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## LAMPIRAN

```
#include <virtuabotixRTC.h>
#include <MPU6050_light.h>
#include <LiquidCrystal_I2C.h>
#include <Wire.h>
#include <SD.h>
#include <SPI.h>

virtuabotixRTC myRTC(6, 7, 8);
MPU6050 mpu(Wire);
LiquidCrystal_I2C lcd(0x27, 16, 2);
File myFile;

unsigned long timer = 0;
int enb_a = A0;
int enb_b = A1;
int in_1 = 2;
int in_2 = 3;
int in_3 = 4;
int in_4 = 5;
int counter = 1;
int push_button = 48;
int pinCS = 53;
//MISO = 50, MOSI = 51, SCK = 52,
CS = 53
int analog_voltage_pitch = A9;
int analog_current_pitch = A8;
int analog_voltage_roll = A11;
int analog_current_roll = A10;
int analog_voltage_tracker = A14;
int analog_current_tracker = A12;
int analog_voltage_statis = A15;
int analog_current_statis = A13;

float R1 = 30000.0; //30K
float R2 = 7500.0; //7K5
float R3 = 8400.0; //8K4
float R4 = 1000.0; //1K

void setup(){
  Serial.begin(9600);
  //myRTC.setDS1302Time (00, 11,
  14, 2, 22, 6, 2021);
  lcd.begin();
  lcd.clear();

  pinMode(enb_a, OUTPUT);
  pinMode(enb_b, OUTPUT);
  pinMode(in_1, OUTPUT);
  pinMode(in_2, OUTPUT);
  pinMode(in_3, OUTPUT);
```

```

pinMode(in_4, OUTPUT);
pinMode(pinCS, OUTPUT);
pinMode(analog_voltage_pitch,
INPUT);
pinMode(analog_current_pitch,
INPUT);
pinMode(analog_voltage_roll,
INPUT);
pinMode(analog_current_roll,
INPUT);
pinMode(analog_voltage_tracker,
INPUT);
pinMode(analog_current_tracker,
INPUT);
pinMode(analog_voltage_statis,
INPUT);
pinMode(analog_current_statis,
INPUT);
pinMode(push_button, INPUT);

Wire.begin();
mpu.begin();
Serial.print(F("MPU6050 status: "));
Serial.println(F("Calculating offsets,
do not move MPU6050"));
delay(1000);
mpu.calcGyroOffsets();
Serial.println("Done!\n");

if (SD.begin()){
    Serial.println("SD Card is Ready to
Use.");
}
else{
    Serial.println("SD Card
Initialization Failed");
}
}

void loop(){
    myRTC.updateTime();
    mpu.update();

    //MPU6050
    float pitch = 0.0, roll = 0.0;
    pitch = pitch + mpu.getAngleX();
    roll = (roll + mpu.getAngleY()*(1);
    //Serial.print(pitch); Serial.print("\t");
    Serial.println(roll);

    //Real-Time-Clock
    int month = myRTC.month;
    int day = myRTC.dayofmonth;
    int hour = myRTC.hours;
    int minute = myRTC.minutes;
    int second = myRTC.seconds;

    //voltage pitch

```

```

float a_p=0, b_p=0, c_p=0,
voltage_pitch=0, sample_p=0;

for(int i=0; i<100; i++){

    a_p =
analogRead(analog_voltage_pitch);
    sample_p = sample_p + a_p;
    b_p = sample_p/100.0;
}

c_p = (b_p*4.9)/1023.0;
voltage_pitch = c_p/(R2/(R1+R2));
if(voltage_pitch>11.85)
voltage_pitch=11.90;

Serial.print(voltage_pitch);
Serial.print("\t");

```

```

//current pitch

float e_p=0, f_p=0, g_p=0, h_p=0,
average_current_pitch=0,
sample_cp=0;

for (int i=0; i<100; i++){

    e_p =
analogRead(analog_current_pitch);
    sample_cp = sample_cp + e_p;
    f_p = sample_cp/100.0;
}

g_p = (f_p*4.93)/1023.0;
h_p = (2.46-g_p)/0.185;

average_current_pitch = abs(h_p);
if(average_current_pitch<=0.03)
average_current_pitch=0.0;

```

```

Serial.print(average_current_pitch);
Serial.print("\t");

```

```

//voltage roll

float a_r=0, b_r=0, c_r=0,
voltage_roll=0, sample_r=0;

for(int i=0; i<100; i++){

    a_r =
analogRead(analog_voltage_roll);
    sample_r = sample_r + a_r;
    b_r = sample_r/100.0;
}

```

```

c_r = (b_r*4.9)/1023.0;
voltage_roll = c_r/(R2/(R1+R2));
if(voltage_roll>11.85)
voltage_roll=11.9;

Serial.print(voltage_roll);
Serial.print("\t");

```

```

//current roll

float e_r=0, f_r=0, g_r=0, h_r=0,
average_current_roll=0, sample_cr=0;

for (int i=0; i<100; i++){

    e_r =
analogRead(analog_current_roll);
    sample_cr = sample_cr + e_r;
    f_r = sample_cr/100.0;
}

g_r = (f_r*4.93)/1023.0;

```

```

h_r = (2.45-g_r)/0.185;
average_current_roll = abs(h_r);
if(average_current_roll<=0.05)
average_current_roll=0.0;

Serial.print(average_current_roll);
Serial.print("\t");

//voltage tracker

float a_t=0, b_t=0, c_t=0,
voltage_tracker=0, sample_t=0;

for(int i=0; i<100; i++){

a_t =
analogRead(analog_voltage_tracker);

sample_t = sample_t + a_t;

b_t = sample_t/100.0;

}

c_t = (b_t*4.9)/1023.0;
voltage_tracker = c_t/(R4/(R3+R4));

Serial.print(voltage_tracker);
Serial.print("\t");

//current tracker

float e_t=0, f_t=0, g_t=0, h_t=0,
average_current_tracker=0,
sample_ct=0;

for (int i=0; i<100; i++){

e_t =
analogRead(analog_current_tracker);

sample_ct = sample_ct + e_t;

```

```

f_t = sample_ct/100.0;
}

g_t = (f_t*5.0)/1023.0;
h_t = (2.65-g_t)/0.185;

average_current_tracker = abs(h_t);
if(average_current_tracker<=0.05)
average_current_tracker=0.0;

Serial.print(average_current_tracker);
Serial.print("\t");

//voltage statis

float a_s=0, b_s=0, c_s=0,
voltage_statis=0, sample_s=0;

for(int i=0; i<100; i++){

a_s =
analogRead(analog_voltage_statis);

sample_s = sample_s + a_s;

b_s = sample_s/100.0;

}

c_s = (b_s*4.9)/1023.0;
voltage_statis = c_s/(R4/(R3+R4));

Serial.print(voltage_statis);
Serial.print("\t");

//current statis

float e_s=0, f_s=0, g_s=0, h_s=0,
average_current_statis=0,
sample_cs=0;

```

```

for (int i=0; i<100; i++){
    e_s =
analogRead(analog_current_statis);
    sample_cs = sample_cs + e_s;
    f_s = sample_cs/100.0;
}

g_s = (f_s*5.0)/1023.0;
h_s = (2.51-g_s)/0.185;
average_current_statis = abs(h_s);
if(average_current_statis<=0.05)
average_current_statis=0.0;

Serial.print(average_current_statis);
Serial.println("\t");

float daya_motor_pitch =
voltage_pitch * average_current_pitch;

float daya_motor_roll = voltage_roll
* average_current_roll;

float daya_tracker = voltage_tracker
* average_current_tracker;

float daya_statis = voltage_statis *
average_current_statis;

float vpitch = voltage_pitch;
float ipitch = average_current_pitch;
float ppitch = daya_motor_pitch;

float vroll = voltage_roll;
float iroll = average_current_roll;

float proll = daya_motor_roll;

float vtracker = voltage_tracker;
float itracker =
average_current_tracker;
int ptracker = daya_tracker;

float vstatis = voltage_statis;
float istatis = average_current_statis;
int pstatis = daya_statis;

int senval =
digitalRead(push_button);
if(senval == LOW) (counter ++);
if(counter == 7) (counter = 1);

if(counter == 1){
    lcd.clear();

//Parameter
    lcd.setCursor(1,0);
    lcd.print("Date");

    lcd.setCursor(10,0);
    lcd.print("Time");

//Date
    lcd.setCursor(1,1); lcd.print(day);

    lcd.setCursor(3,1); lcd.print("/");

    lcd.setCursor(4,1);
    lcd.print(month);

```



```

//Time
lcd.setCursor(8,1); lcd.print(hour);           //parameter
lcd.setCursor(10,1); lcd.print(":");          lcd.setCursor(0,0);
lcd.setCursor(11,1);                           lcd.print("M.PITCH");
lcd.print(minute);
lcd.setCursor(13,1); lcd.print(":");           //Volt Pitch
lcd.setCursor(14,1);                           lcd.setCursor(0,1); lcd.print("V=");
lcd.print(second);                             lcd.setCursor(2,1);
}                                                lcd.print(vpitch);
else if(counter == 2){                          lcd.setCursor(7,1); lcd.print("V");
lcd.clear();
//parameter
lcd.setCursor(6,0);                             lcd.setCursor(9,1); lcd.print("I=");
lcd.print("SUDUT");                             lcd.setCursor(11,1);
                                                lcd.print(ipitch);
//Pitch
lcd.setCursor(0,1);                             lcd.setCursor(15,1); lcd.print("A");
lcd.print("Pi=");
lcd.setCursor(3,1);
lcd.print(int(mpu.getAngleX()));
//Roll
lcd.setCursor(9,1);                             //Daya Pitch
lcd.print("Ro=");                               lcd.setCursor(9,0); lcd.print("P=");
lcd.setCursor(12,1);                             lcd.setCursor(11,0);
lcd.print(int(mpu.getAngleY()));                lcd.print(ppitch);
}                                                lcd.setCursor(15,0);
else if(counter == 3){                          lcd.print("W");
lcd.clear();
//parameter
}
else if(counter == 4){
lcd.clear();
//parameter
}

```

```
lcd.setCursor(0,0);  
lcd.print("M.ROLL");
```

```
//Volt Roll
```

```
lcd.setCursor(0,1); lcd.print("V=");  
lcd.setCursor(2,1); lcd.print(vroll);  
lcd.setCursor(7,1); lcd.print("V");
```

```
//Arus Roll
```

```
lcd.setCursor(9,1); lcd.print("I=");  
lcd.setCursor(11,1); lcd.print(iroll);  
lcd.setCursor(15,1); lcd.print("A");
```

```
//Daya Roll
```

```
lcd.setCursor(9,0); lcd.print("P=");  
lcd.setCursor(11,0);  
lcd.print(roll);  
lcd.setCursor(15,0);  
lcd.print("W");  
}
```

```
else if(counter == 5){
```

```
lcd.clear();
```

```
//parameter
```

```
lcd.setCursor(0,0);  
lcd.print("TRACKER");
```

```
//Volt Tracker
```

```
lcd.setCursor(0,1); lcd.print("V=");
```

```
lcd.setCursor(2,1);  
lcd.print(vtracker);
```

```
lcd.setCursor(7,1); lcd.print("V");
```

```
//Arus Tracker
```

```
lcd.setCursor(9,1); lcd.print("I=");  
lcd.setCursor(11,1);  
lcd.print(itracker);
```

```
lcd.setCursor(15,1); lcd.print("A");
```

```
//Daya Tracker
```

```
lcd.setCursor(9,0); lcd.print("P=");  
lcd.setCursor(11,0);  
lcd.print(ptracker);  
lcd.setCursor(15,0);  
lcd.print("W");
```

```
}
```

```
else if(counter == 6){
```

```
lcd.clear();
```

```
//parameter
```

```
lcd.setCursor(0,0);  
lcd.print("STATIS");
```

```
//Volt Statis
```

```
lcd.setCursor(0,1); lcd.print("V=");  
lcd.setCursor(2,1);  
lcd.print(vstatis);
```

```
lcd.setCursor(7,1); lcd.print("V");
```

```

//Arus Statis
lcd.setCursor(9,1); lcd.print("I=");
lcd.setCursor(11,1);
lcd.print(istatis);
lcd.setCursor(15,1); lcd.print("A");

//Daya Statis
lcd.setCursor(9,0); lcd.print("P=");
lcd.setCursor(11,0);
lcd.print(pstatis);
lcd.setCursor(15,0);
lcd.print("W");
}

//Coordinate = @DTE FT-UH
GOWA Sulawesi Selatan Indonesia

//pitch 21 Juni - 20 Juli
if(month == 6 && day == 21 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.99);}
if(month == 7 && day == 6 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,22.69);}
if(month == 6 && day == 22 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.88);}
if(month == 7 && day == 7 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,22.59);}
if(month == 6 && day == 23 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.42);}
if(month == 7 && day == 8 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,22.48);}
if(month == 6 && day == 24 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.41);}
if(month == 7 && day == 9 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,22.36);}
if(month == 6 && day == 25 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.39);}
if(month == 7 && day == 10 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,22.24);}
if(month == 6 && day == 26 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.36);}
if(month == 7 && day == 11 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,22.11);}
if(month == 6 && day == 27 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.32);}
if(month == 7 && day == 12 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,21.97);}
if(month == 6 && day == 28 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.28);}
if(month == 7 && day == 13 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,21.83);}
if(month == 6 && day == 29 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.23);}
if(month == 7 && day == 14 && hour

```

```

== 8 && minute == 0)
{gerak_motor_pitch(pitch,21.68);}

    if(month == 6 && day == 30 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.17);}
if(month == 7 && day == 15 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,21.53);}

    if(month == 7 && day == 1 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.11);}
if(month == 7 && day == 16 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,21.37);}

    if(month == 7 && day == 2 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,23.04);}
if(month == 7 && day == 17 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,21.20);}

    if(month == 7 && day == 3 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,22.96);}
if(month == 7 && day == 18 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,21.03);}

    if(month == 7 && day == 4 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,22.88);}
if(month == 7 && day == 19 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,20.85);}

    if(month == 7 && day == 5 &&
hour == 8 && minute == 0)
{gerak_motor_pitch(pitch,22.79);}
if(month == 7 && day == 20 && hour
== 8 && minute == 0)
{gerak_motor_pitch(pitch,20.67);}

```

```

//
    if(month == 6 && day == 21 &&
hour == 8 && minute == 0)
{gerak_motor_roll(roll,64.93);}
if(month == 6 && day == 21 && hour
== 12 && minute == 30)
{gerak_motor_roll(roll,15.72);}

    if(month == 6 && day == 21 &&
hour == 8 && minute == 15)
{gerak_motor_roll(roll,64.23);}
if(month == 6 && day == 21 && hour
== 12 && minute == 45)
{gerak_motor_roll(roll,8.91);}

    if(month == 6 && day == 21 &&
hour == 8 && minute == 30)
{gerak_motor_roll(roll,63.43);}
if(month == 6 && day == 21 && hour
== 13 && minute == 0)
{gerak_motor_roll(roll,1.82);}

    if(month == 6 && day == 21 &&
hour == 8 && minute == 45)
{gerak_motor_roll(roll,62.05);}
if(month == 6 && day == 21 && hour
== 13 && minute == 15)
{gerak_motor_roll(roll,-5.34);}

    if(month == 6 && day == 21 &&
hour == 9 && minute == 0)
{gerak_motor_roll(roll,61.43);}
if(month == 6 && day == 21 && hour
== 13 && minute == 30)
{gerak_motor_roll(roll,-12.32);}

    if(month == 6 && day == 21 &&
hour == 9 && minute == 15)
{gerak_motor_roll(roll,60.21);}
if(month == 6 && day == 21 && hour
== 13 && minute == 45)
{gerak_motor_roll(roll,-18.92);}

```

```

    if(month == 6 && day == 21 &&
hour == 9 && minute == 30)
{gerak_motor_roll(roll,58.82);}
if(month == 6 && day == 21 && hour
== 14 && minute == 0)
{gerak_motor_roll(roll,-25.01);}

    if(month == 6 && day == 21 &&
hour == 9 && minute == 45)
{gerak_motor_roll(roll,57.24);}
if(month == 6 && day == 21 && hour
== 14 && minute == 15)
{gerak_motor_roll(roll,-30.52);}

    if(month == 6 && day == 21 &&
hour == 10 && minute == 0)
{gerak_motor_roll(roll,55.43);}
if(month == 6 && day == 21 && hour
== 14 && minute == 30)
{gerak_motor_roll(roll,-35.41);}

    if(month == 6 && day == 21 &&
hour == 10 && minute == 15)
{gerak_motor_roll(roll,53.37);}
if(month == 6 && day == 21 && hour
== 14 && minute == 45)
{gerak_motor_roll(roll,-39.73);}

    if(month == 6 && day == 21 &&
hour == 10 && minute == 30)
{gerak_motor_roll(roll,51.02);}
if(month == 6 && day == 21 && hour
== 15 && minute == 0)
{gerak_motor_roll(roll,-43.51);}

    if(month == 6 && day == 21 &&
hour == 10 && minute == 45)
{gerak_motor_roll(roll,48.33);}
if(month == 6 && day == 21 && hour
== 15 && minute == 15)
{gerak_motor_roll(roll,-46.81);}

    if(month == 6 && day == 21 &&
hour == 11 && minute == 0)
{gerak_motor_roll(roll,45.24);}

```

```

if(month == 6 && day == 21 && hour
== 15 && minute == 30)
{gerak_motor_roll(roll,-49.97);}

    if(month == 6 && day == 21 &&
hour == 11 && minute == 15)
{gerak_motor_roll(roll,41.71);}
if(month == 6 && day == 21 && hour
== 15 && minute == 45)
{gerak_motor_roll(roll,-52.22);}

    if(month == 6 && day == 21 &&
hour == 11 && minute == 30)
{gerak_motor_roll(roll,37.67);}
if(month == 6 && day == 21 && hour
== 16 && minute == 0)
{gerak_motor_roll(roll,-54.42);}

    if(month == 6 && day == 21 &&
hour == 11 && minute == 45)
{gerak_motor_roll(roll,33.07);}
if(month == 6 && day == 21 && hour
== 16 && minute == 15)
{gerak_motor_roll(roll,-56.35);}

    if(month == 6 && day == 21 &&
hour == 12 && minute == 0)
{gerak_motor_roll(roll,27.88);}
if(month == 6 && day == 21 && hour
== 16 && minute == 30)
{gerak_motor_roll(roll,-58.05);}

    if(month == 6 && day == 21 &&
hour == 12 && minute == 15)
{gerak_motor_roll(roll,22.08);}
if(month == 6 && day == 21 && hour
== 16 && minute == 45)
{gerak_motor_roll(roll,-59.53);}

    if ((millis() - timer) > 1000){
        timer = millis();
    }

