

MINISTERIO DE OBRAS PUBLICAS
DIRECCION GENERAL DE AGUAS

Boletín N° : 351
Mes : Julio
Año : 2007

DE : JAVIER NARBONA NARANJO
ING. JEFE DEPARTAMENTO DE HIDROLOGIA

*INFORMACION PLUVIOMETRICA, FLUVIOMETRICA,
ESTADO DE EMBALSES Y AGUAS SUBTERRANEAS*

Contenido :

- 1.- Informe pluviométrico
- 2.- Volúmenes de embalses
- 3.- Informe fluviométrico
- 4.- Informe aguas subterráneas

En Internet (www.dga.cl) se publica: .
-Los informes de este boletín
-Caudales en tiempo real

NOTA: Datos provisorios sujetos a modificaciones posteriores

INFORME PLUVIOMETRICO NACIONAL N°07

| ESTACIONES | JULIO | TOTALES AL 31 DE JULIO | | | EXCESO O DÉFICIT (%) |
|--------------------|-------|------------------------|--------------|------------------|----------------------------|
| | | 2007 (mm) | 2006 (mm) | PROMEDIO (mm) | |
| CENTRAL CHAPIQUÍÑA | 0 0 | 76.1 | 159.0 | 133.3* | - 43 |
| EMBALSE CONCHI | 0.0 | 3.0 | 33.2 | 17.2* | - 83 |
| CALAMA | 0.0 | 0.0 | 0.5 | 3.5 | -100 |
| ANTOFAGASTA | 0.0 | 0.0 | 0.0 | 2.5 | -100 |
| COPIAPÓ | 0.0 | 0.5 | 0.0 | 9.9 | - 95 |
| EMBALSE LAUTARO | 0.0 | 6.5 | 1.0 | 21.7 | - 70 |
| VALLENAR | 0.0 | 1.4 | 2.0 | 23.0 | - 94 |
| RIVADAVIA | 6.5 | 20.0 | 41.6 | 69.6 | - 71 |
| VICUÑA | 0.0 | 9.4 | 51.4 | 65.2 | - 86 |
| LA SERENA | 0.0 | 15.1 | 63.3 | 54.6 | - 72 |
| OVALLE | 0.0 | 25.8 | 62.4 | 75.0 | - 66 |
| EMBALSE PALOMA | 0.0 | 32.9 | 77.1 | 96.6 | - 66 |
| COGOTÍ 18 | 5.5 | 36.0 | 119.0 | 132.6 | - 73 |
| HUINTIL | 12.0 | 91.6 | 131.5 | 152.1 | - 40 |
| COIRÓN | 11.3 | 152.9 | 179.5 | 231.2 | - 34 |
| VILCUYA | 37.0 | 165.5 | 313.2 | 225.3 | - 27 |
| SAN FELIPE | 9.8 | 102.6 | 199.6 | 143.7 | - 29 |
| LAGO PEÑUELAS | 49.5 | 227.0 | 632.5 | 446.2 | - 49 |
| EMBALSE EL YESO | 172.5 | 401.5 | 501.8 | 362.5 | 11 |
| CERRO CALÁN | 66.5 | 202.7 | 257.2 | 258.4 | - 22 |
| SANTIAGO (MOP) | 46.3 | 165.0 | 245.3 | 211.8 | - 22 |
| RANCAGUA | 67.9 | 177.1 | 337.9 | 285.3 | - 38 |
| SAN FERNANDO | 83.7 | 261.9 | 590.9 | 491.1 | - 47 |
| CONVENTO VIEJO | 91.5 | 258.5 | 510.0 | 475.5 | - 46 |
| CURICO | 71.5 | 250.6 | 487.4 | 482.2 | - 48 |
| TALCA | 95.8 | 254.8 | 520.9 | 450.8 | - 43 |
| COLORADO | 346.0 | 660.9 | 1074.0 | 935.9 | - 29 |
| LINARES | 170.4 | 415.8 | 648.2 | 616.1 | - 33 |
| PARRAL | 199.0 | 439.3 | 820.6 | 657.7 | - 33 |
| EMBALSE DIGUA | 251.1 | 609.4 | 1163.6 | 974.3 | - 37 |
| CHILLÁN | 212.6 | 474.9 | 902.8 | 657.5 | - 28 |
| CONCEPCIÓN | 216.3 | 625.5 | 1010.2 | 778.1 | - 20 |
| LOS ÁNGELES | 146.6 | 527.7 | 954.6 | 720.7 | - 27 |
| CAÑETE | 205.5 | 669.4 | 1085.7 | 815.5 | - 18 |
| ANGOL | 105.2 | 556.6 | 1048.1 | 727.5 | - 23 |
| TEMUCO | 183.6 | 632.1 | 1022.6 | 757.2 | - 17 |
| VALDIVIA | 286.1 | 822.6 | 1557.5 | 1385.5 | - 41 |
| OSORNO | 143.5 | 515.0 | 940.9 | 998.8 | - 48 |
| PUERTO MONTT | 213.9 | 741.5 | 1804.9 | 1204.1 | - 38 |
| COYHAIQUE | 69.2 | 410.9 | 799.6 | 800.0 | - 49 |
| PUNTA ARENAS | 24.6 | 380.1 | 425.0 | 264.5 | 44 |

Promedios acumulados para el período 1961-1990 (D.G.A)

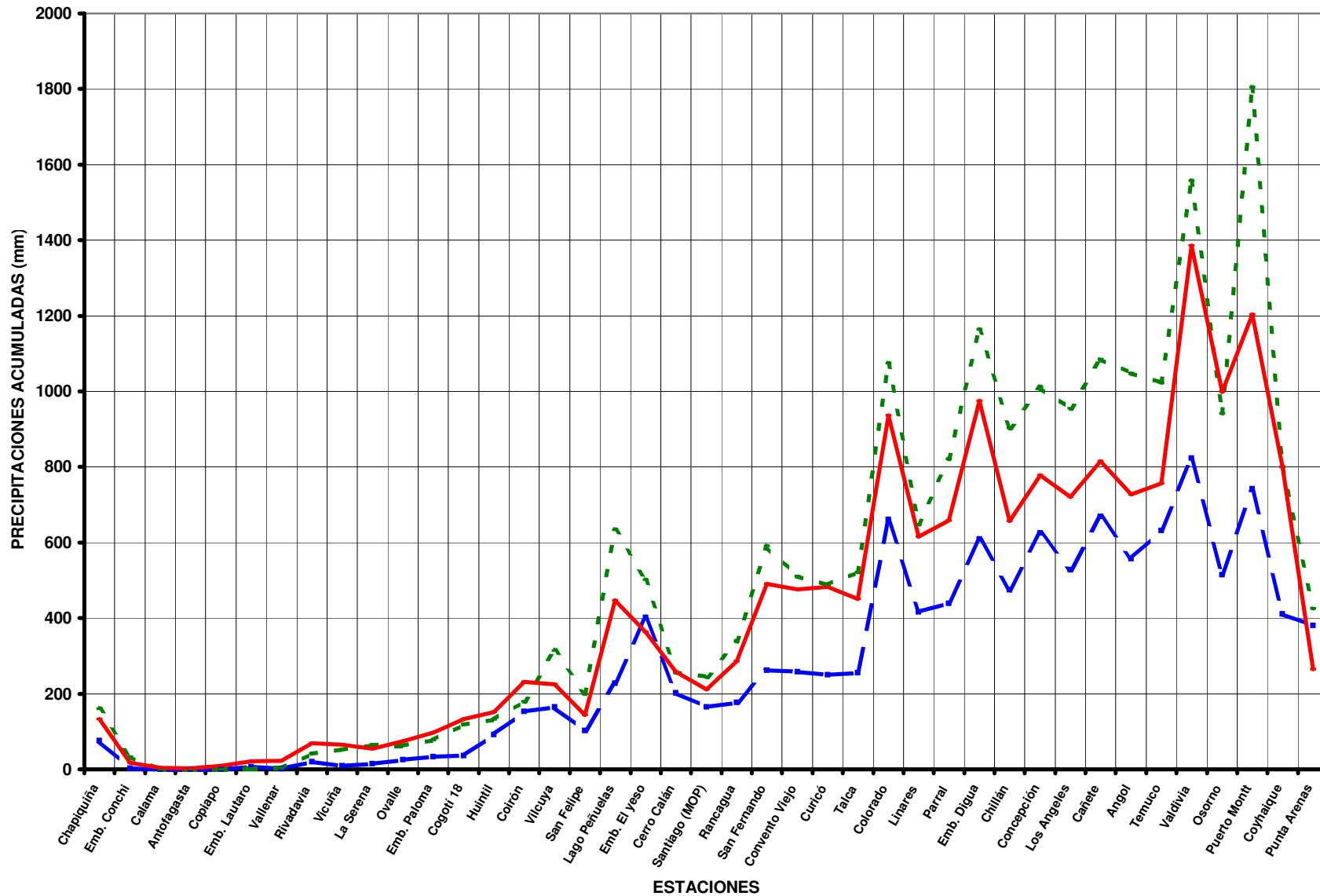
* : Promedios calculados para períodos inferiores a 30 años
Valores expresados en milímetros (1 mm = 1 lt x m2)

TOTALES DE LLUVIA HASTA EL
31 de Junio de 2007

Normal

Año 2007

Año 2006



ESTADO DE EMBALSES

Ultimo día del mes
(Volúmenes en mill-m³)

| EMBALSE | REGION | CUENCA | CAPACIDAD | PROMEDIO | Julio | | Uso Principal |
|---------------|--------|-----------|-----------|-----------|-------|------|--------------------|
| | | | | HISTORICO | 2007 | 2006 | |
| | | | | MENSUAL | | | |
| Conchi | II | Loa | 22 | 18 | 17 | 19 | Riego |
| Lautaro | III | Copiapó | 35 | 13 | 7.0 | 13 | Riego |
| Santa Juana | III | Huasco | 166 | 126 | 129 | 166 | Riego |
| La Laguna | IV | Elquí | 40 | 24 | 32 | 32 | Riego |
| Puclaro | IV | Elqui | 200 | 130 | 192 | 197 | Riego |
| Recoleta | IV | Limarí | 100 | 67 | 75 | 97 | Riego |
| La Paloma | IV | Limarí | 748 | 421 | 463 | 575 | Riego |
| Cogotí | IV | Limarí | 150 | 81 | 41 | 83 | Riego |
| Culimo | IV | Quilimarí | 10 | 5 | 0.0 | 0.7 | Riego |
| Corrales | IV | Illapel | 50 | 38 | 42 | 50 | Riego |
| Peñuelas | V | Peñuelas | 95 | 30 | 16 | 30 | Agua Potable |
| El Yeso | RM | Maipo | 256 | 180 | 170 | 230 | Agua Potable |
| Rungue | RM | Maipo | 2.2 | 1 | 0.4 | 2.0 | Riego |
| Rapel | VI | Rapel | 695 | 526 | 411 | 605 | Generación |
| Colbún | VII | Maule | 1544 | 1218 | 489 | 1522 | Generación y Riego |
| Lag. Maule | VII | Maule | 1420 | 948 | 1189 | 1202 | Generación y Riego |
| Bullileo | VII | Maule | 60 | 49 | 32 | 60 | Riego |
| Digua | VII | Maule | 220 | 162 | 105.0 | 179 | Riego |
| Tutuvén | VII | Maule | 15 | 10 | 6.1 | 11 | Riego |
| Coihueco | VIII | Itata | 29 | 14 | 10 | 16 | Riego |
| Lago Laja (&) | VIII | Bio-Bio | 5582 | 3294 | 2273 | 2989 | Generación y Riego |
| Ralco | VIII | Bio-Bio | 1174 | | 418 | 1170 | Generación |
| Pangue | VIII | Bio-Bio | 83 | | 76 | 80 | Generación |

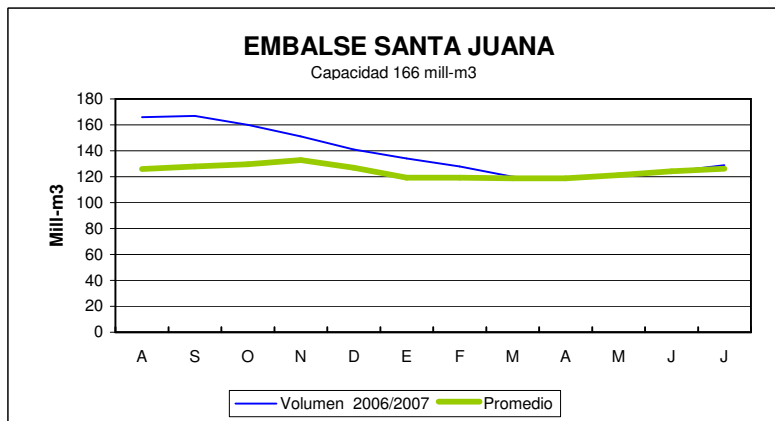
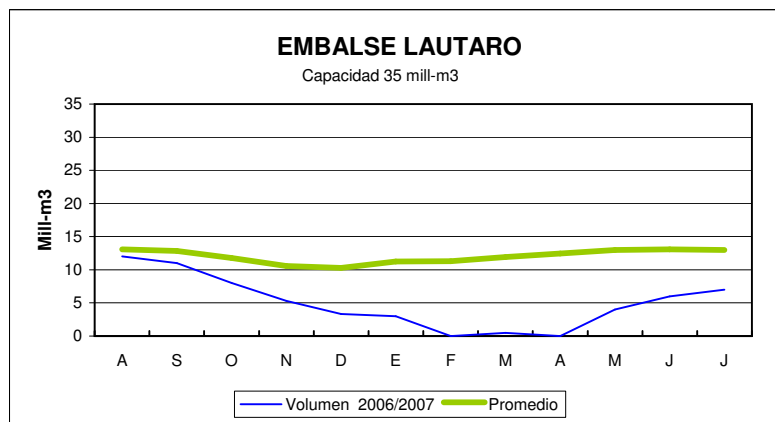
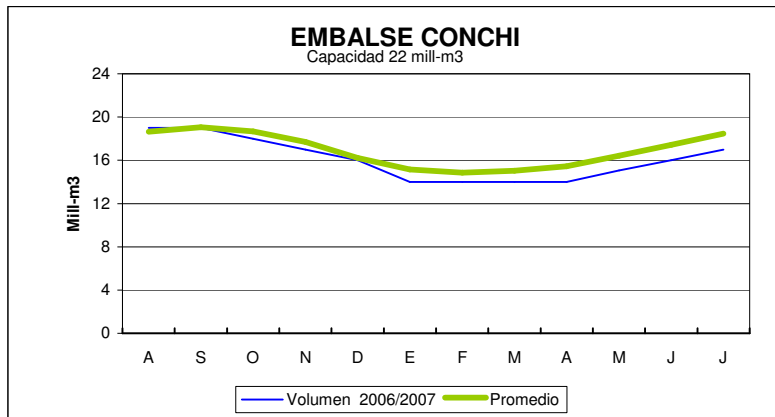
RESUMEN ANUAL

