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LAMPIRAN

Lampiran 1. Data Batimetri

b/h = 0,5	b/h = 0,6	b/h = 0,7	b/h = 0,8
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.2	0.16	0.12	0.08
0.2	0.16	0.12	0.08
0.2	0.16	0.12	0.08
0.2	0.16	0.12	0.08
0.2	0.16	0.12	0.08
0.2	0.16	0.12	0.08
0.2	0.16	0.12	0.08
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4
0.4	0.4	0.4	0.4

Lampiran 2. Script Model Input SWASH (Gelombang Monokromatik)

```
$**********HEADING**********************************
$
PROJ 'L12bbb01' 'L12'     $nama Project
$
$  MODIFIKASI KASUS 6. LENGKAPI DGN SPONGE LAYER
$
$ --|-----------------------------------------------------|--
$   | This SWASH input file is part of the bench mark tests for    |
$   | SWASH. More information about this test can be found in      |
$   | an accompanied document.                                     |
$ --|-----------------------------------------------------|--
$
$**********MODEL INPUT**********************************
$
MODE DYN ONED              $Dinensi Model (1D)
$
CGRID 0. 0. 0. 30. 0. 1200 0 $Dimensi Grid Komputer
[xpc][ypc][alpc][xlenc][ylenc][mxc][myc]
$
VERT 1                     $Skema grid vertical (lapisan vertikal)
$
INPGRID BOTTOM 0. 0. 0. 30 0 1. 1. $inputgrid bottom level
[xpinp][ypinp][alpinp][mxinp][myinp][dxinp][dyinp]
READINP BOTTOM 1. 'B024.bot' 1 1 FREE $bidang input batimetri [fac] data
batimetri [idla][nhedf]
$
INIT zero          $initial water level dan komponen kecepatan disetting nol
$
BOU SIDE W CCW BTYPE VEL  SMOO 1.0 SEC CON FOUR 0. 0.074 6.28 90.
$input data T,Zero, Hi,Omega, Fase
BOU SIDE E CCW BTYPE SOMMERFELD
SPON EAST 5.  $panjang sponge layer 5 m di timur
$
FRIC CONSTANT 0.           $Gesekan Nol
VISC 0.                    $Viskositas nol
NONHYDrostatic             $kasus nonhidrostatik
$
DISCRET UPW FROMM   $UPWind(tipe diskretisasi utk pers. momentum),
Fromm's scheme {kappa=0}
DISCRET UPW  UMOM V NONE  $UMOM(diskretisasi utk Pers. Momentum u/v)
DISCRET CORR FIRST         $NONE(no upwinding), CORR(tipe diskretisasi utk
kedalaman)
$              $FIRSTORDER=indicates that the standard first order upwind
scheme is used
```

```
$
$************ OUTPUT REQUESTS ************************** $keluaran
yang diinginkan
$
POINTS 'M01'   2.0   0.
POINTS 'M02'  10.0   0.
POINTS 'M03'  12.0   0.
POINTS 'M04'  15.0   0.
POINTS 'M05'  17.0   0.          $penempatan letak PROBE
POINTS 'M06'  20.0   0.
POINTS 'M07'  22.0   0.
POINTS 'M08'  25.0   0.
$
QUANTITY HSIG 'Hs' 'Significant wave height' DUR 90 MIN
QUANTITY HRMS 'Hrms' 'root mean squared wave height' DUR 90 MIN
QUANTITY SETUP 'St' 'Wave Set-up' DUR 90 MIN
QUANTITY WATLEV 'WL' 'Water Level' DUR 90 MIN   $Data-data yang
diinginkan berdurasi 90 mnit
QUANTITY BOTLEV 'BL' 'Bottom Level'
QUANTITY XP 'Xp' 'X distance' HEXP 1000
$
TABLE  'M01' NOHEAD 'M1A.tbl' TSEC WATL OUTPUT 000000.000 0.01 SEC
TABLE  'M02' NOHEAD 'M1B.tbl' TSEC WATL OUTPUT 000000.000 0.01 SEC
TABLE  'M03' NOHEAD 'M1C.tbl' TSEC WATL OUTPUT 000000.000 0.01 SEC
TABLE  'M04' NOHEAD 'M1D.tbl' TSEC WATL OUTPUT 000000.000 0.01 SEC
$spasi 0.01 detik untuk setiap probe
TABLE  'M05' NOHEAD 'M1E.tbl' TSEC WATL OUTPUT 000000.000 0.01 SEC
TABLE  'M06' NOHEAD 'M1F.tbl' TSEC WATL OUTPUT 000000.000 0.01 SEC
TABLE  'M07' NOHEAD 'M1G.tbl' TSEC WATL OUTPUT 000000.000 0.01 SEC
TABLE  'M08' NOHEAD 'M1H.tbl' TSEC WATL OUTPUT 000000.000 0.01 SEC
$
FRAME 'PT' 0. 0. 0. 30. 0. 1000 0     $grid frame model
[xpfr][ypfr][alpfr][xlenfr][ylenfr][mxfr][myfr]
TABLE 'PT' HEAD 'M1.tab' XP HSIG HRMS SETUP BOTLEV WATLEV
$menamakan keluaran dan jenisnya
$
TEST 1,0
COMPUTE 000000.000 0.1 SEC 000080.000 $waktu komputasi sebanyak 80 spasi 0.1
detik
STOP          $hentikan komputasi
```

