

# Praktični tečaj

Uporaba elektronskih pripomočkov v jadralnem padalstvu

Žan Kafol  
(Jean Caffou)

# Praktična uporaba pametnih telefonov

- Android
  - **FlyMe**  
(+slo, +enostaven, +kot inštrument, -premalo kompleksen, +LT)
  - **XCTrack in XCSoar**  
(+primeren za tekme, -angleški, -preveč kompleksen)
  - **SeeYou**  
(+slo, -samo beleženje leta)
  - **LiveTrack24**
  - **GPS Status**
- iPhone
  - **FlySkyHy**  
(+kot inštrument, -plačljiv)
  - **SeeYou**  
(+slo, -samo beleženje leta)
  - **LiveTrack24**

# Aplikacije

- Android + XCSoar + Kobo eInk mini (Edo Pohl)



# En korak naprej

- WayteQ + LK 8000 (Damjan Adam)





# Katero bi vzeli za svojo?

- FlyMe

<http://xcglobe.com/flyme>



# FlyMe

- Prenos in namestitvev
- Osnovna uporaba (info okna)
- Nastavitve
- Prijava na [xcglobe.com](http://xcglobe.com)
- Beleženje leta
- Nalaganje leta
  
- **Tekme:**
  - Prenos .cup datotek (/sdcard/xcglobe/poi)
  - Nastavitev taska
  - Letenje po tasku

# Tekma - task

**GAP - SETTINGS**

Nominal Distance :      Goal Proportion :  
 Minimum Distance :      Nominal Time :

TYPE OF START      TYPE OF TASK  
 AIR     GROUND     RACE     ELAPSED TIME  
 TASK No.: **T1**       SPEED RUN  
 STRAIGHT DISTANCE WITH DESIGNATED DIRECTION

START WINDOW **13:00**      STARTMARKER  
 MAXIMUM WINDOW EXTENSION TIME      GOAL DEADLINE \*  
 REPORT BACK      LANDING DEADLINE \*

16.10.16      TURN DIRECTION  
 LEFT     RIGHT  
 EMERGENCY NUMBER **112**

| waypoint                        | SPORT | COMPETITION |
|---------------------------------|-------|-------------|
| 1 L01                           | 400   | 400         |
| 2 L01                           | 1000  | 1000        |
| 3 L06                           | 1000  | 400         |
| 4 L20                           | 1000  | 400         |
| 5 L33                           | 1000  | 400         |
| 6 L05                           | 1300  | 800         |
| 7 L30                           | 1500  | 1000        |
| 8 L23                           | 1000  | 800         |
| 9 L06                           | 800   | 600         |
| 10 L04                          | 400   | 400         |
| 11 L20                          | 1000  | 1000        |
| 12                              |       |             |
| 13                              |       |             |
| 14                              |       |             |
| GOAL L20                        |       |             |
| TASK DISTANCE                   |       |             |
| RETRIEVE NUMBER +386 51 688 013 |       |             |
| Radio freq. 147.800             |       |             |

