FULL GUIDE & DEMO
QSA RPE & QSA RPE LIGHT
QSA WEB

QUANTUM SPORTS ANALYTICS

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SUMMARY

PART 1. SETUP

1. DOWNLOAD
Via Apple Store / Google Play

- Free download

https://itunes.apple.com/us/app/qsa-rpe/id1105309924?mt=8

https://play.google.com/store/apps/details?id=com.qsa.coach

1. CREATE AN ACCOUNT

After installing **QSA RPE©** you will need to create an account.

To do so, click on the **Register** button.

Once you have your credentials, enter your Login name and Password, and hit **Login**.

Note: you have the possibility to Login quicker next time by checking the **Remember me** box under the password line.

When first created, your account is automatically turned into a 20-day trial, limited to the creation of 12 players.

Please contact QSA to discuss terms of an different trial.
info@quantum-sports-analytics.com
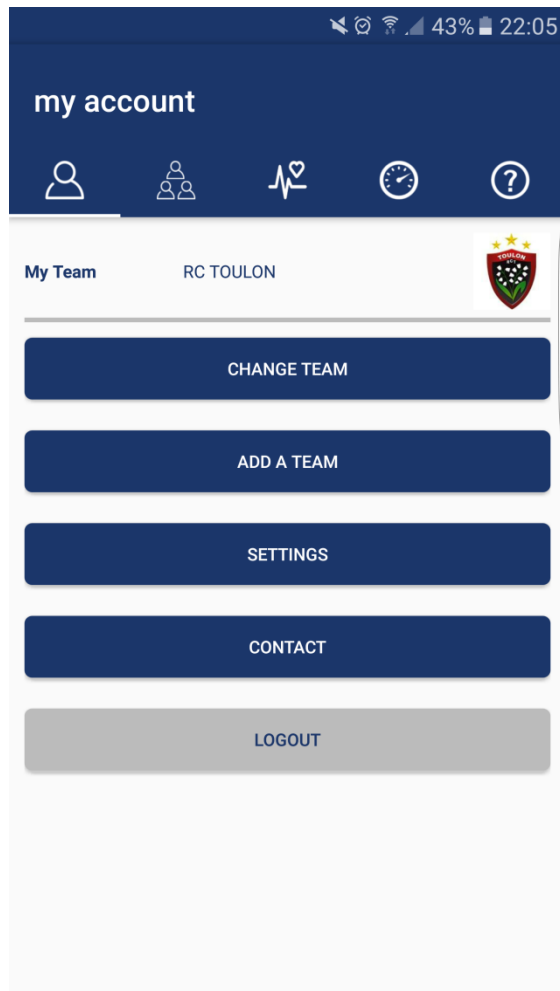
2. CREATE A TEAM

If you have a Team account, you can create a Team, using the button **ADD A TEAM.** The maximum number of Teams you can create depends on your subscription details, but in theory there are no limits.

In **SETTINGS**, you can select the **questions** you want to ask your players. All questions are selected by default.

In **CONTACT**, you can see information about **Quantum Sports Analytics.**
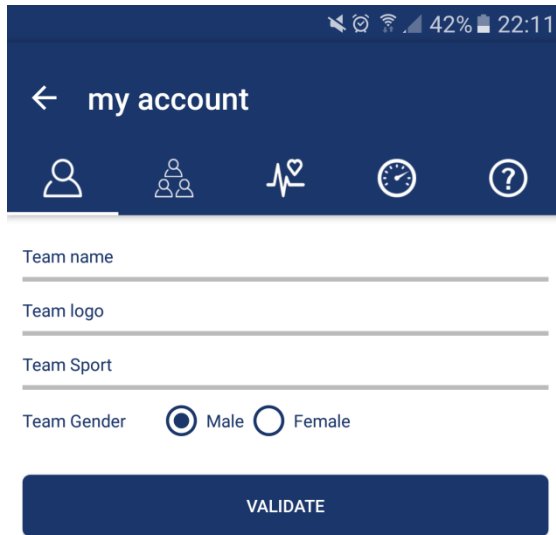
Finally, you can also **Log Out**.

To create a team, select **ADD A TEAM**.

2. CREATE A TEAM

- Go to **My Account** → **Add a team**. You will then access the team creation page.

- Add a **Team Name**, **Logo** (if you have a picture to upload) and select the **Sport**.

