

INSTITUTO GEOGRAFICO NACIONAL
OBSERVATORIO GEOFISICO DE LOGROÑO
BOLETIN SISMICO PROVISIONAL

ENERO - 1.982
(1ª decena)

Naturaleza del terreno: Mioceno Lacustre

Coordenadas geográficas:

L = 42° 27' 28" Norte

M = 02° 30' 11,7" Oeste

Z = 445,50 metros

CONSTANTES DE LOS SISMOGRAFOS

| Aparatos | Período Péndulo | Período Galvan. | Amplificación Máxima |
|---------------|--------------------|--------------------|-------------------------|
| Stuttgart - Z | 1,30 | 1,30 | 7.500 |
| Stuttgart - N | 1,30 | 1,30 | 6.900 |
| Stuttgart - E | 1,21 | 1,21 | 8.700 |

| Núm. de orden | Día | Fase | Componente | Hora TMG | T seg. | Amplitud micrones | Dil. o comp. | △ (Km) (Grad) | INFORMACION COMPLEMENTARIAS | |
|---------------|-----|-------------------------|------------|---|--------|-------------------|--------------|---------------|--------------------------------|--|
| 1 | 1 | eP e(PKP) iS | ZH | 19 05 23,0 08 43,0 18 27,0 | | | | 14033 | | |
| | | eP eS | NH | 19 05 23,0 18 27,0 | | | | | | |
| | | eP eS | EH | 19 05 23,0 18 27,0 | | | | | | |
| 2 | 3 | ePg iSg iSn | ZH | 02 13 36,0 13 45,5 13 50,5 | | | | 81 | Lg T1,1 Ao,23 Duración: 70" | |
| | | ePg iSg iSn | NH | 02 13 36,0 13 45,5 13 50,5 | | | | | | |
| | | ePg iSg iSn | EH | 02 13 36,0 13 45,5 13 50,5 | | | | | | |
| 3 | 3 | iP iPcP ePP eS | ZH | 14 18 23,0 19 43,0 20 36,0 25 27,0 | 1,7 | 0,75 | Com. | 5450 | | |
| | | eP ePcP iPP eS | NH | 14 18 23,0 19 43,0 20 36,0 25 27,0 | | | | | | |
| | | eP ePP eS | EH | 14 18 23,0 20 36,0 25 27,0 | | | | | | |
| 4 | 4 | iP i | ZH | 06 22 35,0 23 37,0 | | | Dil. | | | |
| | | eP e | NH | 06 22 35,0 23 37,0 | | | | | | |
| | | eP | EH | 06 22 35,0 | | | | | | |
| 5 | 4 | eP | ZH | 06 33 32,0 | | | | | | |
| | | eP | NH | 06 33 32,0 | | | | | | |
| | | eP | EH | 06 33 32,0 | | | | | | |

| Núm. de orden | Día | Fase | Componente | Hora TMG | T seg. | Amplitud micrones | Dil. o comp. | Δ (Km) (Grad) | INFORMACION COMPLEMENTARIAS |
|---------------|-----|----------------------|------------|----------------------------------|--------|-------------------|--------------|----------------------|-----------------------------|
| 6 | 4 | ePn iSn | ZH | 07 28 56,0 29 13,5 | | | | 136 | Lg Duración: 55" |
| | | ePn iSn | NH | 07 28 56,0 29 13,5 | | | | | |
| | | ePn eSn | EH | 07 28 56,0 29 13,5 | | | | | |
| 7 | 4 | ePn eSn | ZH | 13 14 18,8 14 36,3 | | | | 136 | Duración: 45" |
| | | ePn iSn | NH | 13 14 18,8 14 36,3 | | | | | |
| | | ePn iSn | EH | 13 14 18,8 14 36,3 | | | | | |
| 8 | 4 | ePn iSn | ZH | 17 28 11,3 28 27,8 | | | | 130 | Duración: 65" |
| | | ePn iSn | NH | 17 28 11,3 28 27,8 | | | | | |
| | | ePn iSn | EH | 17 28 11,3 28 27,8 | | | | | |
| 9 | 4 | iPKP iPKKP ePP | ZH | 22 40 32,8 41 15,0 45 00,0 | | | | Com.17880 | |
| | | ePKP iPKKP | NH | 22 40 32,8 41 15,0 | | | | | |
| | | ePKP ePKKP | EH | 22 40 32,8 41 15,0 | | | | | |
| 10 | 5 | eP | ZH | 00 35 25,0 | | | | | |
| | | eP | NH | 00 35 25,0 | | | | | |
| | | eP | EH | 00 35 25,0 | | | | | |
| 11 | 5 | eP iPP | ZH | 13 53 15,6 55 04,6 | | | | Dil. 5140 | |
| | | eP | NH | 13 53 15,6 | | | | | |
| | | eP | EH | 13 53 15,6 | | | | | |
| 12 | 6 | eP | ZH | 09 21 09,5 | | | | | |
| | | eP | NH | 09 21 09,5 | | | | | |
| | | eP | EH | 09 21 09,5 | | | | | |