| SPORT | COMPETITION |
|-------|-------------|
| 400   | 400         |
| 33,5  | 38,4        |

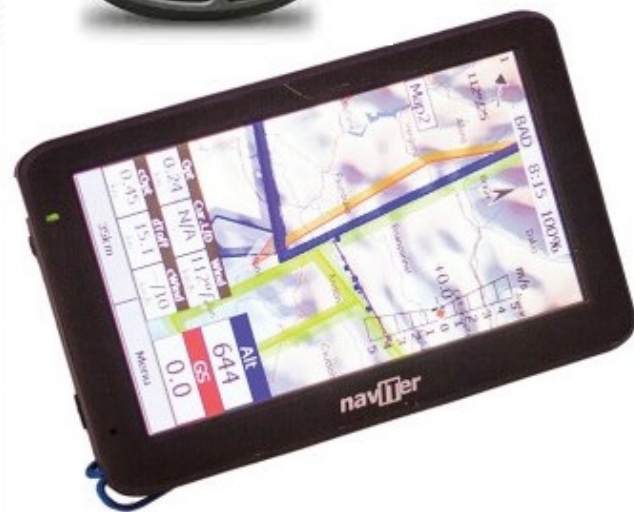
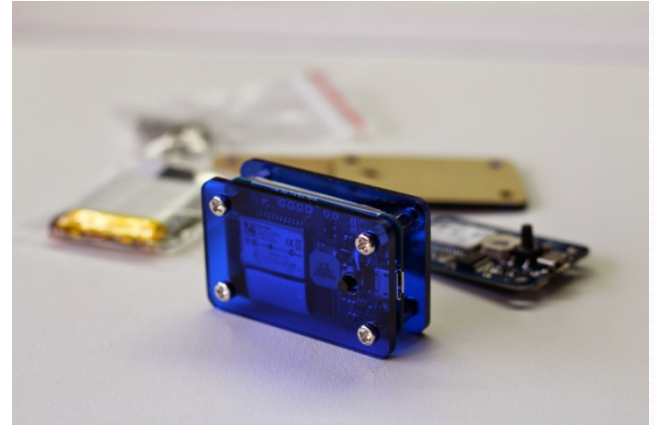
1.00 337 040001 500715 75 LAMARCA  
 1.01 337 040100 500717 80 LAMARCA  
 1.02 337 040200 500719 85 LAMARCA  
 1.03 337 040300 500721 90 LAMARCA  
 1.04 337 040400 500723 95 LAMARCA  
 1.05 337 040500 500725 100 LAMARCA  
 1.06 337 040600 500727 105 LAMARCA  
 1.07 337 040700 500729 110 LAMARCA  
 1.08 337 040800 500731 115 LAMARCA  
 1.09 337 040900 500733 120 LAMARCA  
 1.10 337 041000 500735 125 LAMARCA  
 1.11 337 041100 500737 130 LAMARCA  
 1.12 337 041200 500739 135 LAMARCA  
 1.13 337 041300 500741 140 LAMARCA  
 1.14 337 041400 500743 145 LAMARCA  
 1.15 337 041500 500745 150 LAMARCA  
 1.16 337 041600 500747 155 LAMARCA  
 1.17 337 041700 500749 160 LAMARCA  
 1.18 337 041800 500751 165 LAMARCA  
 1.19 337 041900 500753 170 LAMARCA  
 1.20 337 042000 500755 175 LAMARCA  
 1.21 337 042100 500757 180 LAMARCA  
 1.22 337 042200 500759 185 LAMARCA  
 1.23 337 042300 500761 190 LAMARCA  
 1.24 337 042400 500763 195 LAMARCA  
 1.25 337 042500 500765 200 LAMARCA  
 1.26 337 042600 500767 205 LAMARCA  
 1.27 337 042700 500769 210 LAMARCA  
 1.28 337 042800 500771 215 LAMARCA  
 1.29 337 042900 500773 220 LAMARCA  
 1.30 337 043000 500775 225 LAMARCA  
 1.31 337 043100 500777 230 LAMARCA  
 1.32 337 043200 500779 235 LAMARCA  
 1.33 337 043300 500781 240 LAMARCA  
 1.34 337 043400 500783 245 LAMARCA  
 1.35 337 043500 500785 250 LAMARCA  
 1.36 337 043600 500787 255 LAMARCA  
 1.37 337 043700 500789 260 LAMARCA  
 1.38 337 043800 500791 265 LAMARCA  
 1.39 337 043900 500793 270 LAMARCA  
 1.40 337 044000 500795 275 LAMARCA  
 1.41 337 044100 500797 280 LAMARCA  
 1.42 337 044200 500799 285 LAMARCA  
 1.43 337 044300 500801 290 LAMARCA  
 1.44 337 044400 500803 295 LAMARCA  
 1.45 337 044500 500805 300 LAMARCA  
 1.46 337 044600 500807 305 LAMARCA  
 1.47 337 044700 500809 310 LAMARCA  
 1.48 337 044800 500811 315 LAMARCA  
 1.49 337 044900 500813 320 LAMARCA  
 1.50 337 045000 500815 325 LAMARCA  
 1.51 337 045100 500817 330 LAMARCA  
 1.52 337 045200 500819 335 LAMARCA  
 1.53 337 045300 500821 340 LAMARCA  
 1.54 337 045400 500823 345 LAMARCA  
 1.55 337 045500 500825 350 LAMARCA  
 1.56 337 045600 500827 355 LAMARCA  
 1.57 337 045700 500829 360 LAMARCA  
 1.58 337 045800 500831 365 LAMARCA  
 1.59 337 045900 500833 370 LAMARCA  
 1.60 337 046000 500835 375 LAMARCA  
 1.61 337 046100 500837 380 LAMARCA  
 1.62 337 046200 500839 385 LAMARCA  
 1.63 337 046300 500841 390 LAMARCA  
 1.64 337 046400 500843 395 LAMARCA  
 1.65 337 046500 500845 400 LAMARCA  
 1.66 337 046600 500847 405 LAMARCA  
 1.67 337 046700 500849 410 LAMARCA  
 1.68 337 046800 500851 415 LAMARCA  
 1.69 337 046900 500853 420 LAMARCA  
 1.70 337 047000 500855 425 LAMARCA  
 1.71 337 047100 500857 430 LAMARCA  
 1.72 337 047200 500859 435 LAMARCA  
 1.73 337 047300 500861 440 LAMARCA  
 1.74 337 047400 500863 445 LAMARCA  
 1.75 337 047500 500865 450 LAMARCA  
 1.76 337 047600 500867 455 LAMARCA  
 1.77 337 047700 500869 460 LAMARCA  
 1.78 337 047800 500871 465 LAMARCA  
 1.79 337 047900 500873 470 LAMARCA  
 1.80 337 048000 500875 475 LAMARCA  
 1.81 337 048100 500877 480 LAMARCA  
 1.82 337 048200 500879 485 LAMARCA  
 1.83 337 048300 500881 490 LAMARCA  
 1.84 337 048400 500883 495 LAMARCA  
 1.85 337 048500 500885 500 LAMARCA  
 1.86 337 048600 500887 505 LAMARCA  
 1.87 337 048700 500889 510 LAMARCA  
 1.88 337 048800 500891 515 LAMARCA  
 1.89 337 048900 500893 520 LAMARCA  
 1.90 337 049000 500895 525 LAMARCA  
 1.91 337 049100 500897 530 LAMARCA  
 1.92 337 049200 500899 535 LAMARCA  
 1.93 337 049300 500901 540 LAMARCA  
 1.94 337 049400 500903 545 LAMARCA  
 1.95 337 049500 500905 550 LAMARCA  
 1.96 337 049600 500907 555 LAMARCA  
 1.97 337 049700 500909 560 LAMARCA  
 1.98 337 049800 500911 565 LAMARCA  
 1.99 337 049900 500913 570 LAMARCA  
 2.00 337 050000 500915 575 LAMARCA

# Inštrumenti - naprave za JP

- **KOMPAS!**
- Naviter Oudie
- Flytec
- Brauniger
- Flymaster
- Syride Nav
- Gofly Instruments Kobo
- Garmin Oregon/Montana/Dakota
- **Vario piskači** (*povezava s FlyMe preko bluetooth!*)
  - BlueFly
  - FlyBean
  - FlyNet



# Inštrumenti - naprave za JP



# Radijska postaja

- 147.800 MHz – uradna frekvenca  
Uporaba drugih frekvenc ni dovoljena , če ni zakupljena
- Če je postaja na oddaji, se jo lahko tudi najde s pomočjo usmerjene antene (ARG)
- Radioamaterji:
  - 2 m band (144 – 148 MHz)
  - 70 cm band (420 – 450 MHz)



# Radijska postaja

- APRS?

