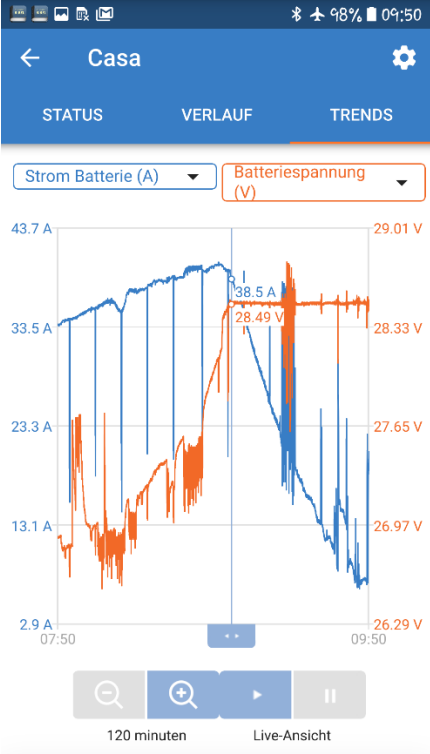
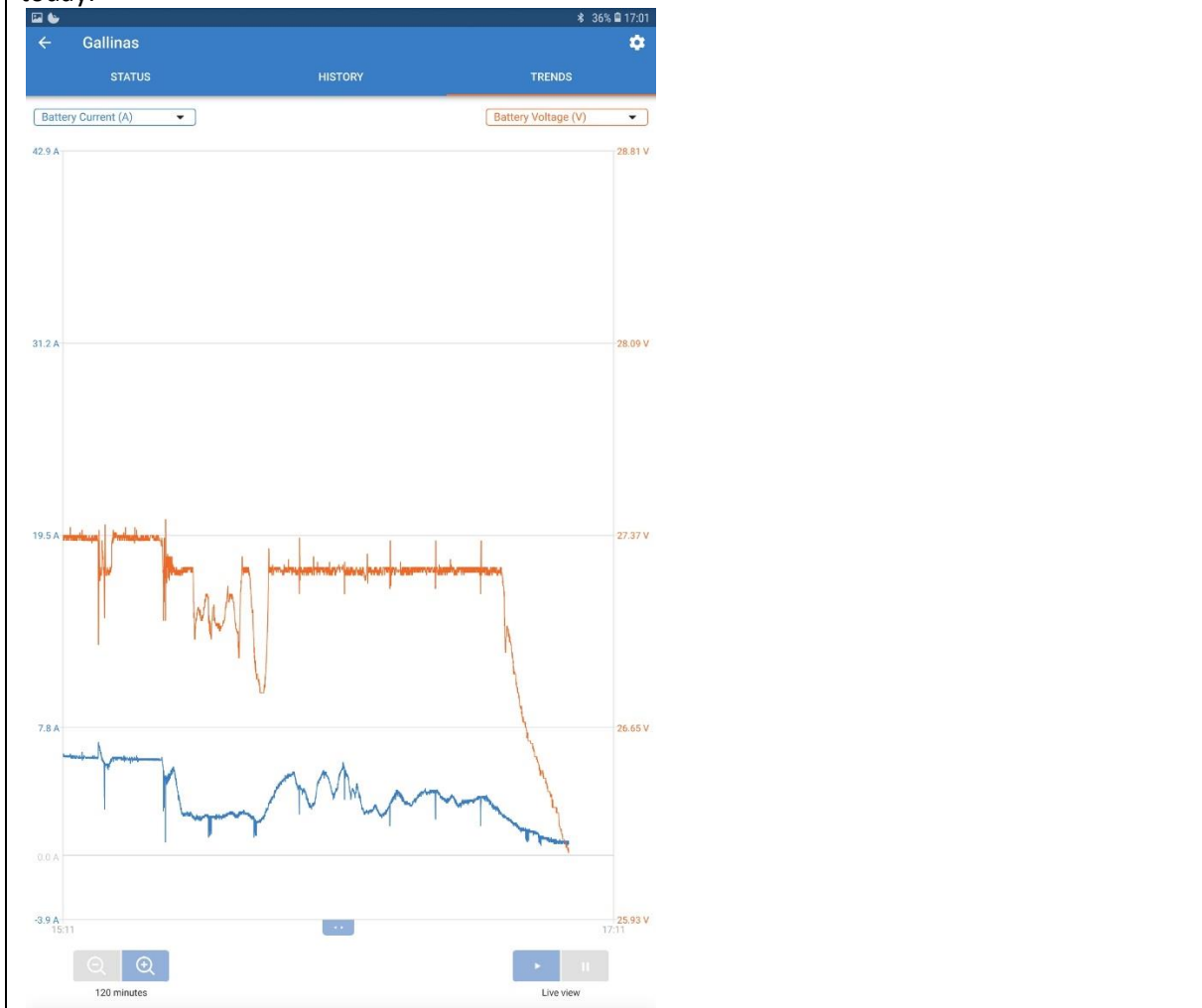


Observations from Monitoring 21.9 with BMV connected to VE Smart Group, still using default setting of Position 2 (Gel victron deep discharge and others):

Casa (Smartsolar)	Gallinas (Bluesolar)
6:13 start Bulk (first as expected, as it is oriented towards east). 25.19V	6:16 start Bulk, 25.19V
<p>8:57 => Absorption, at Voltage of 28.51V which is mainly kept (The set absorption Voltage of 28.8V is never reached! why?)</p> 	9:52 => Absorption mode (94% of Charge)
<p>Charge current has been declining since then when it switched to absorption mode. When the Bluesolar device switches to absorption mode too, this device almost stops delivering current.</p> <p>It then switches to float mode, as its current is almost 0A. So: - based on start voltage of 25.2 the value is exactly at a limit, so the absorption time could be only 1 hour based on that. – it could not be because of tail current, as the device is still charging (18.5A).</p>	<p>While the other device stops delivering current, this one continues with about 700-800W. Voltage remains at about 27.55V (not 28.8 as it set).</p>
	<p>10:58 => float: After almost the same time as the other device (1:07 hour vs. 1:02hour), the device switches into float mode. While the absorption time has basically the same duration as the other, it happens not at the same time. It results in this case, in a doubling of the absorption time!!</p> <p>Float Voltage is around 27.35V (default setting is 27.6)</p>

For this time, both devices remain in float mode the rest of the day, as it is not very rainy/cloudy today.