INSTITUTO GEOGRAFICO NACIONAL
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L = 42° 27' 28" Norte

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| Aparatos | Período Péndulo | Período Galvan. | Amplificación Máxima |
|---------------|--------------------|--------------------|-------------------------|
| Stuttgart - Z | 1,30 | 1,30 | 7.500 |
| Stuttgart - N | 1,30 | 1,30 | 6.900 |
| Stuttgart - E | 1,21 | 1,21 | 8.700 |

| Núm. de orden | Día | Fase | Componente | Hora TMG | | T seg. | Amplitud micrones | Dil. o comp. | Δ (Km) (Grad) | INFORMACION COMPLEMENTARIAS | |
|---------------|-----|-------------------|------------|----------------------------------|-----|--------|-------------------|--------------|----------------------|-----------------------------|--|
| 20 | 11 | eP iPP | ZH | 06 24 21,0 28 41,0 | | | | | 11540 | | |
| | | eP ePP | NH | 06 24 21,0 28 41,0 | | | | | | | |
| | | eP ePP | EH | 06 24 21,0 28 41,0 | | | | | | | |
| 21 | 11 | eP | NH | 21 49 21,5 | | | | Dil.? | | | |
| | | eP | NH | 21 49 21,5 | | | | | | | |
| | | eP | EH | 21 49 21,5 | | | | | | | |
| 22 | 12 | eP | ZH | 01 58 20,0 | | | | | | | |
| | | eP | NH | 01 58 20,0 | | | | | | | |
| | | eP | EH | 01 58 20,0 | | | | | | | |
| 23 | 12 | iP | ZH | 06 00 11,5 | 1,1 | 0,37 | Com. | | | | |
| | | eP | NH | 06 00 11,5 | | | | | | | |
| | | eP | EH | 06 00 11,5 | | | | | | | |
| 24 | 13 | ePKP e | ZH | 00 26 08,0 29 21,0 | | | | | | | |
| | | ePKP | NH | 00 26 08,0 | | | | | | | |
| | | ePKP | EH | 00 26 08,0 | | | | | | | |
| 25 | 14 | ePg eSg eSn | ZH | 14 04 16,0 04 27,5 04 31,4 | | | | 98 | Duración: 45" | | |
| | | ePg eSg iSn | NH | 14 04 16,0 04 27,5 04 31,4 | | | | | | | |
| | | ePg eSg iSn | EH | 14 04 16,0 04 27,5 04 31,4 | | | | | | | |
| 26 | 15 | ePKP | ZH | 14 07 53,0 | | | | | | | |
| | | ePKP | NH | 14 07 53,0 | | | | | | | |
| | | ePKP | EH | 14 07 53,0 | | | | | | | |