```

```

myFile = SD.open("Coba.txt",
FILE_WRITE);
if (myFile) {
  //Serial.print("Writing to File....");
  //Date
myFile.print("Date & Time: ");
myFile.print(day);
myFile.print("/");
myFile.print(month);
myFile.print("\t");
  //Time
myFile.print(hour);
myFile.print(":");
myFile.print(minute);
myFile.print(":");
myFile.print(second);
  //PITCH
myFile.print("\t PITCH= ");
myFile.print(pitch);
  //ROLL
myFile.print("\t ROLL= ");
myFile.print(roll);
  //M.PITCH Consumption
myFile.print("\t M.PITCH
Consumption");
myFile.print("\t Volt= ");
myFile.print(vpitch);
myFile.print("\t Current= ");
myFile.print(ipitch);
myFile.print("\t Daya= ");
myFile.print(ppitch);
  //M.ROLL Consumption
myFile.print("\t M.ROLL
Consumption");
myFile.print("\t Volt= ");
myFile.print(vroll);
myFile.print("\t Current= ");
myFile.print(iroll);
myFile.print("\t Daya= ");
myFile.print(proll);
  //Source from panel tracker
myFile.print("\t Tracker Input");
myFile.print("\t Volt= ");
myFile.print(vtracker);
myFile.print("\t Current= ");
myFile.print(itracker);
myFile.print("\t Daya= ");
myFile.print(ptracker);
  //Source from panel statis
myFile.print("\t Statis Input");
myFile.print("\t Volt= ");
myFile.print(vstatis);
myFile.print("\t Current= ");
myFile.print(istatis);
myFile.print("\t Daya= ");

```

```

    myFile.println(pstatus);
    myFile.close();
    Serial.println("Done Writing");
}
else{
//Serial.println("error opening file");
}
}
delay(10);
}

void gerak_motor_pitch(float pitch,
float angle_pitch){
    float tolerance = 0.50;
    while(pitch > angle_pitch - tolerance
&& pitch > angle_pitch + tolerance){
        //Serial.println("P NYALA
ULUR");
        digitalWrite(in_3, HIGH);
        digitalWrite(in_4, LOW);
        analogWrite(enb_b, 200);
        break;
    }
    while(pitch < angle_pitch - tolerance
&& pitch < angle_pitch + tolerance){
        //Serial.println("P NYALA
TARIK");
        digitalWrite(in_3, LOW);
        digitalWrite(in_4, HIGH);
        analogWrite(enb_b, 200);
        break;
    }
    while(pitch >= angle_pitch -
tolerance && pitch <= angle_pitch +
tolerance){
        //Serial.println("PITCH MATI");
        digitalWrite(in_3, LOW);
        digitalWrite(in_4, LOW);
        break;
    }
}

void gerak_motor_roll(float roll, float
angle_roll){
    float tolerance = 0.50;
    while(roll > angle_roll - tolerance
&& roll > angle_roll + tolerance){
        //Serial.println("/t");
        //Serial.println("R NYALA
TARIK");
        digitalWrite(in_1, HIGH);
        digitalWrite(in_2, LOW);
        analogWrite(enb_a, 200);
        break;
    }
    while(roll < angle_roll - tolerance
&& roll < angle_roll + tolerance){
        //Serial.println("/t");

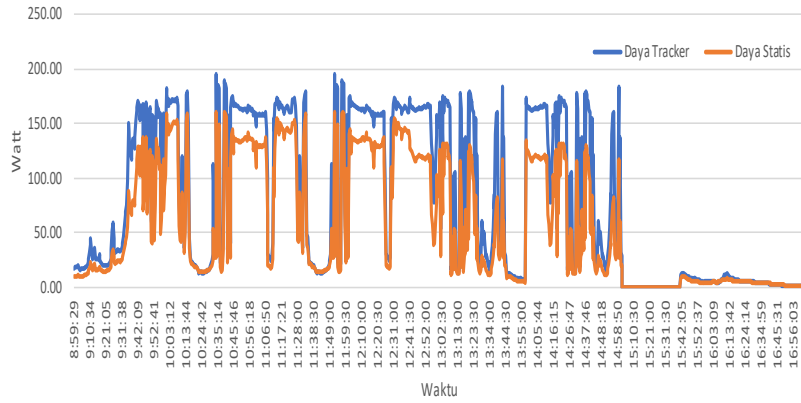
```

```
//Serial.println("R NYALA  
ULUR");  
  
digitalWrite(in_1, LOW);  
digitalWrite(in_2, HIGH);  
analogWrite(enb_a, 200);  
break;  
}  
  
while(roll > angle_roll - tolerance  
&& roll < angle_roll + tolerance){  
  //Serial.println("/t");  
  //Serial.println("ROLL MATI");  
  digitalWrite(in_1, LOW);  
  digitalWrite(in_2, LOW);
```

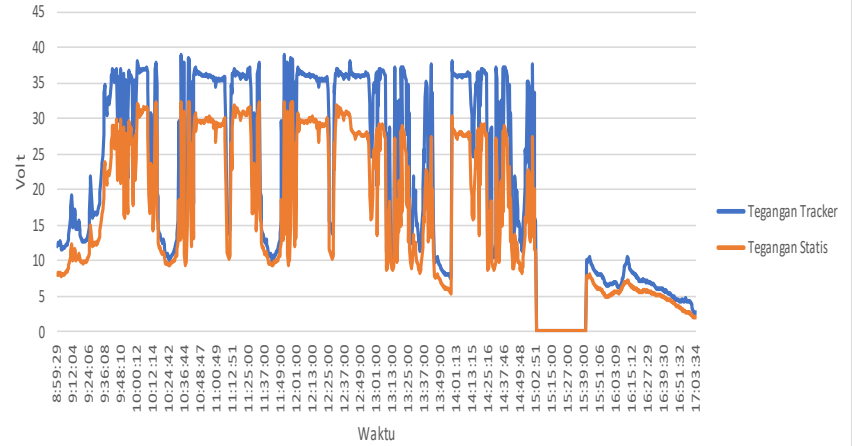


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
8:59:29	23	-26.4	11.9	0	0	0	11.9	0	0	0.00	12.13	1.41	17.10	0.14	8.04	1.24	9.97	0.08
9:15:05	19.7	-26.8	11.9	0.5	5.95	0.10	11.9	0	0	0.06	14.49	1.78	25.79	6.06	10.25	1.61	16.50	3.56
9:30:07	20.3	-26.6	11.9	0.5	5.95	0.15	11.9	0	0	0.06	16.42	2.01	33.00	13.26	12.32	1.93	23.78	8.52
9:45:10	23.2	-26	11.9	0.5	5.95	0.20	11.9	0	0	0.06	36.87	4.56	168.13	42.41	29.92	4.59	137.33	27.58
10:00:12	23.5	-26	11.9	0.5	5.95	0.25	11.9	0.6	7.14	0.12	33.69	4.26	143.52	75.36	25.66	3.97	101.87	51.28
10:15:15	24.9	-25.7	11.9	0.5	5.95	0.30	11.9	0	0	0.12	34.62	4.38	151.64	110.02	26.75	4.12	110.21	80.60
10:30:43	20.2	-26.6	11.9	0	0	0.36	11.9	0	0	0.12	13.02	1.62	21.09	114.85	10.81	1.7	18.38	85.19
10:45:46	21.6	-26.2	11.9	0	0	0.41	11.9	0	0	0.12	36.73	4.61	169.33	140.61	29.87	4.59	137.10	104.96
11:00:49	23.8	-25.9	11.9	0	0	0.46	11.9	0	0	0.18	35.6	4.45	158.42	181.31	29.45	4.51	132.82	138.43
11:15:51	24.1	-25.7	11.9	0	0	0.51	11.9	0	0	0.18	36.59	4.62	169.05	213.24	31.28	4.79	149.83	164.27
11:31:00	21.9	-9.57	11.9	0	0	0.56	11.9	0	0	0.18	17	2.14	36.38	247.74	14.37	2.24	32.19	194.11
11:46:00	22	-9.55	11.9	0	0	0.60	11.9	0	0	0.18	11.09	1.38	15.30	258.01	9.93	1.56	15.49	203.07
12:01:00	22.2	-9.47	11.9	0	0	0.65	11.9	0	0	0.23	17.95	2.25	40.39	277.47	13.12	2.06	27.03	218.01
12:16:00	22.2	-9.37	11.9	0	0	0.70	11.9	0	0	0.23	35.81	4.49	160.79	318.71	29.55	4.54	134.16	251.75
12:31:00	21.9	-11.1	11.9	0	0	0.76	11.9	0	0	0.23	36.33	4.63	168.21	350.09	30.85	4.73	145.92	276.59
12:46:00	22.2	-9.04	11.9	0	0	0.80	11.9	0	0	0.23	35.93	4.52	162.40	391.35	27.68	4.29	118.75	311.00
13:01:00	22.5	-8.8	11.9	0	0	0.85	11.9	0	0	0.28	36.3	4.61	167.34	428.77	27.7	4.3	119.11	336.28
13:16:00	22.7	-8.95	11.9	0	0	0.90	11.9	0	0	0.28	14.33	1.79	25.65	454.24	10.95	1.71	18.72	353.65
13:31:00	23.1	-8.65	11.9	0	0	0.94	11.9	0	0	0.28	17.11	2.19	37.47	476.92	11.11	1.77	19.66	367.09
13:46:00	23.4	-8.75	11.9	0	0	0.99	11.9	0	0	0.28	10.07	1.22	12.29	491.97	7.66	1.23	9.42	375.30
14:01:13	23.3	24.56	11.9	0	0	1.04	11.9	0	0	0.33	35.97	4.53	162.94	503.46	27.74	4.28	118.73	383.91
14:16:15	24.8	29.68	11.9	0	0	1.09	11.9	0	0	0.33	35.02	4.48	156.89	541.07	25.7	4	102.80	409.65
14:31:45	21.2	29.8	11.9	0	0	1.14	11.9	0	0	0.33	12.29	1.53	18.80	567.34	9.88	1.57	15.51	427.65
14:46:48	22	30.09	11.9	0	0	1.18	11.9	0	0	0.33	19.47	2.49	48.48	592.01	12.35	1.96	24.21	442.37
15:02:51	21.9	29.35	11.9	0	0	1.23	11.9	0	0	0.33	15.52	1.85	28.71	607.83	11.44	1.73	19.79	450.89
15:18:00	0	0	0	0	0	1.23	0	0	0	0.33	0	0	0.00	607.83	0	0	0.00	450.89
15:33:00	0	0	0	0	0	1.23	0	0	0	0.33	0	0	0.00	607.83	0	0	0.00	450.89
15:53:37	22.6	30.07	11.9	0	0	1.29	11.9	0	0	0.33	7.7	0.92	7.08	609.85	5.64	0.91	5.13	452.44
16:19:13	22.6	30.12	11.9	0	0	1.39	11.9	0	0	0.33	7.78	0.89	6.92	612.81	5.93	0.95	5.63	454.84
16:37:30	22.2	29.95	11.9	0	0	1.44	11.9	0	0	0.33	6.09	0.65	3.96	614.35	5.07	0.82	4.16	456.31
16:38:00	22.1	30.05	11.9	0	0	1.44	11.9	0	0	0.33	6.11	0.65	3.97	614.39	5.06	0.82	4.15	456.34

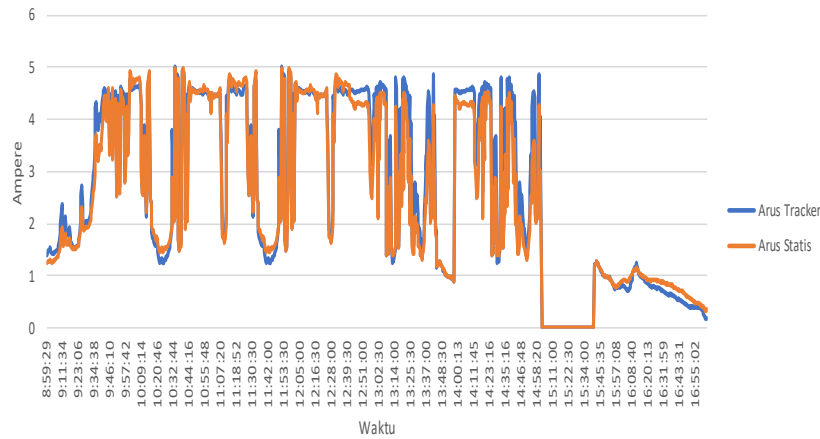
DAYA PV Tracker Vs PV Statis



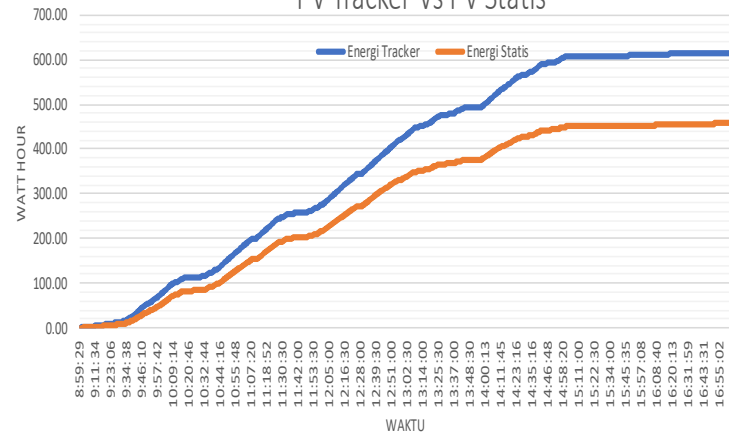
TEGANGAN  
PV Tracker Vs PV Statis



ARUS  
PV Tracker Vs PV Statis

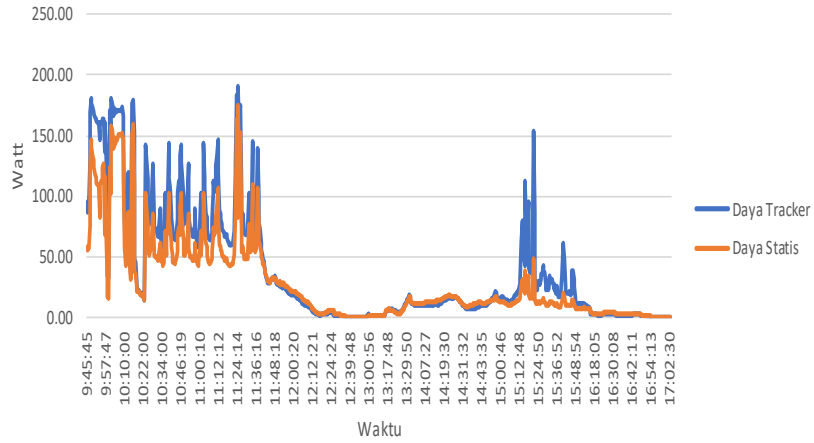


ENERGI  
PV Tracker Vs PV Statis

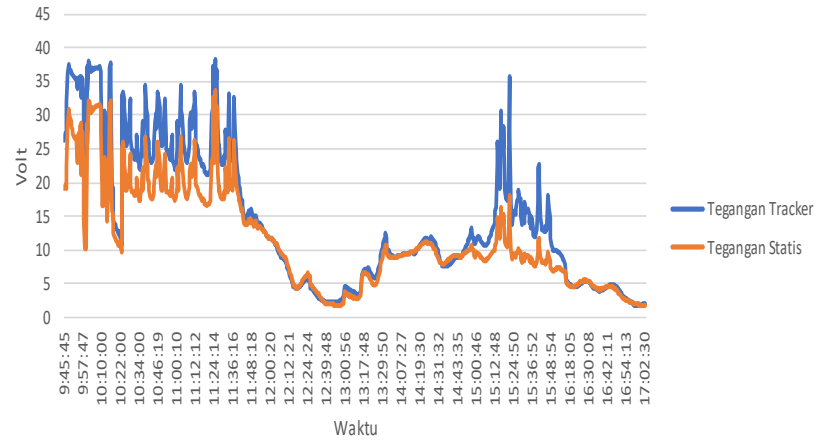


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
9:45:45	21.8	-26.6	11.9	0.6	7.14	0.06	11.9	0.5	5.95	0.05	26.37	3.28	86.49	0.72	19.26	2.87	55.28	0.46
10:01:30	23.3	-25.9	11.9	0	0	0.11	11.9	0	0	0.10	38.01	4.77	181.31	37.34	32.09	4.94	158.52	25.92
10:17:00	24.9	-25.6	11.9	0	0	0.11	11.9	0	0	0.15	19.02	2.4	45.65	71.27	15.23	2.38	36.25	54.53
10:32:30	21	-26	11.9	0	0	0.11	11.9	0	0	0.20	27.12	3.29	89.22	88.65	20.64	2.99	61.71	66.85
10:50:07	23.6	-25.8	11.9	0	0	0.11	11.9	0	0	0.26	25.41	3.05	77.50	111.83	18.87	2.73	51.52	83.03
11:05:41	19.5	-26.1	11.9	0	0	0.17	11.9	0	0	0.31	23.23	2.8	65.04	133.39	17.87	2.6	46.46	98.10
11:21:13	19.4	-26.2	11.9	0	0	0.17	11.9	0	0	0.36	21.56	2.85	61.45	154.57	16.95	2.64	44.75	112.80
11:36:46	18.8	-26.3	11.9	0	0	0.17	11.9	0	0	0.41	26.2	3.44	90.13	180.29	20.97	3.26	68.36	132.39
11:52:19	16.7	-26.5	11.9	0	0	0.17	11.9	0	0	0.46	14.14	1.88	26.58	191.34	13.39	2.08	27.85	142.68
12:07:51	14.9	-26.9	11.9	0	0	0.22	11.9	0	0	0.51	8.89	1.2	10.67	196.10	9.37	1.47	13.77	148.22
12:23:24	12.6	-23.1	11.9	0	0	0.22	11.9	0	0	0.56	5.55	0.75	4.16	197.36	6.12	0.96	5.88	149.90
12:42:19	22.3	-16.7	11.9	0	0	0.22	11.9	0	0	0.60	2.34	0.33	0.77	197.80	1.97	0.35	0.69	150.54
13:06:57	23.5	-2.63	11.9	0	0	0.27	11.9	0	0	0.70	3.71	0.45	1.67	198.15	2.97	0.5	1.49	150.83
13:27:20	23	4.27	11.9	0	0	0.27	11.9	0	0	0.70	7.01	0.87	6.10	199.35	5.94	0.92	5.46	151.95
14:08:27	23.5	24.32	11.9	0	0	0.32	11.9	0	0	0.80	9.32	1.13	10.53	202.31	9.3	1.37	12.74	155.13
14:24:01	22.7	29.26	11.9	0	0	0.32	11.9	0	0	0.85	11.66	1.42	16.56	205.60	11.12	1.63	18.13	159.04
14:39:34	22.4	29.01	11.9	0	0	0.32	11.9	0	0	0.90	8.06	0.98	7.90	208.50	8.91	1.32	11.76	162.36
15:00:16	23.3	29.7	11.9	0.5	5.95	0.37	11.9	0	0	0.90	10.92	1.43	15.62	211.82	9.02	1.41	12.72	165.82
15:15:48	24.4	29.77	11.9	0	0	0.37	11.9	0	0	0.90	20.91	2.48	51.86	217.87	12.49	1.84	22.98	169.57
15:31:21	26.3	30.54	11.9	0	0	0.37	11.9	0	0	0.90	14.72	1.76	25.91	230.25	8.51	1.28	10.89	174.40
15:46:54	28.1	30.87	11.9	0	0	0.37	11.9	0	0	0.90	17.81	2.15	38.29	237.33	9.61	1.45	13.93	177.42
16:19:35	22.7	29.57	11.9	0	0	0.37	11.9	0	0	0.90	4.67	0.55	2.57	240.17	4.57	0.71	3.24	179.23
16:35:09	21.7	29.35	11.9	0	0	0.37	11.9	0	0	0.90	4.26	0.5	2.13	240.90	4.42	0.69	3.05	180.23
16:50:43	21.5	29.31	11.9	0	0	0.37	11.9	0	0	0.90	3.83	0.44	1.69	241.48	3.38	0.53	1.79	180.98
16:51:13	21.5	29.24	11.9	0	0	0.37	11.9	0	0	0.90	3.65	0.42	1.53	241.49	3.24	0.51	1.65	180.99
16:56:44	21.7	29.29	11.9	0	0	0.37	11.9	0	0	0.90	2.34	0.26	0.61	241.58	2.33	0.39	0.91	181.10
17:02:15	21.5	29.3	11.9	0	0	0.37	11.9	0	0	0.90	1.75	0.22	0.39	241.62	1.9	0.34	0.65	181.17
17:00:30	22.9	19.33	11.9	0	0	0.37	11.9	0	0	0.90	1.8	0.24	0.43	241.64	1.79	0.32	0.57	181.19
17:02:30	22.5	-17.8	11.9	0	0	0.37	11.9	0	0	0.90	1.98	0.27	0.53	241.65	1.71	0.32	0.55	181.21
17:03:00	22.3	-25.3	11.9	0	0	0.37	11.9	0	0	0.90	1.94	0.25	0.49	241.66	1.71	0.31	0.53	181.21
17:03:30	22.4	-25.3	11.9	0	0	0.37	11.9	0	0	0.90	1.91	0.25	0.48	241.66	1.67	0.31	0.52	181.22