Questions at this point:

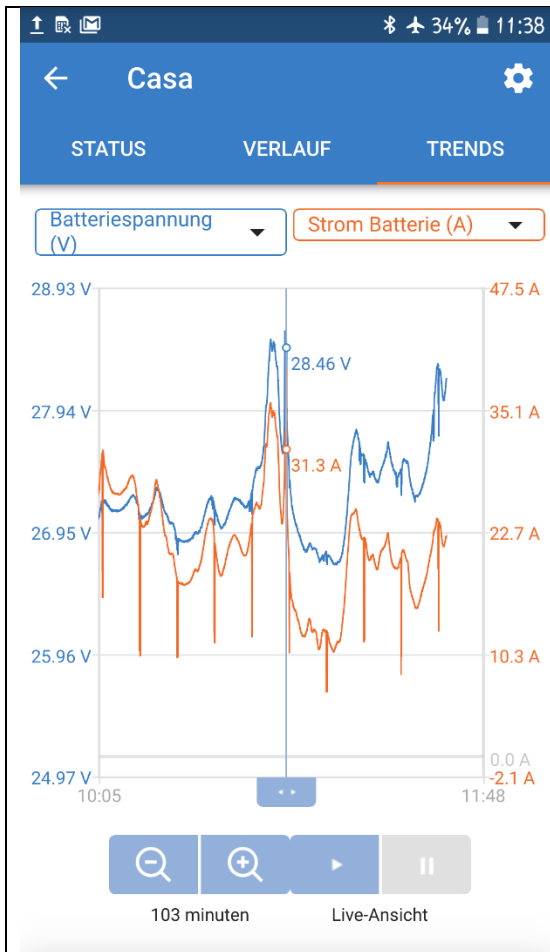
Why are they not switching into absorption mode about at the same time, if it is voltage based? (regardless of synch problem, which is obviously not working)

Tests Day 5

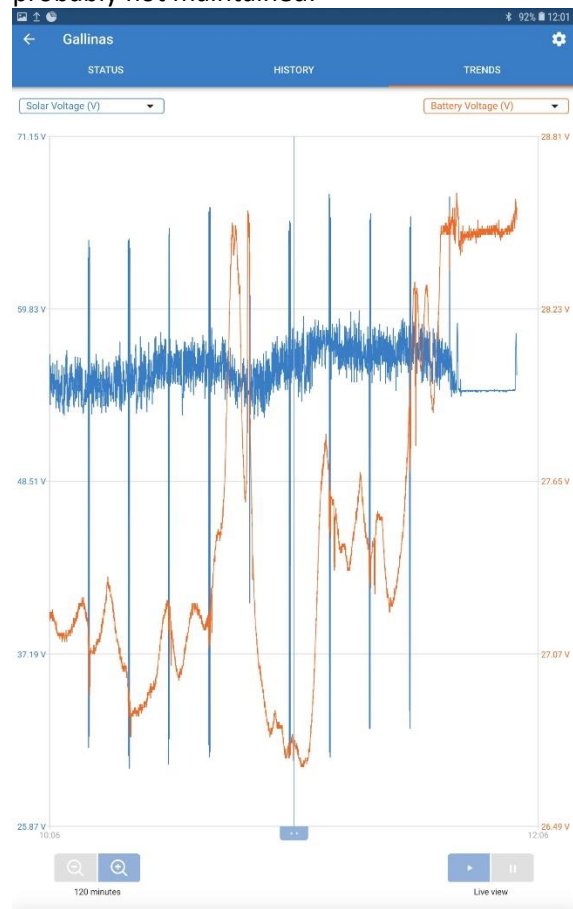
Slightly different setup: System was discharged a bit more (25V before starting to charge). I disabled the option of tail current and set the offset for Re-Bulk to 1.05V...

Similar behaviour than previous day. This morning was not as sunny as the previous day.

Casa (Smartsolar)	Gallinas (Bluesolar)
6:12 start Bulk 24.99V	6:14 => Bulk, 24,99V
10:51 => Absorption, Voltage reaches 28.52 at that point. There might have been a short peak up to 28.8V, but it is not visible in the video of the app. The trend:	Devices stays in Bulk mode, could it be, that it missed the voltage peak? The PV voltage is not constant due to shady conditions and still quite a high power demand.



Because of that the absorption voltage is probably not maintained:



The next time the system goes a bit above 28.5V it also switches into absorption mode!

11:44 => Absorption, 28.54V

13:06 => float mode (1:19h)

12:36 => float, 28.53V (1:44h)

It is longer than yesterday as the voltage in the morning was lower.

Later in the afternoon both devices go back into bulk mode (at exactly the same time), as the voltage drops below 26V, because the battery is now delivering Power.

The total absorption time (however not with constant voltage!) was 3:09hours, because of the fact, that one device comes late into absorption mode and they are not synchronized!