- Selecting the Sport will have an impact later when creating Players.

- Validate this page to go back to **My Account**.

PART 1. SETUP

3. CREATE PLAYER PROFILES
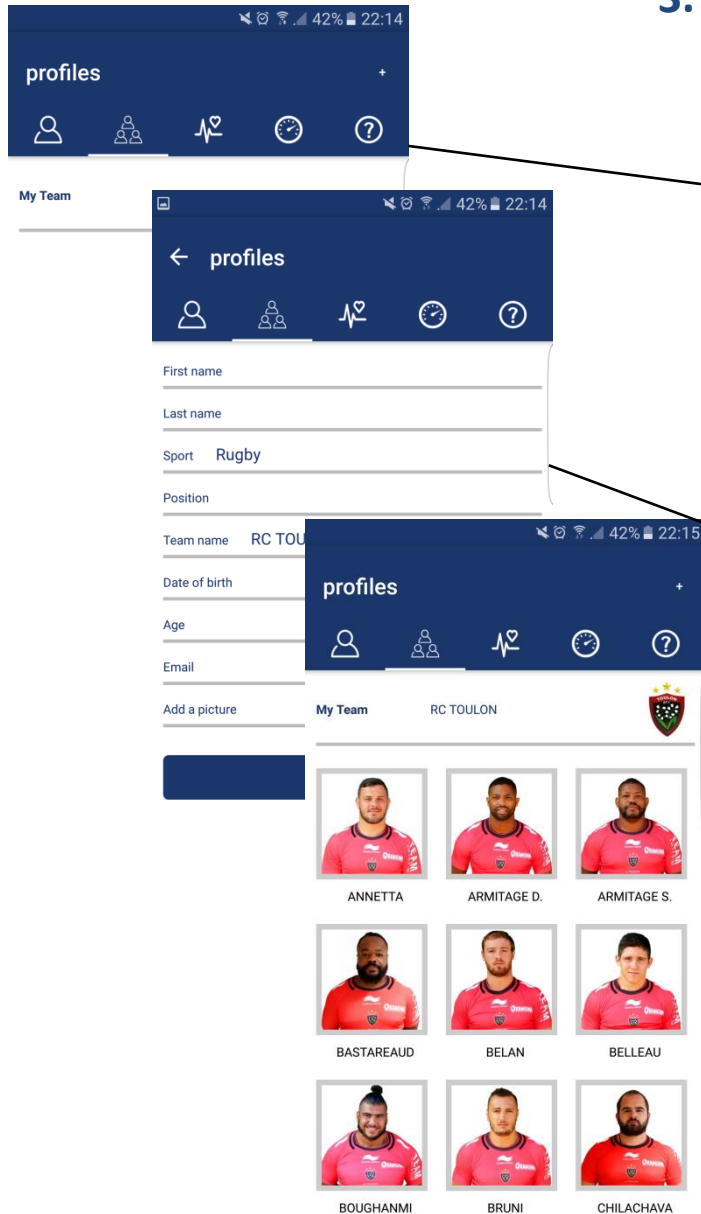
After a Team is created, you can add **Players** to it.
To do so, go to **My Account**, **Change Team** and select your Team.
Then go to the **Profiles** section
Simply press the **+ button at the top right of the screen**

You will need to enter the following information (*mandatory):
First name,
Last name*,
Sport: automatically filled by the Sport chosen on the Create a Team screen,
Position*: choose a position within the available options (choices depend on Sport chosen),
Team Name: automatically filled by the Sport chosen on the Create a Team screen,
Date of Birth,
Age: (automatically calculated),
Email* : player email address. (if you don't want to use the player app, just type anything in this field, like ".com" for example).
Add a picture: player picture (if any)
 Validate to create your player and come back to **Profiles**.

You can then create as many **Players** as allowed by your subscription for your **Team**. You can **modify or delete** a player if needed.

4. INVITE PLAYERS TO GET THEIR OWN APPLICATION, QSA RPE LIGHT©

IMPORTANT NOTE

This is only for coaches who want their players to answer on the player application QSA RPE LIGHT ©.

If you rather want players to answer on your application (for example by asking them one by one to fill in questionnaires on your tablet or phone), you can ignore this section.