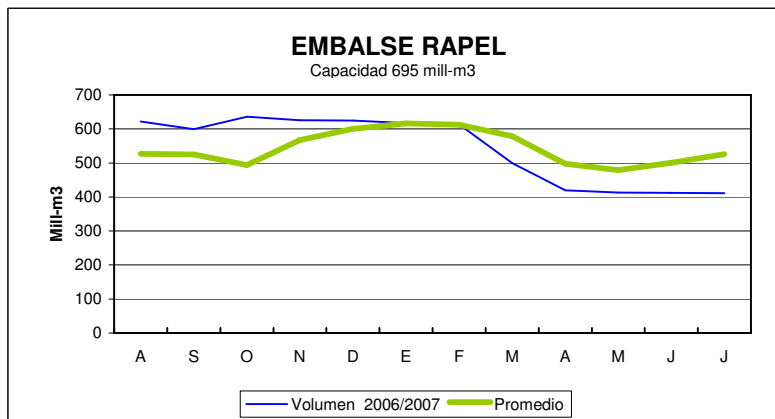
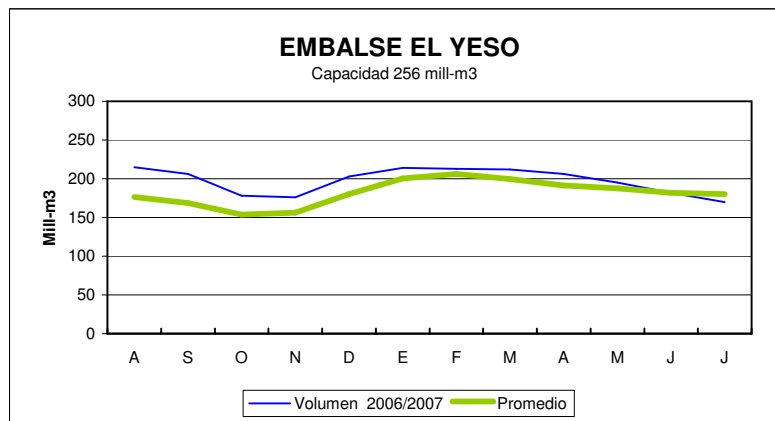
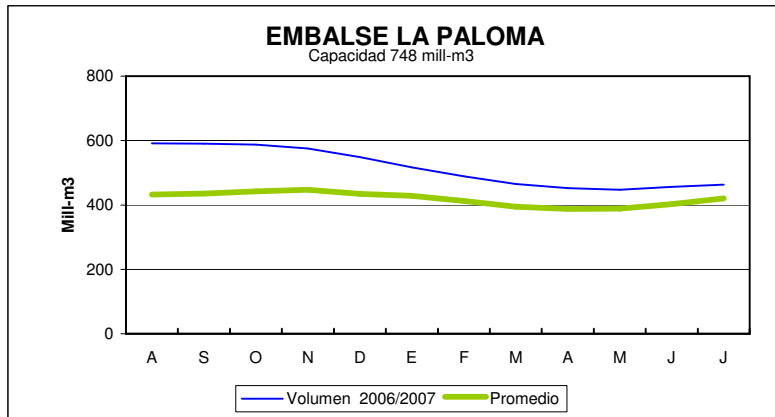
2006-2007

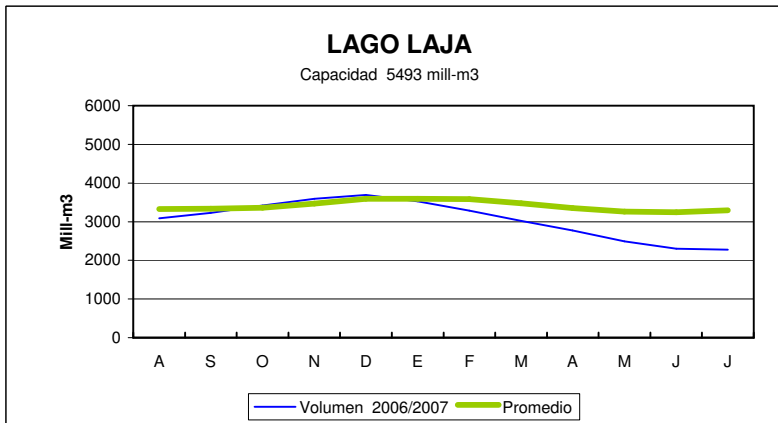
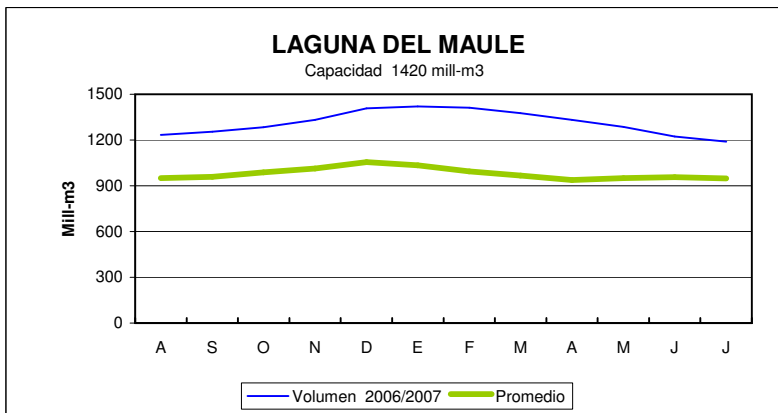
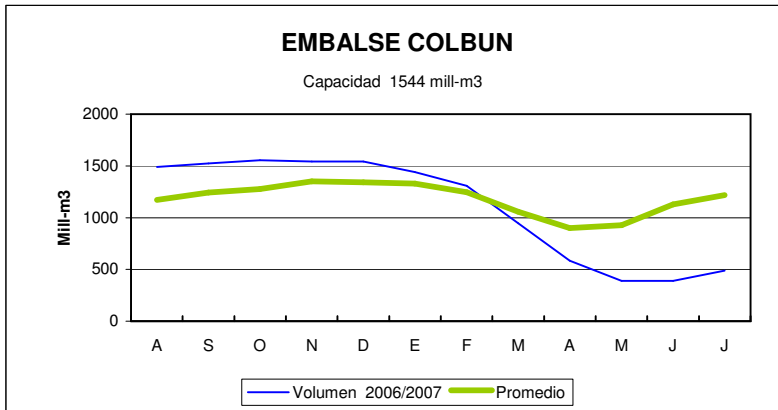
| EMBALSE | A | S | O | N | D | E | F | M | A | M | J | J |
|---------------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Conchi | 19 | 19 | 18 | 17 | 16 | 14 | 14 | 14 | 14 | 15 | 16 | 17 |
| Lautaro | 12 | 11 | 8 | 5 | 3 | 3 | 0 | 0.5 | 0.0 | 4.0 | 6.0 | 7.0 |
| Santa Juana | 166 | 167 | 160 | 151 | 141 | 134 | 128 | 120 | 118 | 121 | 124 | 129 |
| La Laguna | 31 | 32 | 35 | 35 | 35 | 33 | 29 | 28 | 30 | 32 | 32 | 32 |
| Puclaro | 197 | 192 | 189 | 192 | 195 | 196 | 197 | 191 | 188 | 187 | 191 | 192 |
| Recoleta | 95 | 91 | 87 | 82 | 79 | 75 | 71 | 68 | 67 | 68 | 72 | 75 |
| La Paloma | 591 | 590 | 587 | 575 | 549 | 517 | 489 | 465 | 452 | 447 | 456 | 463 |
| Cogotí | 85 | 82 | 81 | 75 | 67 | 59 | 53 | 47 | 43 | 41 | 40 | 41 |
| Culimo | 1.3 | 1.4 | 1.6 | 1.7 | 1.6 | 1.0 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| Corrales | 51 | 50 | 50 | 50 | 49 | 48 | 47 | 43 | 40 | 40 | 41 | 42 |
| Peñuelas | 34 | 33 | 32 | 29 | 26 | 24 | 24 | 20 | 18 | 16 | 16 | 16 |
| El Yeso | 215 | 206 | 178 | 176 | 203 | 214 | 213 | 212 | 206 | 195 | 182 | 170 |
| Rungue | 2.0 | 2.0 | 2.0 | 1.8 | 1.3 | 1.0 | 0.7 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 |
| Rapel | 622 | 599 | 636 | 626 | 625 | 617 | 613 | 500 | 420 | 413 | 412 | 411 |
| Colbún | 1491 | 1525 | 1555 | 1544 | 1544 | 1439 | 1308 | 945 | 584 | 389 | 388 | 489 |
| Lag. Maule | 1234 | 1254 | 1283 | 1332 | 1408 | 1420 | 1411 | 1376 | 1333 | 1285 | 1224 | 1189 |
| Bullileo | 60 | 60 | 60 | 60 | 60 | 50 | 35 | 6.5 | 0 | 2.12 | 6.1 | 32 |
| Digua | 219 | 220 | 220 | 220 | 155 | 85 | 29 | 4 | 3.2 | 6.0 | 38.1 | 105.0 |
| Tutuvén | 12 | 12 | 14 | 15 | 10 | 6 | 4 | 2 | 4.7 | 2.8 | 2.0 | 6.1 |
| Coihueco | 27 | 29 | 30 | 29 | 27 | 20 | 13.4 | 5.9 | 1.8 | 1.8 | 2.8 | 10 |
| Lago Laja (&) | 3083 | 3224 | 3421 | 3590 | 3689 | 3522 | 3282 | 3024 | 2775 | 2492 | 2299 | 2273 |
| Ralco | 1068 | 1158 | 1170 | 1080 | 1139 | 1089 | 743 | 422 | 416 | 416 | 413 | 418 |
| Pangue | 78 | 76 | 82 | 73 | 79 | 82 | 82 | 72 | 80 | 68 | 73 | 76 |

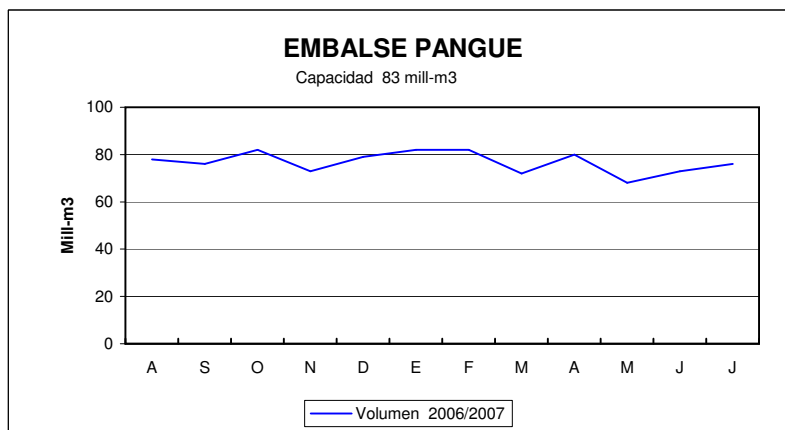
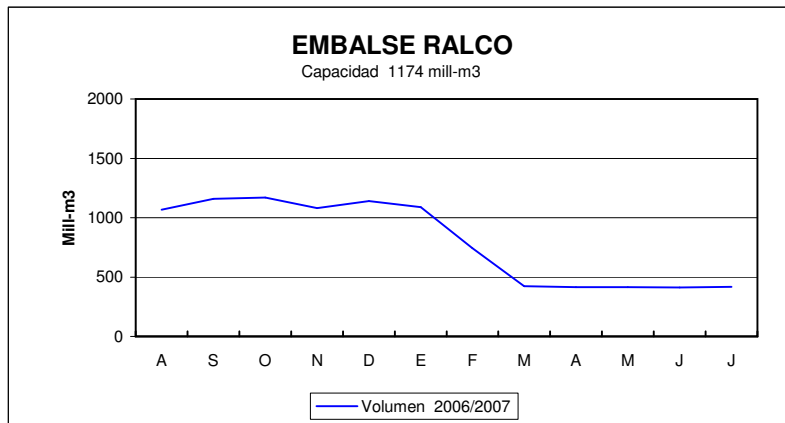
(&) : Volumen sobre cota 1300 msnm

ESTADO DE EMBALSES





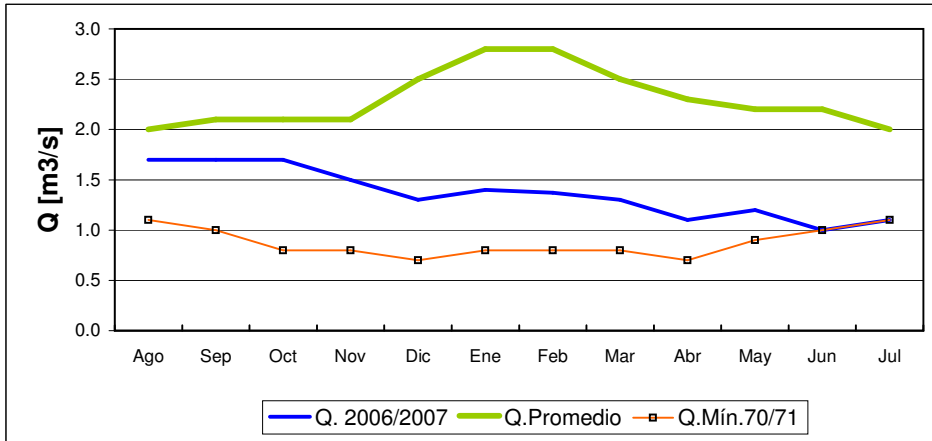




INFORME FLUVIOMETRICO
Caudales medios mensuales en m3/seg

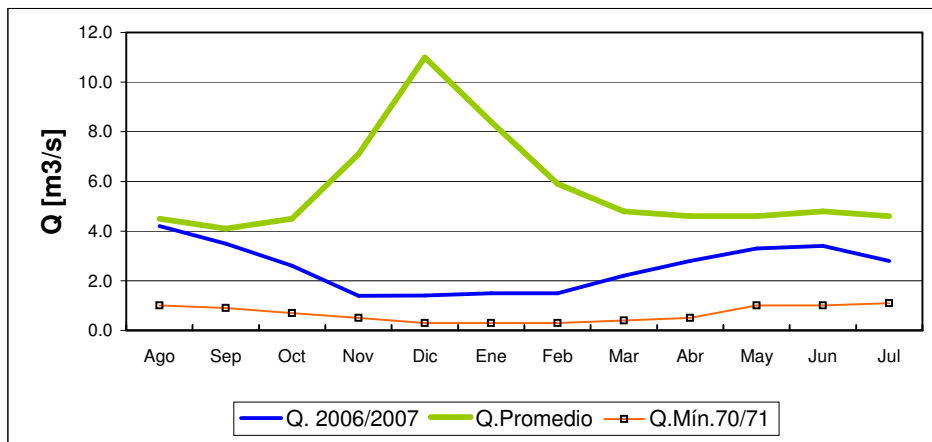
Jul-07

RIO COPIAPO EN LA PUERTA



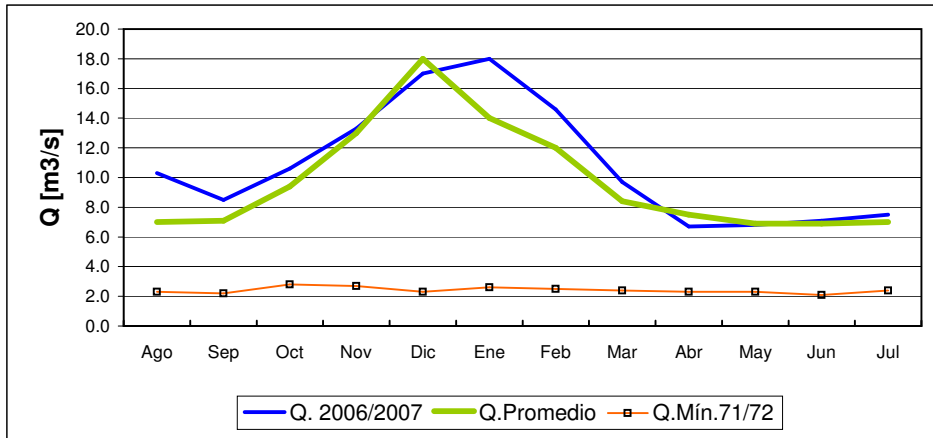
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 1.7 | 1.7 | 1.7 | 1.5 | 1.3 | 1.4 | 1.4 | 1.3 | 1.1 | 1.2 | 1.0 | 1.1 |
| Q. Promedio | 2.0 | 2.1 | 2.1 | 2.1 | 2.5 | 2.8 | 2.8 | 2.5 | 2.3 | 2.2 | 2.2 | 2.0 |
| Q. Min. 70/71 | 1.1 | 1.0 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 | 0.9 | 1.0 | 1.1 |

RIO HUASCO EN ALGODONES



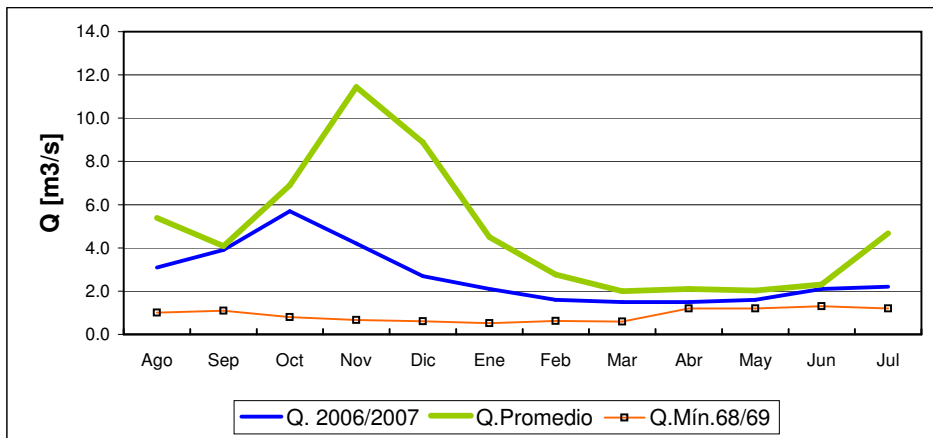
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|----------------------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 4.2 | 3.5 | 2.6 | 1.4 | 1.4 | 1.5 | 1.5 | 2.2 | 2.8 | 3.3 | 3.4 | 2.8 |
| Q. Promedio | 4.5 | 4.1 | 4.5 | 7.1 | 11.0 | 8.4 | 5.9 | 4.8 | 4.6 | 4.6 | 4.8 | 4.6 |
| Q. Min. 70/71 | 1.0 | 0.9 | 0.7 | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 1.0 | 1.0 | 1.1 |