Lampiran 3. Script Model Input SWASH (Gelombang Acak)

```
$**********HEADING**********************************
$
PROJ 'RANDOM' 'B4'          $nama Project
$
$ fp=0.4; H = 2.9 cm
$**********MODEL INPUT*********************************
$
MODE DYN ONED               $Dimensi Model (1D)
$
CGRID 0. 0. 0. 30. 0. 1200 0   $Dimensi Grid Komputer
[xpc][ypc][alpc][xlenc][ylenc][mxc][myc]
$
VERT 1                      $Skema grid vertical (lapisan vertikal)
$
INPGRID BOTTOM 0. 0. 0. 30 0 1. 1.   $input grid bottom level
[xpinp][ypinp][alpinp][mxinp][myinp][dxinp][dyinp]
READINP BOTTOM 1. 'bar01.bot' 1 1 FREE  $bidang input batimetri [fac] data
batimetri [idla][nhedf]
$
INIT zero           $initial water level dan komponen kecepatan disetting nol
$
BOUNd SHAPespec JONswap 3.3 SIG PEAK DSPR DEGR $input gamma default
$
BOUNdcond SIDE W CCW BTYPE WEAK CON SPECTrum 0.148 1 90 0 2 HR
$input data [h][per][dir][dd][cycle]
BOUNDCOND SIDE E CCW BTYPE RADIATION
SPONgelayer EAST 5  $panjang sponge layer 5 m di timur
$
FRIC CONSTANT 0.    $Gesekan Nol
VISC 0.             $Viskositas nol
NONHYDrostatic      $kasus nonhidrostatik
$
DISCRET UPW FROMM   $UPWind(tipe diskretisasi utk pers. momentum),
Fromm's scheme {kappa=0}
DISCRET UPW  UMOM V NONE  $UMOM(diskretisasi utk Pers. Momentum u/v)
DISCRET CORR FIRST      $NONE(no upwinding), CORR(tipe diskretisasi utk
kedalaman)
$               $FIRSTORDER=indicates that the standard first order upwind scheme
is used
$
$*********** OUTPUT REQUESTS ************************* $keluaran
yang diinginkan
$
POINTS 'X00' 0.   0.
```

```
POINTS 'X05' 5.   0.
POINTS 'X10' 10. 0.    $penempatan letak PROBE
POINTS 'X11' 11. 0.
POINTS 'X14' 14. 0.
POINTS 'X22' 22. 0.
$
QUANTITY HSIG 'Hs' 'Significant wave height' DUR 90 MIN
QUANTITY HRMS 'Hrms' 'root mean squared wave height' DUR 90 MIN
QUANTITY SETUP 'St' 'Wave Set-up' DUR 90 MIN   $Data-data yang
diinginkan berdurasi 90 menit
QUANTITY WATLEV 'WL' 'Water Level' DUR 90 MIN
QUANTITY BOTLEV 'BL' 'Bottom Level'
QUANTITY XP 'Xp' 'X distance' HEXP 1000
$
TABLE 'X00' NOHEAD 'X00.tab' TSEC WATLEV OUTPUT 000000.000 0.1 SEC
TABLE 'X05' NOHEAD 'X05.tab' TSEC WATLEV OUTPUT 000000.000 0.1 SEC
TABLE 'X10' NOHEAD 'X10.tab' TSEC WATLEV OUTPUT 000000.000 0.1 SEC
$spasi 0.1 detik untuk setiap probe
TABLE 'X11' NOHEAD 'X11.tab' TSEC WATLEV OUTPUT 000000.000 0.1 SEC
TABLE 'X14' NOHEAD 'X14.tab' TSEC WATLEV OUTPUT 000000.000 0.1 SEC
TABLE 'X22' NOHEAD 'X22.tab' TSEC WATLEV OUTPUT 000000.000 0.1 SEC
$
FRAME 'PT' 0. 0. 0. 30. 0. 240 0   $grid frame model
[xpfr][ypfr][alpfr][xlenfr][ylenfr][mxfr][myfr]
TABLE 'PT' HEAD 'S1.tab' XP HSIG HRMS SETUP BOTLEV WATLEV
$menamakan keluaran dan jenisnya
$
TEST 1,0
COMPUTE 000000.000 0.1 SEC 013500.000     $waktu komputasi sebanyak 13500
spasi 0.1 detik
STOP     $hentikan komputasi
```

