	SUHU			TEKANAN UDARA			KECEPATAN ANGIN			KELEMBAPAN RATA-RATA		
	Sejuk (1)	Sedang (2)	Panas (3)	Rendah (1)	Sedang (2)	Tinggi (3)	Lambat (1)	Sedang (2)	Kencang (3)	Kering (1)	Agak Kering (2)	Basah (3)
JANUARI	0,2	0,8	0	0	0	1	0,88	0,12	0	0	0	1
FEBRUARI	0,8	0,2	0	0	0	1	0,88	0,12	0	0	0	1
MARET	0	0,8	0,2	0	0	1	0	1	0	0	0	1
APRIL	1	0	0	0	0	1	0	1	0	0	0	1
MEI	1	0	0	0	0	1	1	0	0	0	0	1
JUNI	1	0	0	0	0	1	1	0	0	0	0	1
JULI	1	0	0	0	0	1	1	0	0	0	0	1
AGUSTUS	1	0	0	0	0	1	1	0	0	0	0	1
SEPTEMBER	1	0	0	0	0	1	1	0	0	0	0	1
OKTOBER	0	1	0	0	0	1	1	0	0	0	0	1
NOVEMBER	0	1	0	0	0	1	1	0	0	0	0	1
DESEMBER	0	1	0	0	1	0	0,37	0,63	0	0	0	1

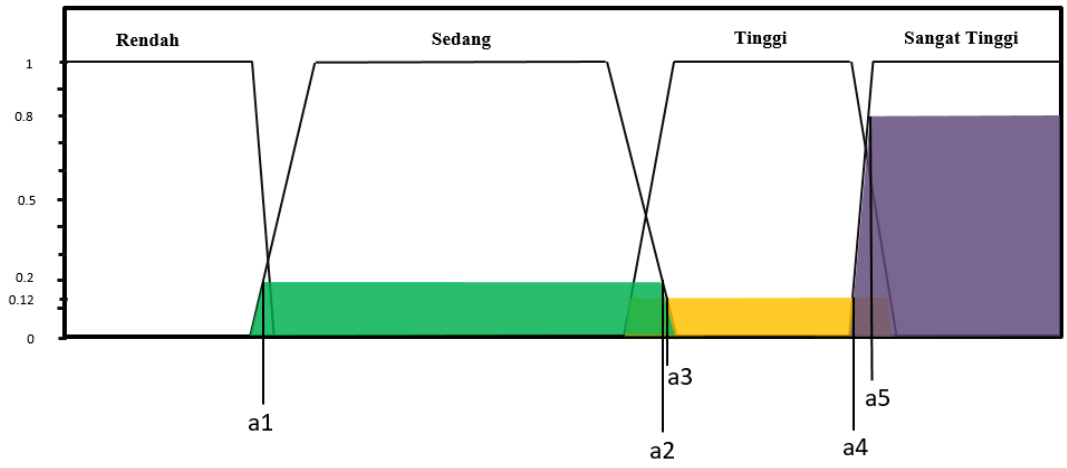
1	Rendah
2	Sedang
3	Tinggi
4	Sangat Tinggi

	SUHU	TEKANAN UDARA	KECEPATAN ANGIN	KELEMBAPAN RATA-RATA	JUMLAH CURAH HUJAN	NILAI LINGUISTIK
JANUARI	1	3	1	3	2	SEDANG
	1	3	2	3	3	TINGGI
	2	3	1	3	1	SANGAT TINGGI
	2	3	2	3	2	SEDANG

CLIPING MIN					
SUHU	TEKANAN UDARA	KECEPATAN ANGIN	KELEMBAPAN RATA-RATA	RESULT (MIN)	NILAI LINGUISTIK
0,2	1	0,88	1	0,2	SEDANG
0,2	1	0,12	1	0,12	TINGGI
0,8	1	0,88	1	0,8	SANGAT TINGGI
0,8	1	0,12	1	0,12	SEDANG