RIO ELQUI EN ALGARROBAL



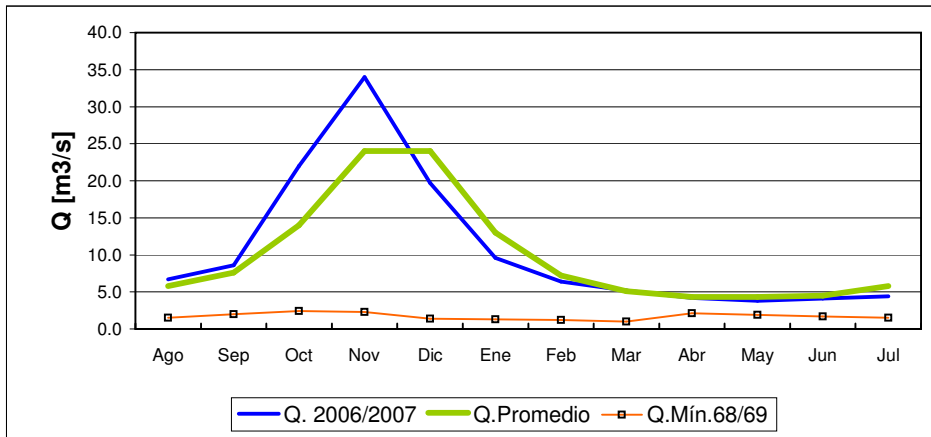
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|----------------------|------|-----|------|------|------|------|------|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 10.3 | 8.5 | 10.6 | 13.3 | 17.0 | 18.0 | 14.6 | 9.7 | 6.7 | 6.8 | 7.1 | 7.5 |
| Q. Promedio | 7.0 | 7.1 | 9.4 | 13.0 | 18.0 | 14.0 | 12.0 | 8.4 | 7.5 | 6.9 | 6.9 | 7.0 |
| Q. Mín. 71/72 | 2.3 | 2.2 | 2.8 | 2.7 | 2.3 | 2.6 | 2.5 | 2.4 | 2.3 | 2.3 | 2.1 | 2.4 |

RIO GRANDE EN LAS RAMADAS



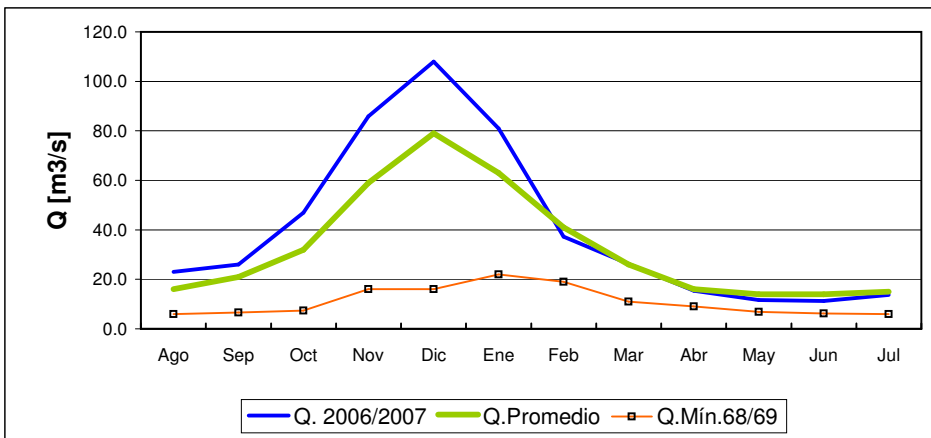
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|----------------------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 3.1 | 3.9 | 5.7 | 4.2 | 2.7 | 2.1 | 1.6 | 1.5 | 1.5 | 1.6 | 2.1 | 2.2 |
| Q. Promedio | 5.4 | 4.1 | 6.9 | 11.4 | 8.9 | 4.5 | 2.8 | 2.0 | 2.1 | 2.0 | 2.3 | 4.7 |
| Q. Mín. 68/69 | 1.0 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.6 | 1.2 | 1.2 | 1.3 | 1.2 |

RIO CHOAPA EN CUNCUMEN



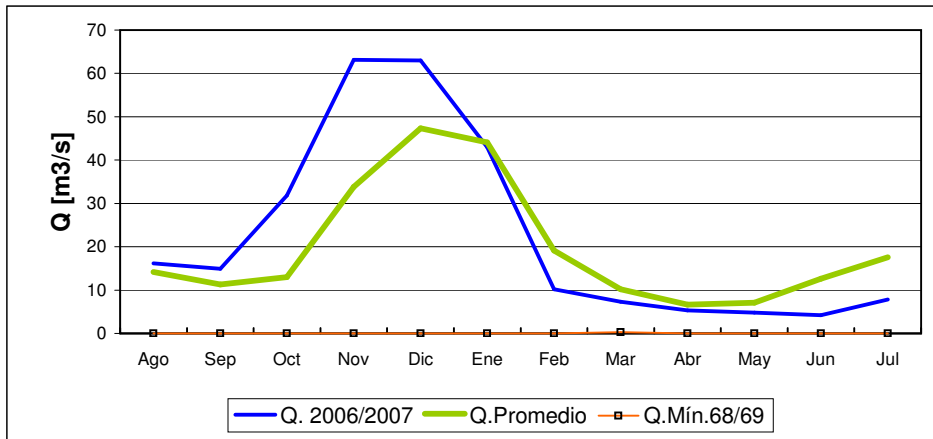
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|-----|-----|------|------|------|------|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 6.7 | 8.6 | 22.0 | 34.0 | 19.7 | 9.6 | 6.4 | 5.2 | 4.2 | 3.8 | 4.1 | 4.4 |
| Q.Promedio | 5.8 | 7.6 | 14.0 | 24.0 | 24.0 | 13.0 | 7.2 | 5.1 | 4.3 | 4.3 | 4.5 | 5.8 |
| Q.Mín.68/69 | 1.5 | 2.0 | 2.4 | 2.3 | 1.4 | 1.3 | 1.2 | 1.0 | 2.1 | 1.9 | 1.7 | 1.5 |

RIO ACONCAGUA EN CHACABUQUITO



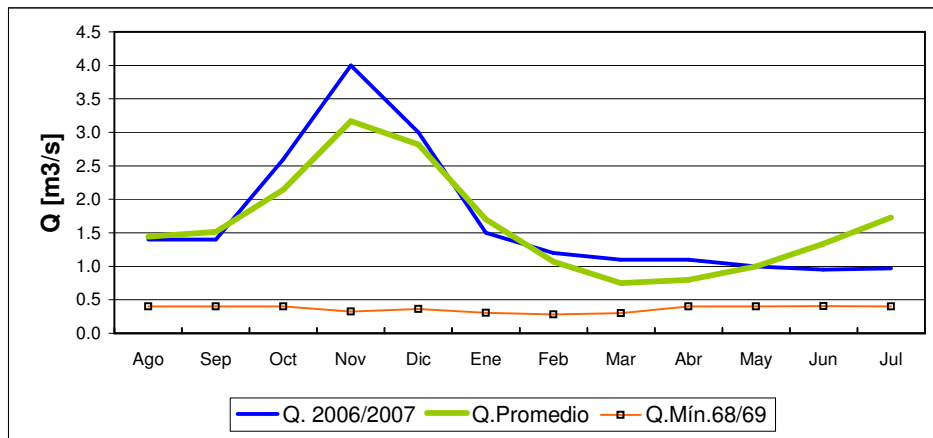
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|---------------------|------|------|------|------|-------|------|------|------|------|------|------|------|
| Q. 2006/2007 | 23.0 | 26.0 | 47.0 | 85.8 | 108.0 | 81.0 | 37.2 | 26.3 | 15.4 | 11.6 | 11.2 | 13.7 |
| Q.Promedio | 16.0 | 21.0 | 32.0 | 59.0 | 79.0 | 63.0 | 41.0 | 26.0 | 16.0 | 14.0 | 14.0 | 15.0 |
| Q.Mín.68/69 | 5.9 | 6.6 | 7.4 | 16.0 | 16.0 | 22.0 | 19.0 | 11.0 | 9.1 | 6.9 | 6.2 | 5.9 |

RIO ACONCAGUA EN SAN FELIPE



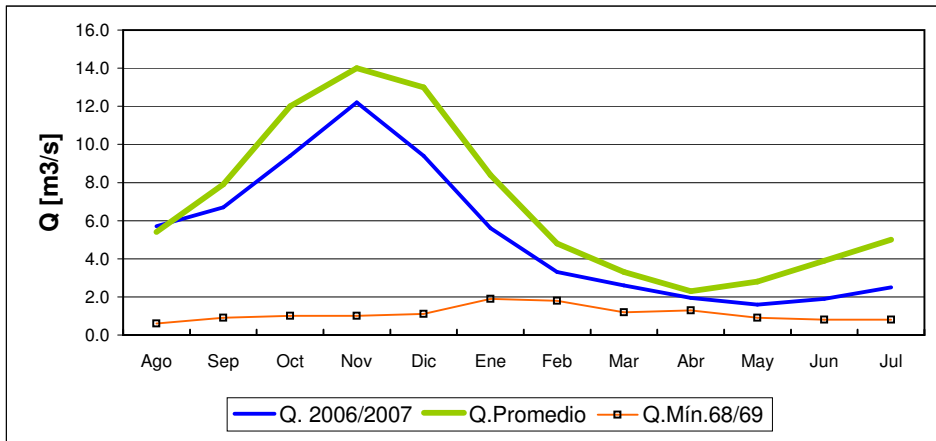
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|---------------------|------|------|------|------|------|------|------|------|-----|-----|------|------|
| Q. 2006/2007 | 16.2 | 14.9 | 31.8 | 63.1 | 63.0 | 43.0 | 10.2 | 7.3 | 5.3 | 4.8 | 4.2 | 7.8 |
| Q.Promedio | 14.2 | 11.3 | 13.0 | 33.8 | 47.3 | 44.1 | 19.1 | 10.2 | 6.7 | 7.1 | 12.7 | 17.6 |
| Q.Mín.68/69 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |

ESTERO ARRAYAN EN LA MONTOSA



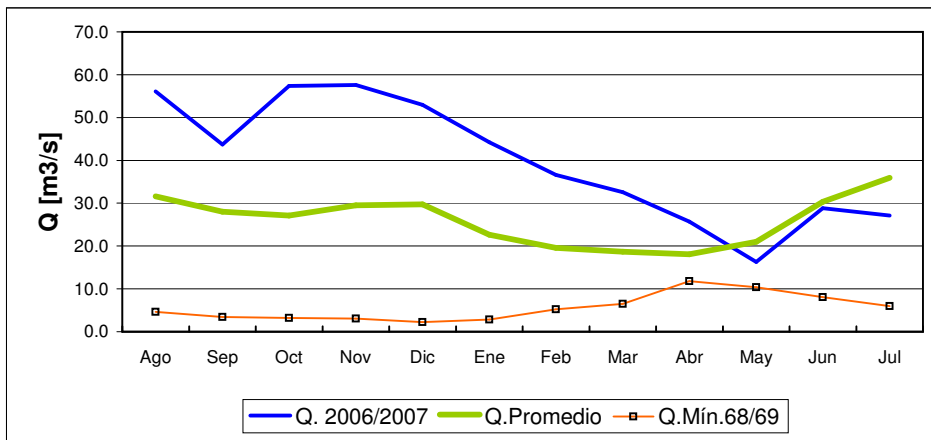
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|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 1.4 | 1.4 | 2.6 | 4.0 | 3.0 | 1.5 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |
| Q.Promedio | 1.4 | 1.5 | 2.1 | 3.2 | 2.8 | 1.7 | 1.1 | 0.8 | 0.8 | 1.0 | 1.3 | 1.7 |
| Q.Mín.68/69 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 |

RIO MAPOCHO EN LOS ALMENDROS



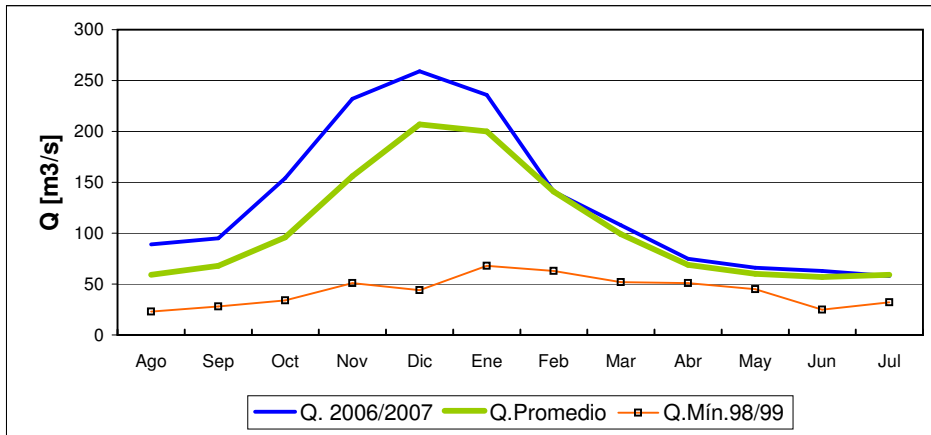
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|-----|-----|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 5.7 | 6.7 | 9.4 | 12.2 | 9.4 | 5.6 | 3.3 | 2.6 | 2.0 | 1.6 | 1.9 | 2.5 |
| Q.Promedio | 5.4 | 7.9 | 12.0 | 14.0 | 13.0 | 8.4 | 4.8 | 3.3 | 2.3 | 2.8 | 3.9 | 5.0 |
| Q.Mín.68/69 | 0.6 | 0.9 | 1.0 | 1.0 | 1.1 | 1.9 | 1.8 | 1.2 | 1.3 | 0.9 | 0.8 | 0.8 |

RIO MAPOCHO EN RINCONADA DE MAIPU



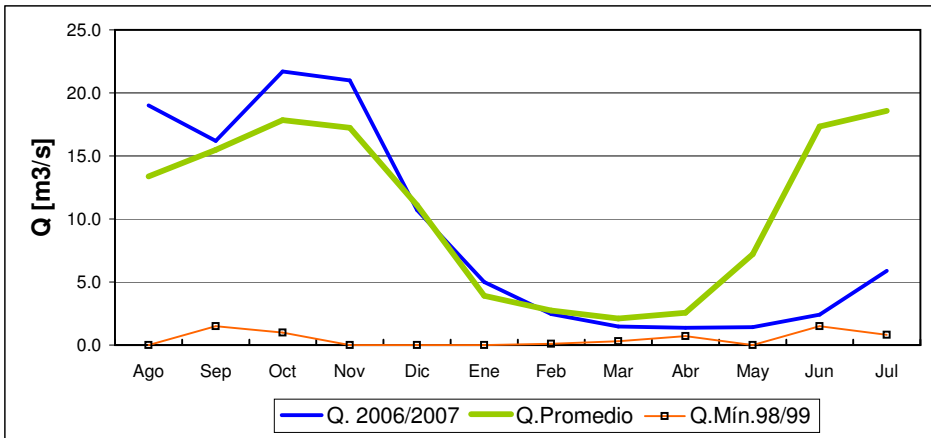
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|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Q. 2006/2007 | 56.1 | 43.7 | 57.4 | 57.6 | 53.0 | 44.2 | 36.6 | 32.6 | 25.7 | 16.3 | 28.8 | 27.1 |
| Q.Promedio | 31.6 | 28.0 | 27.1 | 29.5 | 29.7 | 22.6 | 19.6 | 18.7 | 18.1 | 21.0 | 30.3 | 35.9 |
| Q.Mín.68/69 | 4.6 | 3.4 | 3.2 | 3.1 | 2.2 | 2.9 | 5.3 | 6.5 | 11.8 | 10.4 | 8.1 | 6.0 |