Lampiran 4. Script plot time series gelombang monokromatik

```
%Language    : Matlab R2015b;
%Authors     : Mutmainnah Miranti;
%Affiliation : Departement of Geophysic, Hasanuddin Univ;

%% plot water level
%
%% load table
clear allzxs
load M1B.tbl;
load M1D.tbl;
load M1E.tbl;
```

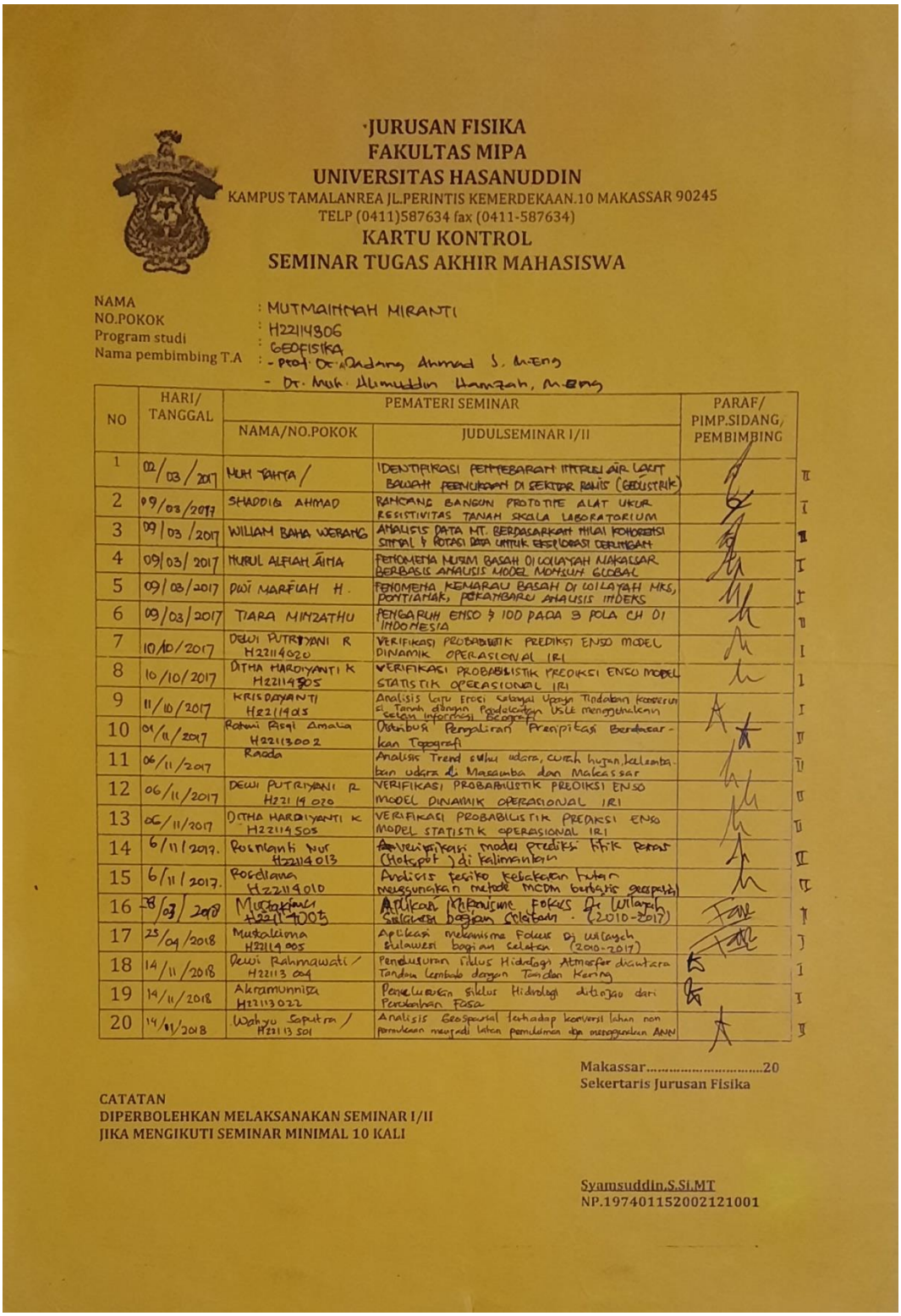
```
load M1H.tbl;
%% declare subplot type
subplot1(4, 1, 'Gap', [.01 .03], 'XTickL', 'Margin', 'YTickL', 'Margin');
xmin = 20;
xmax = 40;
ymin = -0.02;
ymax = 0.04;
%% plot time series at x=10 m
subplot1(1);plot(M1B(:,1),M1B(:,2),'k');
xlim([xmin xmax]);
ylim([ymin ymax]);
title('b/h=05 ; Periode 1.0 s');
%% plot time series at x=15 m
subplot1(2);plot(M1D(:,1),M1D(:,2),'k');
xlim([xmin xmax]);
ylim([ymin ymax]);
ylabel('Water Level (m)');
%% plot time series at x=17 m
subplot1(3);plot(M1E(:,1),M1E(:,2),'k');
xlim([xmin xmax]);
ylim([ymin ymax]);
%% plot time series at x=25 m
subplot1(4);plot(M1H(:,1),M1H(:,2),'k');
xlim([xmin xmax]);
ylim([ymin ymax]);
xlabel('time (s)');
```