When a player is created,

- Go back to his profile,
- Select "**CREATE AN ACCOUNT**" under the validate button

  ➢ Your player will receive an **invitation link** to download QSA RPE LIGHT © (player application), along with a **login** (= the email address used in the player profile) and a **password**.
  ➢ That means players don't need to go download the application and don't need to create an account themselves! All the setup has to be done by the coach (this is very important, otherwise it can lead to setup issues)

STEPS that we advise to follow :
a. Create your player profiles, make sure all emails are correct
b. Let your players know that they will soon receive an invitation link with connexion credentials. The email can be in the spam folder in some cases
c. Go back to each player profile and click on "create an account" for all of them
d. Check with your players that everyone has received the invitation
e. Check with your players that they could clik on the link to download the player application, and connect with credentials given by email.
f. You should be all set.

PART 2. DAILY USE

1. WELLNESS QUESTIONNAIRE

WHERE?
➢ In the **Well-Being & Recovery** section of the player application,
➢ Or in the **Profile section** of the coach application,
you can answer your **Wellness questionnaire**.

- The date is set by default to **today's date** and cannot be changed. **It is recommended to ask your players to answer this questionnaire every morning after waking up. (to give consistency to the analysis).**

- All you need to do is answer all Wellness & Recovery questions:
  - **Pain and Injury** (opens a body map to select the zone and intensity of pain or injury)
  - **Sleep Quality** (0 = very very well; 6 = very very bad)
  - **Fatigue** (0= very very well; 6 = very very bad)
  - **Muscle soreness** (0= very very low; 6 = very very high)
  - **Stress** (0= very very low; 6 = very very high)
  - **Mood** (0= very very well; 6 = very very bad)
  - **Recovery** (0= very poorly; 10 = very well recovered)
  - *Menstruations (yes or no) : only if the team is a Women team*

- **Validate** this page to go back to **My Account**.
- **Informations will be automatically sent to the coach application.**

2. CREATE TRAINING OR MATCH SESSIONS
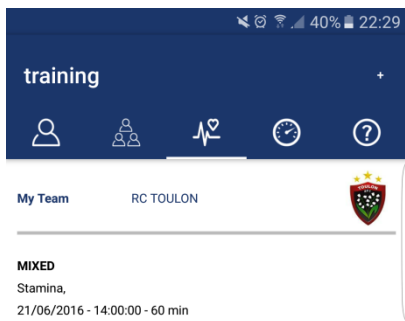
Click on the heartbeat icon to land on the **Training History** screen. You can see past training sessions and add a new one.
To add a new session, simply press the **+ button at the top right of the screen**.

Enter the following information:
Date
Time: from (hour) to (hour)
Duration: will be automatically calculated (in minutes)
Training type: select a training type in the list
Description: add a text to give more details about your session
Validate to create the session and come back to the Training history section.

Your new session is now created and your players will be notified on QSA RPE Light (for players) 30min after the end time of the session, to enter their RPE.

If you have no session today, simply select a Date then press **REST** (your players will be assigned a RPE of 0). Very important point to reflect rest in the training schedule.

2. EDIT OR DELETE TRAINING OR MATCH SESSIONS
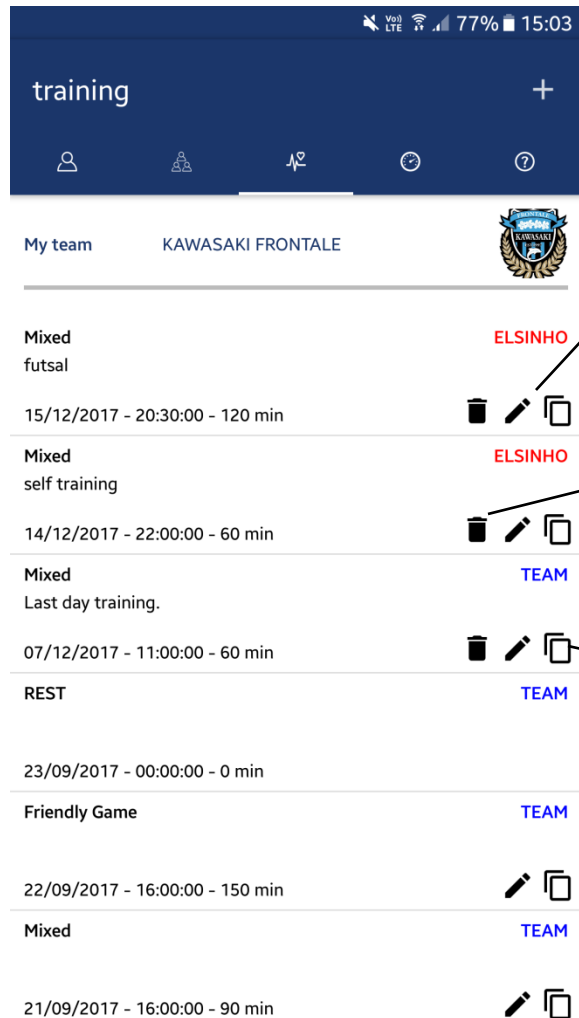
To **EDIT** a session, click on the **Pen icon**.
- If the session has not happened yet, you can change all details.
- If the session has already happened AND that at least 1 athlete replied to the RPE, you can only edit the Training Type and Description.