RIO MAIPO EN EL MANZANO



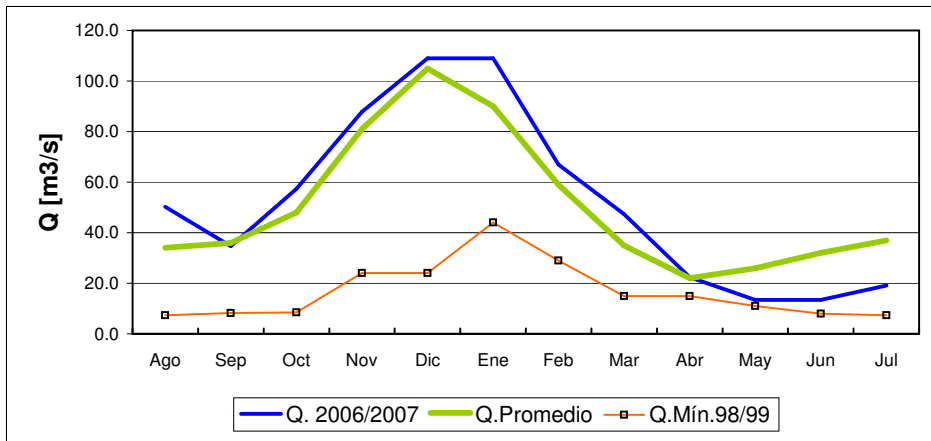
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 89 | 95 | 154 | 232 | 259 | 236 | 141 | 108 | 75 | 66 | 63 | 58 |
| Q. Promedio | 59 | 68 | 96 | 156 | 207 | 200 | 141 | 99 | 69 | 60 | 57 | 59 |
| Q. Mín.98/99 | 23 | 28 | 34 | 51 | 44 | 68 | 63 | 52 | 51 | 45 | 25 | 32 |

RIO CLARO EN EL VALLE 2



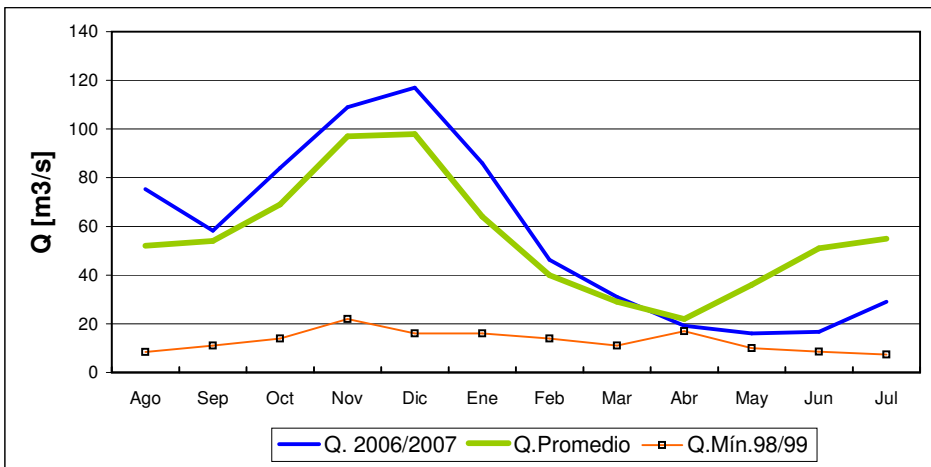
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|------|------|------|------|------|-----|-----|-----|-----|-----|------|------|
| Q. 2006/2007 | 19.0 | 16.2 | 21.7 | 21.0 | 10.7 | 5.0 | 2.5 | 1.5 | 1.4 | 1.4 | 2.4 | 5.9 |
| Q. Promedio | 13.4 | 15.5 | 17.9 | 17.2 | 11.1 | 3.9 | 2.7 | 2.1 | 2.6 | 7.2 | 17.3 | 18.6 |
| Q. Mín.98/99 | 0.0 | 1.5 | 1.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.7 | 0.0 | 1.5 | 0.8 |

RIO TINGUIRIRICA BAJO BRIONES



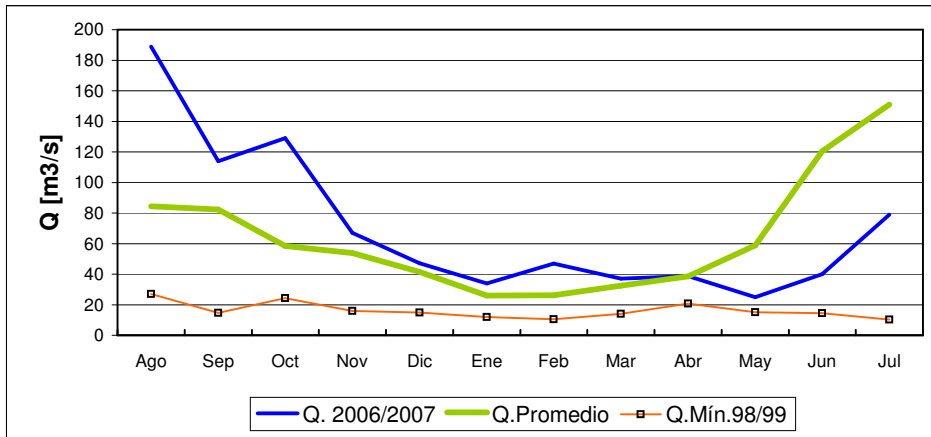
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|------|------|------|------|-------|-------|------|------|------|------|------|------|
| Q. 2006/2007 | 50.3 | 34.7 | 57.3 | 87.9 | 109.0 | 109.0 | 67.0 | 47.4 | 22.4 | 13.4 | 13.4 | 19.1 |
| Q. Promedio | 34.0 | 36.0 | 48.0 | 81.0 | 105.0 | 90.0 | 59.0 | 35.0 | 22.0 | 26.0 | 32.0 | 37.0 |
| Q. Mín.98/99 | 7.4 | 8.2 | 8.5 | 24.0 | 24.0 | 44.0 | 29.0 | 15.0 | 15.0 | 11.0 | 8.0 | 7.4 |

RIO TENO DESPUES DE JUNTA



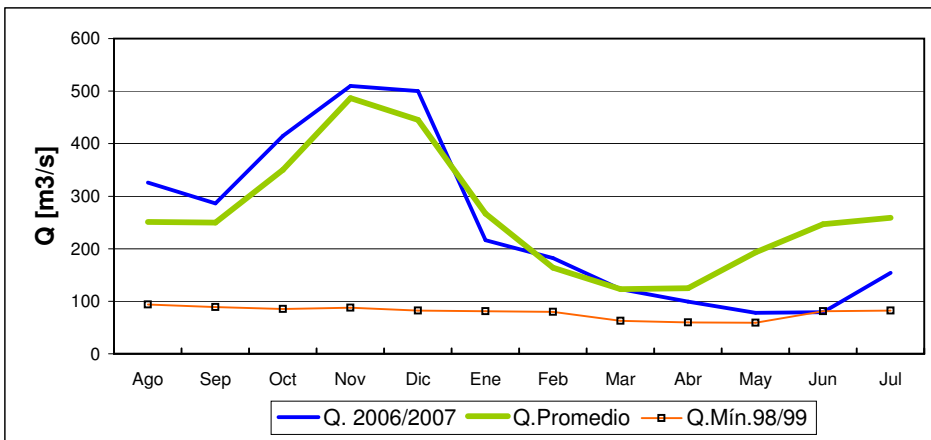
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| Q. 2006/2007 | 75 | 58 | 84 | 109 | 117 | 86 | 46 | 31 | 19 | 16 | 16.7 | 29 |
| Q. Promedio | 52 | 54 | 69 | 97 | 98 | 64 | 40 | 29 | 22 | 36 | 51 | 55 |
| Q. Mín.98/99 | 8.4 | 11 | 14 | 22 | 16 | 16 | 14 | 11 | 17 | 10 | 8.6 | 7.4 |

RIO CLARO EN RAUQUEN



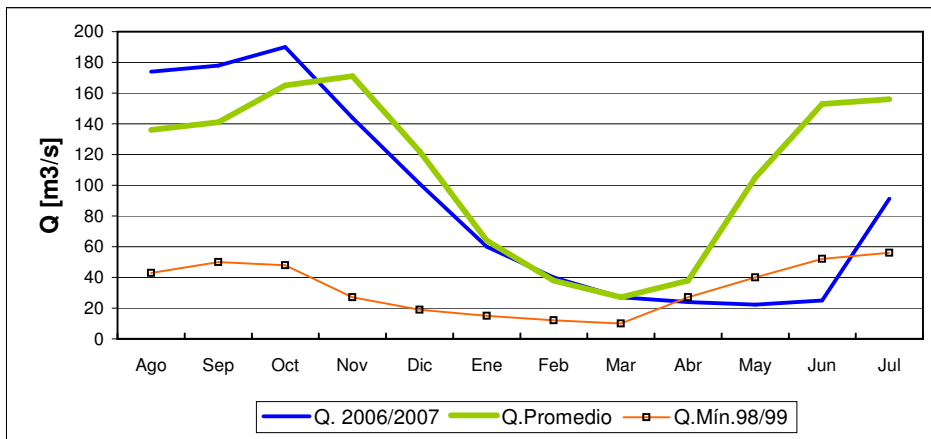
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 189 | 114 | 129 | 67 | 47 | 34 | 47 | 37 | 39 | 25 | 40 | 79 |
| Q. Promedio | 84 | 82 | 58 | 54 | 41 | 26 | 26 | 33 | 39 | 59 | 121 | 151 |
| Q. Mín.98/99 | 27 | 15 | 24 | 16 | 15 | 12 | 10 | 14 | 21 | 15 | 15 | 10 |

RIO MAULE EN ARMERILLO (R. N.)



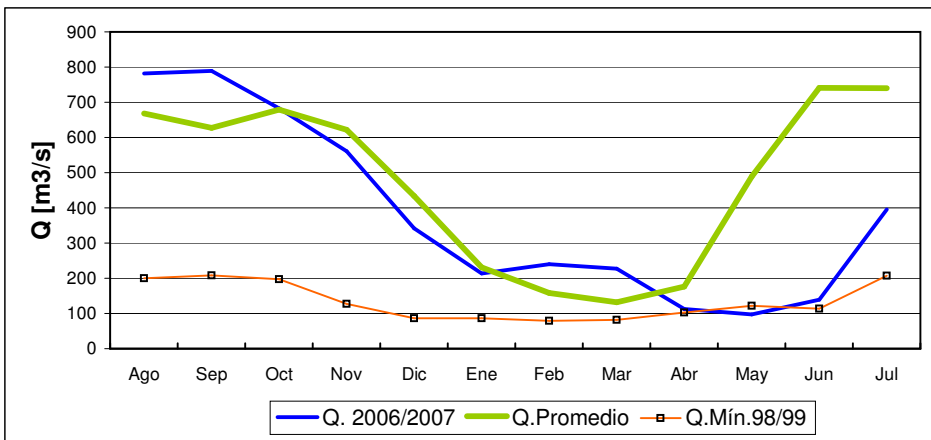
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 326 | 286 | 415 | 510 | 500 | 216 | 182 | 123 | 99 | 78 | 79 | 154 |
| Q. Promedio | 251 | 250 | 350 | 487 | 445 | 267 | 164 | 123 | 125 | 193 | 247 | 259 |
| Q. Mín.98/99 | 94 | 89 | 85 | 88 | 82 | 81 | 80 | 63 | 60 | 59 | 81 | 82 |

RIO ÑUBLE EN SAN FABIAN



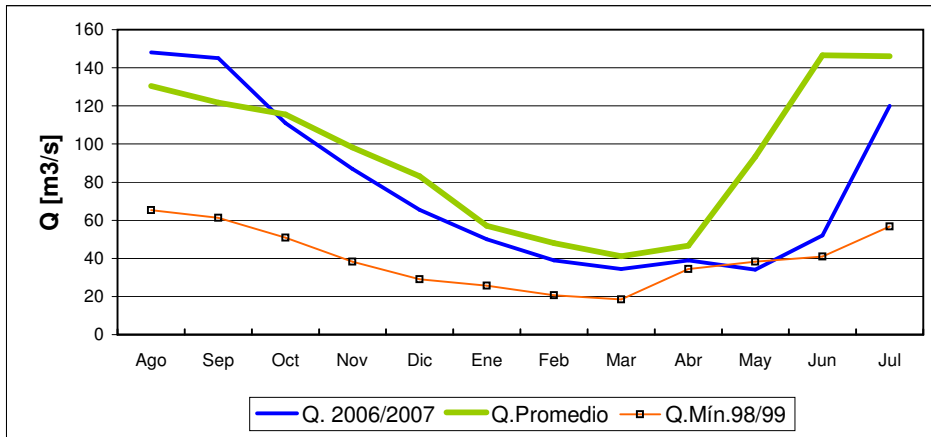
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Q. 2006/2007 | 174 | 178 | 190 | 144 | 101 | 60 | 40 | 27 | 24 | 22 | 25 | 91.2 |
| Q.Promedio | 136 | 141 | 165 | 171 | 122 | 64 | 38 | 27 | 38 | 105 | 153 | 156 |
| Q.Mín.98/99 | 43 | 50 | 48 | 27 | 19 | 15 | 12 | 10 | 27 | 40 | 52 | 56 |

RIO BIO-BIO EN RUCALHUE



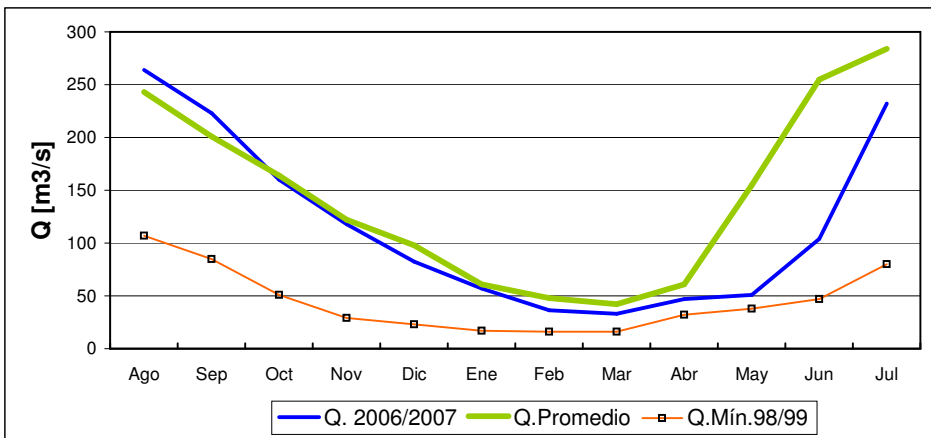
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 782 | 789 | 683 | 561 | 342 | 214 | 240 | 227 | 113 | 97 | 139 | 395 |
| Q.Promedio | 668 | 627 | 679 | 622 | 434 | 231 | 158 | 132 | 176 | 489 | 741 | 740 |
| Q.Mín.98/99 | 200 | 208 | 197 | 127 | 86 | 86 | 79 | 82 | 103 | 122 | 114 | 207 |

RIO CAUTIN EN RARI-RUCA



| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 148 | 145 | 111 | 87 | 66 | 50 | 39 | 34 | 39 | 34 | 52 | 120 |
| Q. Promedio | 131 | 122 | 116 | 98 | 83 | 57 | 48 | 41 | 47 | 93 | 147 | 146 |
| Q. Mín.98/99 | 65 | 61 | 51 | 38 | 29 | 26 | 21 | 19 | 35 | 38 | 41 | 57 |

