# Prostorska in krajinska arheologija-Vaje 

Opisna statistika


Table
(Tabela)
Fields,Attributes, Columns
(Polja, Atributi, Stolpci)



Figure 1.2 Method proposed by Ivan Vajsov for analysing Hamangia figurines (after Vajsov 1992b)

## Kakšne vrednosti?

Numerične: Kategoričnie


Diskretne : Kontinuirane
1,2,3,4,5 : 2.56, 3.87,1298

# Kaj naredimo s številkami? 



## Deskriptivna statistika

| 26305425705251266718212917121835303636 |
| ---: |
| X |
| $\quad 21241810432815262714291929314120444226$ |
|  |
|  |
|  |

## Spremenljivka

"Povprečje"

Mediana

## Modus

Aritmetična sredina

Mediana
$\{1,2,5,7,4,3,2\} \quad\{1,2,2,3,4,5,7\} \longrightarrow 3$
$\{1,2,5,7,4,3,2,1\} \rightarrow\{1,1,2,2,3,4,5,7\} \rightarrow 2.5$

Kvartili

Q1 spodnjih $25 \%$ podatkov, 25. percentil
Q2 spodnjih 50\% podatkov, 50. percentil, mediana
Q3 spodnjih 75\% podatkov, 75. percentil
$\{6,47,49,15,42,41,7,39,43,40,36\}$
$\{6,7,15,36,39,40,41,42,43,47,49\}$
$\mathrm{Q}_{1}=15$
$\mathrm{Q}_{2}=40$
$\mathrm{Q}_{3}=43$

Modus

$$
\begin{gathered}
\{1,2,5,7,4,3,2\} \quad\{1,2,2,3,4,5,7\} \longrightarrow 2 \\
\{1,2,5,7,4,3,2,1\} \longrightarrow\{1,1,2,2,3,4,5,7\} \longrightarrow 1,2
\end{gathered}
$$

bimodalna

Aritmetična sredina ( $\bar{x}$ )

$$
\bar{x}=\frac{1}{n} \sum x_{i}
$$

$\{1,2,5,7,4,3,2,1\} \longrightarrow 3.125$

Mediana $\bar{x}$

## $\{1,2,5,7,4,3,2,1,1\} \quad 3 \quad 3.125$

$\{1,2,5,7,4,3,2,1,100\} \quad 3 \quad 13.88888$

## Variabilnost

## Obseg

## Varianca

Standardna deviacija
Relativna varianca

Obseg

$$
\{1,2,5,7,4,3,2,1,1\} \rightarrow\{1,1,1,2,2,3,4,5,7\} \rightarrow 1,7
$$

Medkvartilni obseg (IQR)

$$
\begin{aligned}
& \mathrm{Q}_{1}=1 \\
& \mathrm{Q}_{3}=4.5
\end{aligned}
$$

$$
\mathrm{IQR}=\mathrm{Q}_{3}-\mathrm{Q}_{1}=3.5
$$

Varianca $\mathrm{s}^{2}$

$$
s^{2}=\frac{1}{n-1} \sum\left(x_{i}-\bar{x}\right)^{2}
$$

$$
\{1,2,5,7,4,3,2,1,1\} \longrightarrow 4.41
$$

Standarda deviacija s, $\sigma$

$$
s=\sqrt{s^{2}}
$$

## $\{1,2,5,7,4,3,2,1,1\} \longrightarrow 2.101$

## Histogram

2630542570525126671821291712
183530363621241810432815262714 291929314120444226191639282139 29202124171315151628
"Predal" (Bin)

10-20: 13
20-30: 19
30-40: 6
40-50: 4
50-60: 3 60-70: 2

Histogram of warpbreaks\$breaks

## Histogram



## Histogram

Histogram of warpbreaks\$breaks


Histogram of warpbreaks\$breaks


Histogram of warpbreaks $\$$ breaks


## Histogram gostote

Histogram of warpbreaks\$breaks


Histogram s številkami ("Stem and leaf plot")

2630542570525126671821291712<br>183530363621241810432815262714<br>291929314120444226191639282139 29202124171315151628

I | 023455667788899
2 | 00IIII|445666678889999
3 | 00156699
4| 1234
5 | 124
6|7
7 | 0

## Grafikon kvartilov (boxplot)


minimum



Histogram of warpbreaks\$breaks


Histogram of $t$






## DIGGING NUMBERS

## http://ge.tt/9aIqgFT/v/0

Elementary Statistics for Archacologists Seoned Idition

Mike Fleteher and Gary R. Leck
<MAT>, <CON>, <LOO> and <PEG>.

| Column | Variable name | Description <br> <mAT> | Malues <br> 2 |
| :---: | :---: | :---: | :--- |
|  |  |  | $1=$ Bronze |
| 3 | <CON> | Context | $2=$ Iron |
|  |  |  | $=$ Stray find (including 1 |
|  |  | $2=$ Settlement |  |
| 4 | <LOO> | Loop | $3=$ Burial |
| 5 | <PEG> | Peghole | $1=$ No $2=$ Yes |
| 5 |  |  |  |

## Variable number

8. Maximum length (cm) <MAXLE>
9. Length of socket (cm) <SOCLE>
10. Maximum width( cm ) <MAXWI>
11. Width of upper socket (cm) <UPSOC>
12. Width of lower socket (cm) <LOSOC>
13. Distance between maximum width and lower socket (cm) <MAWIT>
14. Weight (g)
<WEIGHT>

Figure 1.1. The seven quantitative variables.

## http://ge.tt/900BU4C?c