<http://aprs.fi/#!call=a%2FS55JC-7&timerange=3600&tail=3600>

- FM Radio (“poslušaj muziko, ko letiš”)
- Sirena – postaja piska in gre na oddajo



# Vremenski podatki - danes

- Vertikalna sondaža

[http://www.arso.gov.si/vreme/napovedi%20in%20podatki/vertikalna\\_sondaza.html](http://www.arso.gov.si/vreme/napovedi%20in%20podatki/vertikalna_sondaza.html)

- Satelitska slika oblačnosti

[http://www.arso.gov.si/vreme/napovedi%20in%20podatki/satelit\\_uvod2.html](http://www.arso.gov.si/vreme/napovedi%20in%20podatki/satelit_uvod2.html)

- Radarska slika padavin

[http://www.arso.gov.si/vreme/napovedi%20in%20podatki/radar\\_animacija.html](http://www.arso.gov.si/vreme/napovedi%20in%20podatki/radar_animacija.html)

- INCA/SI - kratkoročna napoved

<http://meteo.arso.gov.si/uploads/meteo/app/inca/>



# Vremenski podatki - napoved

- Parapente

<https://meteo-parapente.com/?lang=en>

- ALADIN

<http://meteo.arso.gov.si/met/sl/app/webmet/#>

- Napoved za letalstvo

<http://meteo.arso.gov.si/met/sl/aviation/>

# Vremenski podatki - trenutni

- **Veter**

<https://kafol.net/code/weather/>

<http://skytech.si/>

[http://www.arso.gov.si/vreme/napovedi%20in%20podatki/vreme\\_avt.html](http://www.arso.gov.si/vreme/napovedi%20in%20podatki/vreme_avt.html)

- **Kamere**

<https://kafol.net/rnd/cam/>

ALADIN/ARSO – spletne kamere

# Vse na enem mestu

- Vzletišča
- Vreme – veter
- Live tracking

<https://kafol.net/code/xcg/?c=SI>

# Live tracking

- Mobilne naprave
  - FlyMe
  - LiveTrack24
- Namenske naprave
  - SPOT
  - FlyMaster
  - GPRS sledilne naprave
  - APRS sledilne naprave



# Live tracking – xcglobe.com, FlyMe

The image shows a screenshot of the xcglobe.com website interface. The top navigation bar includes links for Flights, Sites, Pilots, Gliders, and Teams. A 'More...' dropdown menu is open, with 'Live tracking' highlighted in red. Below the navigation bar, there is a table of 'Latest flights' and a sidebar with various news and announcements. A second screenshot on the right shows a different view of the website with a 'More...' dropdown menu also open, highlighting 'Live tracking' in red. The bottom of the page shows a flight time summary and a pie chart.

| Pilot                   | km  | Site                      |
|-------------------------|-----|---------------------------|
| 20.01 Primož T          | 7.7 | Kriška gora - Blažun      |
| 20.01 Primož T          | 5.4 | Kriška gora - Blažun      |
| 20.01 Jean Philippe GOI | 4.2 | Puy De Dome               |
| 20.01 Gregor Malenšek   | 6.6 | Kriška gora - Blažun      |
| 20.01 Miran Drač        | 3.1 | Golte - Planica           |
| 20.01 Jože Poje         | 0.9 | Prosvinik                 |
| 20.01 Milan Velkavrh    | 2.9 | Gozd                      |
| 20.01 Darko Kučina      | 5.4 | Gozd                      |
| 20.01 Darko Kučina      | 2.5 | Gozd                      |
| 20.01 Simon Spruk       | 4.4 | Planjava - Kamniški Vrh   |
| 20.01 Domen Dolenc      | 2.3 | Sv. Lovrenc Polhov Gradec |

| Flight time: 20.1.2017  |
|-------------------------|
| Grmada (Planinska gora) |

# Live tracking – Flymaster PWCA SF

- <https://lt.flymaster.net/bs.php?grp=518#>

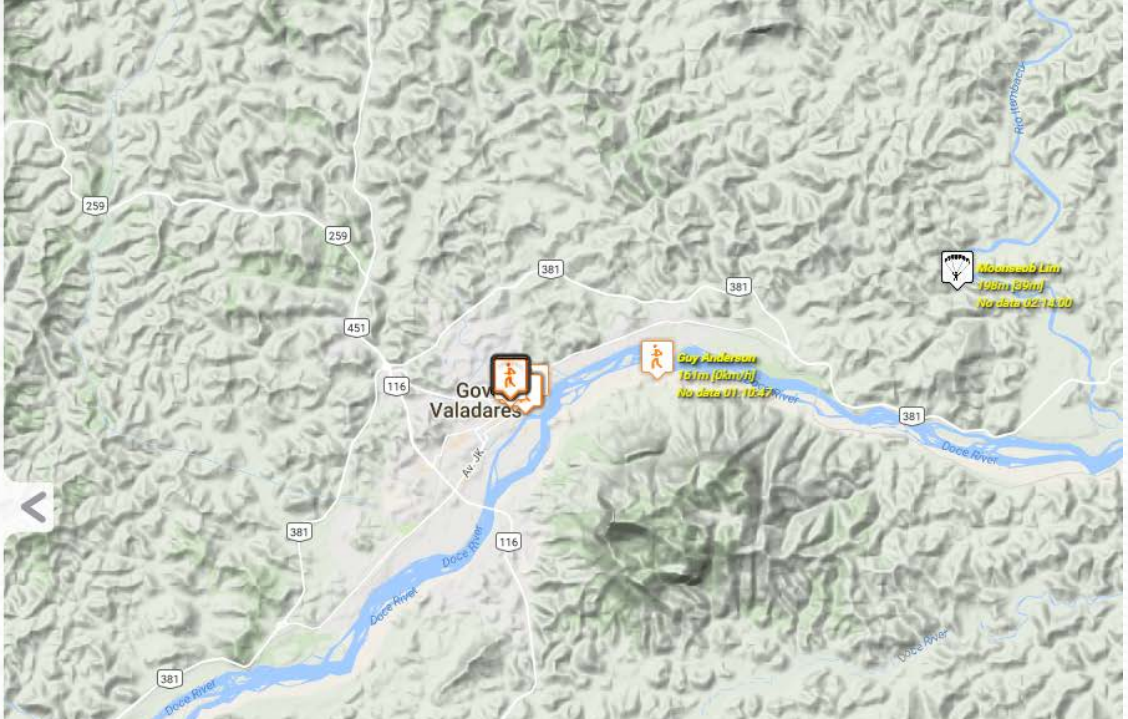
PWCA SuperFinal - GovernadorValadares - Brazil  
Jan 16, 2017 to Jan 30, 2017