RIO CAUTIN EN CAJON

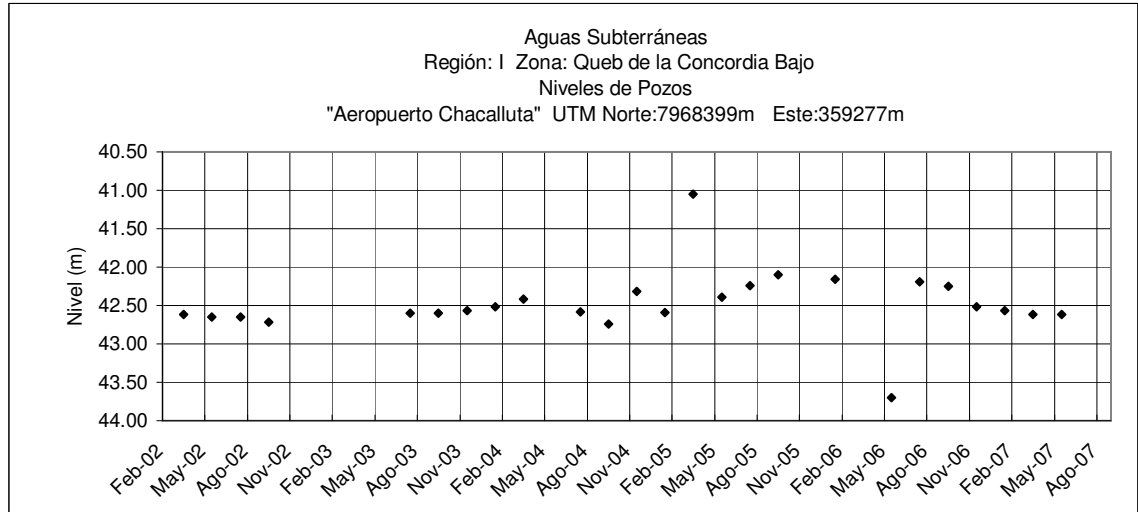


| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2006/2007 | 264 | 223 | 160 | 118 | 82 | 57 | 36 | 33 | 47 | 51 | 104 | 232 |
| Q. Promedio | 243 | 201 | 164 | 122 | 98 | 61 | 48 | 42 | 61 | 155 | 255 | 284 |
| Q. Mín.98/99 | 107 | 85 | 51 | 29 | 23 | 17 | 16 | 16 | 32 | 38 | 47 | 80 |

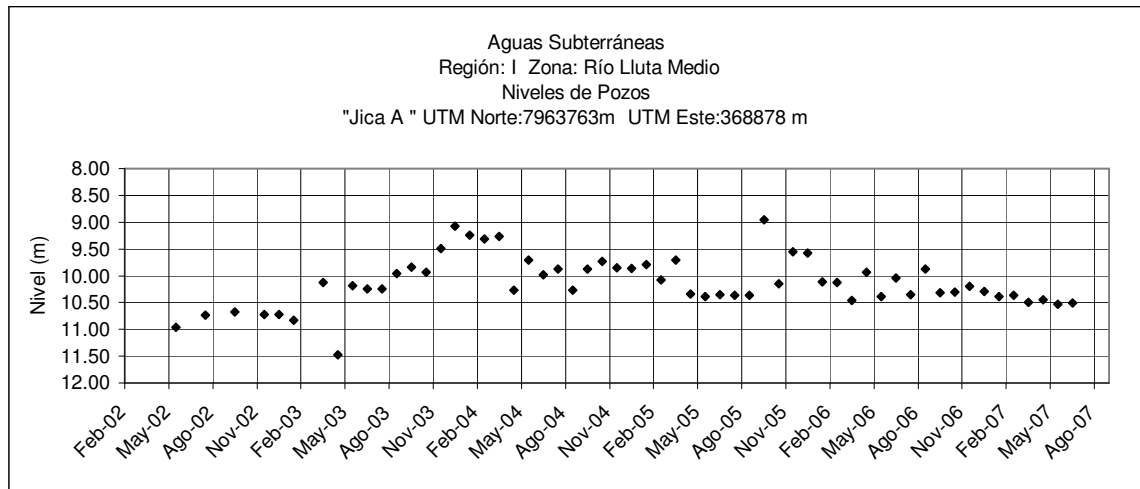
Informe de Aguas Subterráneas

Niveles de Pozos en metros

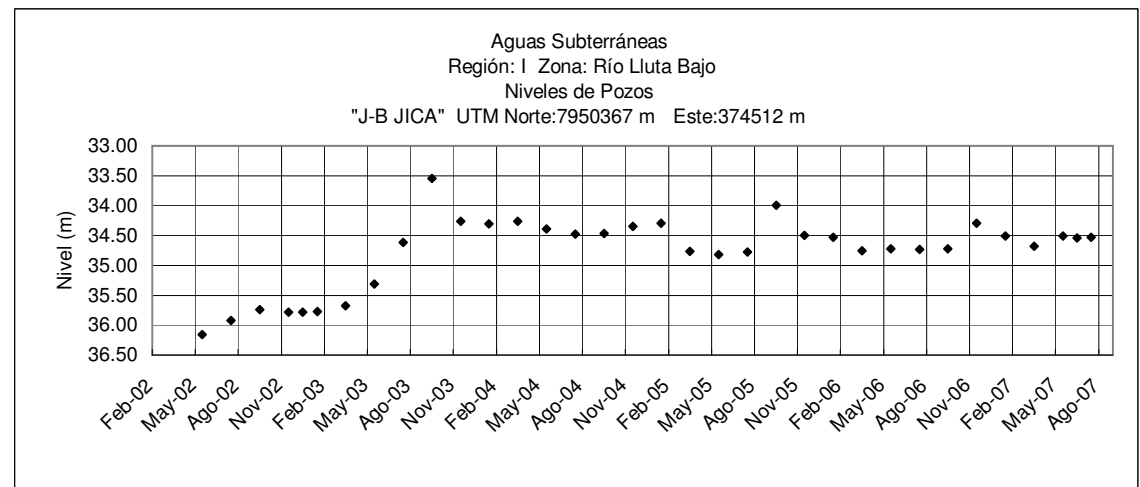
*Gráficos de últimos cinco años.



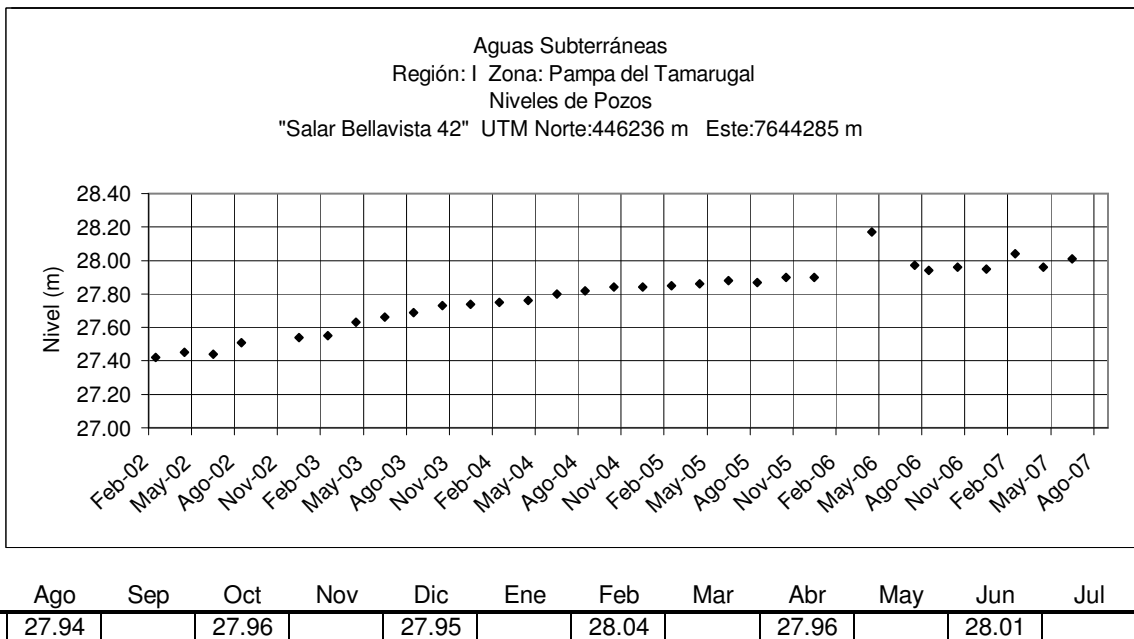
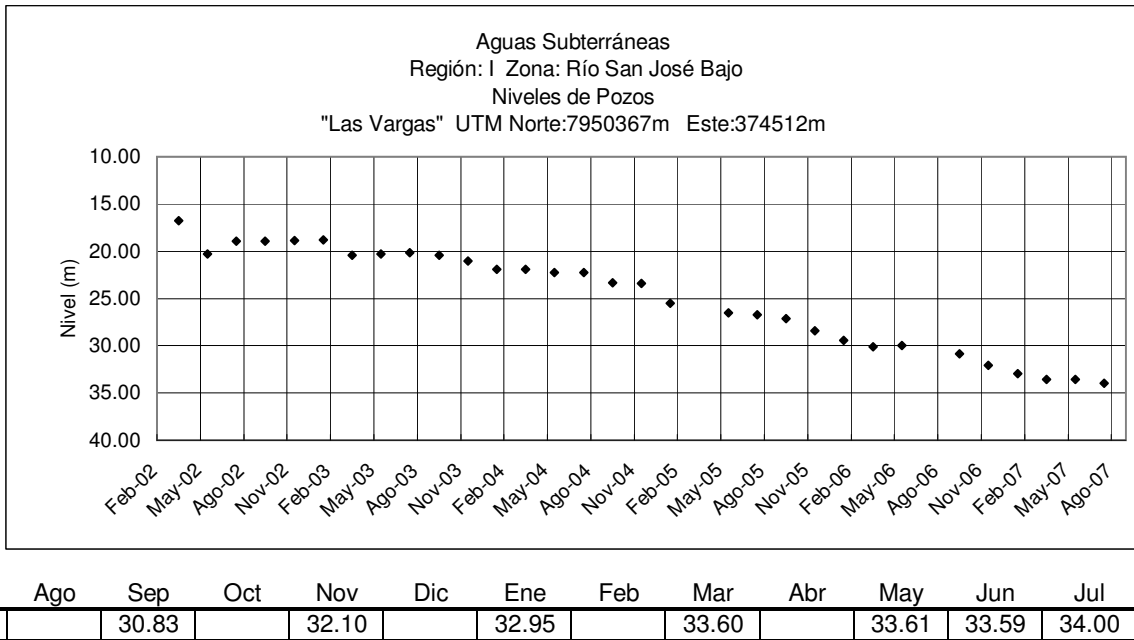
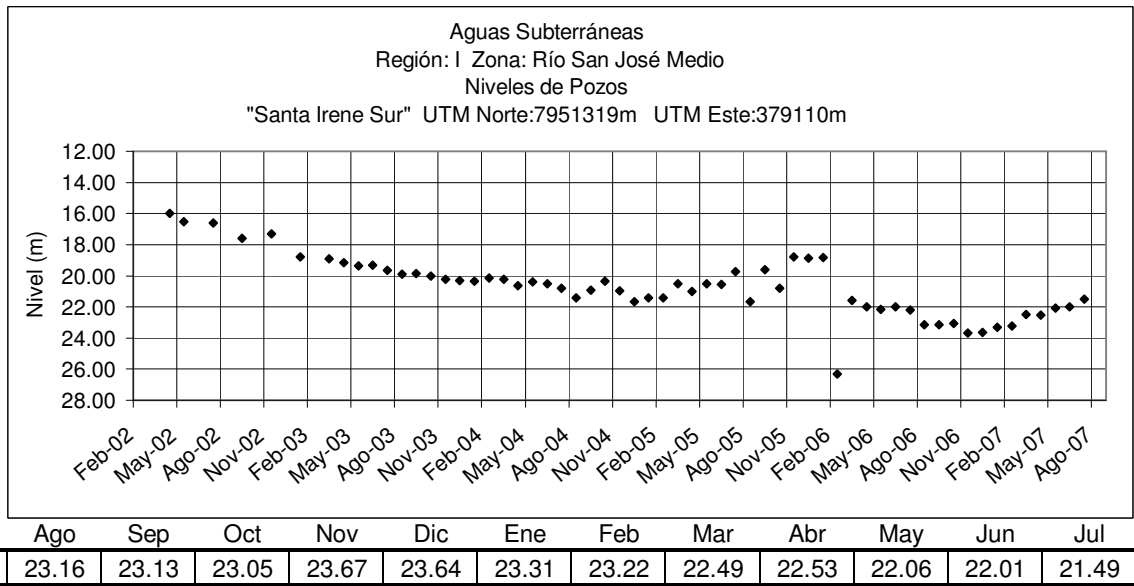
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-----|
| 2006-2007 | | 42.25 | | 42.52 | | 42.57 | | 42.62 | | 42.49 | | |

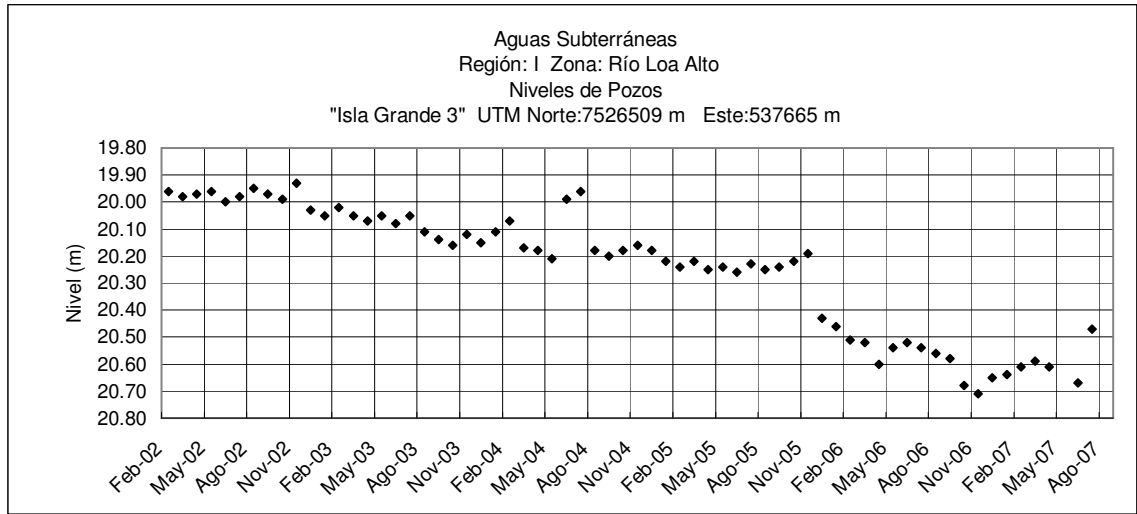


| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|------|
| 2006-2007 | 9.87 | 10.32 | 10.3 | 10.2 | 10.29 | 10.39 | 10.37 | 10.49 | 10.45 | 10.53 | 10.51 | 10.5 |

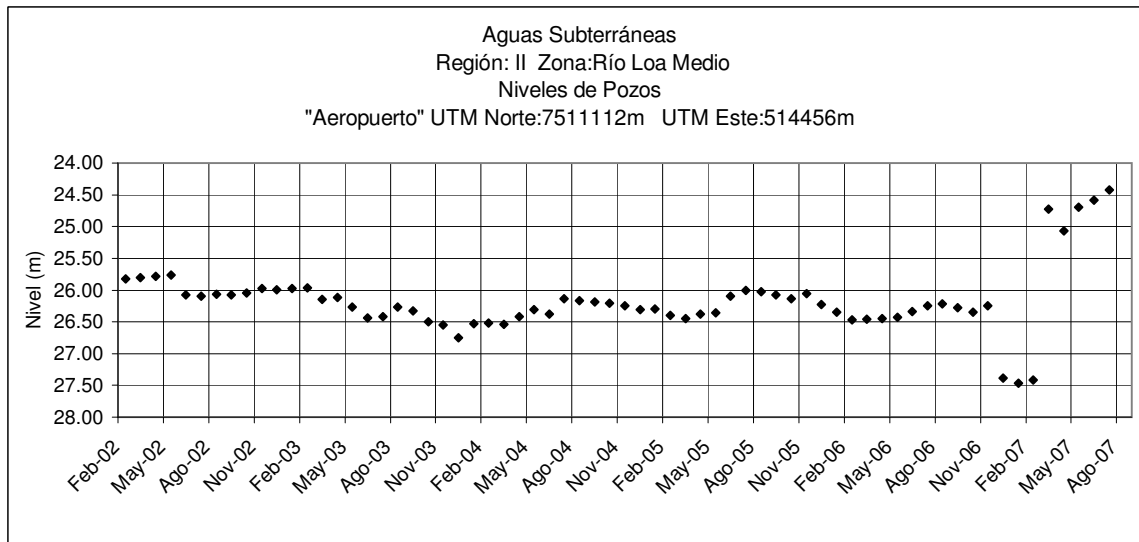


| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-------|-------|
| 2006-2007 | | 34.72 | | 34.29 | | 34.51 | | 34.68 | | 34.51 | 34.54 | 34.53 |

