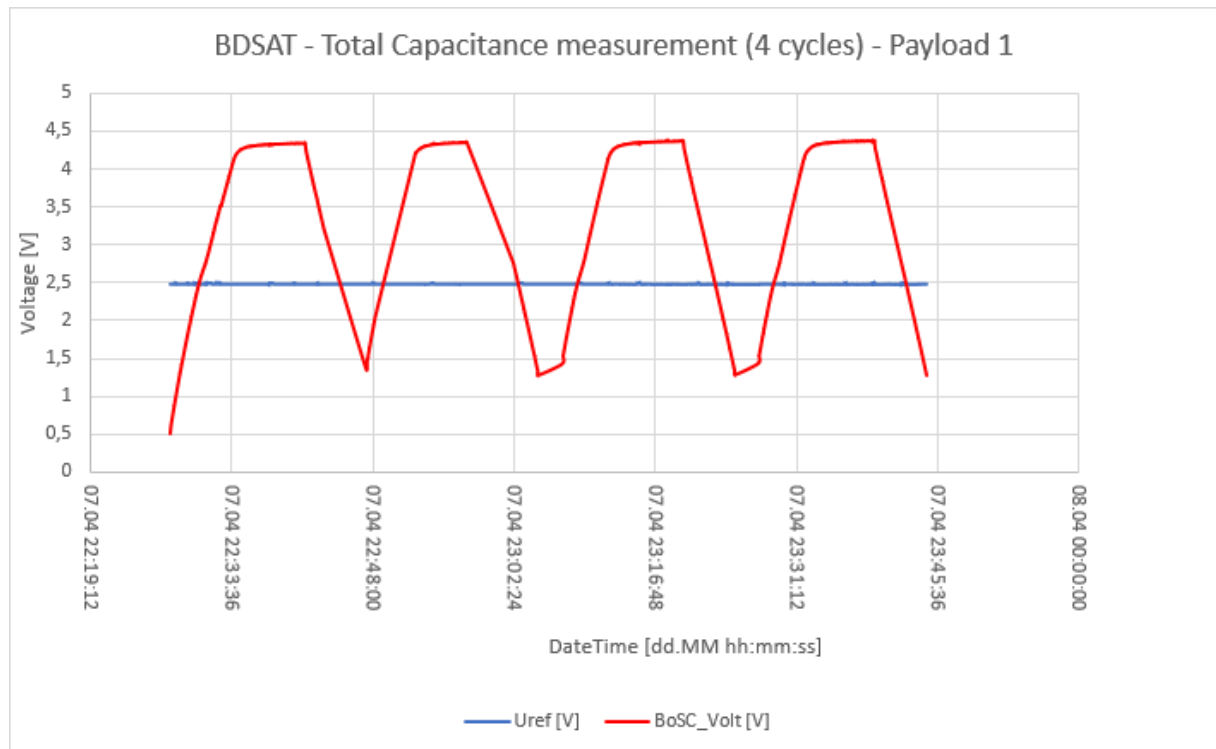


Measurement of the total capacity of the supercapacitor bank – Payload 1:

| BDSAT - Total Capacitance measurement | | | | | | | | | | | | | | |
|---------------------------------------|---------------|----------------------------------|----------------|---------------|------------------|----------------|---------------|------------------|----------------|---------------|------------------|-----------------|---------------|--|
| Date: 7.4.2022 | | | | | | | | | | | | | | |
| Measurement #1 | | | Measurement #2 | | | Measurement #3 | | | Measurement #4 | | | | | |
| DateTime | Signal | Meaning | real_ref [mV] | real_val [mV] | DateTime | real_ref [mV] | real_val [mV] | DateTime | real_ref [mV] | real_val [mV] | DateTime | real_ref [mV] | real_val [mV] | |
| 07.04.2022 22:27 | I_Y2Init | C/2 before charging | 2494 | 255 | 07.04.2022 22:47 | 2494 | 679 | 07.04.2022 23:07 | 2493 | 717 | 07.04.2022 23:27 | 2493 | 720 | |
| 07.04.2022 22:36 | I_Y2ChargeOn | C/2 after charging | 2494 | 2155 | 07.04.2022 22:54 | 2494 | 2166 | 07.04.2022 23:14 | 2493 | 2172 | 07.04.2022 23:33 | 2493 | 2169 | |
| 07.04.2022 22:36 | I_Y4ChargeOn | C_1_2 voltage after charging | 2494 | 2155 | 07.04.2022 22:54 | 2494 | 2165 | 07.04.2022 23:14 | 2493 | 2170 | 07.04.2022 23:33 | 2493 | 2167 | |
| 07.04.2022 22:36 | I_Y2ChargeOff | C/2 after charging off | 2494 | 2157 | 07.04.2022 22:54 | 2494 | 2166 | 07.04.2022 23:14 | 2493 | 2172 | 07.04.2022 23:33 | 2493 | 2169 | |
| 07.04.2022 22:36 | I_Y4ChargeOff | C_1_2 voltage after charging off | 2494 | 2155 | 07.04.2022 22:54 | 2494 | 2165 | 07.04.2022 23:14 | 2493 | 2170 | 07.04.2022 23:33 | 2493 | 2167 | |
| 07.04.2022 22:41 | Y2init | C/2 before discharging | 2494 | 2171 | 07.04.2022 22:59 | 2494 | 2179 | 07.04.2022 23:19 | 2493 | 2186 | 07.04.2022 23:39 | 2493 | 2190 | |
| 07.04.2022 22:41 | Y4init | C_1_2 before discharging | 2494 | 2170 | 07.04.2022 22:59 | 2494 | 2178 | 07.04.2022 23:19 | 2493 | 2184 | 07.04.2022 23:39 | 2497 | 2182 | |
| 07.04.2022 22:41 | Y2Cap_Mea_1 | U1/2 for capacitance calculation | 2494 | 2048 | 07.04.2022 22:59 | 2494 | 2057 | 07.04.2022 23:19 | 2493 | 2063 | 07.04.2022 23:39 | 2493 | 2064 | |
| 07.04.2022 22:41 | Y4Cap_Mea_1 | | 2494 | 2048 | 07.04.2022 22:59 | 2494 | 2057 | 07.04.2022 23:19 | 2494 | 2062 | 07.04.2022 23:39 | 2494 | 2064 | |
| 07.04.2022 22:46 | Y2Cap_Mea_2 | U2/2 for capacitance calculation | 2494 | 630 | 07.04.2022 23:04 | 2494 | 641 | 07.04.2022 23:24 | 2493 | 643 | 07.04.2022 23:44 | 2494 | 638 | |