Lampiran 5. Script plot spektrum gelombang acak

```
%Language    : Matlab R2015b;
%Authors     : Mutmainnah Miranti;
%Affiliation : Departement of Geophysic, Hasanuddin Univ;
%% plot spectral
% plot and analyze spectrum
%% load file
load X14.tab
titleStr = 'b/h=0.5 ; x = 14 m';
data = X14;
t = data(:,1);
W = data(:,2);
p=20;
%% spectral analysis
[Hm0,Tp,Tm01,Tm_10,Hrms]=spectral_analysis(t,W,p)
%% frequency
figure(2);
```

```
xlim([0  5]);
title(titleStr);
grid  on
figure(3);
xlim([0  5]);
title(titleStr);
grid  on
```

Lampiran 6. Kartu Kontrol Seminar



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NAMA : MUTMAINNAH MIRANTI
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Nama pembimbing T.A : - Prof. Dr. Andang Ahmad S. M.Eng
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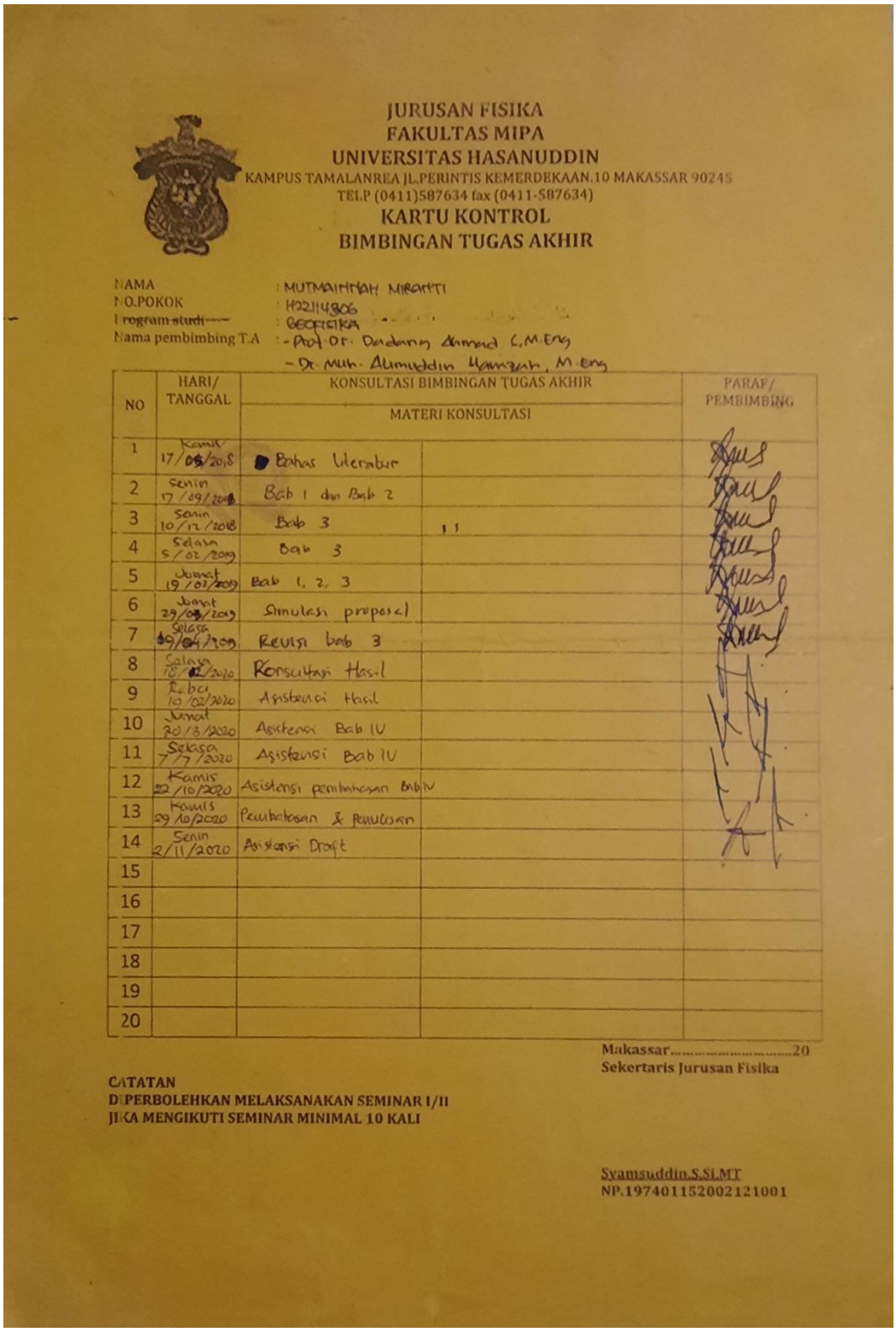
NO	HARI/ TANGGAL	PEMATERI SEMINAR		PARAF/ PIMP.SIDANG/ PEMBIMBING
		NAMA/NO.POKOK	JUDULSEMINAR I/II	
1	02/03/2017	MUH FAHTA /	IDENTIFIKASI PENYEBARAN INTRUSI AIR LAUT BAWAH PERMUKAAN DI SEKTOR RANIS (GEOLISTRIK)	II
2	09/03/2017	SHADDIQ AHMAD	RANCANG BANGUN PROTOTYPE ALAT UKUR RESISTIVITAS TANAH SKALA LABORATORIUM	I
3	09/03/2017	WILLIAM BAHA WERANG	ANALISIS DATA MT BERDASARKAN NILAI KOHERENSI SINYAL & ROTASI DATA UNTUK EKSPLORASI GEOTHERMAL	II
4	09/03/2017	NURUL ALFIAH ĀIMA	FENOMENA MUSIM BASAH DI WILAYAH MAKASSAR BERBASIS ANALISIS MODEL MONSUN GLOBAL	I
5	09/03/2017	DWI NARFIAH H.	FENOMENA KEMARAU BASAH DI WILAYAH MKS, PONTIANAK, PEKANBARU ANALISIS INDEKS	I
6	09/03/2017	TIARA MINZATHU	PENGARUH ENSO & IOD PADA 3 POLA CH DI INDONESIA	II