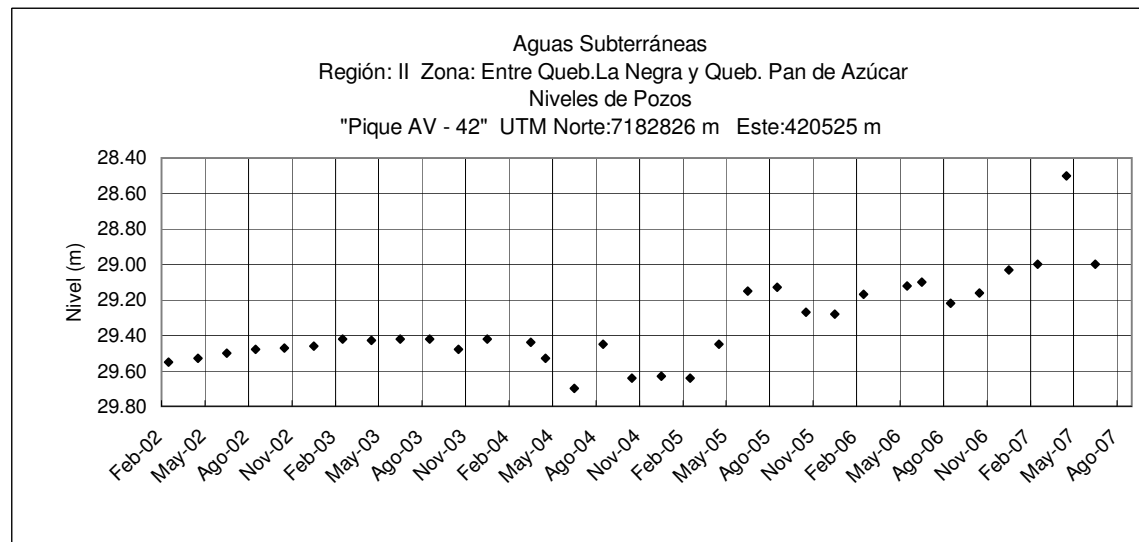




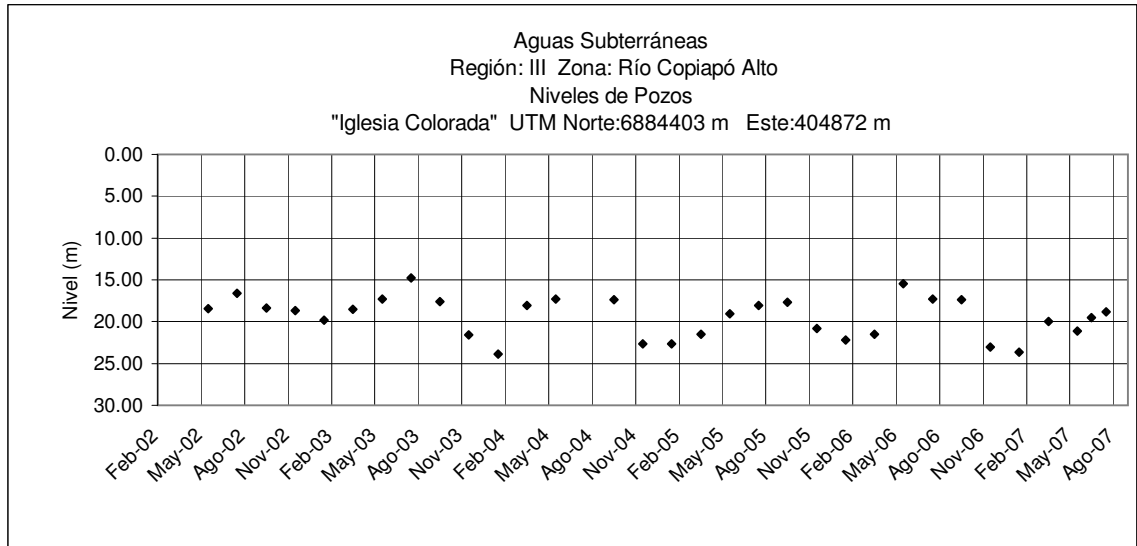
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|
| 2006-2007 | 20.56 | 20.58 | 20.68 | 20.71 | 20.65 | 20.64 | 20.61 | 20.59 | 20.61 | | 20.67 | 20.47 |



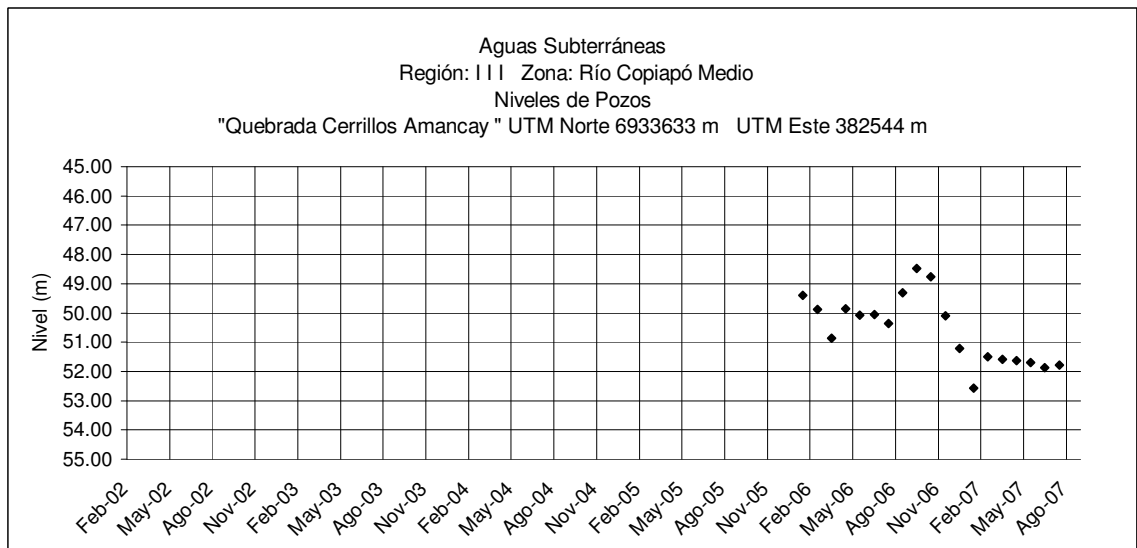
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2006-2007 | 26.22 | 26.28 | 26.35 | 26.25 | 27.39 | 27.47 | 27.42 | 24.73 | 25.07 | 24.70 | 24.58 | 24.42 |



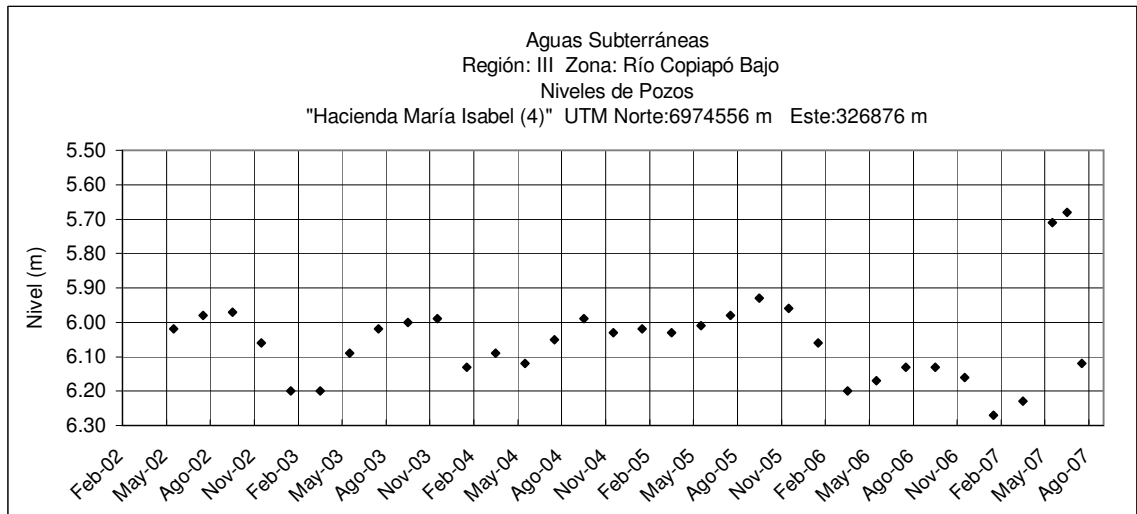
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| 2006-2007 | 29.22 | | 29.16 | | 29.03 | | 29.00 | | 28.50 | | 29.00 | |



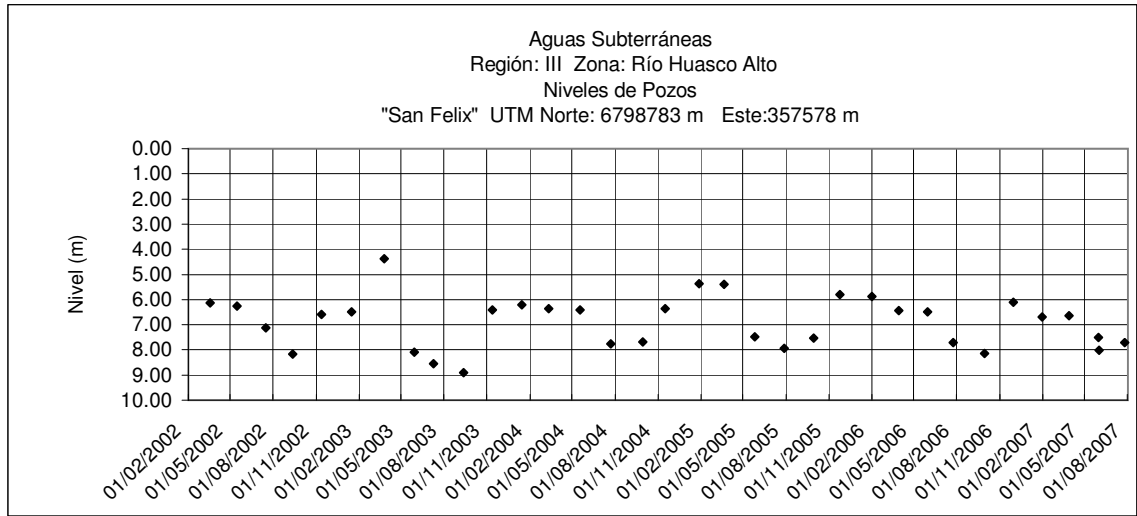
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-------|-------|
| 2006-2007 | | 17.41 | | 23.06 | | 23.65 | | 19.97 | | 21.09 | 19.51 | 18.81 |



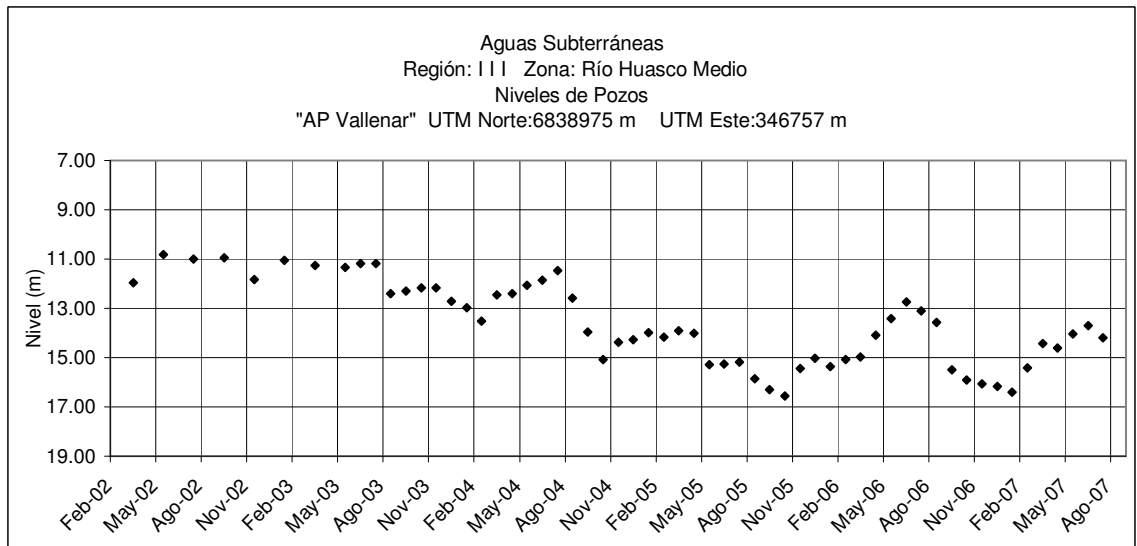
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2006-2007 | 49.3 | 48.47 | 48.77 | 50.09 | 51.21 | 52.58 | 51.50 | 51.59 | 51.63 | 51.69 | 51.87 | 51.79 |



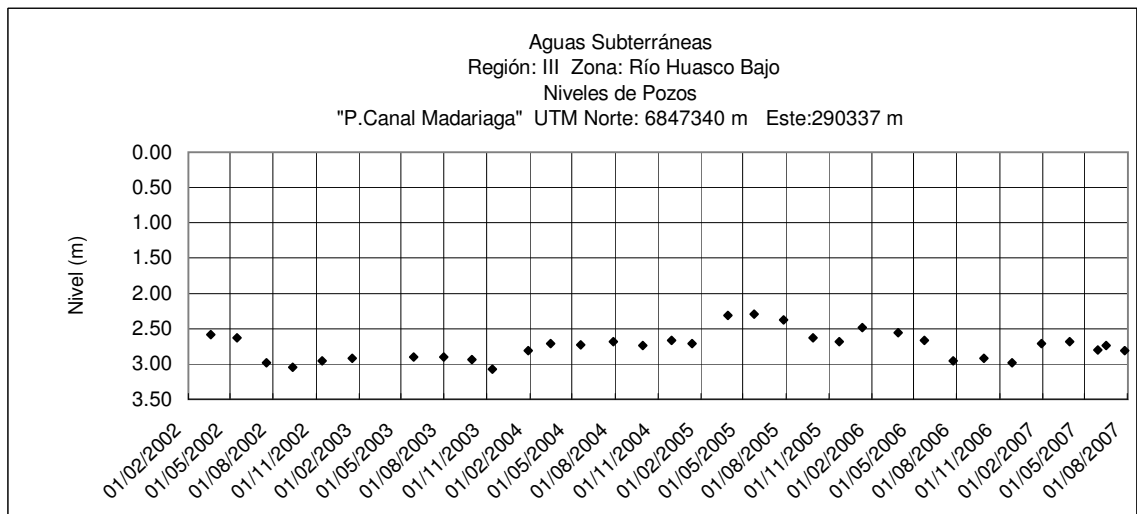
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| 2006-2007 | | 6.13 | | 6.16 | | 6.27 | | 6.23 | | 5.71 | 5.68 | 6.12 |



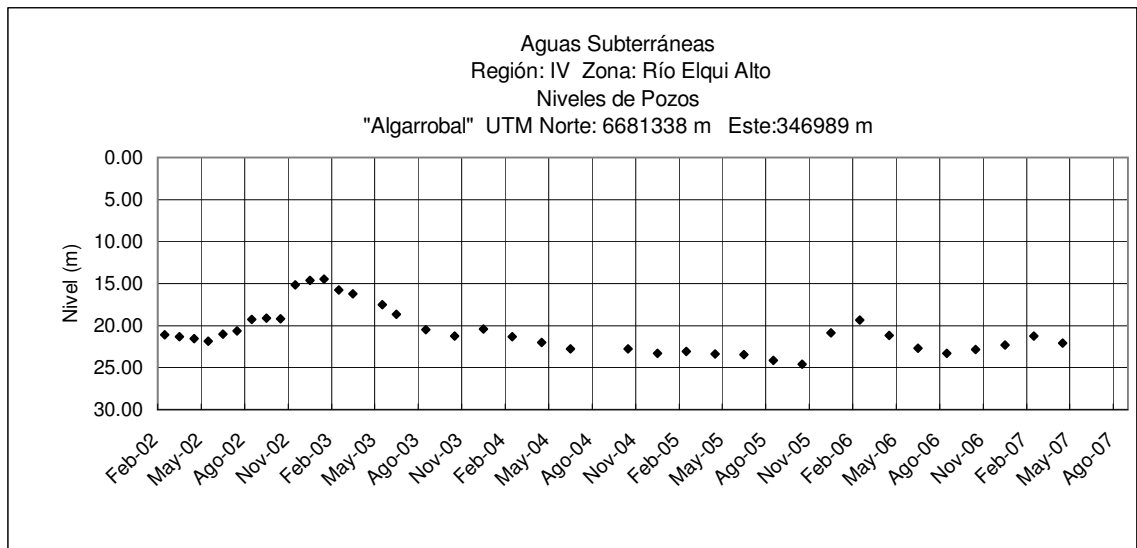
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| 2006-2007 | | 8.13 | | 6.11 | | 6.68 | | 6.64 | | 7.50 | 8.01 | 7.72 |



