THIS DIAGRAM IS ABLE TO DEAL WITH ALL CASES

New data

Start flag ?

START_TS or START_SECTION

NO_START

number full >0 ?

Partial_status != EMPTY ?

NO → WARN and Exit

YES

Data left is stuffing bytes ?

YES → Exit

PID, CC ok ?

NO → WARN and Exit

YES

Copy the first packet of buffer full to data_full

Update CC

Copy data needed see code for details about the len

set data_left = 0

Warn if partial_status != empty

Set PID, CC, expected len

Copy data
len = min(expected,left)

If the partial packet is full and CRC32 valid
Append it's data to the full buffers, increase the full buffer number

If the full buffer number is equal to one, copy the data to data_full

Data_left > 0

NO → Exit

Yes

Call recursively append_data with
data_len = data_left
ie the data after the current section
and start_flag = START_SECTION