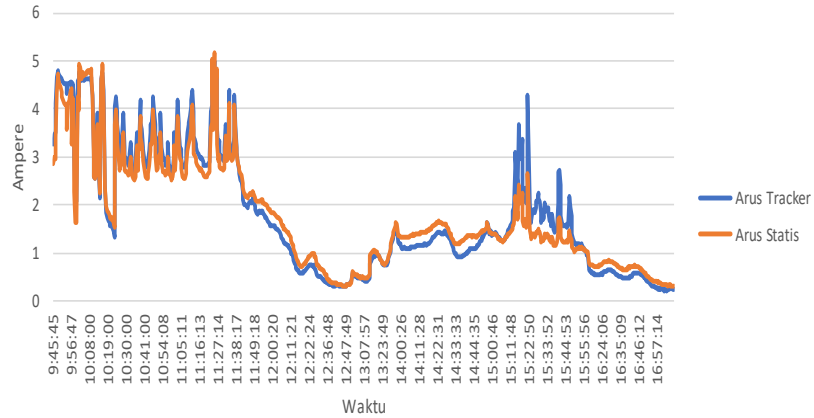
DAYA  
PV Tracker Vs PV Statis



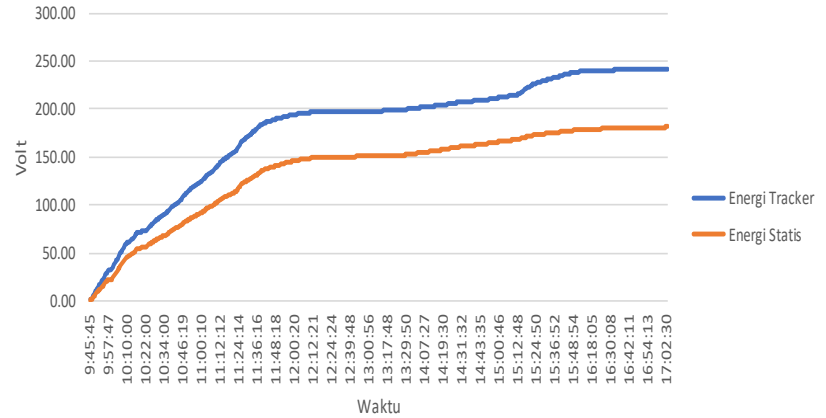
TEGANGAN  
PV Tracker Vs PV Statis



Arus  
PV Tracker Vs PV Statis

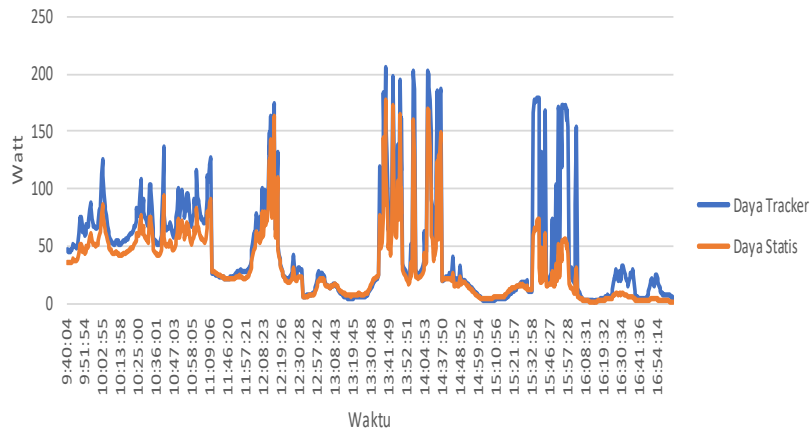


Energi  
PV Tracker Vs PV Statis

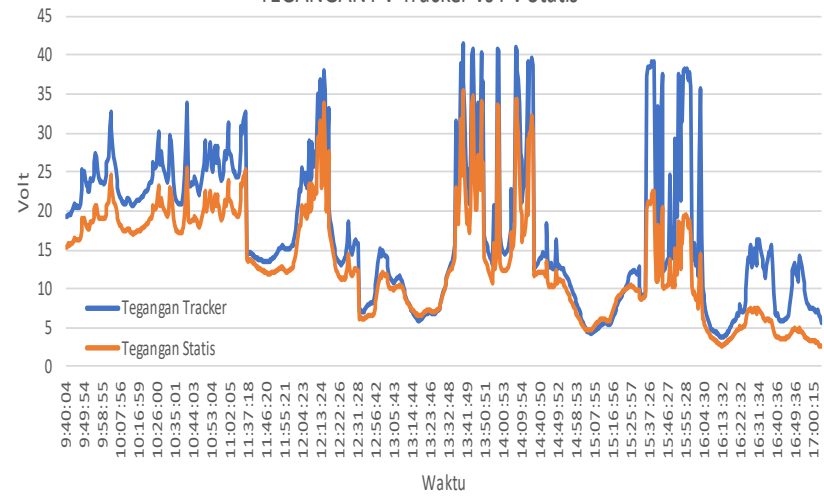


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
9:40:04	22.9	-26	11.9	0.15	1.785	0.01	11.9	0	0	0	19.23	2.4	46.16	0.38	15.32	2.27	34.8	0.29
9:53:55	22.9	-26	11.9	0	0	0.01	11.9	0	0	0.04	23.87	2.8	66.78	12.67	18.64	2.64	49.2	9.34
10:06:56	23.5	-25.9	11.9	0	0	0.01	11.9	0	0	0.09	22.28	2.63	58.55	29.82	18.48	2.64	48.75	22.11
10:19:59	23	-25.9	11.9	0	0	0.01	11.9	0	0	0.14	22.5	2.68	60.27	41.55	18.23	2.59	47.23	31.65
10:33:01	24.5	-25.6	11.9	0	0	0.01	11.9	0	0	0.19	28.91	3.41	98.63	58.59	22.5	3.2	72.11	44.53
10:46:03	25	-25.4	11.9	0	0	0.01	11.9	0	0	0.24	22.56	2.66	60	72.97	18.14	2.6	47.13	55.64
10:59:05	25.9	-25.2	11.9	0	0	0.01	11.9	0	0	0.24	25.7	3.04	78.11	90.04	20.08	2.88	57.94	68.45
11:38:18	22.1	-26	11.9	0	0	0.01	11.9	0	0	0.29	14.56	1.75	25.45	107.06	13.65	1.99	27.17	81.30
11:51:21	21.3	-26	11.9	0	0	0.01	11.9	0	0	0.34	14.53	1.75	25.5	112.06	12.35	1.81	22.35	86.23
12:04:23	20.7	-25.8	11.9	0	0	0.01	11.9	0	0	0.39	24.57	2.94	72.2	120.21	19.93	2.89	57.56	92.81
12:17:25	23.3	-23.1	11.9	0	0	0.01	11.9	0	0	0.44	20.62	2.46	50.78	141.41	17.97	2.6	46.67	110.63
12:30:28	22.7	-17.1	11.9	0	0	0.01	11.9	0.5	5.95	0.49	16.28	1.93	31.34	147.32	12.53	1.84	23.02	115.75
12:59:42	21.9	-9.71	11.9	0	0	0.01	11.9	0	0	0.49	14.43	1.75	25.22	150.32	11.83	1.74	20.56	118.13
13:12:43	22.3	-3.14	11.9	0	0	0.03	11.9	0	0	0.54	8.17	0.98	8.04	153.81	8.08	1.21	9.74	121.49
13:25:47	22	4.33	11.9	0	0	0.05	11.9	0	0	0.60	6.86	0.81	5.56	154.97	7.07	1.07	7.53	123.11
13:38:49	22.3	11.52	11.9	0	0	0.07	11.9	0	0	0.64	39.03	4.71	183.83	162.25	31.78	4.54	144.14	129.50
13:51:51	24.6	18.21	11.9	0	0	0.07	11.9	0	0	0.69	15.38	1.87	28.69	185.20	12.91	1.89	24.35	147.00
14:05:53	23.1	24.25	11.9	0	0	0.07	11.9	0	0	0.74	19.18	2.32	44.48	196.18	15.48	2.26	34.95	155.56
14:40:50	22.6	29.59	11.9	0	0	0.07	11.9	0	0	0.79	13.85	1.68	23.29	218.49	12.18	1.79	21.75	172.09
14:53:53	21.7	29.63	11.9	0	0	0.07	11.9	0	0	0.79	11.7	1.41	16.52	223.23	9.93	1.47	14.63	176.02
15:06:55	20.3	29.34	11.9	0	0	0.07	11.9	0	0	0.84	4.38	0.52	2.26	224.73	4.88	0.76	3.72	177.45
15:19:57	19.4	29.03	11.9	0	0	0.07	11.9	0	0	0.84	8.31	0.99	8.21	225.61	9.04	1.33	12.04	178.86
15:32:58	20.4	29.28	11.9	0	0	0.07	11.9	0	0	0.84	9.57	1.13	10.86	228.62	9.17	1.37	12.53	181.86
15:48:27	24.8	30.09	11.9	0	0	0.07	11.9	0	0	0.84	17.53	2.11	36.94	247.80	11.67	1.71	19.97	189.98
16:01:29	25.4	30.27	11.9	0	0	0.07	11.9	0	0	0.84	12.09	1.46	17.71	268.71	7.92	1.19	9.45	197.05
16:14:32	24.1	29.95	11.9	0	0	0.07	11.9	0	0	0.84	3.8	0.44	1.67	271.83	2.8	0.45	1.27	198.10
16:27:33	22.7	29.6	11.9	0	0	0.07	11.9	0	0	0.84	15.5	1.87	29	273.49	7.58	1.16	8.78	198.91
16:40:36	23.7	29.95	11.9	0	0	0.07	11.9	0	0	0.84	6.5	0.78	5.06	278.19	3.81	0.6	2.3	200.24
16:55:14	23.6	29.86	11.9	0	0	0.07	11.9	0	0	0.84	11.69	1.55	18.13	280.71	4.26	0.73	3.13	200.86
17:00:45	23.4	29.72	11.9	0	0	0.07	11.9	0	0	0.84	7.37	0.99	7.28	281.55	3.28	0.57	1.87	201.05
17:01:15	23.4	29.82	11.9	0	0	0.07	11.9	0	0	0.84	7.24	0.96	6.95	281.60	3.23	0.55	1.78	201.07

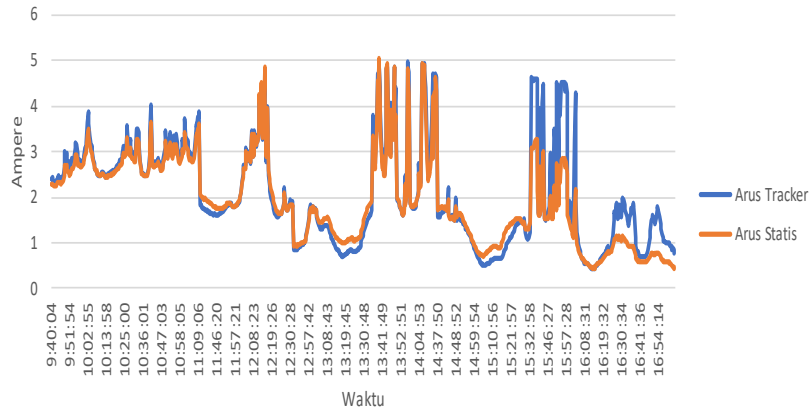
DAYA  
PV Tracker Vs PV Statis



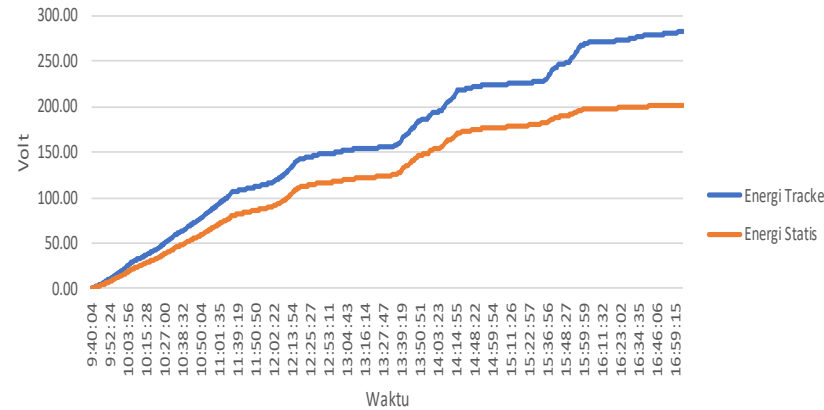
TEGANGAN PV Tracker Vs PV Statis



ARUS  
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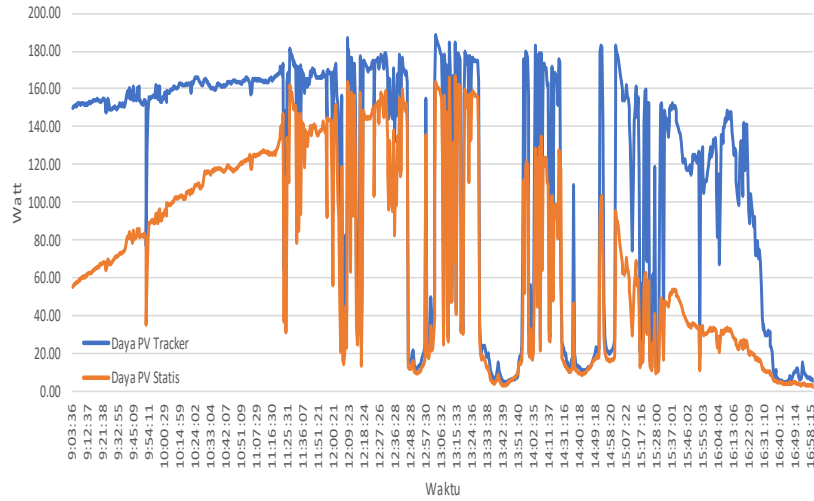


ENERGI  
PV Tracker Vs PV Statis

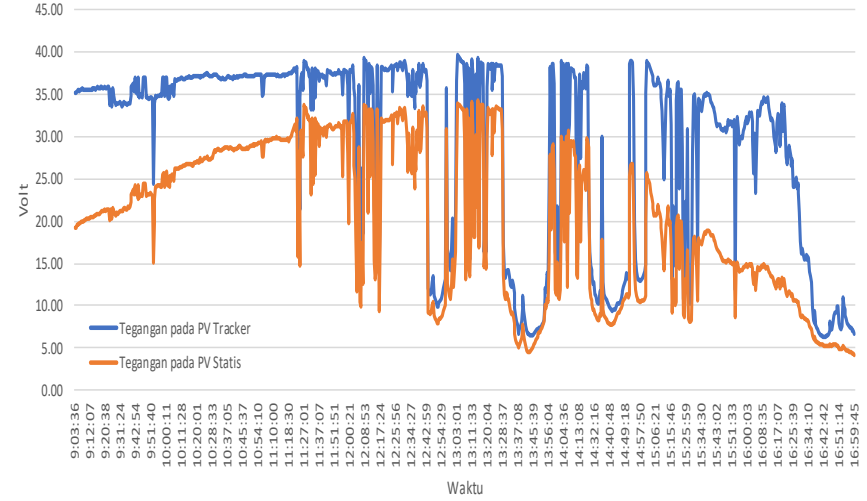


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
9:03:36	11.45	-23.95	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	35.13	4.26	149.68	1.25	19.19	2.88	55.17	0.46
9:18:37	26.65	11.31	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	35.90	4.30	154.33	39.35	21.13	3.13	66.15	15.73
9:36:58	27.16	-22.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.91	4.45	150.79	77.24	21.64	3.42	73.94	33.07
9:54:11	20.96	-18.60	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	34.82	4.47	155.73	115.20	24.10	3.69	88.85	52.94
10:11:58	23.38	-27.39	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.05	36.87	4.36	160.85	154.58	26.54	3.83	101.61	76.59
10:27:02	21.49	-26.33	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.10	37.23	4.39	163.29	195.27	27.32	3.95	107.88	102.91
10:42:07	23.63	-25.03	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.15	37.11	4.37	162.07	235.78	28.63	4.11	117.56	131.85
11:04:28	32.65	-30.27	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.21	35.10	4.51	158.33	276.67	27.73	4.26	118.07	161.80
11:19:30	32.34	-30.24	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.26	37.58	4.47	167.80	317.91	30.02	4.29	128.70	193.29
11:36:07	23.60	-32.94	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.31	37.63	4.47	168.08	357.41	31.51	4.47	140.92	224.78
11:57:21	23.11	-32.99	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.31	37.88	4.48	169.74	398.87	31.74	4.54	144.06	258.84
12:12:23	23.74	-29.42	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.36	38.29	4.52	172.98	432.00	33.20	4.71	156.41	284.93
12:27:26	22.00	-24.07	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.41	38.49	4.57	175.78	468.69	32.92	4.69	154.30	315.09
12:42:29	23.68	-16.82	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.46	37.76	4.43	167.41	509.54	32.46	4.57	148.22	347.83
13:00:30	23.18	-4.01	11.90	0.00	0.00	0.15	11.90	0.50	5.95	0.51	20.30	2.43	49.37	518.10	15.51	2.24	34.81	354.70
13:15:33	24.83	3.49	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.56	19.00	2.28	43.27	548.53	16.82	2.43	40.93	380.24
13:30:37	25.32	8.32	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.60	14.10	1.70	23.96	582.47	11.46	1.68	19.22	409.88
13:45:39	21.82	8.86	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.65	6.49	0.79	5.10	585.33	5.04	0.76	3.85	411.77
14:02:35	22.63	16.62	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.70	15.87	1.92	30.52	597.07	11.90	1.74	20.68	419.63
14:28:16	23.57	16.89	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.70	38.46	4.58	175.99	631.98	29.81	4.28	127.66	442.37
14:43:18	22.15	16.62	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.75	9.52	1.16	11.01	638.40	7.98	1.20	9.55	447.43
14:58:20	22.73	16.88	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.80	12.97	1.57	20.40	649.65	10.51	1.55	16.30	454.71
15:13:23	23.66	16.92	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.85	36.72	4.39	161.12	682.08	21.83	3.17	69.28	468.93
15:31:00	22.89	16.71	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.85	35.08	4.34	152.21	702.29	18.13	2.70	49.05	477.15
15:46:02	22.76	16.98	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.85	30.86	3.79	117.06	735.61	15.66	2.36	36.93	488.56
16:01:04	22.63	16.81	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.85	32.00	3.96	126.82	764.90	14.69	2.20	32.38	496.72
16:16:07	22.49	17.00	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.85	28.62	3.54	101.43	796.68	12.21	1.87	22.87	504.16
16:31:10	22.22	16.85	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.85	16.80	2.10	35.36	819.99	8.76	1.34	11.75	509.16
16:46:13	21.39	16.67	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.85	6.94	0.86	5.96	823.44	5.31	0.82	4.34	510.81
16:46:43	21.20	16.56	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.85	8.06	1.00	8.08	823.51	5.45	0.85	4.65	510.84
16:47:13	21.14	16.32	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.85	7.17	0.89	6.41	823.56	5.29	0.83	4.37	510.88