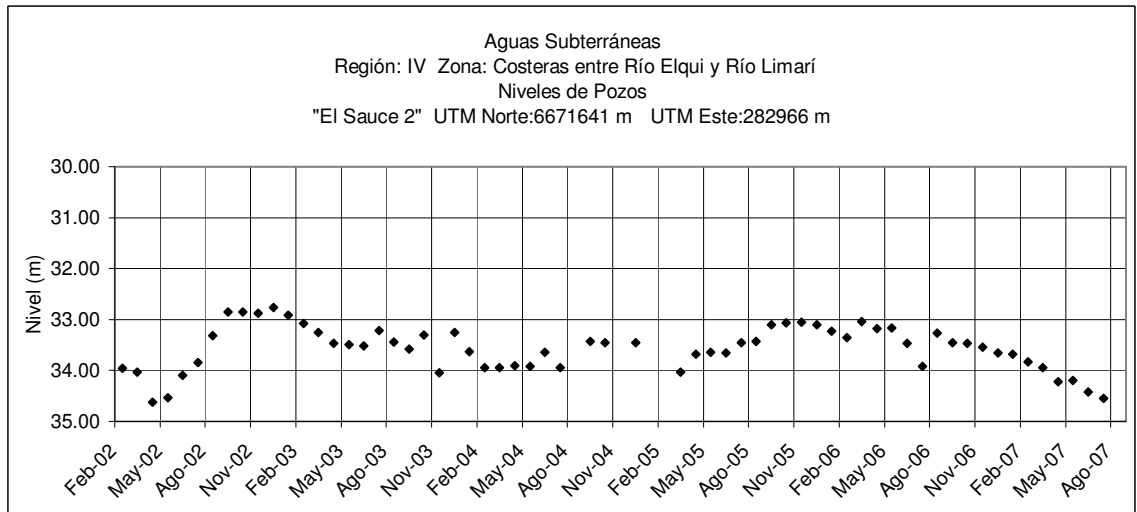
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2006-2007 | 13.57 | 15.50 | 15.92 | 16.07 | 16.17 | 16.41 | 15.41 | 14.42 | 14.61 | 14.05 | 13.71 | 14.19 |



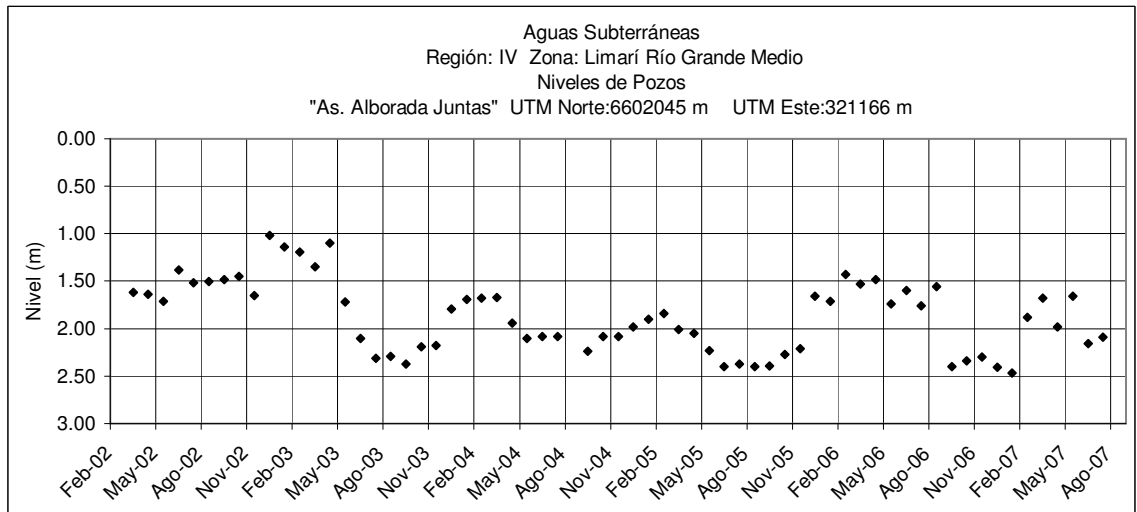
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|
| 2006-2007 | | 2.92 | | 2.98 | | 2.71 | | 2.68 | | 2.80 | 2.74 | 2.81 |



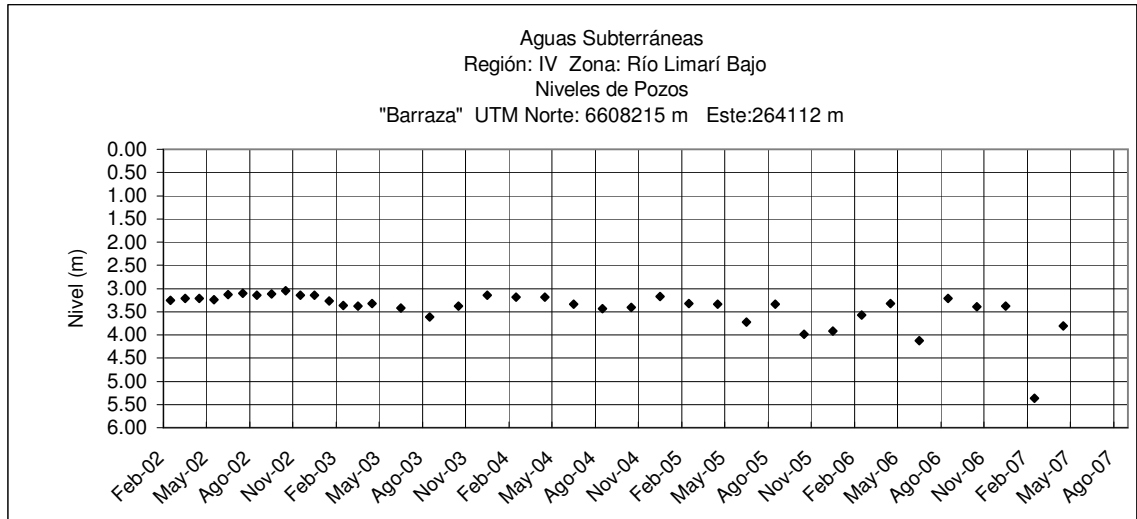
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| 2006-2007 | 23.32 | | 22.87 | | 22.31 | | 21.27 | | 22.09 | | 22.70 | |



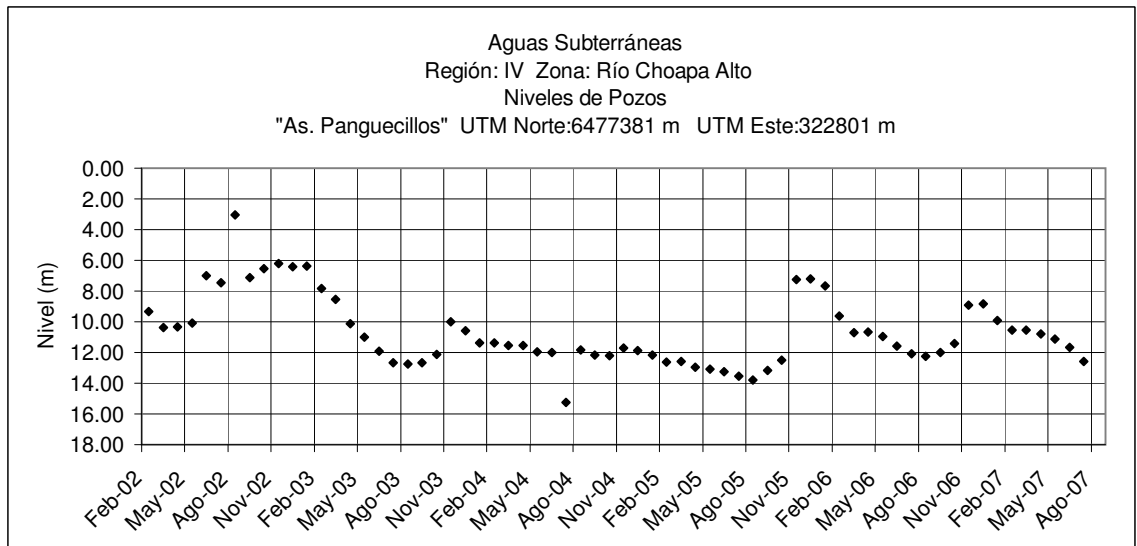
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2006-2007 | 33.27 | 33.45 | 33.47 | 33.54 | 33.65 | 33.68 | 33.83 | 33.95 | 34.22 | 34.20 | 34.42 | 34.55 |



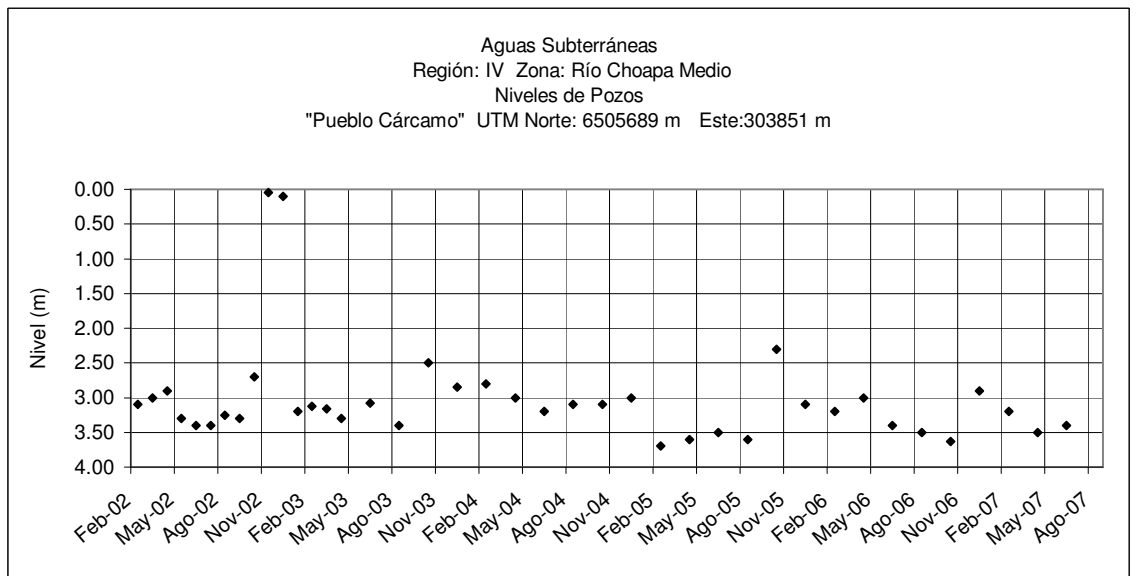
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2006-2007 | 1.56 | 2.40 | 2.34 | 2.30 | 2.41 | 2.47 | 1.88 | 1.68 | 1.98 | 1.66 | 1.60 | 2.09 |



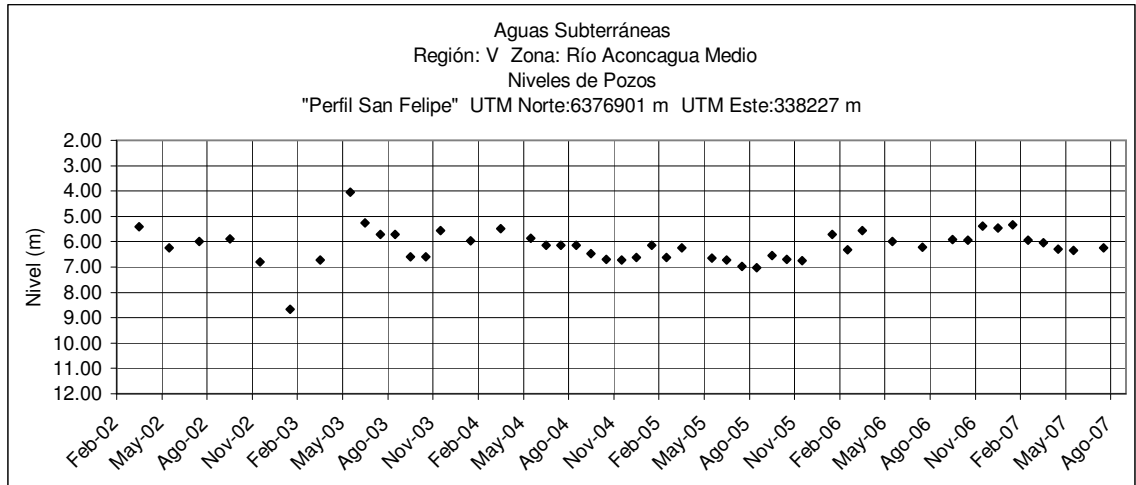
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| 2006-2007 | 3.22 | | 3.39 | | 3.38 | | 5.37 | | 3.81 | | 3.94 | |



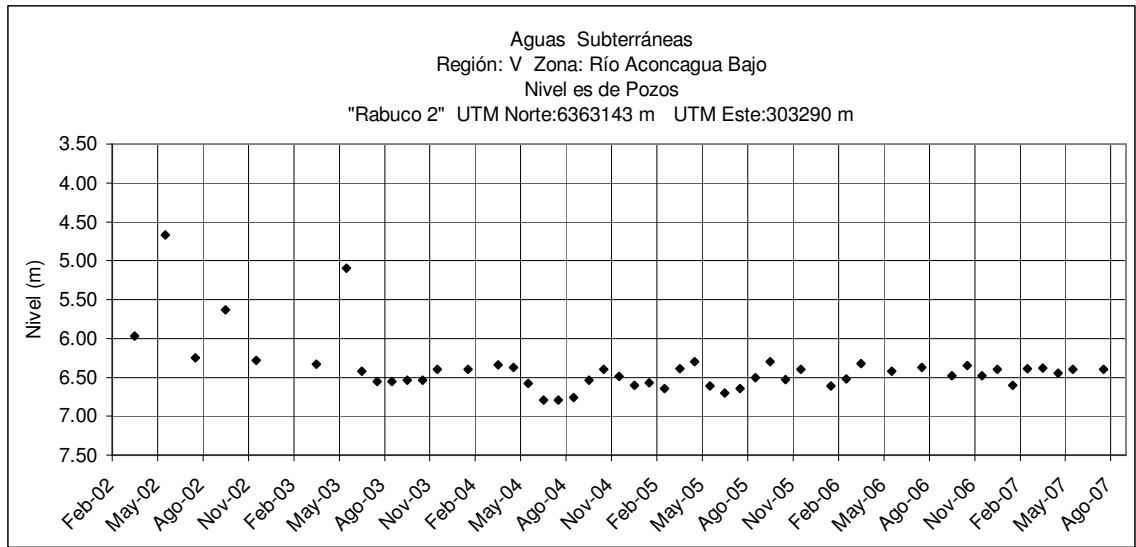
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-------|-------|-------|------|------|------|-------|-------|-------|-------|-------|-------|
| 2006-2007 | 12.26 | 12.00 | 11.40 | 8.93 | 8.85 | 9.90 | 10.55 | 10.56 | 10.80 | 11.12 | 11.68 | 12.60 |



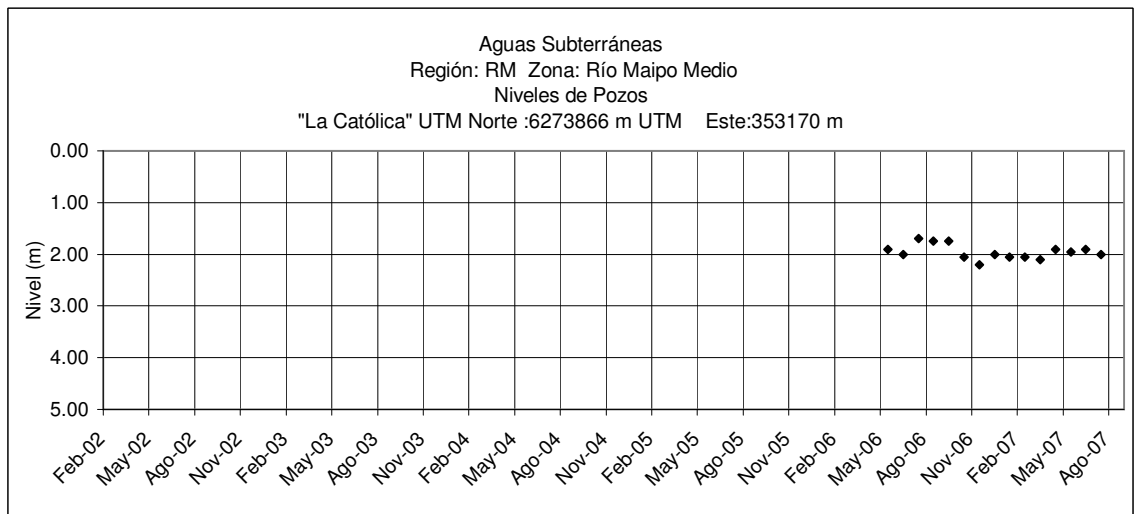
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| 2006-2007 | 3.5 | | 3.63 | | 2.90 | | 3.20 | | 3.50 | | 3.40 | |