CLIPING MAX (1)					
SUHU	TEKANAN UDARA	KECEPATAN ANGIN	KELEMBAPAN RATA-RATA	RESULT (MAX)	NILAI LINGUISTIK
0,2	1	0,88	1	0,2	SEDANG
0,2	1	0,12	1	0,12	TINGGI
0,8	1	0,88	1	0,8	SANGAT TINGGI
0,8	1	0,12	1	0,12	SEDANG

CLIPING MAX (2)					
SUHU	TEKANAN UDARA	KECEPATAN ANGIN	KELEMBAPAN RATA-RATA	RESULT (MAX)	NILAI LINGUISTIK
0,2	1	0,88	1	0,2	SEDANG
0,2	1	0,12	1	0,12	TINGGI
0,8	1	0,88	1	0,8	SANGAT TINGGI



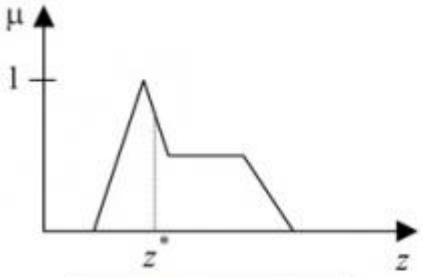
a1 - 95 / 10	=	0,2		
a1	-	95	=	2
		a1	=	97

a3 - 395 / 10	=	0,12		
a3	-	395	=	1,2
		a4	=	396,2

305 - a2 / 10	=	0,2		
305	-	a2	=	2
		a2	=	303

a4 - 395 / 10	=	0,8		
a4	-	395	=	8
		a5	=	403

305 - a3 / 10	=	0,12		
305	-	a3	=	1,2
		a3	=	303,8



$$z^* = \frac{\int \mu_x(z).z dz}{\int \mu_x(z) dz}$$

→ Momen

→ Luas daerah

Defuzifikasi dengan kaidah Centroid.

$$z^* = \frac{\text{Momen}}{\text{Luas Daerah}}$$

Momen

$$M_1 = \int_{95}^{97} \left(\frac{z - 95}{10} \right) z \, dz$$

$$= \int_{95}^{97} \frac{z^2 - 95z}{10} \, dz$$

$$= \frac{\frac{z^3}{3} - \frac{95z^2}{2}}{10} \Bigg]_{95}^{97}$$

$$= \frac{\frac{2z^3 - 285z^2}{6}}{10} \Bigg]_{95}^{97}$$

$$= \frac{z^2 \cdot (2z - 285)}{60} \Bigg]_{95}^{97}$$

$$= \left(\frac{97^2 \cdot (2 \cdot 97 - 285)}{60} \right) - \left(\frac{95^2 \cdot (2 \cdot 95 - 285)}{60} \right)$$

Date. No.

$$= \left(\frac{9409 \cdot (194 - 285)}{60} \right) - \left(\frac{9025 \cdot (190 - 285)}{60} \right)$$

$$= \left(\frac{9409 \cdot (-91)}{60} \right) - \left(\frac{9025 \cdot (-95)}{60} \right)$$

$$= \left(-\frac{856219}{60} \right) - \left(-\frac{857375}{60} \right)$$

$$= \frac{(-856219) + 857375}{60} = \frac{1156}{60}$$

$$= \frac{289}{15} = 19,27$$

$$M_2 = \int_{97}^{303} (0,2)\, z \, dz$$

$$= \frac{(0,2)}{2} z^2 \Big]_{97}^{303} = 0,1 \cdot z^2 \Big]_{97}^{303}$$

$$= \left[0,1 \cdot (303)^2 \right] - \left[0,1 \cdot (97)^2 \right]$$

Date. No.

$= (0{,}1 \cdot 9180g) - (0{,}1 \cdot 940g)$

$= 9180{,}9 - 940{,}9$

$= 8240$ ✓

$M_3 = \int_{303}^{303{,}8} \left(\frac{305 - z}{10}\right) z\, dz = \int_{303}^{303{,}8} \frac{305z - z^2}{10}\, dz$

$= \frac{\frac{305z^2}{2} - \frac{z^3}{3}}{10} \Big]_{303}^{303{,}8} = \frac{\frac{915z^2 - 2z^3}{6}}{10} \Big]_{303}^{303{,}8}$