7	10/10/2017	DEWI PUTRIYANI R H22114020	VERIFIKASI PROBABILISTIK PREDIKSI ENSO MODEL DINAMIK OPERASIONAL IRI	I
8	10/10/2017	DITHA HARDIYANTI K H22114505	VERIFIKASI PROBABILISTIK PREDIKSI ENSO MODEL STATISTIK OPERASIONAL IRI	I
9	11/10/2017	KRISDAYANTI H22114015	Analisis Laju Erosi Sebagai Upaya Tindakan Konservasi di Tanah dengan Pendekatan Usle menggunakan Sistem Informasi Geografi	I
10	01/11/2017	Rahmi Rizqi Amalia H22113002 Raada	Aplikasi Pengaliran Presipitasi Berdasarkan Topografi	II
11	06/11/2017		Analisis Trend suhu udara, curah hujan, kelembaban udara di Maros dan Makassar	II
12	06/11/2017	DEWI PUTRIYANI R H22114020	VERIFIKASI PROBABILISTIK PREDIKSI ENSO MODEL DINAMIK OPERASIONAL IRI	II
13	06/11/2017	DITHA HARDIYANTI K H22114505	VERIFIKASI PROBABILISTIK PREDIKSI ENSO MODEL STATISTIK OPERASIONAL IRI	II
14	6/11/2017.	Rosmiyanti Nur H22114013	Verifikasi model prediksi titik panas (Hotspot) di Kalimantan	II
15	6/11/2017.	Rosdiana H22114010	Analisis resiko kebakaran hutan menggunakan metode MCDM berbasis geospasial	II
16	18/03/2018	Mutakhirah H22114005	Aplikasi Mekanisme Fokus di Wilayah Sulawesi bagian selatan (2010-2017)	I
17	23/04/2018	Mutakleima H22114005	Aplikasi mekanisma Fokus di wilayah Sulawesi bagian selatan (2010-2017)	I
18	14/11/2018	Dewi Rahmawati / H22113 004	Pendeteksian Siklus Hidrologi Atmosfer dicirikan Tandan Lembab dengan Tandan Kering	I
19	14/11/2018	Akramunnisa H22113022	Pendeteksian Siklus Hidrologi ditinjau dari Perubahan Fasa	I
20	14/11/2018	Wahyu Saputra / H22113501	Analisis GeoSpasial terhadap konversi lahan non pertanian menjadi lahan pemukiman dgn menggunakan ANN	II