To **DELETE** a session, click on the **Bin icon**.
- If the session has already happened AND that at least 1 athlete replied to the RPE, you WON'T be able to delete it. Please contact QSA if you really need to delete a session where athletes already replied.
- Otherwise, you can delete all other created sessions if needed

To **DUPLICATE** a session, click on the **Copy icon**.
- You can use it to quickly create a new session where one or more fields are similar to what you want to create.

- Note: if you create sessions in the future, your athletes will be able to see them listed in their PLANNING page (if they use the player application).

3. COLLECT PLAYER ANSWERS ON RPE & PAIN/INJURY

- Athletes who answered = blue square notfication

- Data collection via :
  - QSA RPE (coach app) or QSA RPE LIGHT (athlete app)

- Collected data:
  - Before training
    - ✓ Pain and Injuries
    - ✓ Sleep quality
    - ✓ Stress
    - ✓ Mood
    - ✓ Fatigue
    - ✓ DOMS
    - ✓ Recovery
  - After training
    - ✓ RPE
    - ✓ Pain and Injuries

3. COLLECT PLAYER ANSWERS ON RPE & PAIN/INJURY

Created sessions will be instantly available on the coach and player applications to collect answers.

Otherwise, players will be sent a notification 30min after the end time of the session planned by your coach.

To answer the **RPE question** and report any **pain or injury** following the session:

➢ **In the coach app: go to the training page and select the training itself**
➢ **In the player app: go to the training page and select the training itself (see screenshot)**

1. If the player attended the session, no need to click on the toggle.
    a) Check if the **Duration** is correct.
        ○ (players) for any session, you can reflect how many minutes you played by changing the "Start" – "To" section!
    b) Answer the **RPE** question and the **Pain/Injury question**
    c) Validate. Data will be sent to the coach automatically.

2. If the player did not attend the session
    a) Click on the **toggle** button
    b) Select a reason why you did not attend
    c) Validate. Data will be sent to the coach and your coach.

Important
If a player has an issue or cannot answer, the coach can do it in his application !

4. (If required) A PLAYER CAN ENTER HIS OWN SESSIONS
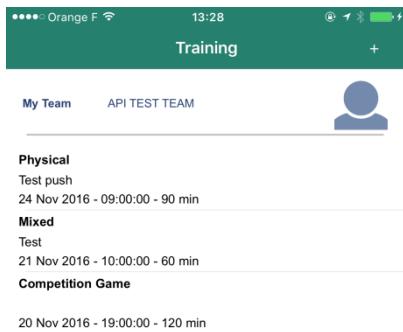
Players can create their own personal sessions
(extra work, additional sessions, recovery sessions after injury, etc…).
Data will be sent to the coach, so that's better to agree with players whether they should or not report any individual sessions.

To add a new personal session
➢ Go to the **RPE** screen.
➢ Press the **+ button at the top right of the screen**.

Enter the following information:
Date
Time: Start (hour) to (hour)
Duration: will be automatically calculated (in minutes)
Training type: select a training type in the list
Description: add a text to give more details about the session
Validate to create the session and come back to the Training history section.

The new session is now created.
You will be able to see it in the RPE screen.
Select it after to answer the RPE and Pain/Injury!