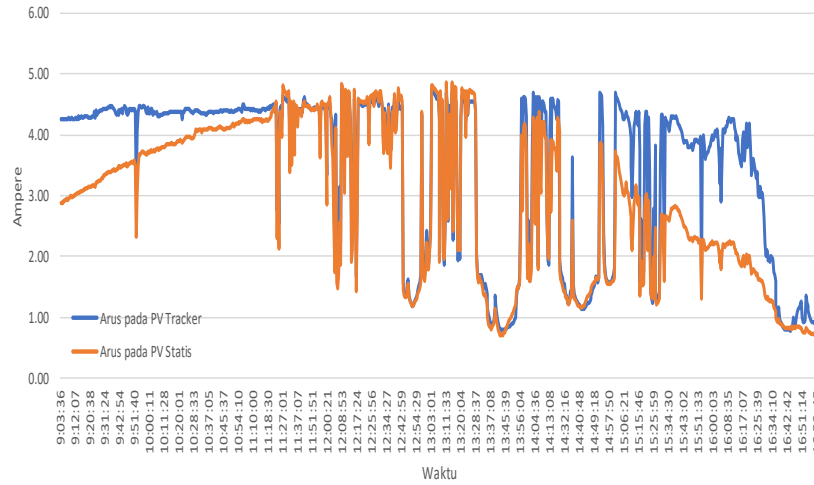
DAYA PV Tracker Vs PV Statis



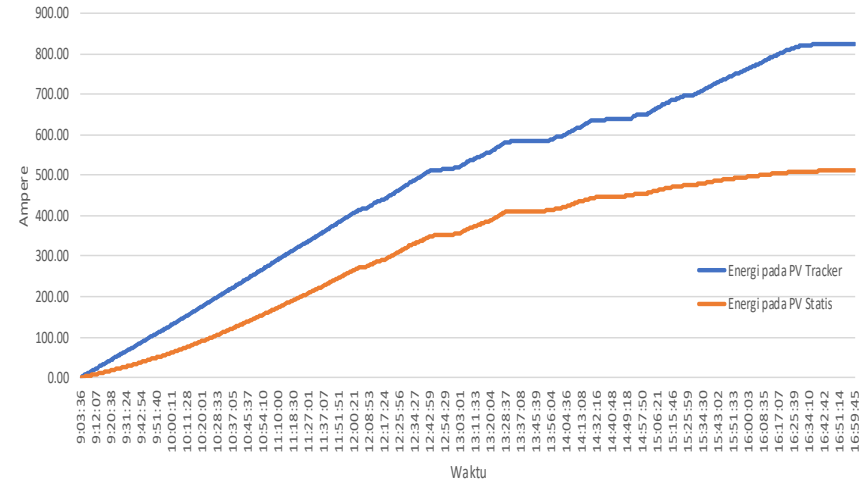
TEGANGAN PV Tracker Vs PV Statis



ARUS PV Tracker Vs PV Statis

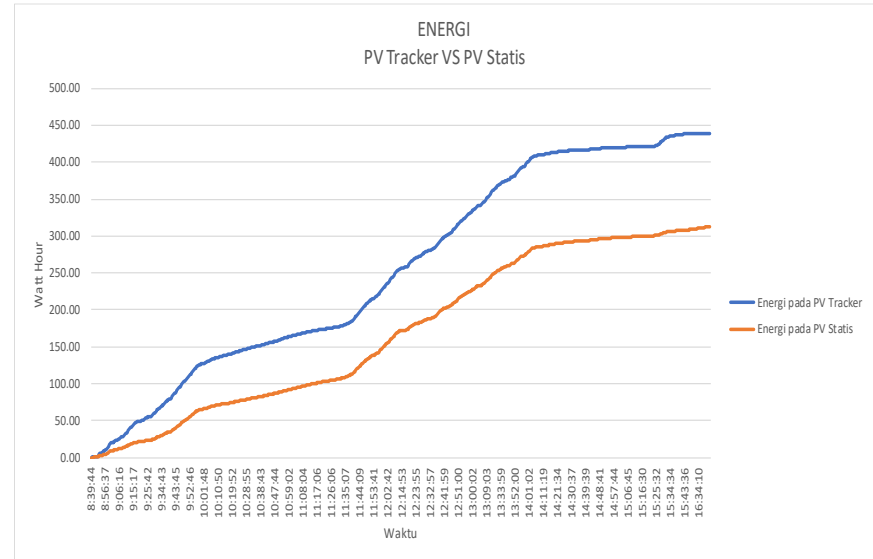
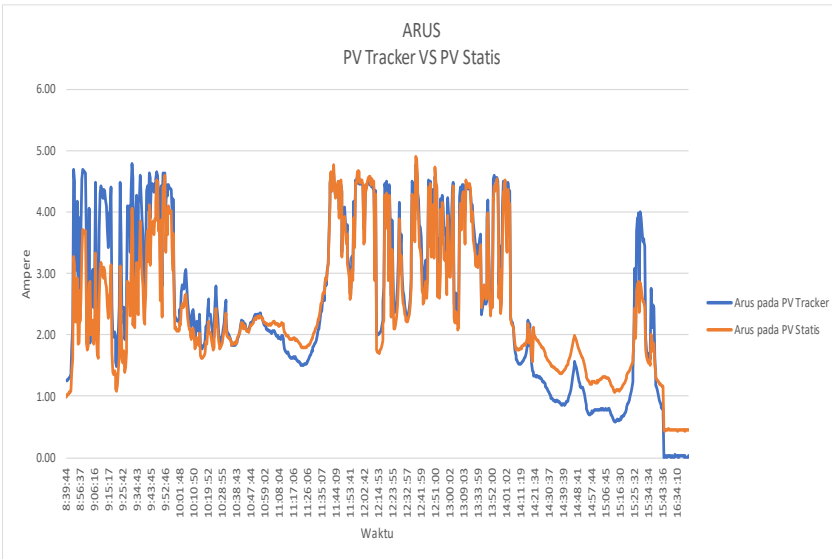
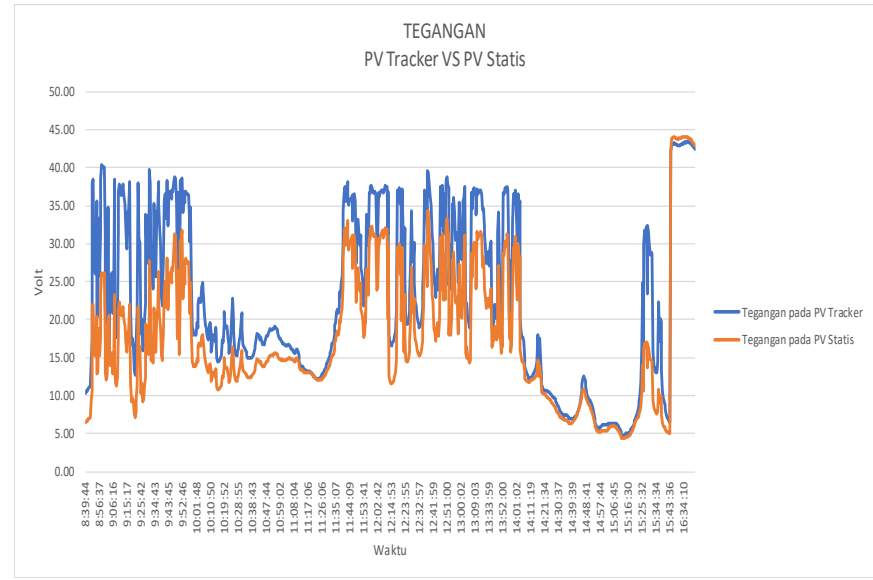
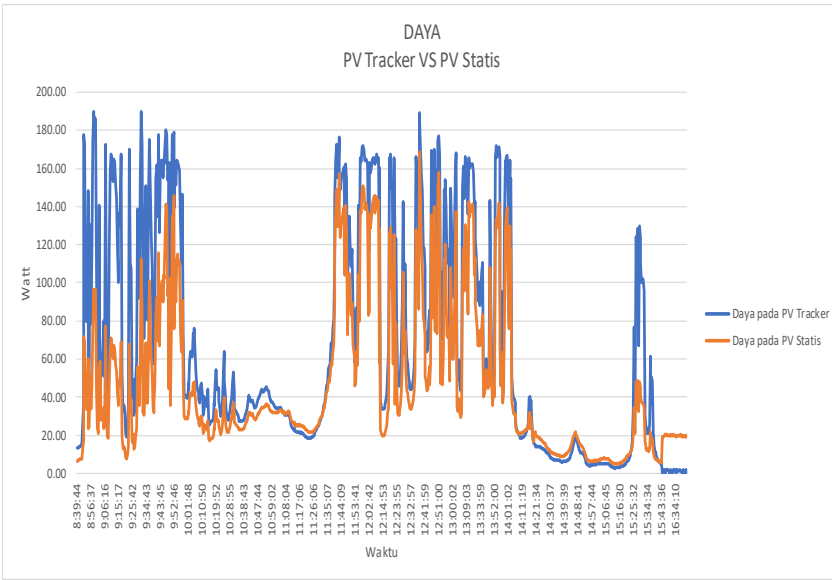


ENERGI PV Tracker Vs PV Statis



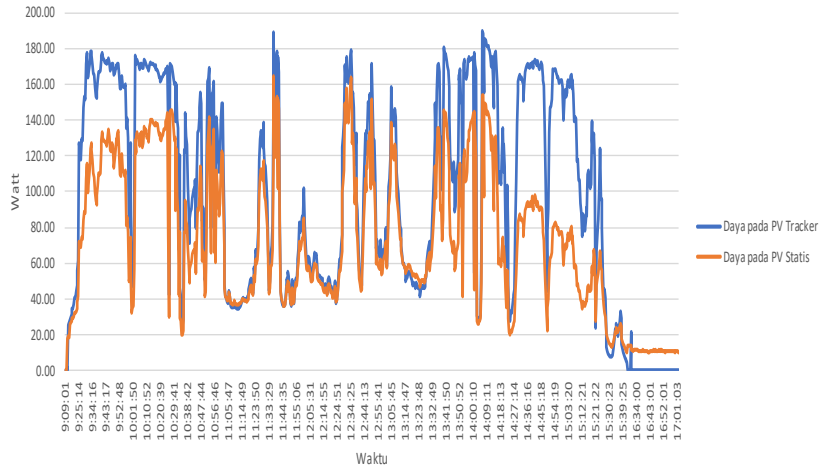


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
8:39:44	22.04	-22.00	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	10.39	1.25	13.04	0.11	6.52	0.99	6.49	0.05
9:01:45	22.85	-22.18	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.05	19.40	2.25	43.63	20.52	12.04	1.75	21.13	9.26
9:15:17	23.43	-22.06	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.05	34.13	3.98	135.84	44.32	18.31	2.63	48.10	19.39
9:30:13	23.14	-22.42	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.05	27.47	3.35	91.96	60.57	15.50	2.31	35.86	25.66
9:43:45	23.58	-22.25	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.05	36.59	4.41	161.51	89.13	25.41	3.74	95.01	40.38
9:57:17	25.93	-21.81	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.05	30.29	3.65	110.66	123.61	20.83	3.05	63.63	63.11
10:10:50	21.38	-22.66	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.10	18.29	2.25	41.19	135.96	13.37	2.00	26.76	71.32
10:24:24	20.87	-22.61	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.10	20.47	2.52	51.50	144.13	14.88	2.22	32.97	76.62
10:38:43	20.54	-22.66	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.10	15.13	1.87	28.22	151.95	12.71	1.88	23.89	82.51
10:54:31	20.67	-22.46	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.10	18.81	2.33	43.78	160.52	15.42	2.29	35.31	89.43
11:08:04	22.94	-22.03	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.15	15.67	1.94	30.33	168.71	14.56	2.14	31.12	96.83
11:21:36	22.78	-21.96	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.15	12.36	1.52	18.79	174.04	12.36	1.84	22.71	102.84
11:35:07	22.67	-21.99	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.15	19.55	2.39	46.79	180.00	17.13	2.52	43.13	109.03
11:48:39	24.08	-21.66	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.15	31.59	3.89	122.73	207.97	25.72	3.76	96.77	132.62
12:02:42	23.23	-21.79	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.20	31.15	3.79	118.01	236.51	24.17	3.52	85.00	155.51
12:19:24	23.58	-23.79	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.20	36.14	4.36	157.71	261.55	27.15	3.91	106.05	175.14
12:32:57	22.43	-17.10	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.20	19.03	2.31	44.01	281.00	15.22	2.21	33.57	188.46
12:46:29	23.34	-10.49	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.20	37.48	4.52	169.45	305.36	30.75	4.41	135.74	206.72
13:00:02	24.21	-9.98	11.90	0.50	5.95	0.25	11.90	0.50	5.95	0.25	28.06	3.36	94.24	334.27	20.38	2.95	60.10	227.54
13:29:28	23.75	5.45	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.25	36.57	4.32	158.00	362.68	31.09	4.39	136.46	249.16
13:52:00	23.10	10.73	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.25	20.36	2.54	51.63	381.77	16.42	2.44	40.08	264.01
14:06:49	23.15	10.95	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.30	17.22	2.13	36.73	408.98	14.29	2.13	30.37	284.72
14:21:34	23.17	10.86	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.30	10.70	1.33	14.22	414.07	10.19	1.97	20.08	289.85
14:35:08	22.50	10.55	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.30	7.42	0.94	6.95	416.48	6.78	1.44	9.78	293.05
14:48:41	22.10	10.50	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.30	11.32	1.40	15.88	418.67	9.90	1.86	18.45	295.98
15:02:15	22.91	9.12	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.35	6.24	0.77	4.82	420.20	5.45	1.24	6.74	298.09
15:16:30	25.83	9.89	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.35	5.01	0.63	3.16	421.12	4.63	1.11	5.14	299.54
15:30:03	25.39	9.77	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.35	31.71	3.90	123.52	429.97	16.35	2.78	45.43	303.99
15:43:36	26.02	10.00	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.35	6.54	0.80	5.25	438.14	5.08	1.16	5.90	307.60
16:38:41	28.93	10.33	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.35	43.32	0.03	1.44	438.42	43.78	0.46	19.98	311.96
16:41:42	29.21	10.35	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.35	42.38	0.04	1.71	438.45	42.85	0.46	19.57	312.93

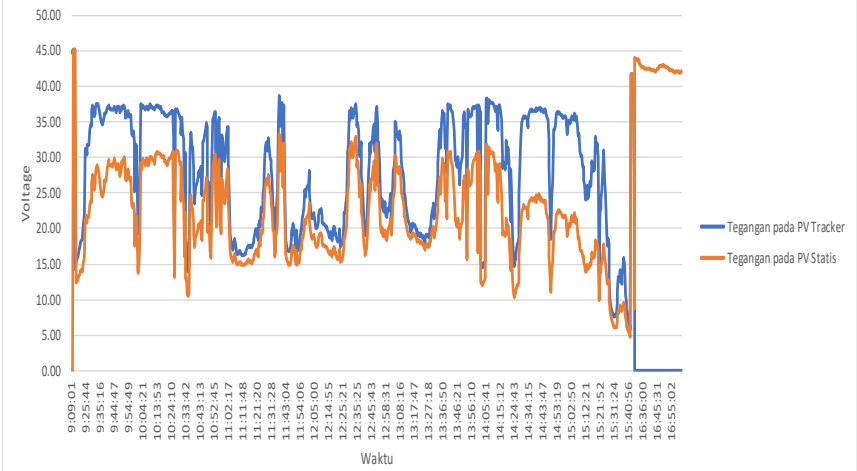


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
9:09:01	24.25	-42.26	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	44.84	0.00	0.00	0.00	0.01	0.40	0.01	0.00
9:30:15	25.14	-21.63	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	37.32	4.77	177.99	17.48	27.56	4.21	115.94	11.41
9:44:17	26.36	-21.50	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	36.79	4.69	172.41	56.94	29.22	4.47	130.59	38.43
9:58:50	26.49	-21.69	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	25.34	3.18	80.55	94.01	17.68	2.81	49.65	64.75
10:12:53	22.29	-22.25	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	37.18	4.63	172.02	128.61	30.50	4.54	138.53	90.54
10:27:41	21.77	-22.36	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	36.71	4.66	171.05	166.52	30.96	4.70	145.44	121.15
10:41:43	20.44	-22.32	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	27.31	3.55	96.86	191.73	20.12	3.23	64.92	139.11
10:55:45	20.11	-22.41	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	35.60	4.54	161.61	219.53	29.68	4.53	134.50	159.92
11:09:48	23.31	-21.80	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.00	16.92	2.18	36.94	237.82	15.36	2.53	38.90	175.52
11:23:50	20.87	-21.21	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.05	22.87	2.95	67.53	247.76	19.66	3.14	61.75	185.23
11:40:34	23.16	-14.52	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.10	37.68	4.73	178.10	273.32	32.05	4.78	153.38	206.98
11:56:06	23.27	-7.17	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.15	21.91	2.82	61.84	286.76	18.68	3.00	55.96	219.56
12:11:55	23.75	-0.83	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.20	20.58	2.58	53.12	302.38	17.68	2.83	50.09	233.67
12:26:51	23.83	7.49	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.25	22.18	2.80	62.01	313.51	18.77	3.00	56.24	244.29
12:42:13	23.68	14.57	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.30	19.17	2.46	47.23	342.83	16.36	2.75	44.93	269.45
12:59:31	23.91	21.32	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.35	21.64	2.82	61.12	367.53	18.44	2.93	54.02	290.49
13:13:47	24.21	27.59	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.40	21.36	2.78	59.42	390.85	19.29	3.07	59.19	311.45
13:27:48	22.97	31.52	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.45	19.00	2.48	47.04	402.37	17.58	2.82	49.65	323.90
13:41:50	22.96	31.63	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.49	37.31	4.74	176.94	429.84	30.77	4.68	143.90	345.95
13:56:10	23.55	31.69	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.53	35.98	4.60	165.40	462.16	26.64	4.16	110.76	367.44
14:10:11	22.26	31.92	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.58	37.63	4.82	181.28	494.13	30.57	4.69	143.47	392.61
14:24:13	22.24	31.79	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.58	15.44	2.01	30.99	524.14	10.81	1.97	21.24	412.12
14:38:16	21.90	31.88	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.58	36.64	4.68	171.31	553.72	24.29	3.87	93.89	427.92
14:52:19	22.94	32.39	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.58	34.41	4.41	151.76	588.41	20.02	3.30	66.01	445.46
15:06:21	23.35	32.50	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.58	35.77	4.53	162.02	625.96	21.52	3.50	75.37	463.02
15:20:22	22.91	32.46	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.58	32.04	4.12	132.13	651.32	17.89	3.76	67.29	473.98
15:34:24	22.87	32.50	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.58	13.24	1.73	22.87	661.87	8.50	2.55	21.67	481.81
16:34:00	22.06	32.32	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.58	0.02	0.00	0.00	664.30	43.24	0.26	11.27	485.48
16:48:01	22.26	32.33	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.58	0.03	0.00	0.00	664.30	42.92	0.26	11.07	488.02
16:58:02	22.37	32.29	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.58	0.02	0.00	0.00	664.30	42.04	0.26	10.94	489.83
17:02:03	20.72	-1.81	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.58	0.05	0.00	0.00	664.30	42.03	0.24	10.10	490.54

