  $\text{CO}_2$  isotopes

Picarro

- isotopes of  $\text{H}_2\text{O}$  of  $\text{H}_2\text{O}$

Combines to show  $^{16}\text{O}$  vs  $^{18}\text{O}$  exchange in  
a leaf

## Python vs Labview

- Python is usable & extendable
- UI more approachable, modern & user-friendly
- Customizable
- Labview is not powerful enough for MS2