PART 3. DATA ANALYSIS

1. ANALYSIS ON QSA RPE (coach app) – MAIN VIEW

On the Main page, you will find your Team and the indexes for each player. Each index is calculated and is a direct application of the Foster* method.

*Foster et. al, A New Approach to Monitoring Exercise Training, Journal of Strength and Conditioning Research, 2001, 15(1), 109-115

LOAD STRESS INDEX
How a player accepts the training charge compared to his own training charge over the past calendar week.
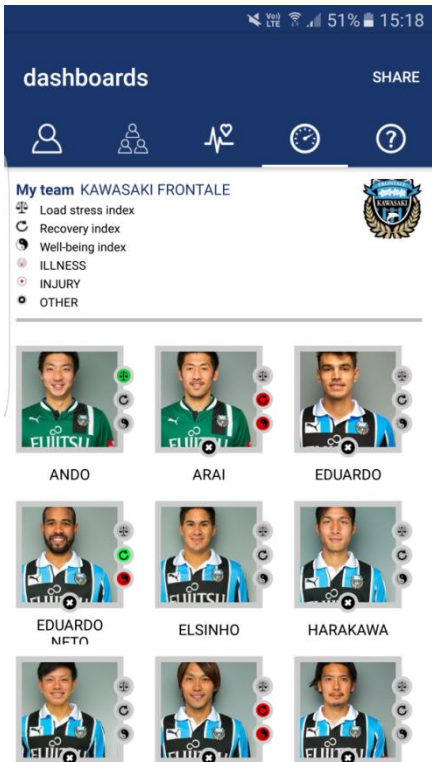Find out instantly whether your player training is Optimal, Normal, going Low to Too Low, or inversely, High to Too high! Adapt you training in consequence to optimize your player performance.

RECOVERY INDEX
How a player recovers from the last training session.
If recovery is not good enough, average, or good, you will see that instantly!

WELL-BEING INDEX
How a player feels.
If anything is wrong, it is maybe time for a chat with your player! Is it about stress, sleep, mood issues?

Also, find out instantly:
Injured,
Sick players,
Players absent for other reasons,
Players in their menstruation period (Women sports)

TOO LOW – OPTIMAL – NORMAL – HIGH – VERY HIGH

VERY GOOD – GOOD – AVERAGE – BAD – VERY BAD

VERY GOOD – GOOD – AVERAGE – BAD – VERY BAD

These indexes and values are automatically updated (you need a Wi-Fi connection).

1. ANALYSIS ON QSA RPE (coach app) – PLAYER VIEW

To know more about a player, click on him on the dashboard page!
To access more data, there is QSA WEB (see the following slides)
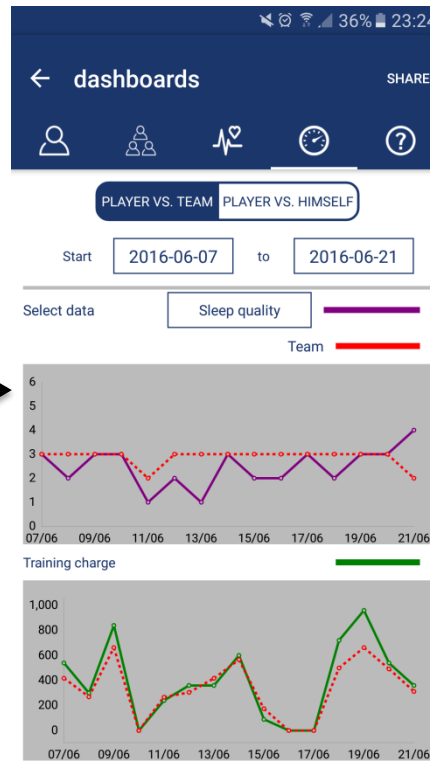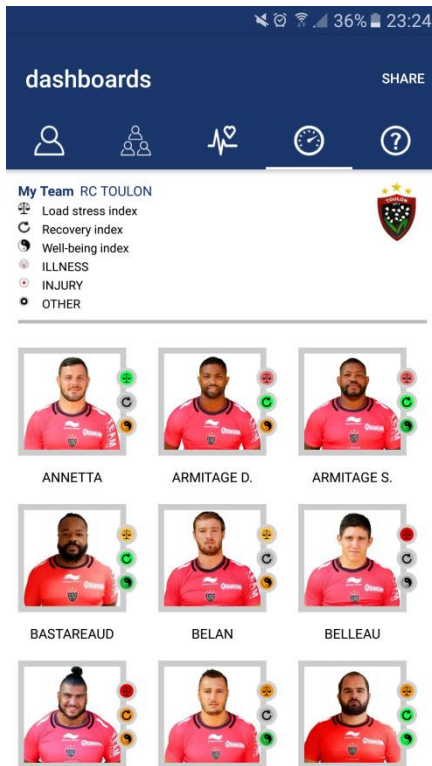
The Player vs. Team view shows the evolution of the Player sleep, DOMS, fatigue, stress, mood and recovery over time. In dotted line, you can see the Team average for these parameters, to have an instant Player vs. Team comparison over time!