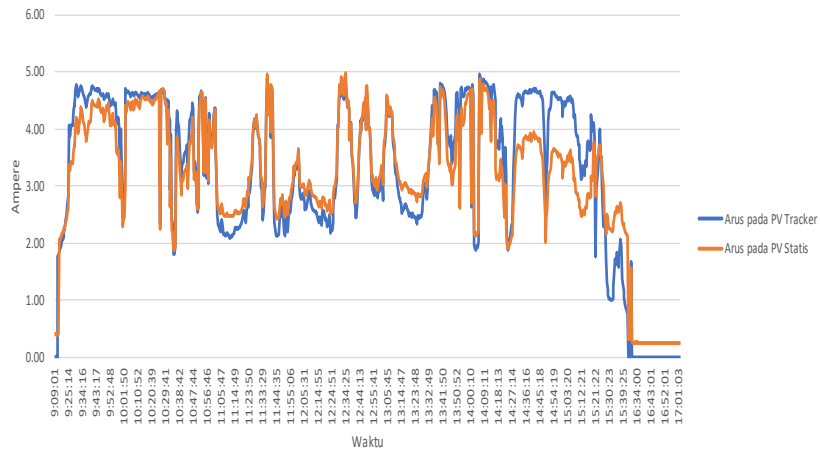
DAYA  
PV Tracker VS PV Statis



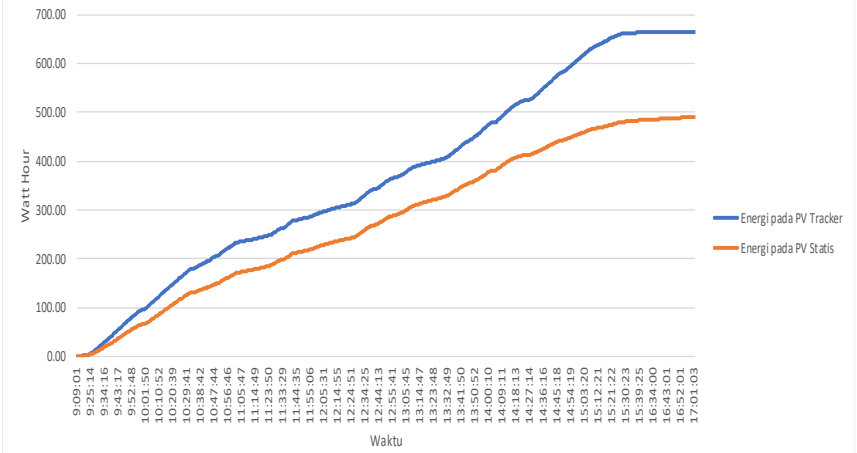
TEGANGAN  
PV Tracker VS PV Statis



ARUS  
PV Tracker VS PV Statis

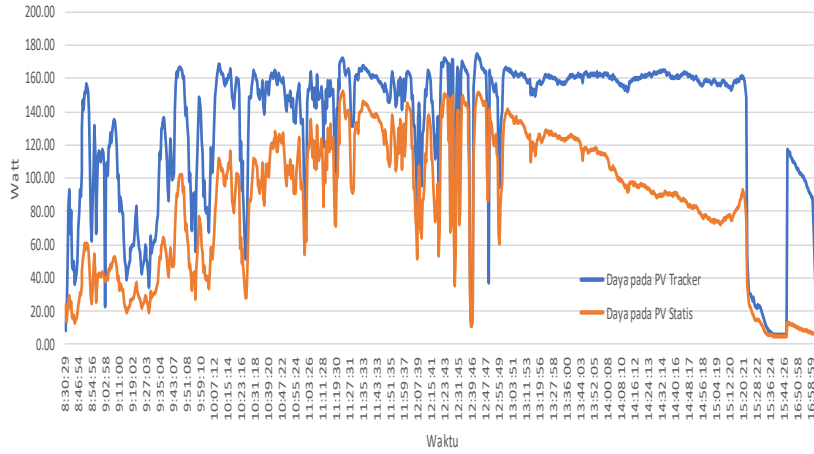


ENERGI  
PV Tracker VS PV Statis

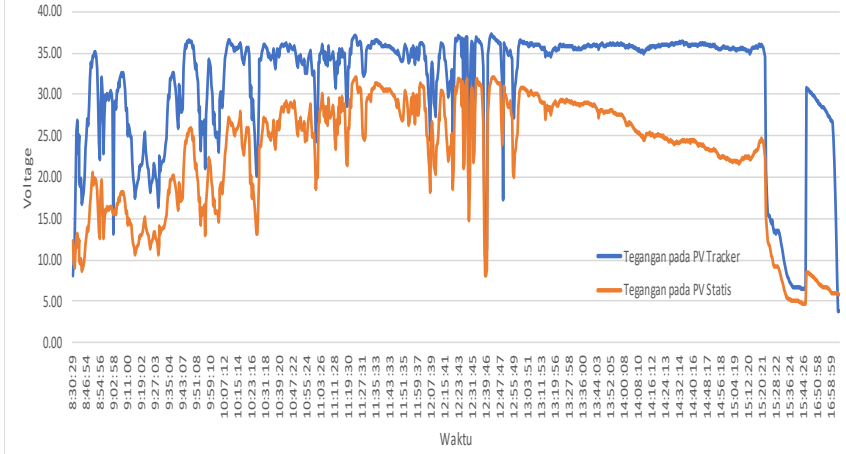


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
8:30:29	21.31	18.83	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	8.12	1.05	8.54	0.07	12.26	1.96	24.00	0.20
8:53:56	19.75	-22.57	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	24.11	3.07	74.01	22.18	13.32	2.13	28.32	8.33
9:09:00	21.46	-21.95	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	31.77	4.03	128.14	49.64	17.71	2.80	49.65	19.01
9:24:03	21.35	-22.02	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	18.11	2.33	42.22	66.10	11.42	1.89	21.53	26.30
9:39:06	22.06	-21.74	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	29.57	3.76	111.34	86.26	18.11	2.85	51.67	35.98
9:54:09	23.25	-21.62	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	26.58	3.40	90.35	118.77	16.30	2.58	42.09	53.10
10:09:13	22.36	-21.53	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.05	36.19	4.56	165.20	146.47	26.12	3.96	103.53	67.14
10:24:17	23.66	-21.32	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.10	27.05	3.44	92.95	183.87	17.59	2.78	48.96	90.36
10:39:20	22.96	-21.43	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.15	34.61	4.36	150.86	218.31	25.79	3.92	101.05	112.15
10:54:24	23.73	-21.07	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.20	32.56	4.11	133.91	256.89	24.38	3.72	90.77	140.57
11:09:28	22.89	-21.11	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.25	34.32	4.32	148.25	292.03	27.50	4.14	113.90	166.94
11:24:31	23.12	-21.25	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.30	36.06	4.55	164.00	329.34	30.77	4.54	139.78	196.62
11:39:33	23.72	-17.01	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.35	35.85	4.50	161.24	369.15	30.70	4.54	139.36	229.62
11:54:35	24.13	-10.54	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.40	33.82	4.25	143.62	408.12	26.34	3.98	104.81	261.55
12:09:39	23.52	-2.80	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.45	28.51	3.61	103.05	443.79	20.98	3.23	67.72	289.51
12:24:43	22.93	4.11	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.50	36.85	4.62	170.32	479.54	31.74	4.70	149.17	317.01
12:39:46	23.31	11.52	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.55	10.26	1.32	13.53	512.98	8.07	1.41	11.38	344.35
12:54:49	23.32	18.06	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.60	34.33	4.32	148.19	550.90	27.44	4.10	112.52	376.49
13:09:53	23.79	24.59	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.64	36.03	4.50	162.19	589.55	29.89	4.44	132.72	407.57
13:24:57	23.61	30.18	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	35.91	4.50	161.55	628.92	29.23	4.37	127.75	438.50
13:40:02	23.92	32.67	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.74	35.83	4.49	160.93	668.78	28.83	4.31	124.41	469.77
13:55:06	23.36	32.59	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.79	35.95	4.50	161.85	709.28	27.71	4.17	115.68	499.38
14:10:10	23.83	32.89	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.84	35.06	4.37	153.15	749.25	24.96	3.80	94.85	525.94
14:25:13	23.26	32.57	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.84	36.08	4.51	162.61	789.08	24.59	3.78	93.03	549.75
14:40:16	23.47	32.84	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.89	35.92	4.48	161.00	829.77	24.31	3.72	90.43	572.31
14:55:18	23.98	32.72	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.89	35.52	4.42	156.90	870.00	22.56	3.46	78.10	593.49
15:10:19	23.01	32.97	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	35.48	4.43	157.15	909.39	22.26	3.41	75.97	612.26
15:25:21	23.84	33.18	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	14.79	1.88	27.83	942.61	11.09	1.81	20.03	629.95
15:40:25	18.17	31.82	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	6.65	0.86	5.74	946.29	5.05	0.99	4.98	632.37
16:53:58	23.15	33.01	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	28.47	3.53	100.56	964.05	6.82	1.28	8.75	634.52
17:01:30	22.90	6.57	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	18.06	2.23	40.27	974.91	5.90	1.12	6.59	635.47

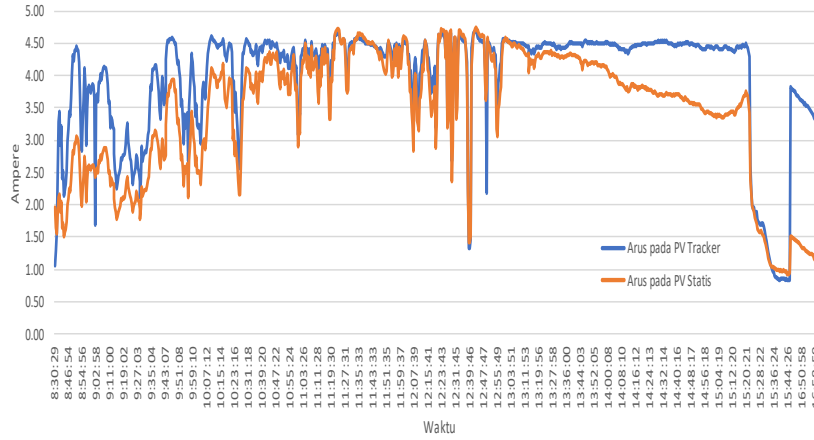
DAYA  
PV Tracker VS PV Statis



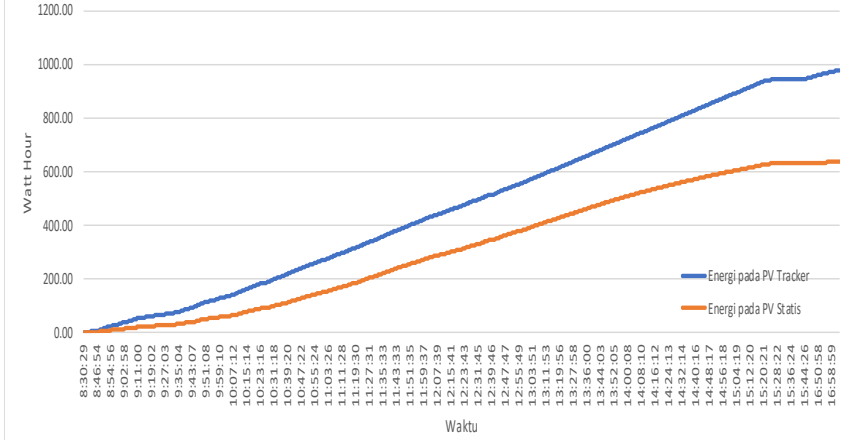
TEGANGAN  
PV Tracker VS PV Statis



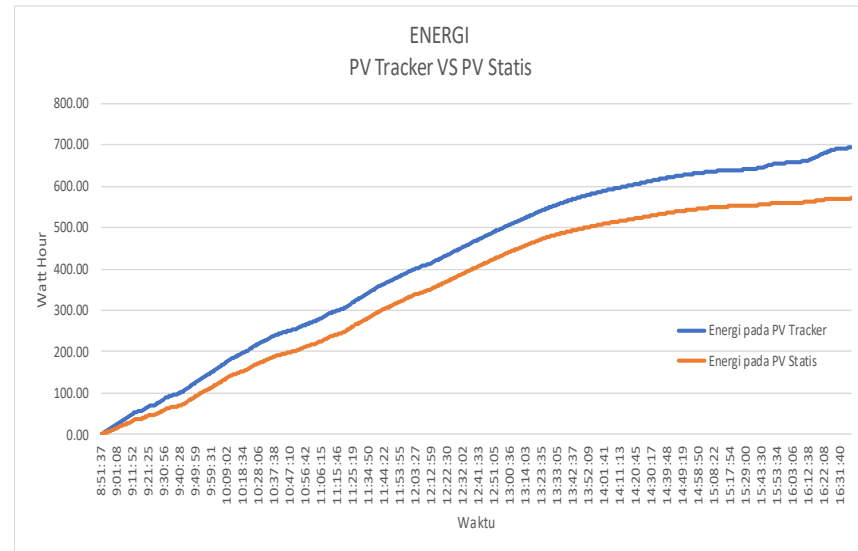
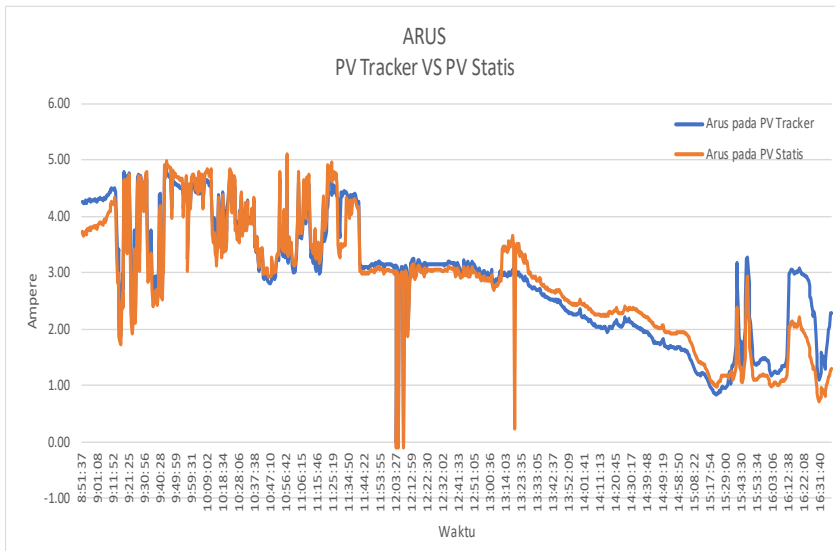
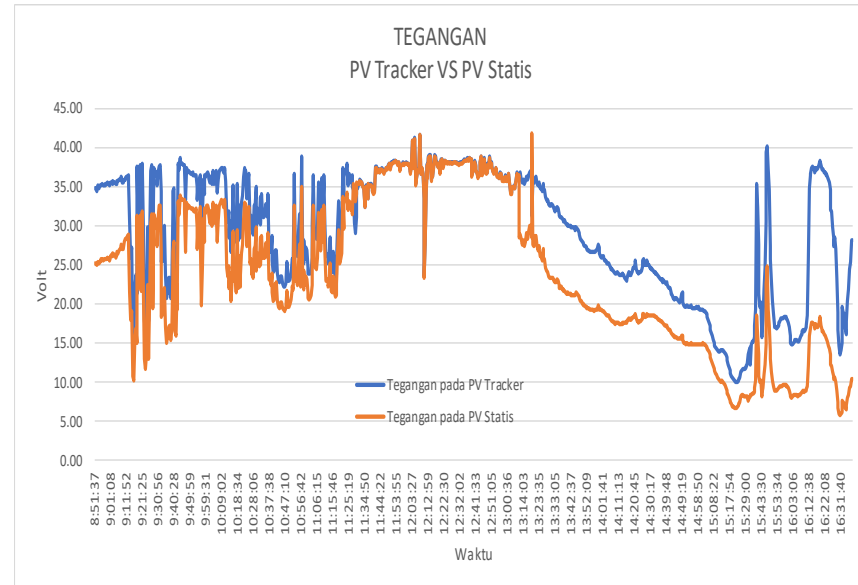
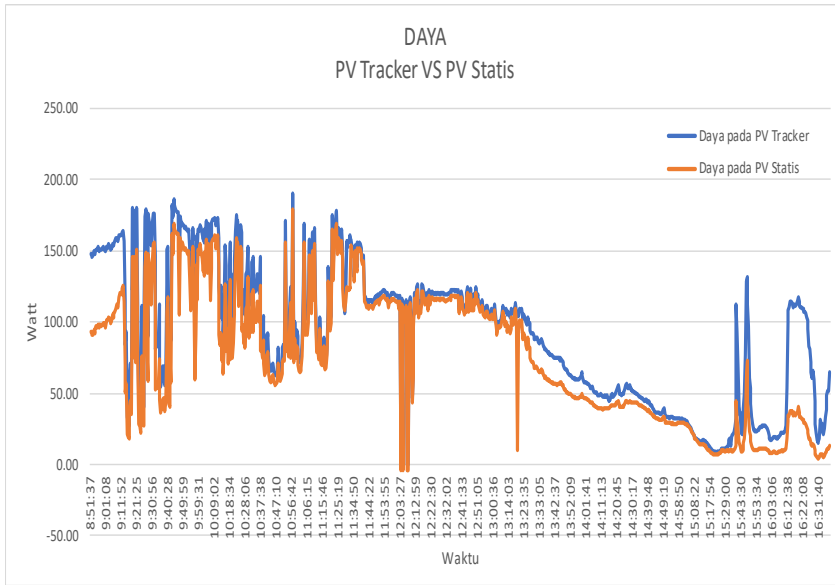
ARUS  
PV Tracker VS PV Statis