Live Ranking [Live Task](#)

Speed  Alt [AGL]  Dist/Time

Top 3 Search:

| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Pilot name              | Speed<br>km/h | Alt [AGL]<br>m | Dist/Time<br>km |  |
|-------------------------------------|-------------------------------------|-------------------------|---------------|----------------|-----------------|--|
| <input checked="" type="checkbox"/> | 51                                  | <a href="#">Susa, P</a> | 0             | 276 [98]       | 58.1            |  |



# Live tracking – LiveTrack24

- <http://www.livetrack24.com/tracks/activity/1>

The screenshot displays the LiveTrack24 website interface. At the top, there is a navigation bar with the logo, a 'Get Started' button, and links for 'Login', 'Sign Up', 'Contact', and 'English'. Below the navigation bar, there are links for 'Explore LiveTracks 174', 'Live Events 4', and 'Services'. The main content area is titled 'Live Tracks \ List' and includes a search bar. The current view is filtered to 'Paraglider' and shows a list of tracks. A map on the right side of the page shows the location of the selected track, 'Live gsabu', in Valle de Bravo, Mexico. The map includes a pop-up window with details for the track.

**LIVETRACK24** [Get Started](#) [Login](#) [Sign Up](#) [Contact](#) [English](#) [Follow](#) [Like 1.8K](#)

Explore LiveTracks **174** Live Events **4** Services ▾

Live Tracks \ List Search ▾

Now showing >> [Paraglider](#) [20:57:29 UTC](#)

1 2 3 4 5 6 7 8 9 »

- Live gsabu**  
was at Valle de Bravo - MX [-0.6 km]  
on 20-01-2017 20:57:04 UTC+0 0 mins 09 secs ago  
Alt:3110 m, Speed:45 km/h, Duration:03:35:44  
Distance from takeoff 0.9 km, [Max] 21.5 km
- Live Bertran**  
was at Patu - BR [-125.6 km]  
on 20-01-2017 20:57:00 UTC+0 0 mins 13 secs ago  
Alt:786 m, Speed:0 km/h, Duration:01:12:19  
Distance from takeoff 1.9 km, [Max] 2.0 km
- Live pierog**  
was at Valle de Bravo - MX [-0.7 km]  
on 20-01-2017 20:56:08 UTC+0 1 mins 05 secs ago  
Alt:2360 m, Speed:43 km/h, Duration:03:23:01  
Distance from takeoff 11.3 km, [Max] 21.4 km
- Live danielvelez**  
was at Roldanillo Compe - CO [-0.7 km]  
on 20-01-2017 20:55:16 UTC+0 1 mins 57 secs ago  
Alt:0 m, Speed:0 km/h, Duration:04:52:39  
Distance from takeoff 79.8 km, [Max] 0.0 km
- Live frograff - Frode Graff**  
was at Valle de Bravo - MX [-0.2 km]  
on 20-01-2017 20:53:58 UTC+0 3 mins 15 secs ago

Map Satellite

**Live gsabu**  
was at Valle de Bravo - MX [-0.6 km]  
on 20-01-2017 20:57:04 UTC+0 0 mins 09 secs ago  
Alt:3110 m, Speed:45 km/h, Duration:03:35:44  
Distance from takeoff 0.9 km, [Max] 21.5 km

# Live tracking xcglobe.com/livetrack

The screenshot shows the XCGlobe website interface. The browser address bar displays "xcglobe.com/livetrack". The navigation menu includes "XCglobe", "Flights", "Sites", "Pilots", "Teams", "Gliders", and "More...". The user is logged in as "Jean Caffou" and can "Claim flight" or "Logout".

### Live tracking

Buttons: Last day | Live flights | Refresh

| Pilot               | Site             | Alt. | Time |
|---------------------|------------------|------|------|
| Berto Prodan        | Vogel            | 539  | 7 h  |
| Damir Košta         | Aerodrom Grobnik | 233  | 7 h  |
| Domen Kastner       | Gozd             | 392  | 6 h  |
| Laurent Mrasilevici | -                | 90   | 5 h  |
| Marek Malyszka      | Poland           | 87   | 8 h  |
| Lojze Kupljenik     | Slovenia         | 476  | 7 h  |
| Darrell Packe       | New Zealand      | 15   | 21 h |
| Janez Kanižar       | Golte - Planica  | 434  | 6 h  |
| Jurij Franko        | Slovenia         | 167  | 3 h  |
| Peter Žilnik        | Vogel            | 535  | 7 h  |

1 2 >>

Pilot: Domen Kastner | Site: Gozd  
Altitude: 392 m | Speed: 0 km/h | Duration: 22 h  
Updated before: 6 h

The map displays a flight path in yellow over a topographic map of the Polhograjska gora region. The path starts near Polhov Gradec and moves towards the mountains. A red dot indicates the current position of the glider at 392m altitude.