| 07.04.2022 22:46 | Y4Cap_Mea_2 | | 2494 | 628 | 07.04.2022 23:04 | 2494 | 639 | 07.04.2022 23:24 | 2493 | 641 | 07.04.2022 23:44 | 2494 | 636 | |
| 07.04.2022 22:46 | Y2Off | C/2 after discharging off | 2494 | 650 | 07.04.2022 23:04 | 2493 | 662 | 07.04.2022 23:24 | 2493 | 664 | 07.04.2022 23:44 | 2494 | 658 | |
| 07.04.2022 22:46 | Y4Off | C_1_2 after discharging off | 2494 | 649 | 07.04.2022 23:04 | 2494 | 659 | 07.04.2022 23:24 | 2493 | 662 | 07.04.2022 23:44 | 2494 | 656 | |
| 07.04.2022 22:46 | Pressure_1 | P_1_1 output | 2494 | 1459 | 07.04.2022 23:04 | 2494 | 1557 | 07.04.2022 23:24 | 2493 | 1668 | 07.04.2022 23:44 | 2494 | 1500 | |
| 07.04.2022 22:46 | Pressure_2 | P_1_2 output | 2494 | 1561 | 07.04.2022 23:04 | 2494 | 1616 | 07.04.2022 23:24 | 2493 | 1679 | 07.04.2022 23:44 | 2494 | 1587 | |
| 07.04.2022 22:46 | Temperature_1 | Pt_1_1 | 2494 | 1651 | 07.04.2022 23:04 | 2494 | 1843 | 07.04.2022 23:24 | 2494 | 2043 | 07.04.2022 23:44 | 2493 | 1732 | |
| 07.04.2022 22:46 | Temperature_2 | Pt_1_2 | 2494 | 1651 | 07.04.2022 23:04 | 2494 | 1832 | 07.04.2022 23:24 | 2493 | 2045 | 07.04.2022 23:44 | 2494 | 1744 | |
| ΔTime [s] | | | 300 | | | 300 | | | 300 | | | 300 | | |
| I_discharging [A] | | | 0,05 | | | 0,05 | | | 0,05 | | | 0,05 | | |
| Total Capacitance [F] | | | 5,28914 | | | 5,29661 | | | 5,28169 | | | 5,259467 | | |



Measurement of the total capacity of the supercapacitor bank – Payload 2:

| BDSAT - Total Capacitance measurement | | | | | | | | | | | | | |
|---------------------------------------|---------------|----------------------------------|---------------|---------------|------------------|---------------|---------------|------------------|---------------|---------------|------------------|---------------|---------------|
| Date: 7.4.2022 | | | | | | | | | | | | | |
| Measurement #1 | | | | | Measurement #2 | | | Measurement #3 | | | Measurement #4 | | |
| DateTime | Signal | Meaning | real_ref [mV] | real_val [mV] | DateTime | real_ref [mV] | real_val [mV] | DateTime | real_ref [mV] | real_val [mV] | DateTime | real_ref [mV] | real_val [mV] |
| 07.04.2022 22:27 | I_Y2Init | C/2 before charging | 2492 | 509 | 07.04.2022 22:47 | 2492 | 658 | 07.04.2022 23:07 | 2492 | 687 | 07.04.2022 23:27 | 2491 | 691 |
| 07.04.2022 22:35 | I_Y2ChargeOn | C/2 after charging | 2492 | 2152 | 07.04.2022 22:54 | 2492 | 2161 | 07.04.2022 23:14 | 2491 | 2167 | 07.04.2022 23:34 | 2491 | 2168 |
| 07.04.2022 22:35 | I_Y4ChargeOn | C_1_2 voltage after charging | 2492 | 2151 | 07.04.2022 22:54 | 2492 | 2160 | 07.04.2022 23:14 | 2491 | 2166 | 07.04.2022 23:34 | 2491 | 2168 |