~~$\frac{\#\# - (\#\#\#\#)}{\#\#\#} \Big]_{\#\#\#}^{\#\#\#}$~~

$= -\frac{z^2 \cdot (2z - 915)}{60} \Big]_{303}^{303{,}8}$

$= \left(-\frac{(303{,}8)^2 \cdot (2(303{,}8) - 915)}{60}\right) - \left(-\frac{(303)^2 \cdot (2(303) - 915)}{60}\right)$

$= \left(-\frac{92294{,}44\,(607{,}6 - 915)}{60}\right) - \left(-\frac{91809 \cdot (606 - 915)}{60}\right)$

Date. No.

$$= \left(-\frac{92294,44 \cdot (-307,4)}{60}\right) - \left(-\frac{9180g \cdot (-309)}{60}\right)$$

$$= \left(\frac{28371310,856}{60}\right) - \left(\frac{28368981}{60}\right)$$

$$= \frac{2329,856}{60} = 38,83$$

$$M_4 = \int_{303,8}^{396,2} (0,12)\, z \, dz$$

$$= 0,12 \int_{303,8}^{396,2} z \, dx = 0,12 \cdot \frac{z^2}{2} \Big]_{303,8}^{396,2}$$

$$= \frac{3}{25} \cdot \frac{z^2}{2} \Big]_{303,8}^{396,2} = \frac{3z^2}{50} \Big]_{303,8}^{396,2}$$

$$= \frac{3 \cdot (396,2)^2}{50} - \frac{3 \cdot (303,8)^2}{50}$$

$$= \frac{3 \times 156974,44}{50} - \frac{3 \times 92294,44}{50}$$

$$= \frac{470923,32}{50} - \frac{276883,32}{50}$$

$$= 9418,4664 - 5537,6664$$

$$= 3880,8 \quad \checkmark$$

$$M5 = \int_{396,2}^{403} \left(\frac{z-395}{10}\right) z \, dz = \int_{396,2}^{403} \left(\frac{z^2}{10} - \frac{395z}{10}\right) dz$$

$$= \int_{396,2}^{403} \left(\frac{z^2}{10} - \frac{79z}{2}\right) dz = \frac{1}{10}\int_{396,2}^{403} z^2 \, dz - \frac{79}{2}\int_{396,2}^{403} z \, dz$$

$$\left(\left(\frac{1}{10} \cdot \frac{z^3}{3}\right) - \left(\frac{79}{2} \cdot \frac{z^2}{2}\right)\right)\Bigg|_{396,2}^{403}$$

$$= \frac{z^3}{30} - \frac{79z^2}{4}\Bigg]_{396,2}^{403} = \frac{z^2 \cdot (2z - 1185)}{60}\Bigg]_{396,2}^{403}$$

$$= \left(\frac{403^2 \cdot (2 \cdot 403 - 1185)}{60}\right) - \left(\frac{(396,2)^2 \cdot (2 \cdot (396,2) - 1185)}{60}\right)$$

$$= \left(\frac{162409 \cdot (806 - 1185)}{60}\right) - \left(\frac{156974,49 \cdot (792,4 - 1185)}{60}\right)$$

Date. No.

$$= \left(\frac{162409 \cdot (-379)}{60}\right) - \left(\frac{156974,49 \cdot (-392,6)}{60}\right)$$