The graph shows altitude in meters over time. The y-axis ranges from -500 to 1000 meters. The altitude remains near 0 meters for most of the duration, then rises sharply to approximately 392 meters at the end of the recorded flight.



# SOS? Vse OK?

- Pošiljanje koordinat
  - GPS Status
  - Kot MMS sporočilo (na 112 ali prijatelju)
  - Android aplikacija  
**Paragliding takeoff sites (Žan Kafol)**  
<https://play.google.com/store/apps/details?id=com.xcglobe.xcglobesites>
    - Klikneš na pilota in takoj navigiraš z Google Maps
    - Dobiš lahko tudi koordinate (iz spleta - xcglobe.com - jih je težko dobiti)
- Pripomočki: flic.io

# SOS ! V skrajnih primerih

- Ko Live Track spodleti?

The screenshot shows the XCglobe online contest website. The navigation menu includes Flights, Sites, Pilots, Gliders, and Teams. The live tracking status bar shows "Live Tracking", "Refresh rate: 1 min", "Flights: 1", and "Last day".

| Pilot     | Updated | Altitude |    |
|-----------|---------|----------|----|
| ● Socci I | 40 sec  | 545      | 54 |
| ● Benoit  | 104 min | 548      | 53 |
| ● Mikhai  | 11 h    | 207      | 52 |
| ● Grega   | 23 h    | 466      | 51 |
| ● Yevge   | 11 h    | 154      | 50 |
| ● Herve   | 17 h    | 943      | 49 |
| ● Philipp | 11 h    | 122      | 48 |
| ● Marek   | 17 h    | 96       | 47 |
| ● Dainiu  | 12 h    | 72       | 46 |
| ● Jakub   | 18 h    | 389      | 45 |
| ● Ugniu:  | 12 h    | 40       | 44 |
| ● Pavle   | 14 h    | 1359     | 43 |
| ● Grigor  | 18 h    | 572      | 42 |
| ● Zbigni  | 17 h    | 520      | 41 |
| ● Milan ^ | 16 h    | 932      | 40 |
| ● Hristo  | 19 h    | 129      | 39 |
| ● Omer ,  | 21 h    | 484      | 38 |
| ● Patryk  | 24 h    | 427      | 37 |
| ● Sunay   | 16 h    | 293      | 36 |
| ● Grigor  | 20 h    | 1451     | 35 |
| ● Jozo k  | 9 h     | 67       | 34 |
| ● Yarosl  | 18 h    | 2278     | 33 |
| ● Svetoz  | 19 h    | 268      | 32 |
| ● Mihaili | 19 h    | 371      | 31 |
| ● Omer I  | 24 h    | 308      | 30 |
| ● Milan I | 18 h    | 832      | 29 |
| ● Dušan   | 17 h    | 540      | 28 |

The map shows a flight path in red over a topographic map of the region. A popup window displays the following flight data:

- Altitude: 1359 m
- Speed: 4.7 km/h
- Duration: 70 min
- Updated before: 20 h

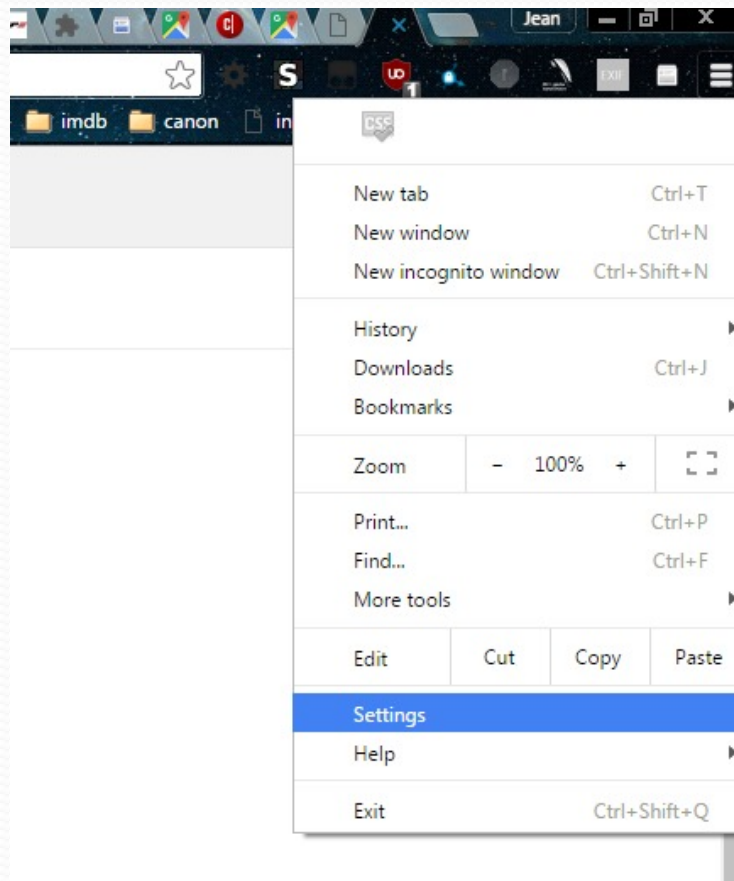
# Mobilni operater?