ENERGI  
PV Tracker VS PV Statis



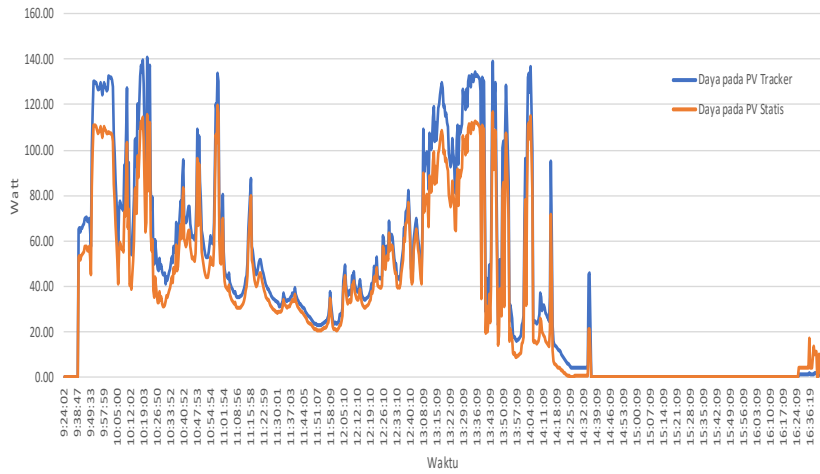
Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
8:51:37	20.40	-21.92	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	34.78	4.26	148.09	1.23	25.18	3.72	93.63	0.78
9:07:09	23.63	-21.44	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	36.16	4.39	158.70	40.43	27.28	4.01	109.34	26.37
9:23:55	18.18	-22.74	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	18.74	2.36	44.32	69.99	13.51	2.17	29.33	47.49
9:39:28	19.48	-22.57	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	31.67	3.99	126.25	98.66	23.64	3.60	85.06	68.87
9:55:00	21.33	-22.09	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	35.51	4.40	156.31	138.87	30.60	4.47	136.93	103.84
10:10:33	21.90	-21.88	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.05	37.03	4.58	169.64	180.01	32.76	4.75	155.71	140.29
10:26:05	21.35	-21.94	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.10	30.98	3.86	119.54	214.81	25.12	3.74	93.98	168.41
10:41:39	20.95	-21.81	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.15	26.60	3.37	89.74	244.60	22.59	3.41	77.00	193.07
10:57:12	20.17	-21.78	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.20	38.88	4.90	190.35	266.60	35.01	5.11	178.90	212.64
11:12:46	24.31	-21.19	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.25	26.30	3.32	87.40	294.61	23.20	3.48	80.67	237.99
11:28:19	26.28	-20.92	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.30	34.67	4.30	149.06	326.41	35.36	3.49	123.46	267.91
11:43:52	28.16	-17.03	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.35	37.23	3.11	115.90	362.80	37.13	3.01	111.76	301.88
11:59:26	29.75	-10.12	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.40	37.99	3.16	119.97	393.35	37.89	3.06	115.94	331.38
12:14:59	22.33	-3.56	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.45	35.91	2.98	107.02	418.18	35.81	2.88	103.13	355.19
12:30:32	23.08	8.07	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.55	38.04	3.15	119.84	449.06	37.94	3.05	115.72	385.01
12:46:04	21.47	9.95	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.60	36.89	3.05	112.48	479.61	36.79	2.95	108.53	414.51
13:01:36	13.13	11.51	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.64	36.72	3.05	112.15	508.58	36.62	2.95	108.03	442.45
13:21:04	24.29	11.28	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	36.12	3.01	108.86	535.85	28.68	3.52	100.87	467.23
13:36:36	23.02	11.15	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.74	31.08	2.60	80.93	560.03	22.03	2.77	61.07	486.78
13:52:09	21.67	17.77	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.79	27.27	2.30	62.79	578.86	19.69	2.49	49.08	501.17
14:07:42	24.39	24.31	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.84	24.47	2.07	50.62	593.84	17.85	2.28	40.67	513.01
14:23:15	22.27	29.54	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.84	24.02	2.06	49.35	606.48	17.85	2.28	40.61	523.49
14:38:48	21.50	30.18	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.89	22.98	1.96	45.05	619.41	17.42	2.23	38.83	534.42
14:54:20	20.81	30.12	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.89	19.72	1.69	33.23	629.04	14.88	1.93	28.71	542.84
15:09:53	23.74	29.09	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	14.57	1.23	17.97	636.47	11.23	1.52	17.08	549.64
15:27:00	27.99	29.68	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	11.59	0.95	10.99	639.78	8.34	1.18	9.85	552.36
15:48:03	24.08	31.34	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	40.19	3.28	131.81	649.50	24.77	2.93	72.68	556.79
16:03:36	24.57	31.53	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	15.09	1.21	18.22	657.86	8.31	1.01	8.44	560.20
16:19:08	24.97	31.69	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	37.73	3.03	114.32	673.31	17.49	2.10	36.81	565.50
16:34:40	25.73	31.87	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	16.82	1.36	22.93	691.33	6.79	0.85	5.74	570.26
16:39:38	23.88	31.59	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.89	28.14	2.28	64.22	694.65	10.36	1.29	13.32	570.99



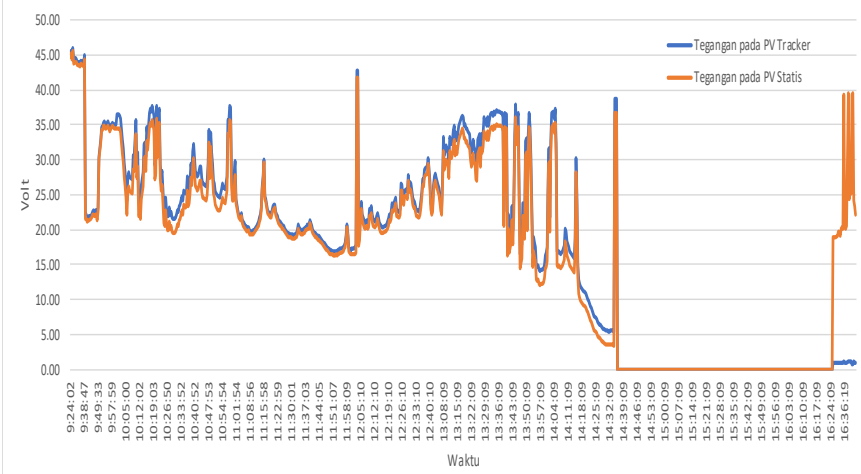


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
9:24:02	22.39	-21.77	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	45.66	0.00	0.00	0.00	45.16	0.00	0.00	0.00
9:48:24	22.15	-22.53	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	21.87	2.99	65.39	7.28	21.37	2.49	53.17	5.94
10:04:00	22.11	-22.61	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	29.66	2.93	86.90	34.54	27.66	2.43	67.15	28.71
10:17:33	21.51	-22.44	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.05	37.25	3.69	137.45	54.66	35.25	3.19	112.34	44.38
10:31:51	21.44	-22.43	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.10	22.73	1.93	43.87	71.73	20.73	1.73	35.88	57.53
10:45:23	20.95	-22.50	11.90	0.00	0.00	0.05	11.90	0.50	5.95	0.15	26.54	2.34	62.10	86.16	24.54	2.14	52.58	69.77
10:58:54	21.00	-22.37	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.15	37.44	3.48	130.29	103.15	35.44	3.28	116.33	84.40
11:12:27	21.53	-22.40	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.20	20.62	1.88	38.77	113.33	20.12	1.68	33.71	93.24
11:25:59	21.13	-22.31	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.25	20.45	1.84	37.63	124.42	19.95	1.64	32.81	103.07
11:39:33	20.92	-17.47	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.30	21.39	1.84	39.36	132.17	20.89	1.74	36.38	110.06
11:53:07	21.13	-10.52	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.35	16.89	1.36	22.97	138.37	16.39	1.26	20.60	115.69
12:06:40	22.61	-3.23	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.40	21.34	1.77	37.77	144.81	20.44	1.67	34.05	121.46
12:20:10	22.52	-3.34	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.45	22.01	1.85	40.72	153.42	21.11	1.75	36.91	129.24
12:33:40	23.07	-3.14	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.50	22.76	1.91	43.47	165.12	21.86	1.81	39.50	139.98
13:08:09	25.29	-3.06	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.55	33.22	3.28	108.96	178.91	31.22	2.88	89.96	152.63
13:21:39	24.19	-3.18	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.55	31.99	3.08	98.53	203.63	29.99	2.68	80.26	173.04
13:35:09	23.59	-3.30	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.60	37.04	3.62	134.08	229.26	35.04	3.22	112.91	194.29
13:48:39	25.01	-2.98	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.64	23.65	2.13	50.37	248.61	21.65	1.73	37.42	209.98
14:02:09	25.08	-2.83	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	21.80	1.99	43.38	259.21	19.80	1.59	31.40	217.97
14:15:39	24.46	-2.68	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.74	25.29	2.60	65.75	271.04	23.29	2.00	46.50	226.76
14:29:09	23.56	-3.03	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.74	5.89	0.73	4.30	272.98	3.89	0.13	0.51	227.33
14:42:39	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.79	0.00	0.00	0.00	274.13	0.00	0.00	0.00	227.73
14:56:09	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.79	0.00	0.00	0.00	274.13	0.00	0.00	0.00	227.73
15:09:39	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.79	0.00	0.00	0.00	274.13	0.00	0.00	0.00	227.73
15:23:09	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.79	0.00	0.00	0.00	274.13	0.00	0.00	0.00	227.73
15:36:39	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.79	0.00	0.00	0.00	274.13	0.00	0.00	0.00	227.73
15:50:09	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.79	0.00	0.00	0.00	274.13	0.00	0.00	0.00	227.73
16:03:39	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.79	0.00	0.00	0.00	274.13	0.00	0.00	0.00	227.73
16:17:09	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.79	0.00	0.00	0.00	274.13	0.00	0.00	0.00	227.73
16:35:49	26.53	30.01	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.79	1.01	1.11	1.12	274.23	20.21	0.21	4.20	228.11
16:46:21	26.51	30.39	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.79	0.90	1.00	0.90	274.37	22.22	0.10	2.16	228.86

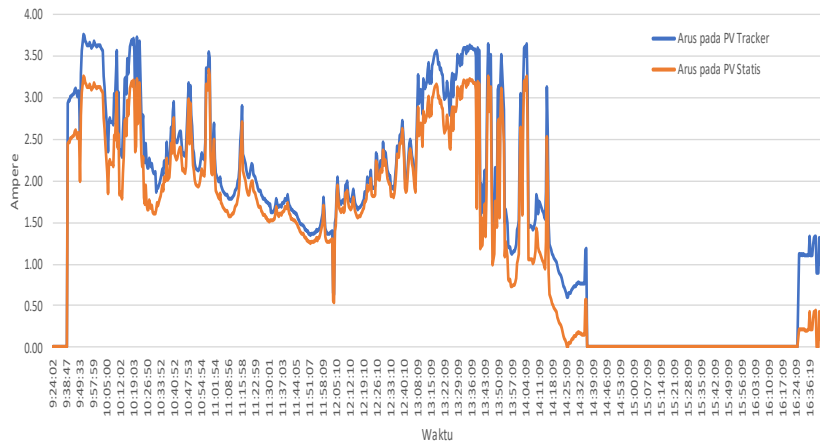
DAYA  
PV Tracker VS PV Statis



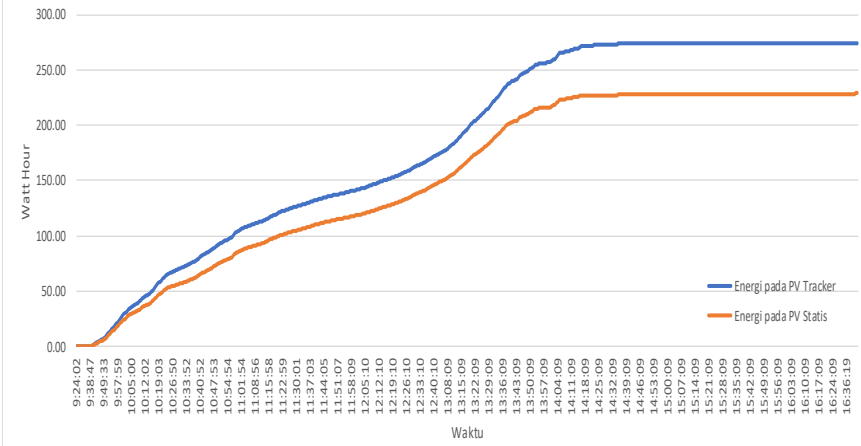
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PV Tracker VS PV Statis



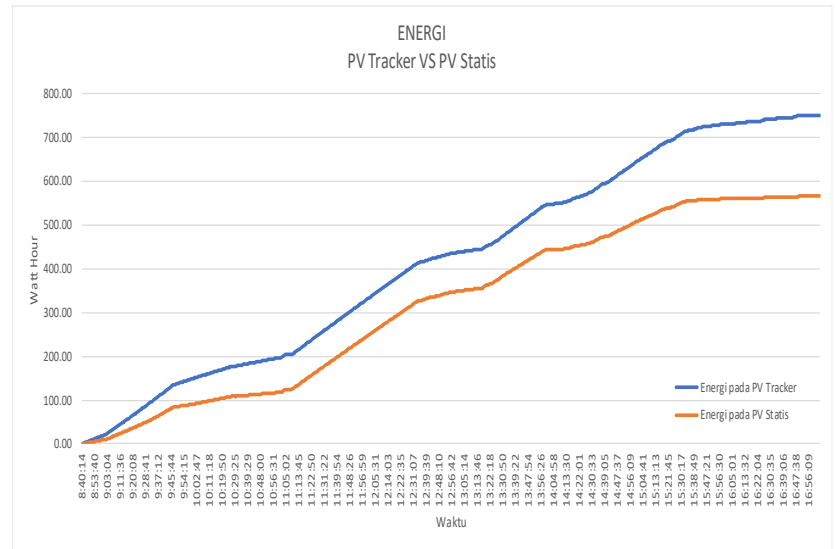
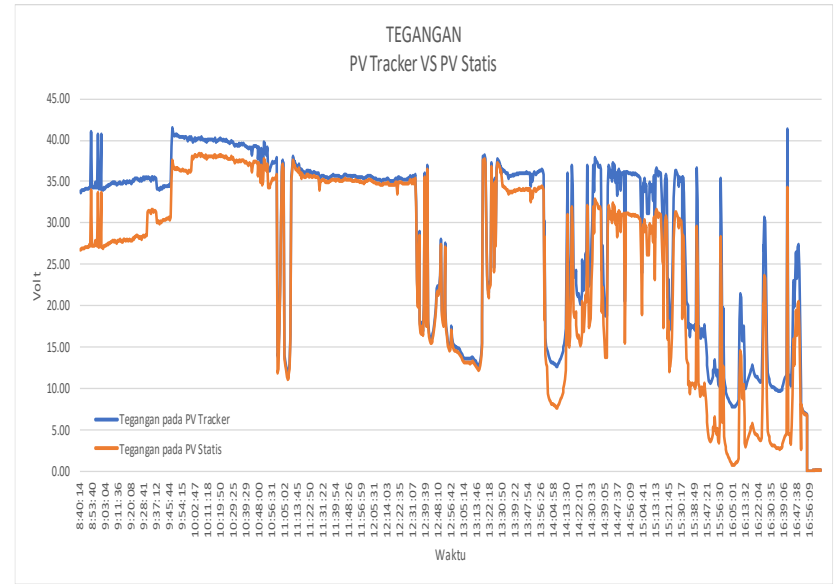
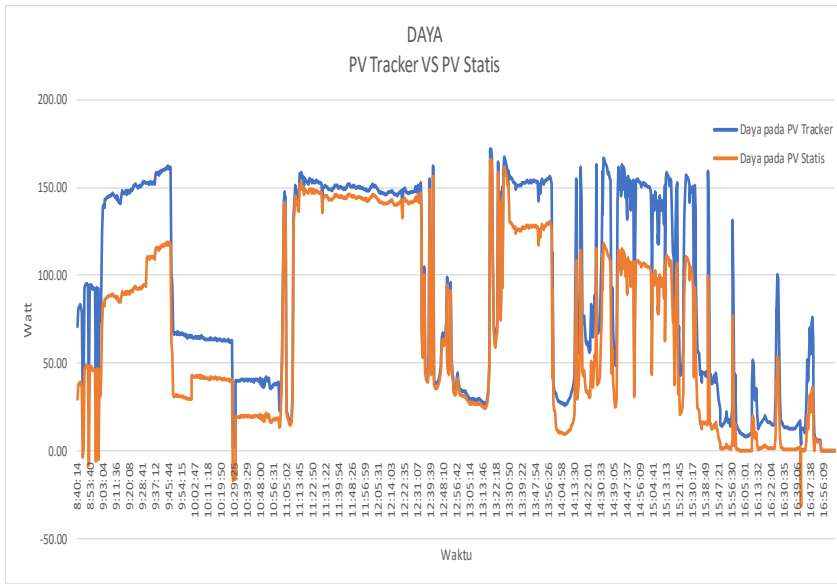
ARUS  
PV Tracker VS PV Statis