The Player vs. Player view shows the evolution of the Player 3 indexes over time. You can see historical values for each index (line charts).

2. ANALYSIS ON QSA WEB
Access and Connexion

➢ **GO TO www.quantum-sports-analytics.com**
➢ **CLICK ON "customer Log in"**
➢ **On the next page, type your email address and password (from QSA RPE coach app)**
➢ **CLICK ON "Log in"**

2. ANALYSIS ON QSA WEB

Analysis Pages

There are 5 pages in the QSA WEB tool

SESSION CALENDAR

Allows you to see your team and player sessions and edit their "Duration" and "Description"
Thanks to this you can adjust session times for your players, to better reflect the training charge.

TRAINING ANALYSIS

Allows you to see your team and player training load, cumulated load, acute:chronic workload, RPE and Load Stress
This is the page where all data linked to training times and RPE will be visible.

WELLNESS (AND RECOVERY) ANALYSIS

Allows you to see your team and player Wellness card
This is the page where all data linked Wellness and its components (mood, sleep, DOMS, fatigue, stress) and Recovery will be visible.

PAIN & INJURY ANALYSIS

Allows you to see your players reported Pain & Injuries
You can see Low intensity pain, high intensity pain and Injuries for each player by day, week, month, quarter, half-year and full year. Historical data can also be seen (i.e. what is a player most common pain or injury). The page also shows whether a reported pain or injury occurred after a training session.

EXPORT DATA

Allows you to export your data in Excel or PDF format.
You can download all team data in a single excel file ! (player by player in the same spreadsheet)

2. ANALYSIS ON QSA WEB
Session Calendar

Continue on the same topic ▶

2. ANALYSIS ON QSA WEB

Session Calendar

There are 5 pages in the QSA WEB tool

Can be edited and saved

Session View

Player

All Team

Date
Thursday December 7th 2017

Type
Mixed

Time
From 11:00 am To 12:00 pm

Duration
60

RPE
-

Description
Last day training.

Close   Save changes

PART 3. DATA ANALYSIS

Training Analysis

2. ANALYSIS ON QSA WEB
Training Analysis

Team	Player	Date Range
KAWASAKI FRONTALE	ELSINHO	June 1, 2016 - June 21, 2016

Overview

Total Days	Total Sessions	Total Duration	Total Training Load	Average Training Load	Illness	Injury
21 Day(s)	**21** Session(s)	**1275** Minute(s)	**7125.0** U.A.	**339.3** U.A. per day	**0** Absence(s)	**0** Absence(s)

Load Stress Index

⊘ Load Stress Index
-0.3
Optimal
Optimal Monotony and Charge
Average between
June 01, 2016
and
June 21, 2016

Last Training Load
420 U.A.