| Núm. de orden | Día | Fase | Componente | Hora TMG | T seg. | Amplitud micrones | Dil. o comp. | Δ (Km) (Grad) | INFORMACION COMPLEMENTARIAS |
|---------------|-----|------------|------------|------------|--------|-------------------|--------------|----------------------|-----------------------------|
| 27 | 18 | ePKP | ZH | 04 43 39,0 | | | | | |
| | | ePKP | NH | 04 43 39,0 | | | | | |
| | | ePKP | EH | 04 43 39,0 | | | | | |
| 28 | 18 | e | ZH | 18 45 23,0 | | | | | |
| | | e | NH | 18 45 23,0 | | | | | |
| | | e | EH | 18 45 23,0 | | | | | |
| 29 | 18 | iP | ZH | 19 32 04,0 | 1,3 | 1,6 | Com. | 2302 | |
| | | iPP | | 32 28,0 | | | | | |
| | | iS | | 35 51,5 | | | | | |
| | | eP | NH | 19 32 04,0 | | | | | |
| | | iPP | | 32 28,0 | | | | | |
| | | iS | | 35 51,5 | | | | | |
| iP | EH | 19 32 04,0 | | | | | | | |
| iPP | | 32 28,0 | | | | | | | |
| iS | | 35 51,5 | | | | | | | |
| 30 | 18 | eP | ZH | 20 04 38,5 | | | | | |
| | | eP | NH | 20 04 38,5 | | | | | |
| | | eP | EH | 20 04 38,5 | | | | | |
| 31 | 18 | eP | ZH | 23 03 38,0 | | | | | |
| | | eP | NH | 23 03 38,0 | | | | | |
| | | eP | EH | 23 03 38,0 | | | | | |
| 32 | 18 | eP | ZH | 23 45 18,0 | | | | | |
| | | eP | NH | 23 45 18,0 | | | | | |
| | | eP | EH | 23 45 18,0 | | | | | |
| 33 | 19 | eP | ZH | 16 22 29,0 | | | Dil ? | | |
| | | eP | NH | 16 22 29,0 | | | | | |
| | | eP | EH | 16 22 29,0 | | | | | |
| 34 | 20 | eP | ZH | 04 38 16,0 | | | | | |
| | | e | | 41 52,0 | | | | | |
| | | eP | NH | 04 38 16,0 | | | | | |
| | | eP | EH | 04 38 16,0 | | | | | |

| Núm. de orden | Día | Fase | Componente | Hora TMG | T seg. | Amplitud micrones | Dil. o comp. | △ (Km) (Grad) | INFORMACION COMPLEMENTARIAS |
|---------------|-----|------|------------|------------|--------|-------------------|--------------|---------------|-----------------------------|
| 35 | 20 | eP | ZH | 05 26 29,0 | | | | | |
| | | eP | NH | 05 26 29,0 | | | | | |
| | | eP | EH | 05 26 29,0 | | | | | |
| 36 | 20 | eP | ZH | 07 22 15,0 | | | | | |
| | | eP | NH | 07 22 15,0 | | | | | |
| | | eP | EH | 07 22 15,0 | | | | | |
| 37 | 20 | iP | ZH | 09 43 06,0 | 1,1 | 0,28 | Dil. | | |
| | | eP | NH | 09 43 06,0 | | | | | |
| | | eP | EH | 09 43 06,0 | | | | | |

E. Maza



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(3ª decena)

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Coordenadas geográficas:

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CONSTANTES DE LOS SISMOGRAFOS

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|---------------|--------------------|--------------------|-------------------------|
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| Stuttgart - N | 1,30 | 1,30 | 6.900 |
| Stuttgart - E | 1,21 | 1,21 | 8.700 |

| Núm. de orden | Día | Fase | Componente | Hora TMG | T seg. | Amplitud micrones | Dil. o comp. | Δ (Km) (Grad) | INFORMACION COMPLEMENTARIAS |
|---------------|-----|-------------------|------------|----------------------------------|--------|-------------------|--------------|----------------------|--------------------------------|
| 38 | 21 | ePn eSn | ZH | 12 35 13,0 35 31,5 | | | | 145 | Duración: 65" |
| | | ePn eSn | NH | 12 35 13,0 35 31,5 | | | | | |
| | | ePn eSn | EH | 12 35 13,0 35 31,5 | | | | | |
| 39 | 22 | eP | ZH | 04 41 21,0 | | | | | |
| | | eP | NH | 04 41 21,0 | | | | | |
| | | eP | EH | 04 41 21,0 | | | | | |
| 40 | 23 | iP iPcP ePP | ZH | 17 48 15,5 48 44,5 50 47,0 | | | Com. | 7506 | |
| | | eP ePP | NH | 17 48 15,5 50 47,0 | | | | | |
| | | eP ePP | EH | 17 48 15,5 50 47,0 | | | | | |
| 41 | 23 | ePg eSg eSn | ZH | 18 24 30,5 24 37,0 24 44,0 | | | | 56 | Duración: 45" Lg T1,2 Ao,19 |
| | | ePg eSg eSn | NH | 18 24 30,5 24 37,0 24 44,0 | | | | | |
| | | ePg eSg eSn | EH | 18 24 30,5 24 37,0 24 44,0 | | | | | |
| 42 | 25 | iP ePP | ZH | 05 41 58,0 45 10,0 | 1,3 | 0,53 | Com. | 9174 | |
| | | eP ePP | NH | 05 41 58,0 45 10,0 | | | | | |
| | | eP ePP | EH | 05 41 58,0 45 10,0 | | | | | |
| 43 | 25 | ePg iSg eSn | ZH | 15 00 43,9 00 51,4 00 57,9 | | | | 64 | Lg To,7 Ao,20 Duración: 50" |
| | | ePg iSg eSn | NH | 15 00 43,9 00 51,4 00 57,9 | | | | | |
| | | ePg iSg eSn | EH | 15 00 43,9 00 51,4 00 57,9 | | | | | |