ENERGI  
PV Tracker VS PV Statis

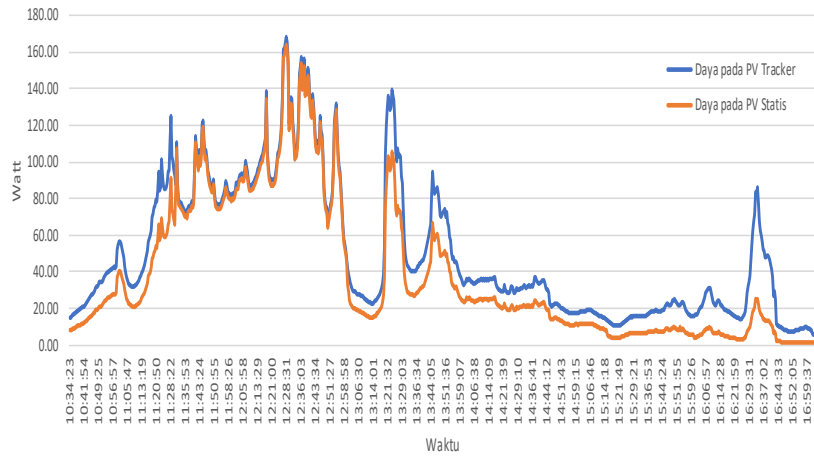


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
8:40:14	24.56	-21.51	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	33.77	2.11	71.15	0.59	26.77	1.11	29.71	0.25
9:02:34	22.44	-22.20	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	34.16	4.09	139.72	23.52	27.16	3.09	83.92	10.87
9:19:08	21.15	-22.44	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	35.08	4.23	148.46	63.33	28.08	3.23	90.70	35.03
9:35:42	20.27	-22.40	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	35.50	4.32	153.37	104.90	31.50	3.52	110.88	61.92
9:52:15	20.24	-22.37	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.00	40.41	1.66	66.95	140.73	36.41	0.86	31.31	86.55
10:08:48	22.94	-21.80	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.05	40.06	1.60	64.10	158.68	38.06	1.10	41.87	96.61
10:25:22	22.97	-21.73	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.10	39.79	1.57	62.30	176.12	37.79	1.07	40.44	107.94
10:44:29	25.16	-21.59	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.10	39.37	1.04	40.95	186.53	37.37	0.54	20.18	112.69
11:01:01	22.66	-21.95	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.20	14.36	1.71	24.56	197.00	12.36	1.21	14.96	117.83
11:18:19	22.56	-21.80	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.25	36.19	4.26	154.20	226.18	35.69	4.16	148.47	145.77
11:34:53	23.27	-17.36	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.30	35.44	4.19	148.60	267.88	34.94	4.09	142.90	185.91
11:51:27	23.35	-10.69	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.35	35.62	4.20	149.51	309.22	35.12	4.10	143.99	225.71
12:08:01	23.55	-3.01	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.40	35.22	4.17	146.75	350.28	34.72	4.07	141.31	265.23
12:24:35	25.06	4.13	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.45	35.27	4.17	147.08	390.67	34.77	4.07	141.51	304.08
12:41:09	24.92	11.17	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.50	36.99	4.38	162.20	421.89	36.49	4.28	156.18	334.01
12:57:42	24.32	11.29	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.55	16.11	2.40	38.66	435.85	15.61	2.30	35.90	347.11
13:14:16	21.28	15.32	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.60	13.01	2.10	27.29	444.37	12.51	2.00	25.02	354.95
13:30:50	22.21	20.74	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	36.03	4.26	153.45	474.26	35.53	4.16	147.80	383.58
13:47:24	22.42	24.06	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.74	36.07	4.27	154.05	516.31	34.07	3.77	128.44	418.62
14:03:58	22.16	27.11	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.79	13.11	2.13	27.89	548.05	8.11	1.33	10.79	444.22
14:20:31	20.73	30.49	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.84	22.67	3.02	68.46	563.32	17.67	2.22	39.23	452.74
14:37:04	22.27	32.41	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.89	36.27	4.24	153.90	592.80	31.27	3.44	107.57	472.08
14:53:38	20.84	31.92	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.94	36.09	4.26	153.76	627.43	31.09	3.46	107.57	495.55
15:10:12	22.41	31.59	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.99	33.85	4.04	136.85	666.65	28.85	3.24	93.47	522.61
15:26:46	22.33	31.71	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.99	36.25	4.31	156.33	699.57	31.25	3.51	109.69	544.71
15:43:20	21.70	31.63	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.99	16.17	2.40	38.83	723.37	9.17	1.40	12.84	558.12
16:00:31	23.33	31.89	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.99	9.95	1.30	12.97	731.46	2.95	0.30	0.89	560.62
16:17:03	23.20	31.97	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.99	12.02	1.50	18.06	736.04	5.02	0.50	2.51	561.44
16:33:36	23.24	31.73	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.99	9.97	1.31	13.06	743.44	2.97	0.31	0.92	563.70
16:50:08	23.15	31.94	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.99	17.72	1.84	32.65	750.75	10.72	0.84	9.00	565.59
17:04:11	20.37	-21.27	11.90	0.00	0.00	0.35	11.90	0.00	0.00	0.99	0.07	0.12	0.01	751.26	0.07	0.02	0.00	565.96

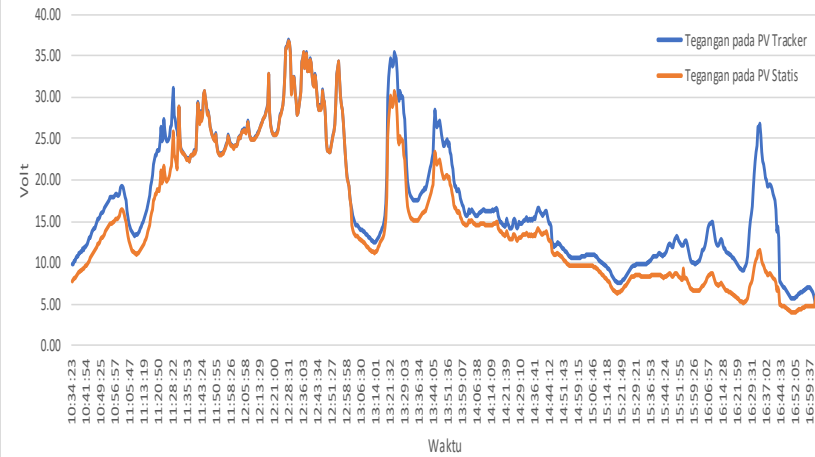


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
10:34:23	21.69	-21.71	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	9.81	1.52	14.90	0.12	7.79	1.02	7.95	0.07
10:47:25	26.17	-20.97	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.05	14.87	1.99	29.57	4.77	11.88	1.49	17.70	2.72
11:01:47	22.26	-22.22	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.10	19.32	2.94	56.73	13.54	16.44	2.44	40.11	8.44
11:14:49	22.85	-22.30	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.10	16.39	2.65	43.49	21.85	13.23	2.15	28.44	14.00
11:27:52	23.57	-22.09	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.15	29.13	3.84	111.84	38.95	23.75	3.34	79.33	25.68
11:40:53	25.28	-17.39	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.20	26.69	3.63	96.85	57.21	26.59	3.53	93.86	42.25
11:53:55	25.68	-10.53	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.25	23.20	3.32	77.10	77.84	23.10	3.22	74.38	62.22
12:06:58	22.88	-3.35	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.30	26.32	3.61	95.13	96.53	26.22	3.51	92.03	80.31
12:20:00	23.25	3.97	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.35	25.67	3.55	91.13	117.74	25.57	3.45	88.22	100.86
12:33:02	23.34	8.67	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.40	27.96	3.75	104.88	144.22	27.86	3.65	101.69	126.60
12:46:05	23.68	12.34	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.45	30.91	4.04	124.77	172.77	30.81	3.94	121.39	154.38
12:59:28	20.99	11.65	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.45	20.33	2.55	51.89	192.20	20.23	2.45	49.56	173.15
13:12:31	22.55	16.17	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.50	12.56	1.83	22.97	198.52	11.33	1.33	15.07	177.59
13:25:33	21.78	18.82	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.55	30.24	3.46	104.65	213.59	24.98	2.96	73.94	188.52
13:38:34	21.99	20.86	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.60	18.67	2.41	44.94	226.54	16.02	1.91	30.60	197.43
13:51:36	22.39	23.97	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.64	24.11	2.91	70.26	241.39	20.09	2.41	48.42	207.72
14:04:38	22.46	28.46	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.69	16.25	2.18	35.48	250.96	14.97	1.68	25.15	214.36
14:17:39	21.95	29.85	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.69	15.60	2.13	33.20	258.59	14.23	1.63	23.19	219.69
14:30:41	21.75	32.12	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.69	14.97	2.06	30.80	265.08	13.32	1.56	20.78	224.10
14:43:42	21.61	32.25	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.69	15.08	2.08	31.34	272.28	12.89	1.58	20.37	228.84
14:56:44	21.08	31.96	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.69	10.57	1.64	17.35	276.91	9.58	1.14	10.92	231.83
15:09:47	21.65	31.64	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	10.40	1.63	16.99	280.81	9.04	1.13	10.22	234.25
15:22:50	20.71	31.23	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	7.86	1.40	11.01	283.63	6.82	0.60	4.09	235.58
15:35:53	20.49	31.10	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	10.04	1.60	16.11	286.81	8.28	0.80	6.62	236.90
15:48:54	20.34	31.30	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	11.92	1.79	21.33	290.95	8.27	0.99	8.19	238.56
16:01:57	20.29	31.17	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	10.11	1.63	16.49	295.33	6.64	0.63	4.18	240.12
16:14:58	20.24	31.23	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	12.09	1.82	22.02	300.57	7.10	0.82	5.82	241.60
16:28:00	20.30	31.24	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	12.26	1.85	22.71	304.32	6.29	0.85	5.35	242.47
16:41:03	20.87	31.61	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	18.23	2.40	43.70	316.37	8.19	1.40	11.47	245.82
16:54:06	20.72	31.35	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	6.16	1.29	7.95	319.17	4.27	0.29	1.24	246.39
17:04:08	17.95	-21.85	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.69	5.02	1.18	5.91	320.55	6.09	0.18	1.10	246.63

DAYA  
PV Tracker VS PV Statis



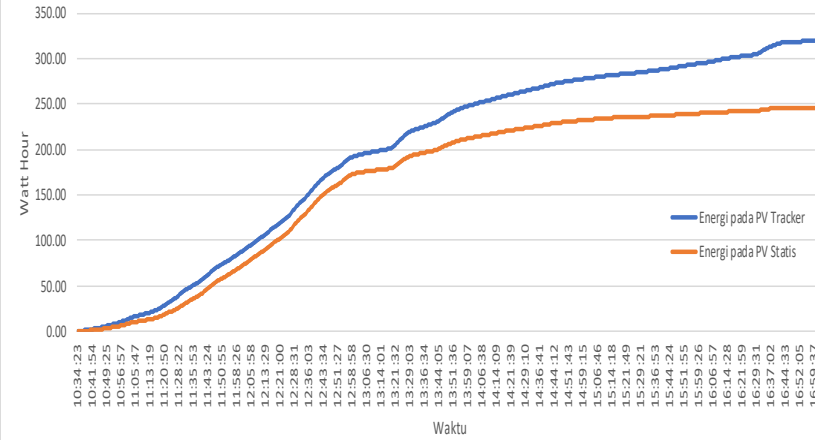
TEGANGAN  
PV Tracker VS PV Statis



ARUS  
PV Tracker VS PV Statis

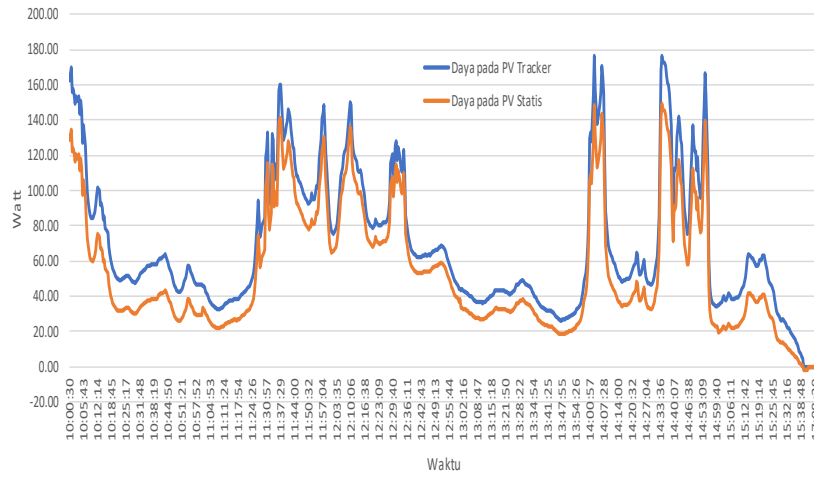


ENERGI  
PV Tracker VS PV Statis

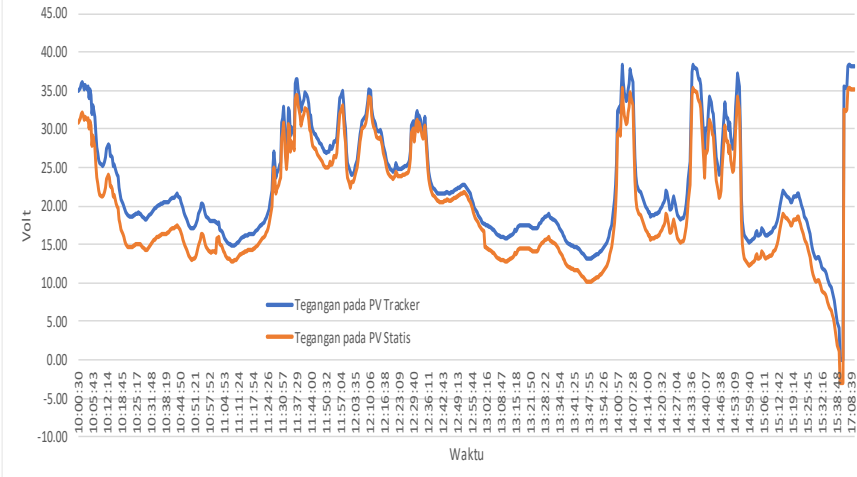


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
10:00:30	22.19	-22.65	11.90	0.50	5.95	0.05	11.90	0.50	5.95	0.05	34.93	4.66	162.60	1.36	30.93	4.16	128.67	1.07
10:11:14	21.20	-22.68	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.05	26.40	3.46	91.35	26.23	22.40	2.96	66.30	20.09
10:23:16	20.64	-22.76	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.10	18.67	2.66	49.58	40.25	14.67	2.16	31.69	29.81
10:35:18	19.54	-22.80	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.15	20.15	2.83	57.04	50.54	16.15	2.33	37.63	36.44
10:47:21	20.32	-22.61	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.20	18.32	2.61	47.75	62.19	14.32	2.11	30.22	44.17
10:59:23	20.67	-22.40	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.20	18.05	2.59	46.70	71.82	14.05	2.09	29.36	50.27
11:11:54	23.38	-22.05	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.25	15.65	2.27	35.59	79.30	13.65	1.77	24.16	55.35
11:23:56	23.06	-21.99	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.30	18.79	2.60	48.80	87.39	16.79	2.10	35.26	61.00
11:35:59	22.85	-17.85	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.35	29.21	3.66	106.95	106.18	27.21	3.36	91.43	76.49
11:48:01	24.27	-10.81	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.40	27.98	3.53	98.74	131.78	25.98	3.23	83.92	98.70
12:00:04	22.87	-9.06	11.90	0.50	5.95	0.10	11.90	0.50	5.95	0.45	25.62	3.29	84.41	153.33	23.62	2.99	70.62	117.13
12:12:07	22.26	-3.49	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.45	31.02	3.83	118.71	174.99	30.02	3.53	105.97	136.33
12:24:09	22.70	-1.46	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.50	24.91	3.23	80.36	193.21	23.91	2.93	70.06	152.32
12:36:11	22.49	3.75	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.55	24.44	3.18	77.75	213.90	23.44	2.88	67.51	170.65
12:48:13	21.66	8.61	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.60	22.13	2.95	65.30	226.78	21.13	2.65	55.99	181.68
13:00:16	21.93	11.14	11.90	0.00	0.00	0.10	11.90	0.50	5.95	0.64	17.86	2.49	44.45	238.68	16.86	2.19	36.92	191.81
13:12:18	21.45	11.12	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.64	15.99	2.30	36.71	246.55	12.99	2.10	27.28	197.76
13:24:21	21.53	14.59	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.69	17.07	2.42	41.24	254.86	14.07	2.22	31.24	204.05
13:36:24	21.63	16.95	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.74	16.22	2.33	37.73	263.84	13.22	2.13	28.16	210.93
13:48:26	22.05	19.80	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.79	13.15	2.02	26.49	270.01	10.15	1.82	18.47	215.37
14:00:27	22.07	24.33	11.90	0.50	5.95	0.15	11.90	0.50	5.95	0.84	25.84	3.34	86.27	277.62	22.84	3.14	71.72	221.07
14:12:29	22.75	24.39	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.84	20.74	2.79	57.79	301.13	17.74	2.39	42.40	240.16
14:24:33	22.52	30.28	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.84	19.51	2.66	51.89	311.75	16.51	2.26	37.31	247.82
14:36:36	22.49	30.99	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.84	37.03	4.45	164.86	329.16	34.03	4.05	137.82	261.54
14:48:38	23.18	31.19	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.84	33.41	4.09	136.81	352.28	30.41	3.69	112.21	280.21
15:00:40	22.58	31.83	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.84	15.48	2.25	34.77	369.91	12.48	1.55	19.34	294.08
15:12:42	22.06	31.45	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.84	18.61	2.57	47.91	377.86	15.61	1.87	29.19	298.69
15:24:45	22.17	31.41	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.84	18.42	2.56	47.16	389.49	15.42	1.86	28.68	306.15
15:36:47	20.84	31.46	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.84	8.91	1.56	13.90	394.83	5.91	0.86	5.08	308.89
17:07:39	22.79	17.88	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.84	38.30	0.00	0.00	395.24	35.30	0.00	0.00	308.93
17:10:09	22.11	-22.60	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.84	38.13	0.00	0.00	395.24	35.13	0.00	0.00	308.93