$$= -\frac{61553.011}{60} + \frac{61628165,149}{60}$$

$$= -1025883,5166666 + 1027136.0857333$$

$$= 1252,57.$$

$$M6 = \int_{403}^{405} 0,8 \cdot z \, dz = 0,8 \int_{403}^{405} z \, dz$$

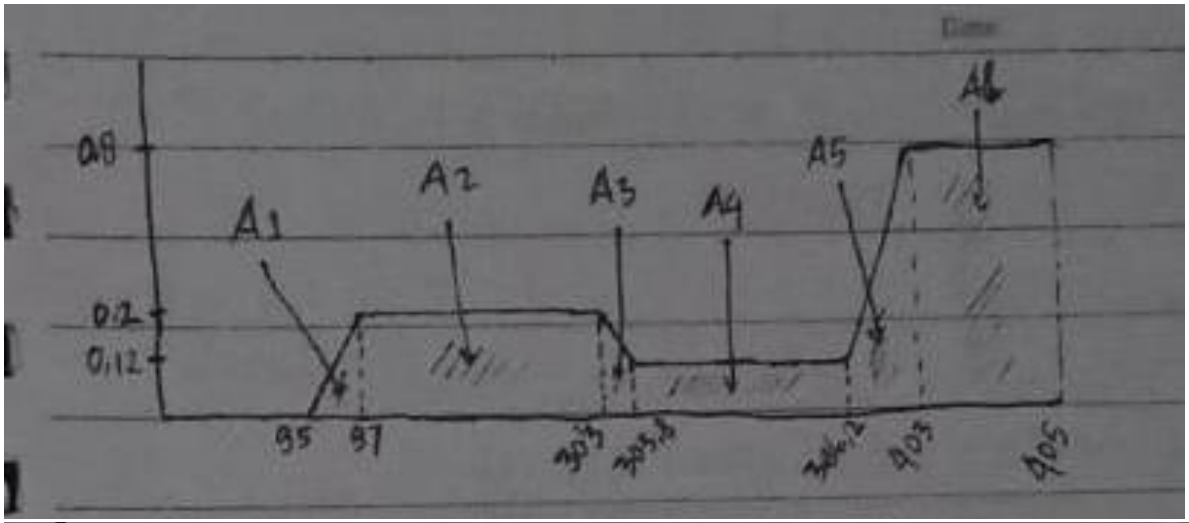
$$= 0,8 \cdot \frac{z^2}{2} \Big]_{403}^{405} = 0,4 \cdot z^2 \Big]_{403}^{405}$$

$$= (0,4 \cdot (405)^2) - (0,4 \cdot (403)^2)$$

$$= (0,4 \cdot 164025) - (0,4 \cdot 162409)$$

$$= 65610 - 64963,6$$

$$= 646,4$$



- Luas Daerah

$A_1 = \frac{(97-95)\cdot 0,2}{2} = \frac{2\cdot 0,2}{2} = 0,2$

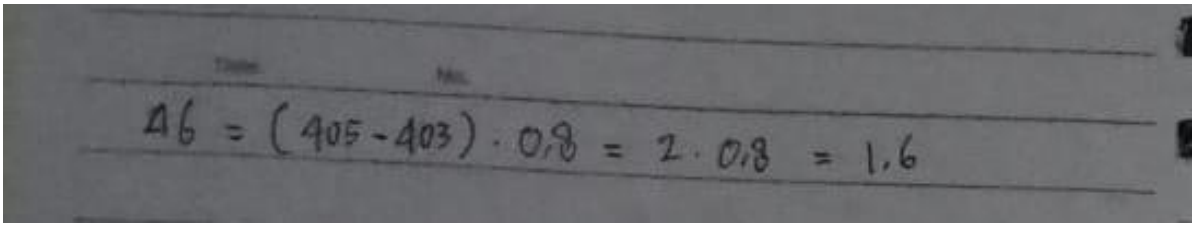
$A_2 = (303-97)(0,2) = 206\,(0,2) = 41,2$

$A_3 = \frac{(0,2+0,12)(303,8-303)}{2} = \frac{0,32\cdot 0,8}{2} = \frac{0,256}{2}$

$= 0,128.$

$A_4 = (396,2-303,8)(0,12) = 92,4\cdot(0,12) = 11,088$

$A_5 = \frac{(0,8+0,12)(403-396,2)}{2} = \frac{0,92\cdot 6,8}{2} = 3,128$



$$Z = \frac{M1 + M2 + M3 + M4 + M5 + M6}{A1 + A2 + A3 + A4 + A5 + A6}$$

$$Z = \frac{19{,}27 + 8240 + 38{,}83 + 3880{,}8 + 1252{,}57 + 646{,}4}{0{,}2 + 41{,}2 + 0{,}128 + 11{,}088 + 3{,}128 + 1{,}6}$$

$$Z = \frac{14077{,}87}{57{,}344}$$

$$Z = 245{,}498570033482$$