| Núm. de orden | Día | Fase | Componente | Hora TMG | T seg. | Amplitud micrones | Dil. o comp. | Δ (Km) (Grad) | INFORMACION COMPLEMENTARIAS | | | | |
|---------------|-----|-------------------|------------|----------------------------------|--------|-------------------|--------------|----------------------|--------------------------------|------|----------------|--|--|
| 44 | 26 | ePg eSg iSn | ZH | 11 13 19,1 13 23,6 13 31,4 | | | | 38 | Lg To,8 Ao,33 Duración: 40" | | | | |
| | | | NH | 11 13 19,1 13 23,6 13 31,4 | | | | | | | | | |
| | | | EH | 11 13 19,1 13 23,6 13 31,4 | | | | | | | | | |
| | | ePn iSn | ZH | 00 19 27,4 19 47,2 | | | | | | 159 | Duración: 110" | | |
| | | | NH | 00 19 27,4 19 47,2 | | | | | | | | | |
| | | | EH | 00 19 27,4 19 47,2 | | | | | | | | | |
| | | 46 | 28 | 1P eP eP | ZH | 16 12 15,1 | 1,7 | | | 0,45 | Dil. | | |
| | | | | | NH | 16 12 15,1 | | | | | | | |
| | | | | | EH | 16 12 15,1 | | | | | | | |
| 47 | 29 | eP eP eP | ZH | 00 13 44,6 | | | | | | | | | |
| | | | NH | 00 13 44,6 | | | | | | | | | |
| | | | EH | 00 13 44,6 | | | | | | | | | |
| 48 | 29 | e e e | ZH | 16 27 55,5 | | | | | | | | | |
| | | | NH | 16 27 55,5 | | | | | | | | | |
| | | | EH | 16 27 55,5 | | | | | | | | | |
| 49 | 29 | 1P e | ZH | 22 39 34,5 41 03,0 | 1,6 | 0,41 | Com. | | | | | | |
| | | | NH | 22 39 34,5 | | | | | | | | | |
| | | eP | EH | 22 39 34,5 | | | | | | | | | |
| 50 | 30 | 1P ePP | ZH | 02 44 47,5 46 53,5 | 1,5 | 0,38 | Dil. | 6227 | | | | | |
| | | | NH | 02 44 47,5 | | | | | | | | | |
| | | eP | EH | 02 44 47,5 | | | | | | | | | |

| Núm. de orden | Día | Fase | Componente | Hora TMG | T seg. | Amplitud micrones | Dil. o comp. | △ (Km) (Grad) | INFORMACION COMPLEMENTARIAS |
|---|-----|------|------------|------------|--------|-------------------|--------------|---------------|-----------------------------|
| 51 | 31 | eP | ZH | 08 56 36,0 | | | | | |
| | | eP | NH | 08 56 36,0 | | | | | |
| | | eP | EH | 08 56 36,0 | | | | | |
| 52 | 31 | eP | ZH | 16 07 44,0 | | | | | |
| | | eP | NH | 16 07 44,0 | | | | | |
| | | eP | EH | 16 07 44,0 | | | | | |
|  | | | | | | E. Maza | | | |