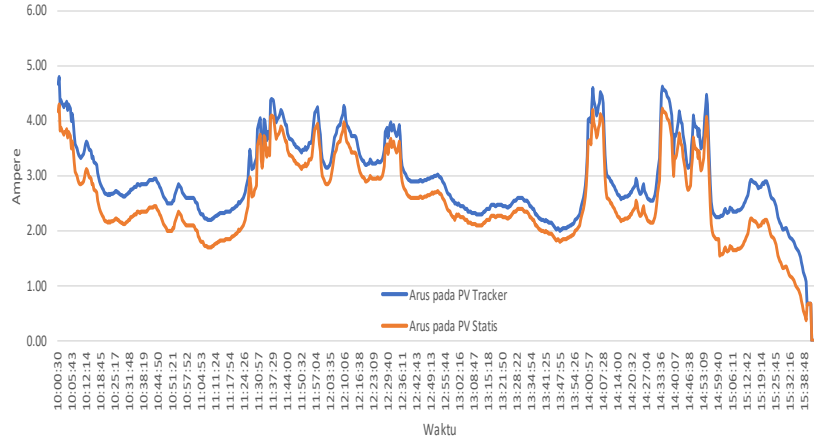
DAYA  
PV Tracker VS PV Statis



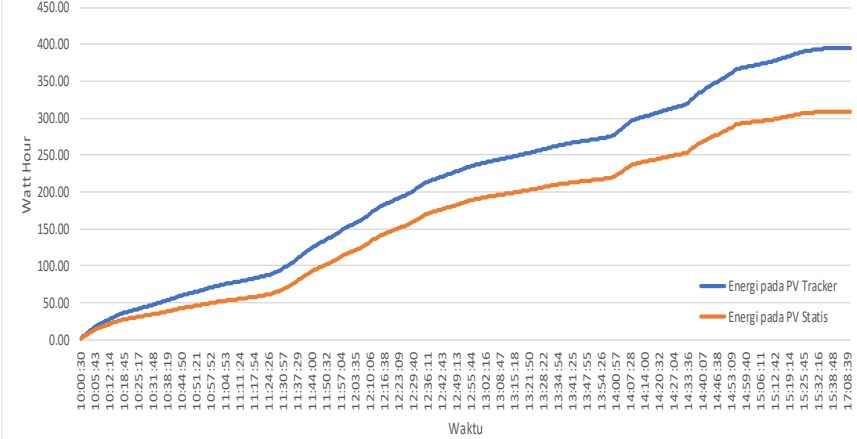
TEGANGAN  
PV Tracker VS PV Statis



ARUS  
PV Tracker VS PV Statis



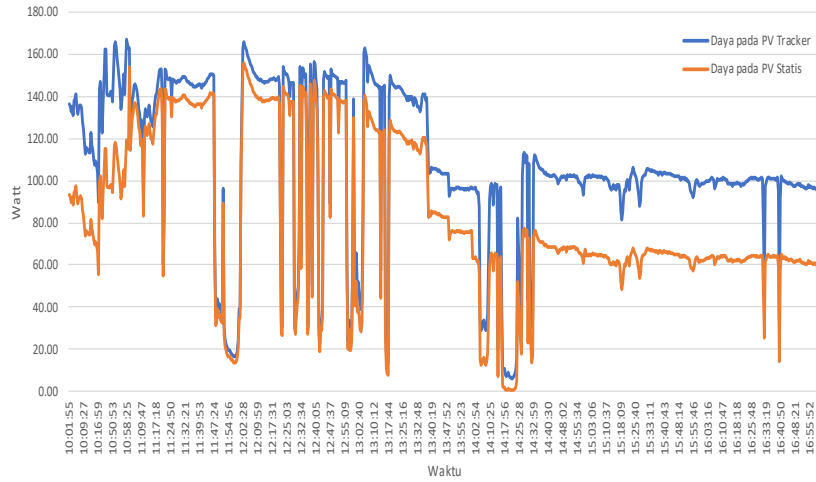
ENERGI  
PV Tracker VS PV Statis



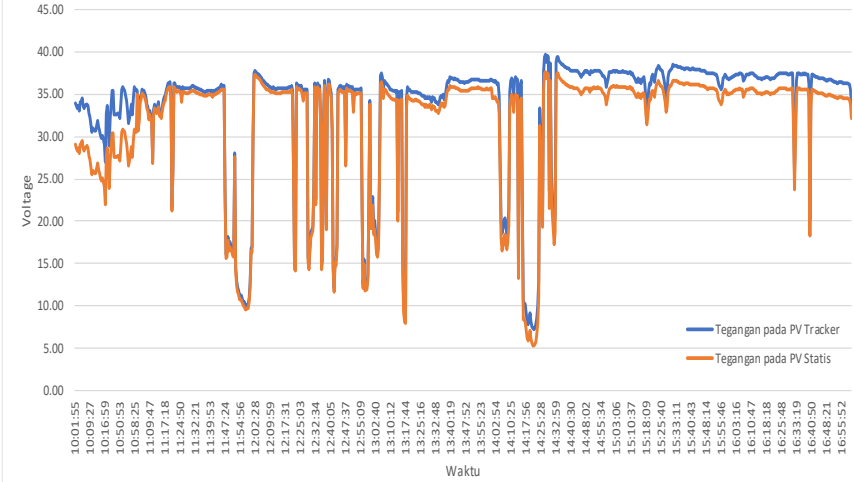


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
10:01:55	23.13	-23.5	11.90	0.50	5.95	0.05	11.90	0.50	5.95	0.05	34.00	4.01	136.35	1.14	29.00	3.21	93.09	0.78
10:15:29	26.49	-23.74	11.90	0.00	0.00	0.05	11.90	0.50	5.95	0.10	30.05	3.64	109.45	29.32	25.05	2.84	71.14	19.69
10:55:24	44.48	-32	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.10	32.16	4.30	138.21	61.11	27.16	3.50	95.06	41.66
11:12:47	22.05	-17.37	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.15	33.27	3.91	130.20	92.41	32.77	3.71	121.58	68.84
11:26:20	22.23	-14.24	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.20	35.72	4.14	147.78	123.42	35.22	3.94	138.77	97.88
11:39:53	22.49	-10.36	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.25	35.42	4.11	145.69	156.45	34.92	3.91	136.54	128.86
11:53:26	22.35	-7.2	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.30	12.17	1.85	22.45	178.28	11.67	1.65	19.26	149.14
12:06:59	22.51	-2.97	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.35	36.42	4.21	153.43	196.50	35.92	4.01	144.04	166.03
12:20:32	22.86	0.5	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.40	35.98	4.15	149.44	229.85	35.48	3.95	140.15	197.33
12:34:04	23.25	4.14	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.45	35.89	4.17	149.51	254.94	35.39	3.97	140.50	220.72
12:47:37	23.52	8.11	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.50	26.99	3.31	89.35	279.43	26.49	3.11	82.38	243.55
13:01:10	22.59	11.65	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.55	22.82	2.88	65.81	303.75	21.82	2.38	51.93	266.01
13:14:43	22.63	12.07	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.55	35.20	4.08	143.46	330.88	34.20	3.58	122.44	288.91
13:28:16	23.05	15.94	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.60	34.47	4.01	138.09	359.02	33.47	3.51	117.48	312.78
13:41:50	23.5	19.22	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.64	36.79	2.87	105.46	387.86	35.79	2.37	84.82	336.97
13:55:23	23.49	23.14	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.69	36.63	2.62	96.10	410.38	35.63	2.12	75.54	354.85
14:08:55	22.38	26.32	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.74	19.54	1.61	31.45	427.57	17.54	0.81	14.21	366.86
14:22:28	22.12	28.54	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.74	7.38	0.86	6.38	438.77	5.38	0.06	0.32	373.64
14:36:00	21.69	27.62	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.74	38.56	2.76	106.53	455.53	36.56	1.96	71.66	384.37
14:49:33	22.08	28.21	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.74	37.50	2.71	101.45	478.59	35.50	1.91	67.81	399.77
15:03:06	21.81	28.33	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	37.72	2.71	102.25	501.32	35.92	1.81	65.02	414.71
15:16:38	21.59	28.25	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	36.84	2.66	98.16	523.81	35.04	1.76	61.67	428.93
15:30:10	21.65	27.96	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	37.80	2.71	102.54	545.61	36.00	1.81	65.16	442.61
15:43:43	21.67	27.75	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	37.90	2.73	103.29	569.03	36.10	1.83	66.06	457.57
15:57:16	21.77	28.07	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	37.08	2.69	99.68	591.50	35.28	1.79	63.15	471.77
16:10:47	21.59	27.7	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	37.44	2.69	100.59	613.90	35.64	1.79	63.80	485.94
16:24:18	21.52	27.83	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	37.29	2.69	100.43	636.21	35.49	1.79	63.53	500.03
16:37:50	21.55	27.77	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	37.40	2.70	101.10	658.32	35.60	1.80	64.08	513.97
16:51:22	21.6	28.11	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	36.62	2.67	97.63	680.00	34.82	1.77	61.63	527.61
16:56:53	21.76	28.22	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	36.36	2.66	96.54	688.88	34.56	1.76	60.83	533.20
16:57:23	21.47	28.34	11.90	0.00	0.00	0.30	11.90	0.00	0.00	0.74	36.29	2.66	96.59	689.69	34.49	1.76	60.70	533.70

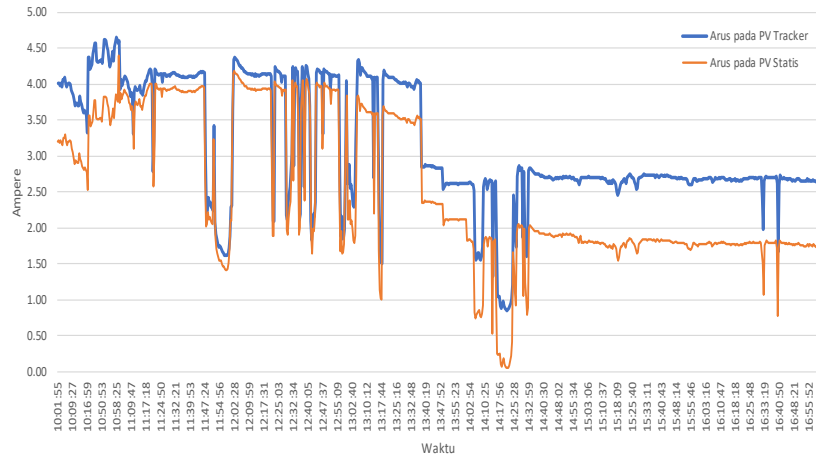
DAYA  
PV Tracker VS PV Statis



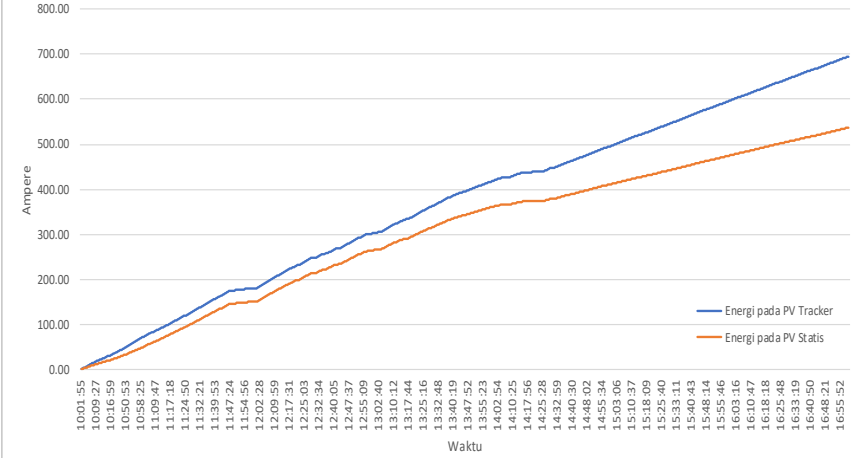
TEGANGAN  
PV Tracker VS PV Statis



ARUS  
PV Tracker VS PV Statis

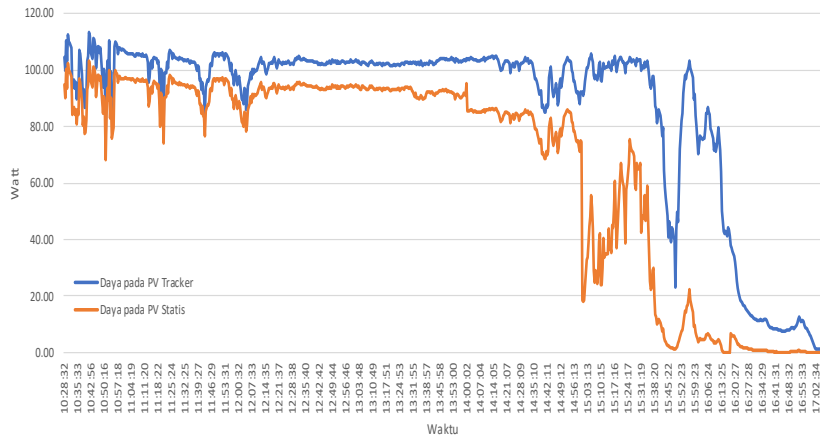


ENERGI  
PV Tracker VS PV Statis

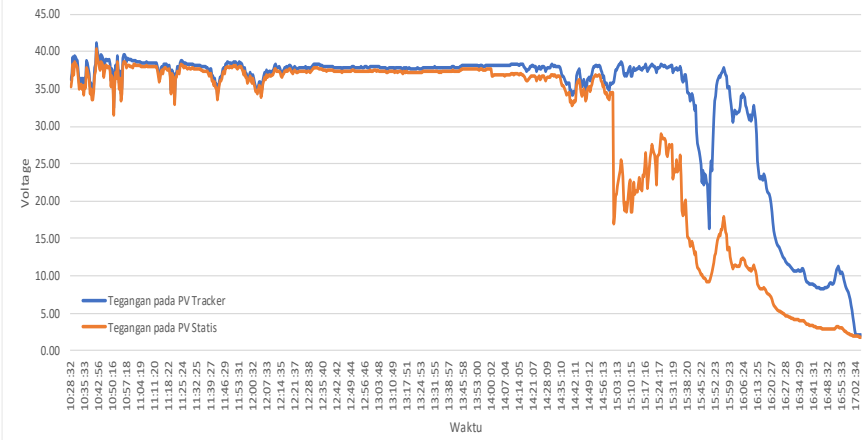


Waktu	Sudut		Motor Pitch Consumption				Motor Roll Consumption				PV Tracker				PV Statis			
	Pitch	Roll	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)	Tegangan (V)	Arus (A)	Daya (W)	Energi (Wh)	Tegangan	Arus (A)	Daya (W)	Energi (Wh)
10:28:32	19.92	-24.03	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.00	36.29	2.88	104.60	0.87	35.39	2.68	94.85	0.79
10:42:05	20.51	-24.35	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.05	40.11	2.79	111.96	23.36	39.21	2.59	101.55	21.11
10:56:18	20.00	-22.22	11.90	0.00	0.00	0.00	11.90	0.00	0.00	0.10	39.51	2.77	109.62	46.27	38.61	2.57	99.23	41.80
11:09:50	22.06	-17.47	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.15	38.47	2.73	105.02	70.16	37.97	2.53	96.06	63.60
11:23:23	22.18	-14.94	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.20	37.53	2.68	100.75	92.78	37.03	2.48	91.83	84.26
11:36:56	22.55	-10.53	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.25	37.93	2.71	102.70	116.22	37.43	2.51	93.95	105.69
11:50:30	22.48	-7.15	11.90	0.00	0.00	0.05	11.90	0.00	0.00	0.30	38.45	2.75	105.70	138.66	37.95	2.55	96.77	126.17
12:04:03	22.33	-3.35	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.35	35.87	2.59	92.98	160.94	35.37	2.39	84.53	146.51
12:17:36	22.51	0.29	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.40	37.98	2.71	102.90	183.34	37.48	2.51	94.07	166.96
12:31:09	22.82	4.31	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.45	38.30	2.73	104.59	206.46	37.80	2.53	95.63	188.10
12:44:43	22.92	4.38	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.45	37.83	2.70	102.17	229.68	37.33	2.50	93.33	209.33
12:58:16	22.99	8.01	11.90	0.00	0.00	0.10	11.90	0.00	0.00	0.50	37.92	2.72	103.03	252.81	37.42	2.52	94.30	230.46
13:11:50	22.53	11.58	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.55	37.74	2.70	101.83	275.93	37.24	2.50	93.10	251.60
13:25:23	22.60	15.35	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.60	37.76	2.70	102.09	298.89	37.26	2.50	93.15	272.58
13:38:57	22.88	19.38	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.64	37.89	2.71	102.50	321.94	37.39	2.51	91.34	293.28
13:52:30	23.01	23.24	11.90	0.00	0.00	0.15	11.90	0.00	0.00	0.69	38.17	2.72	103.81	345.21	37.67	2.52	91.88	314.06
14:06:03	22.18	26.98	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.74	38.14	2.71	103.20	368.53	36.84	2.31	85.10	334.02
14:19:37	22.24	28.37	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.79	37.95	2.70	102.59	391.82	36.65	2.30	84.30	353.21
14:33:10	22.33	28.44	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.84	37.93	2.71	102.88	414.88	36.63	2.31	84.62	372.18
14:46:42	22.06	28.35	11.90	0.00	0.00	0.20	11.90	0.00	0.00	0.89	36.34	2.62	95.29	436.01	35.04	2.22	77.79	389.42
15:00:13	22.19	28.09	11.90	0.50	5.95	0.25	11.90	0.00	0.00	0.89	35.64	2.57	91.67	457.72	34.34	2.17	74.52	407.17
15:13:45	22.12	28.09	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.89	37.61	2.69	101.10	480.11	21.27	1.65	35.06	414.68
15:27:18	22.08	28.51	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.89	38.09	2.72	103.72	503.21	28.32	2.50	70.74	427.14
15:40:51	22.05	28.33	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.89	34.33	2.51	86.10	525.14	14.59	0.81	11.87	436.33
15:54:23	21.93	28.08	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.89	36.74	2.67	98.02	538.80	15.55	0.94	14.61	437.46
16:07:54	21.94	28.12	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.89	32.71	2.42	79.24	558.18	11.49	0.44	5.03	439.52
16:21:27	21.78	27.75	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.89	17.05	1.48	25.18	570.12	6.35	0.58	3.68	440.19
16:34:59	21.57	27.79	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.89	10.61	1.08	11.45	573.39	4.06	0.18	0.73	440.50
16:48:32	21.59	27.72	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.89	8.47	0.93	7.85	575.38	2.87	0.03	0.09	440.56
17:02:04	19.71	-4.22	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.89	3.66	0.64	2.35	577.29	1.97	0.01	0.02	440.61
17:05:34	19.11	-22.89	11.90	0.00	0.00	0.25	11.90	0.00	0.00	0.89	2.08	0.55	1.14	577.37	1.86	0.01	0.02	440.62

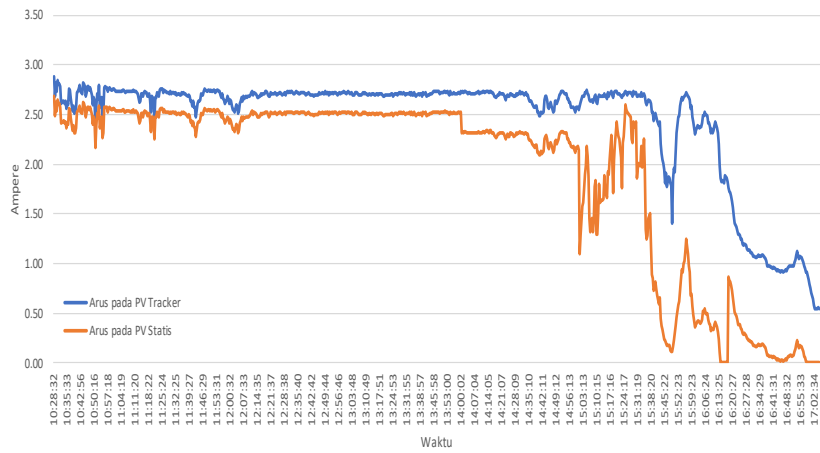
DAYA  
PV Tracker VS PV Statis



TEGANGAN  
PV Tracker VS PV Statis



ARUS  
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