| 07.04.2022 22:35 | I_Y2ChargeOff | C/2 after charging off | 2492 | 2152 | 07.04.2022 22:54 | 2492 | 2161 | 07.04.2022 23:14 | 2491 | 2167 | 07.04.2022 23:34 | 2491 | 2168 |
| 07.04.2022 22:35 | I_Y4ChargeOff | C_1_2 voltage after charging off | 2492 | 2151 | 07.04.2022 22:54 | 2492 | 2160 | 07.04.2022 23:14 | 2491 | 2166 | 07.04.2022 23:34 | 2491 | 2168 |
| 07.04.2022 22:41 | Y2Init | C/2 before discharging | 2492 | 2167 | 07.04.2022 22:59 | 2492 | 2174 | 07.04.2022 23:19 | 2491 | 2182 | 07.04.2022 23:39 | 2491 | 2187 |
| 07.04.2022 22:41 | Y4Init | C_1_2 before discharging | 2492 | 2166 | 07.04.2022 22:59 | 2492 | 2173 | 07.04.2022 23:19 | 2491 | 2181 | 07.04.2022 23:39 | 2491 | 2185 |
| 07.04.2022 22:41 | Y2Cap_Mea_1 | U1/2 for capacitance calculation | 2492 | 2048 | 07.04.2022 22:59 | 2491 | 2055 | 07.04.2022 23:19 | 2491 | 2062 | 07.04.2022 23:39 | 2491 | 2062 |
| 07.04.2022 22:41 | Y4Cap_Mea_1 | | 2492 | 2048 | 07.04.2022 22:59 | 2491 | 2054 | 07.04.2022 23:19 | 2491 | 2062 | 07.04.2022 23:39 | 2491 | 2062 |
| 07.04.2022 22:46 | Y2Cap_Mea_2 | U2/2 for capacitance calculation | 2492 | 612 | 07.04.2022 23:04 | 2491 | 616 | 07.04.2022 23:24 | 2491 | 620 | 07.04.2022 23:44 | 2491 | 618 |
| 07.04.2022 22:46 | Y4Cap_Mea_2 | | 2492 | 609 | 07.04.2022 23:04 | 2491 | 614 | 07.04.2022 23:24 | 2491 | 619 | 07.04.2022 23:44 | 2491 | 614 |
| 07.04.2022 22:46 | Y2Off | C/2 after discharging off | 2492 | 630 | 07.04.2022 23:04 | 2492 | 634 | 07.04.2022 23:24 | 2491 | 640 | 07.04.2022 23:44 | 2491 | 636 |
| 07.04.2022 22:46 | Y4Off | C_1_2 after discharging off | 2492 | 628 | 07.04.2022 23:04 | 2491 | 633 | 07.04.2022 23:24 | 2491 | 637 | 07.04.2022 23:44 | 2491 | 634 |
| 07.04.2022 22:46 | Pressure_1 | P_1_1 output | 2492 | 1470 | 07.04.2022 23:04 | 2491 | 1576 | 07.04.2022 23:24 | 2491 | 1708 | 07.04.2022 23:44 | 2491 | 1526 |
| 07.04.2022 22:46 | Pressure_2 | P_1_2 output | 2492 | 1510 | 07.04.2022 23:04 | 2491 | 1559 | 07.04.2022 23:24 | 2491 | 1626 | 07.04.2022 23:44 | 2491 | 1542 |
| 07.04.2022 22:46 | Temperature_1 | Pt_1_1 | 2492 | 1641 | 07.04.2022 23:04 | 2491 | 1819 | 07.04.2022 23:24 | 2491 | 2029 | 07.04.2022 23:44 | 2491 | 1717 |
| 07.04.2022 22:46 | Temperature_2 | Pt_1_2 | 2492 | 1637 | 07.04.2022 23:04 | 2491 | 1820 | 07.04.2022 23:24 | 2492 | 2025 | 07.04.2022 23:44 | 2491 | 1707 |
| ΔTime [s] | | | | 300 | | 300 | | 300 | | 300 | | 300 | |
| I_discharging [A] | | | | 0,05 | | 0,05 | | 0,05 | | 0,05 | | 0,05 | |
| Total Capacitance [F] | | | | 5,222841 | | 5,211953 | | 5,20111 | | 5,193906 | | | |