- Ni tako kot v filmih



# Lokacija s pomočjo Googla

- Ni aktivne seje?
- Včasih rabiš geslo



# Lokacija s pomočjo Googla

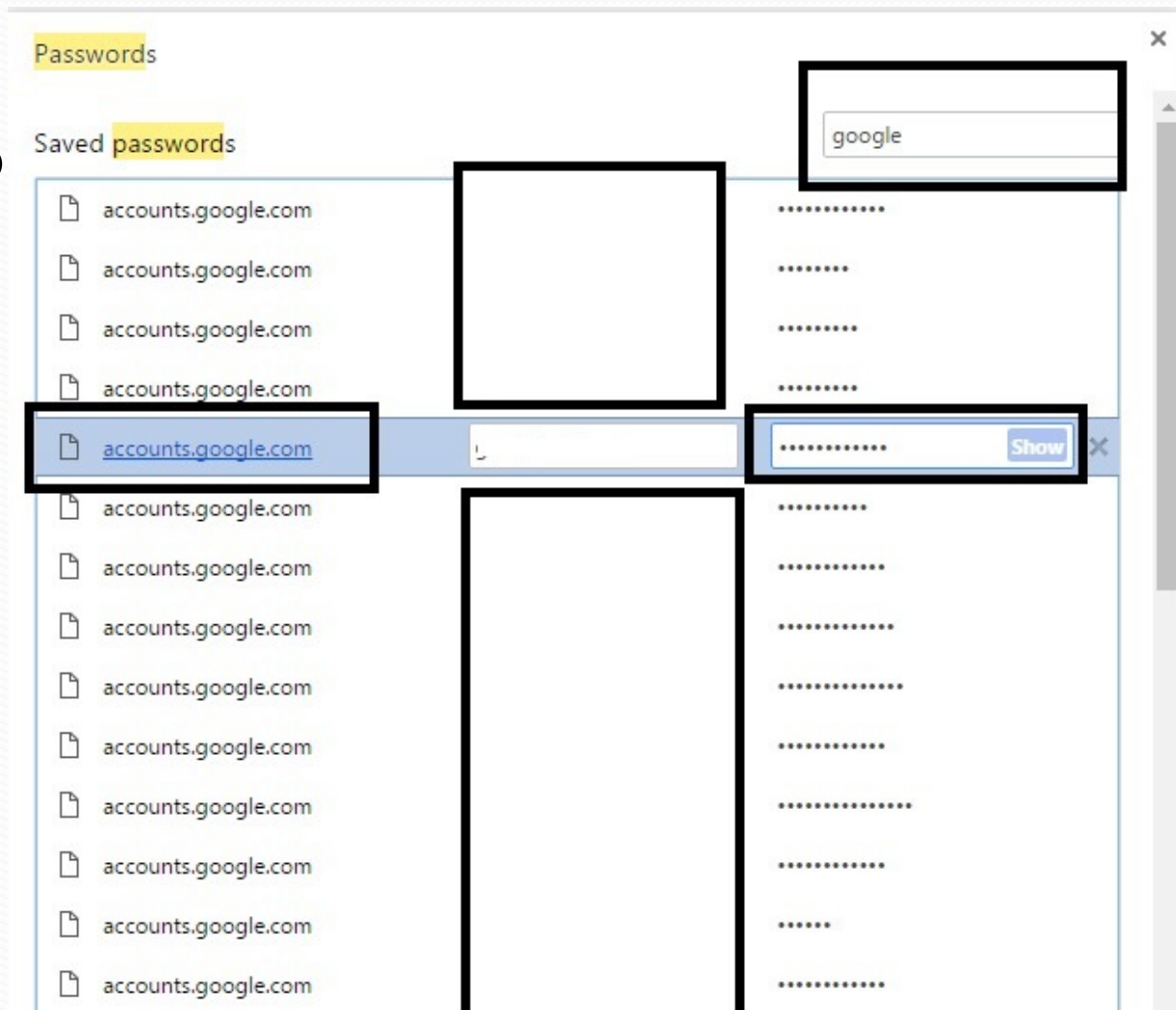
- Ni aktivne seje?
- Včasih rabiš geslo

The screenshot shows a Google search results page. At the top right, the search bar contains the word "password" and is circled in black. Below the search bar, the "Sign in" section includes a "Manage your synced data on Google Dashboard" link and two buttons: "Disconnect your Google Account..." and "Advanced sync settings...". A yellow callout box labeled "password" points to the "Advanced sync settings..." button. In the "Privacy" section, there are two buttons: "Content settings..." and "Clear browsing data...". A yellow callout box labeled "password" points to the "Clear browsing data..." button. Below this, a message states: "Google Chrome may use web passwords to improve your browsing experience. You may optionally disable these services. [Learn more](#)". A list of privacy settings follows, with checkboxes for various services. The "Passwords and forms" section is highlighted in yellow and contains two checked items: "Enable Auto-fill to fill in web forms in a single click. [Manage Auto-fill settings](#)" and "Offer to save your web passwords. [Manage passwords](#)". A yellow callout box labeled "password" points to the "Manage passwords" link, which is also circled in black.



