Hello,

attached you can find a lua script which i've built for simple performance measurement purposes by using the openXsensor (including altitude & airspeed sensor).
The script is designed to run with oTx 2.2 (tested on RC8) / Taranis transmitters.

How it works:

Without further configuration this script performes 4 measurement cycles and builts the average of the determined values.

The duration for a specific cycle can be preselected between 10 seconds (min) and 25 seconds (max) by using pod S2. The duration can't be changed during measurement.

A measurement will be initiated by pulling switch „sh“
During record, the script builts the altitude difference between start and end, and permanently calculates the average speed.
So the L/D ratio can be determined when the record is succesfully finished.

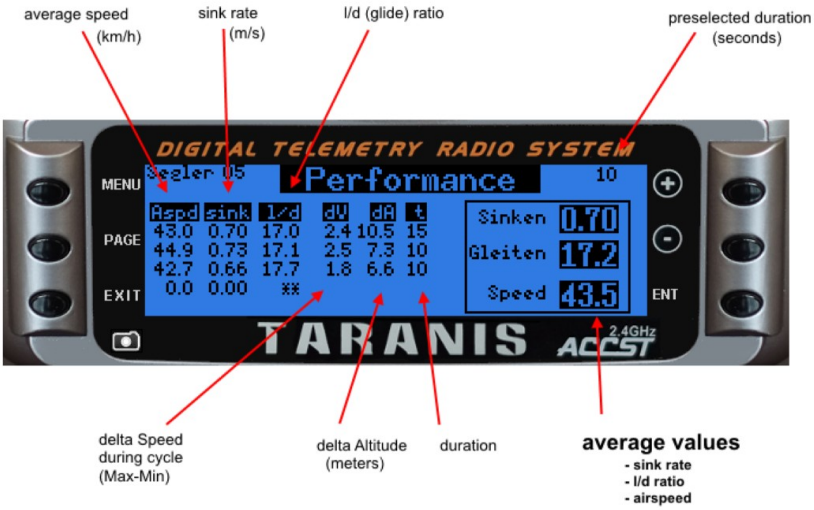
During measurement, the maximum deviation from the average speed will be traced.
If the deviation exceeds 3 percent from average speed, the script aborts this cycle and you can restart it by pulling „sh“ again.

Conditions:

- openXsensor, including altitude & airspeed sensor
- openTx 2.2
- Altitude sensor labeled „Alt“, Precision 1
- Airspeed sensor labeled „ASpd“, Precision 1
- actual lua returns mp/h speed values, which are recalculated into km/h

Display:

this examples shows a situation after three cycles,
first measurement was done with 15 seconds,
the other ones with 10 seconds duration.



Configuration

There are some variables where you can customize the functionality in order to fulfill your individual requirements:

- sw_record choose switch to start record / cycle
- Tmin minimal duration (in seconds) of a record
- Tmax maximal duration of a record
- setTime pod where you can select duration between Tmin / Tmax
- max_cyc maximal number of records for building average values
- Vdelta max allowed deviation from average speed during measurement (in percent)
-…. telemetry labels (VSpd is obsolet)

```
-- ############################################################      customizing start

local sw_record = "sh"      -- start record switch
local Tmin = 10             -- recording duration (in seconds) for one measurement (minimum)
local Tmax = 25             -- recording duration (in seconds) for one measurement (maximum)
local setTime = "s2"        -- pod to select recording duration between min & max
local max_cyc = 4           -- number of cycles
local Vdelta = 3            -- max deviation (in percent) from avg speed until measurement will be stopped

-- Telemetry variable: Vario
local l_Vclimbrate =    "VSpd"

-- Telemetry variable: Altitude
local l_Alt =   "Alt"

-- Telemetry variable: Airspeed
local l_Airspeed =  "ASpd"

-- ############################################################      customizing end

```

have fun & regards

Udo