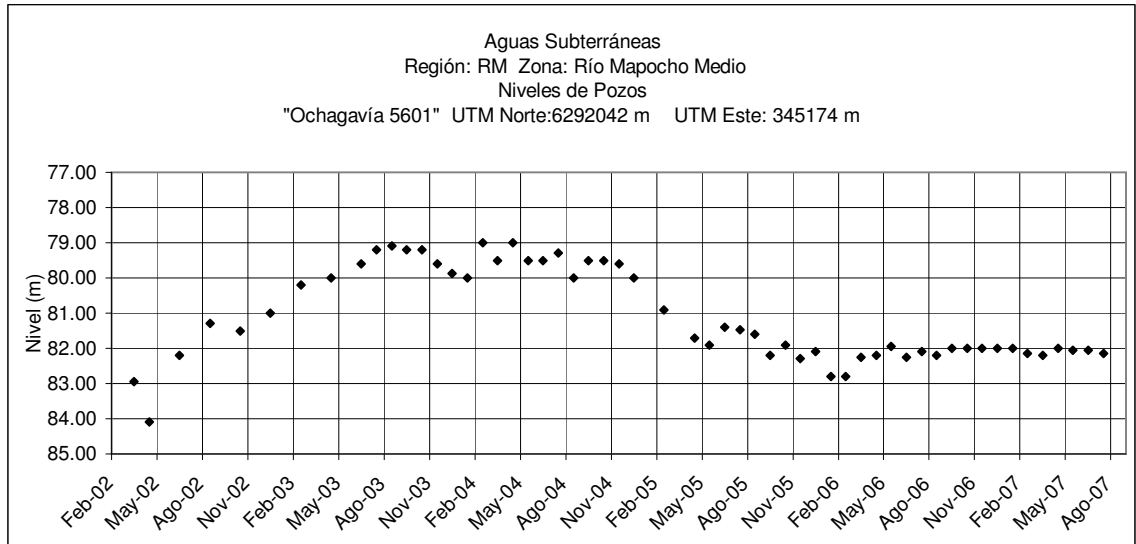
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|------|------|------|------|------|------|------|------|------|-----|------|
| 2006-2007 | . | 5.91 | 5.95 | 5.39 | 5.45 | 5.34 | 5.93 | 6.03 | 6.30 | 6.35 | . | 6.25 |



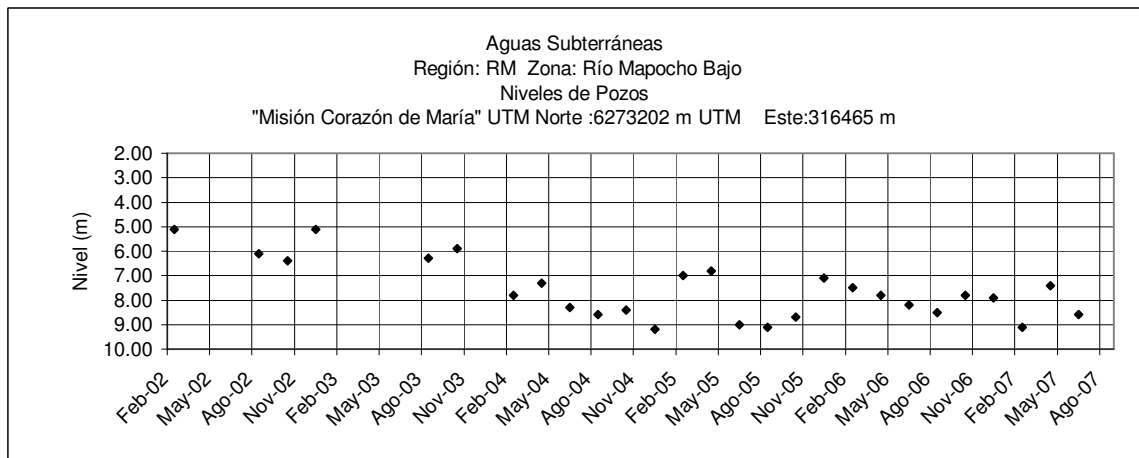
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|------|------|------|------|------|------|------|------|------|-----|------|
| 2006-2007 | . | 6.48 | 6.35 | 6.48 | 6.40 | 6.60 | 6.39 | 6.38 | 6.45 | 6.40 | . | 6.40 |



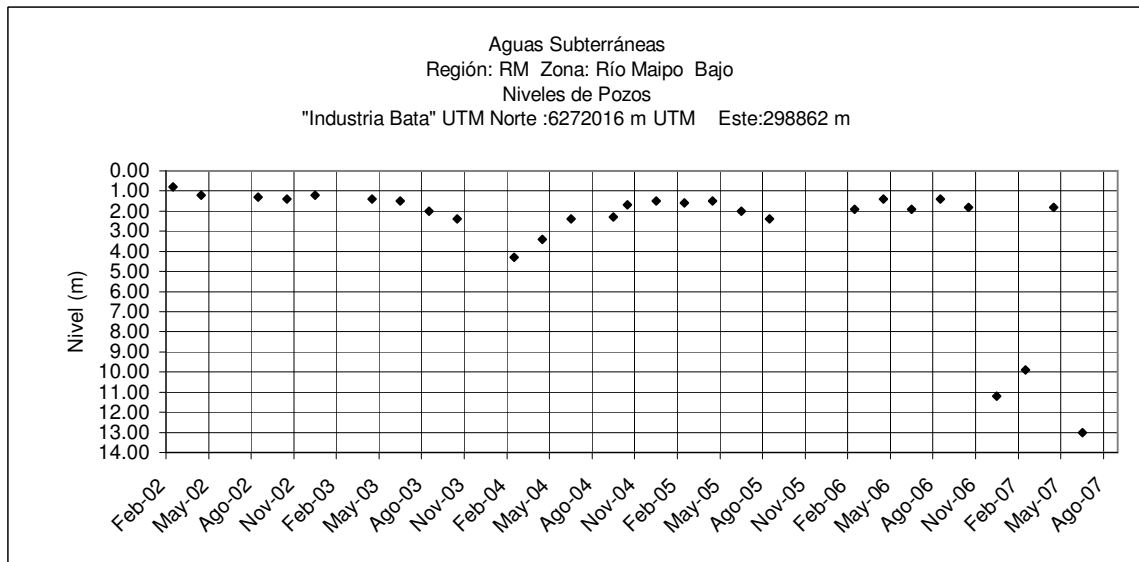
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2006-2007 | 1.75 | 1.75 | 2.05 | 2.20 | 2.00 | 2.05 | 2.05 | 2.10 | 1.90 | 1.95 | 2.00 | 2.00 |



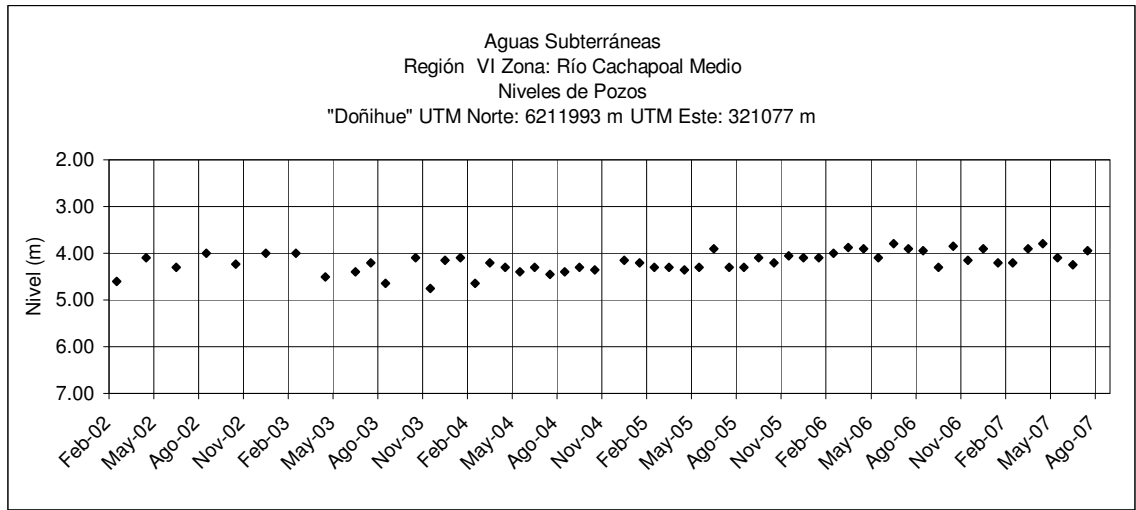
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2006-2007 | 82.2 | 82.00 | 82.00 | 82.00 | 82.00 | 82.00 | 82.15 | 82.20 | 82.00 | 82.05 | 82.25 | 82.15 |



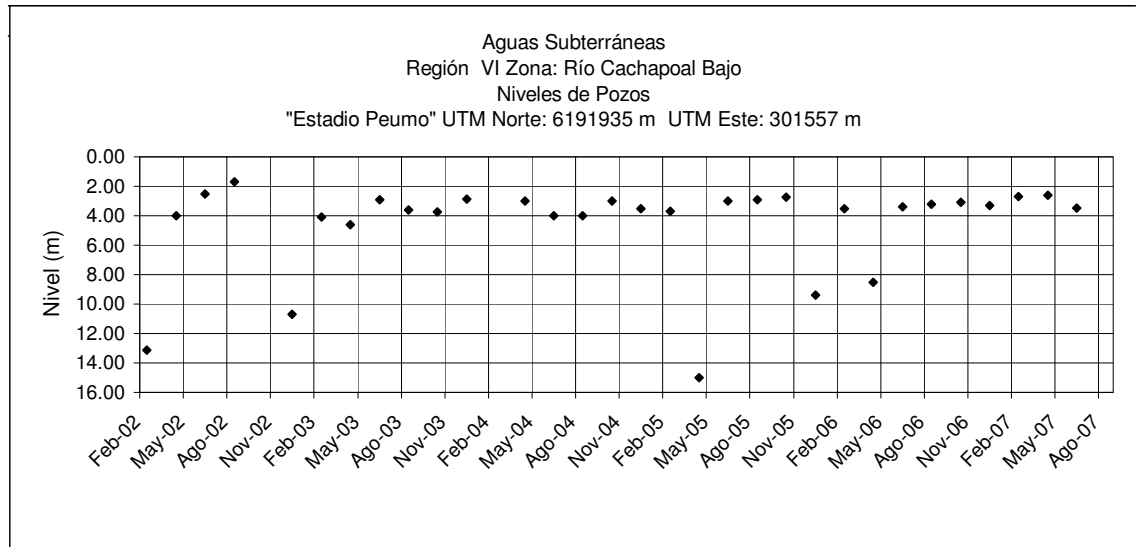
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| 2006-2007 | 8.5 | | 7.80 | | 7.90 | | 9.10 | | 7.40 | | 8.60 | |



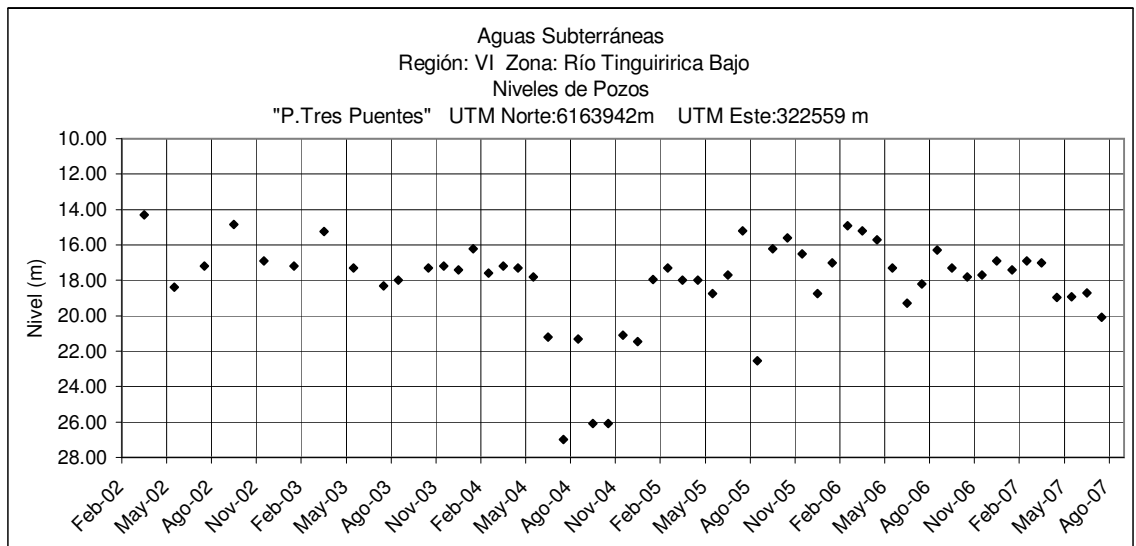
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|-----|------|-----|-------|-----|------|-----|------|-----|-------|-----|
| 2006-2007 | 1.4 | | 1.80 | | 11.20 | | 9.90 | | 1.80 | | 13.00 | |



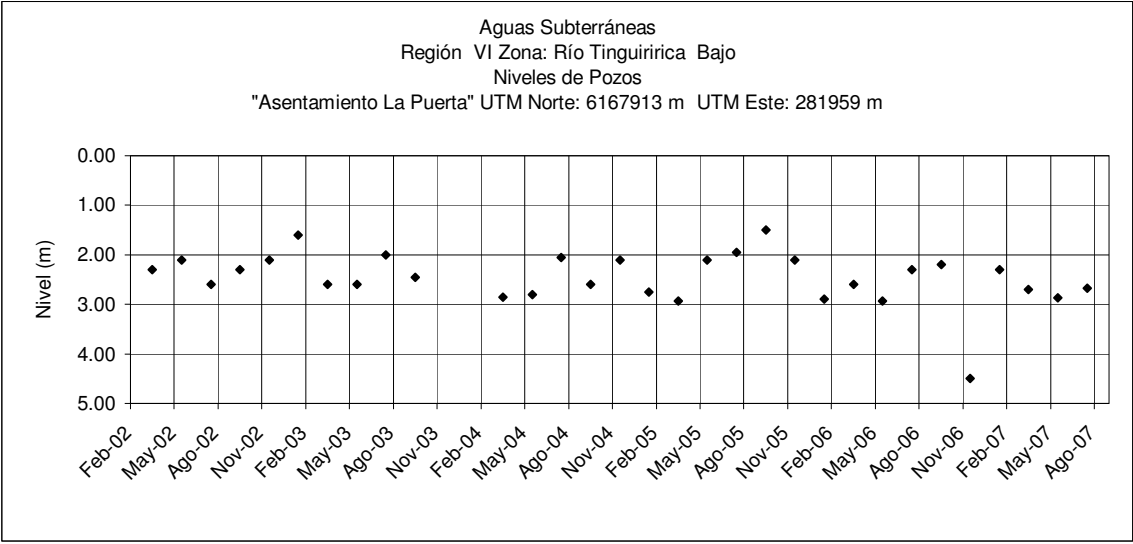
| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2006-2007 | 3.95 | 4.30 | 3.85 | 4.15 | 3.90 | 4.20 | 4.20 | 3.90 | 3.80 | 4.10 | 4.25 | 3.95 |



| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| 2006-2007 | 3.2 | | 3.10 | | 3.30 | | 2.70 | | 2.60 | | 3.48 | |



| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2006-2007 | 16.3 | 17.30 | 17.80 | 17.70 | 16.90 | 17.40 | 16.90 | 17.00 | 18.97 | 18.92 | 18.70 | 20.08 |



| | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr | May | Jun | Jul |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|
| 2006-2007 | | 2.20 | | 4.50 | | 2.30 | | 2.70 | | 2.87 | | 2.67 |