Makassar.....20
Sekertaris Jurusan Fisika

CATATAN
DIPERBOLEHKAN MELAKSANAKAN SEMINAR I/II
JIKA MENGIKUTI SEMINAR MINIMAL 10 KALI

Syamsuddin,S.Si,MT
NP.197401152002121001

Lampiran 7. Kartu Kontrol Bimbingan Tugas Akhir



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NO	HARI/ TANGGAL	KONSULTASI BIMBINGAN TUGAS AKHIR		PARAF/ PEMBIMBING
		MATERI KONSULTASI		
1	Kamis 17/05/2018	Bahas literatur		
2	Senin 17/09/2018	Bab 1 dan Bab 2		
3	Senin 10/12/2018	Bab 3		
4	Selasa 5/02/2019	Bab 3		
5	Jumat 19/01/2019	Bab 1, 2, 3		
6	Jumat 29/03/2019	Simulasi proposal		
7	Selasa 09/04/2019	Revisi bab 3		
8	Selasa 18/02/2020	Konsultasi Hasil		
9	Rabu 10/02/2020	Asistensi Hasil		
10	Jumat 20/3/2020	Asistensi Bab IV		
11	Selasa 7/7/2020	Asistensi Bab IV		
12	Kamis 22/10/2020	Asistensi pembahasan Bab IV		
13	Kamis 29/10/2020	Pembahasan & penulisan		
14	Senin 2/11/2020	Asistensi Draft		
15				
16				
17				
18				
19				
20				

Makassar.....20
Sekertaris Jurusan Fisika

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