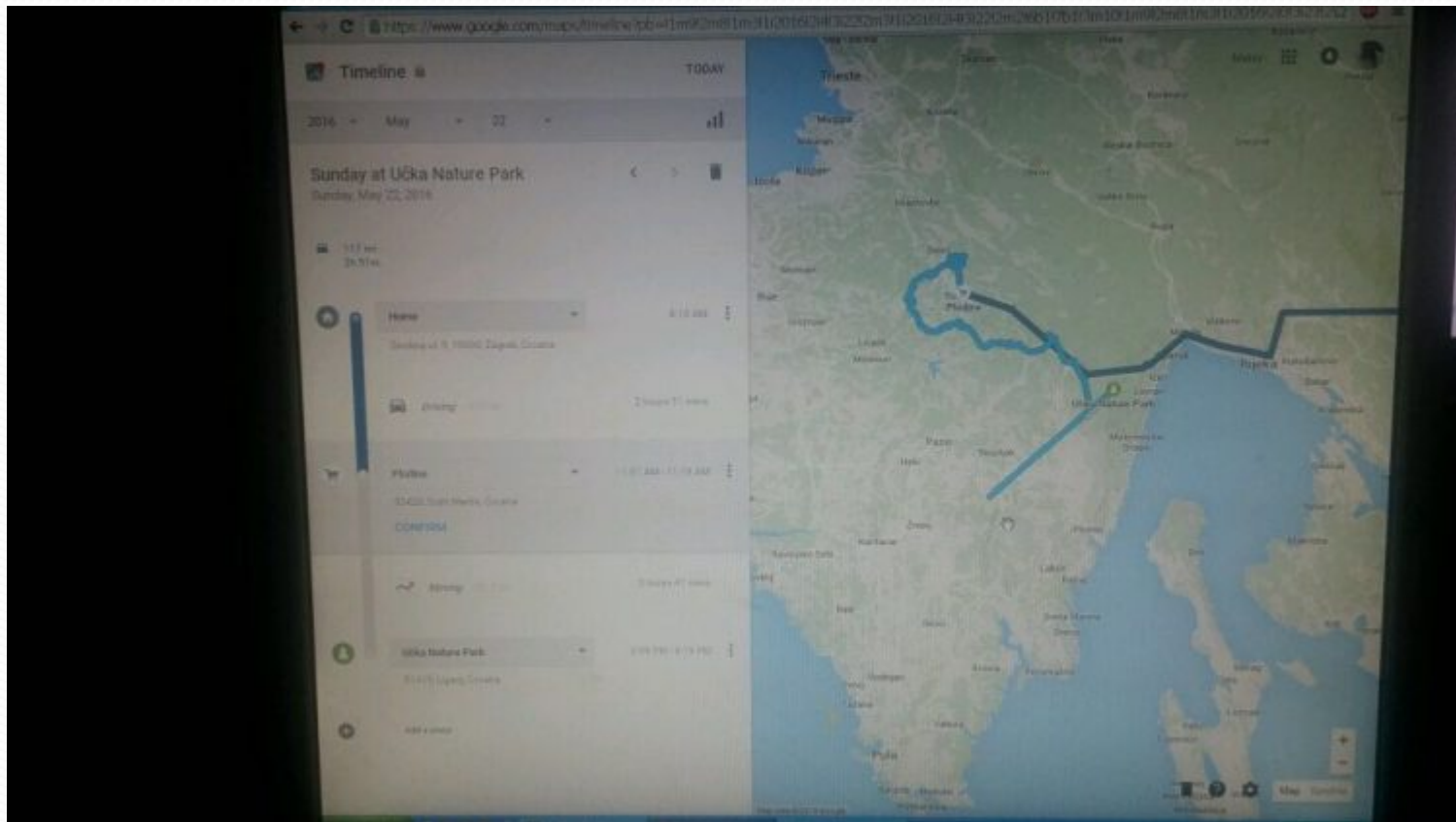
# Lokacija s pomočjo Googla

- Ni aktivne seje?
- Včasih rabiš geslo



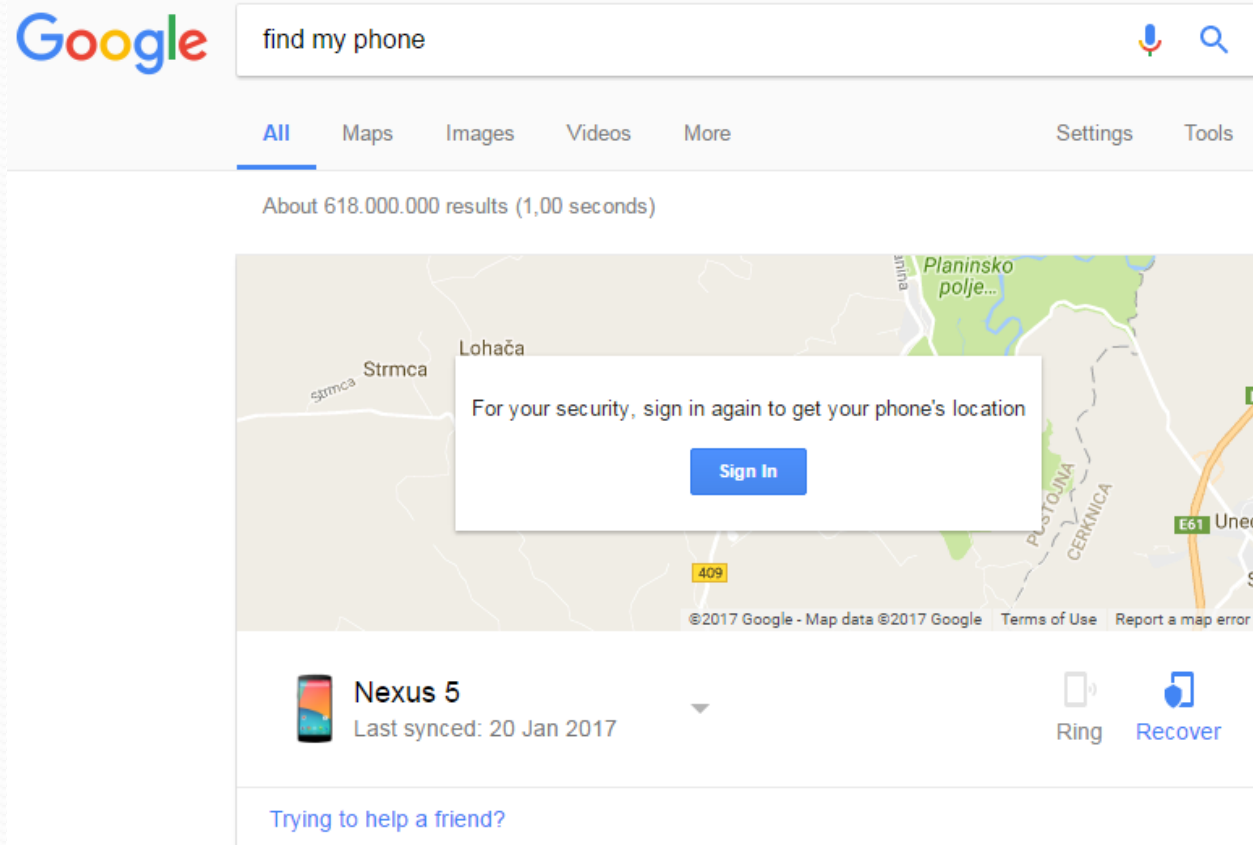
# Google Maps Timeline

- <https://www.google.com/maps/timeline>



# Android Device Manager

- “find my phone” v Google



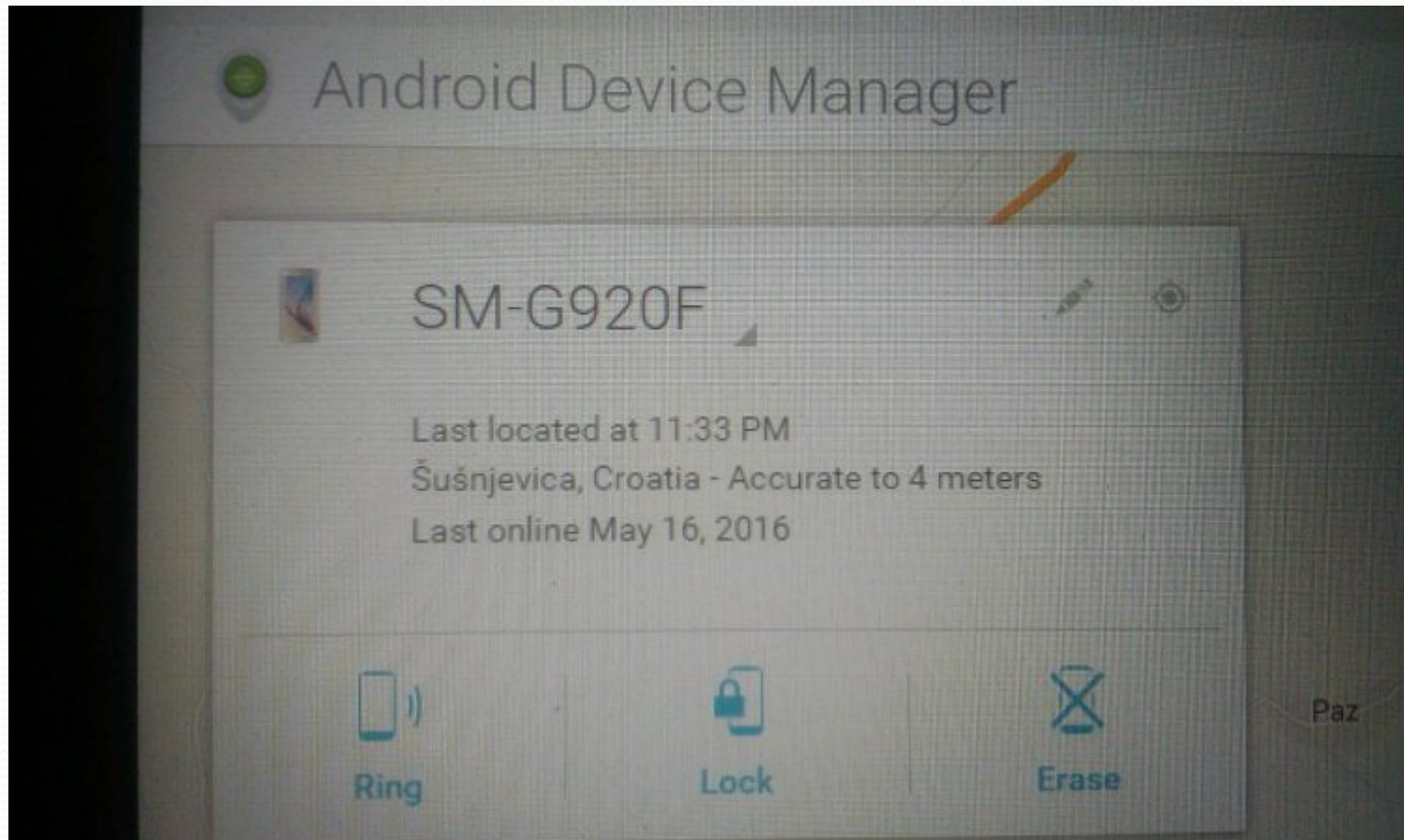
The screenshot shows a Google search for "find my phone". The search bar contains the text "find my phone" and a microphone icon. Below the search bar are navigation tabs for "All", "Maps", "Images", "Videos", and "More", along with "Settings" and "Tools". The search results indicate "About 618.000.000 results (1,00 seconds)".

The main content area displays a map of a region in Slovenia, with a white dialog box overlaid on it. The dialog box contains the text: "For your security, sign in again to get your phone's location" and a blue "Sign In" button. The map shows locations like "Lohača", "Strmca", "Planinsko polje...", "Ploščina", and "CERNICA".

Below the map, there is a section for the device "Nexus 5". It includes a small image of the phone, the text "Nexus 5", and "Last synced: 20 Jan 2017". To the right of this section are two icons: "Ring" and "Recover".

At the bottom of the page, there is a link "Trying to help a friend?" and a "Feedback" link in the bottom right corner.

# Android device manager



# Android device manager