Rated Perceived Exertion

5.5

Hard

Training Load Per Day

From June 01, 2016 To June 21, 2016

—○— Team ■ Player
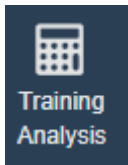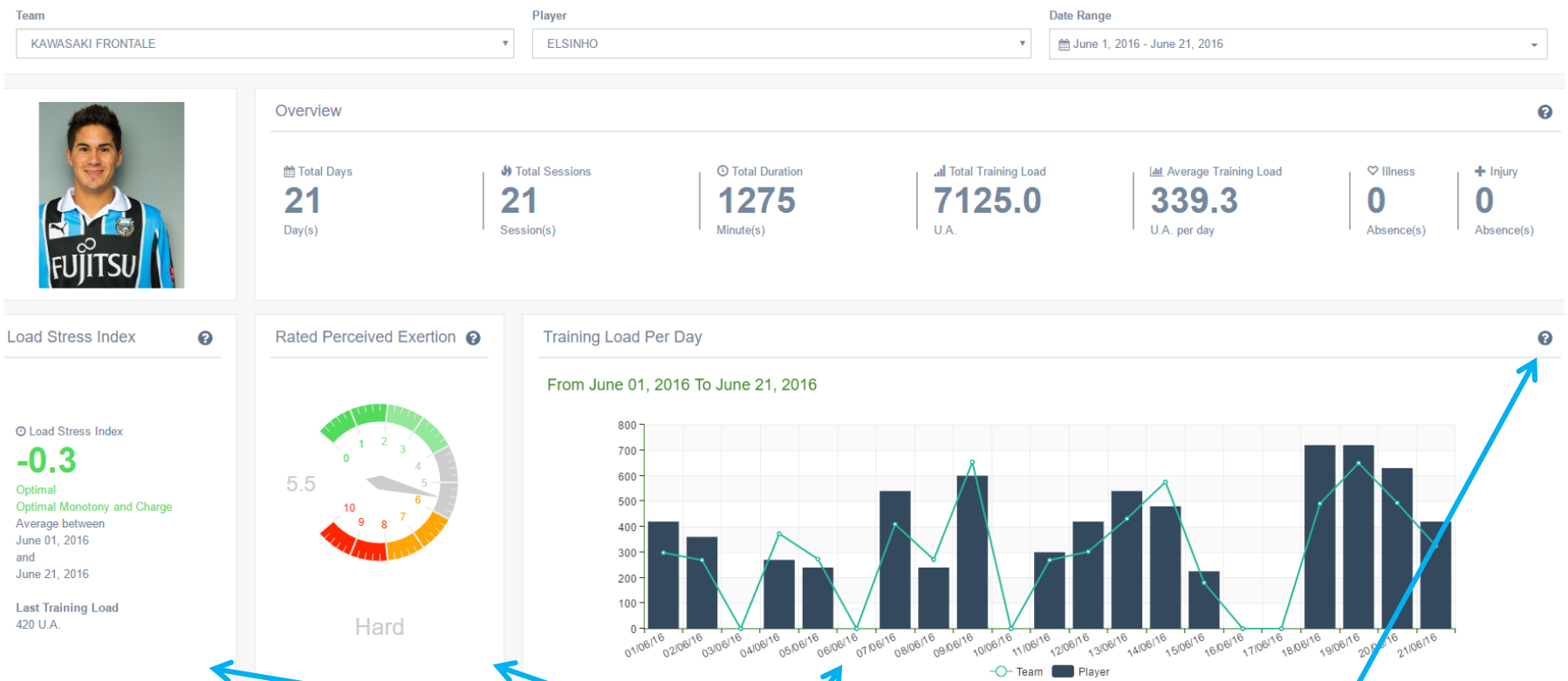
- Team selection
- All team selection or athlete selection
- Day or Period selection

- Load Stress index – low, optimal, normal, high, too high training charge
- Average RPE
- Daily Training load vs. team

- Interactive views
- Click on legends to add/remove them
- Help via the « ? » signs

Continue on the same topic ▶
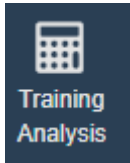
2. ANALYSIS ON QSA WEB
Training Analysis
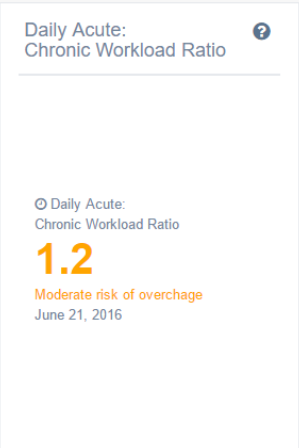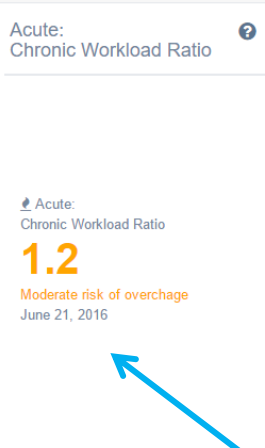
- Acute:Chronic workload ratio to measure the risk of apparition of injury

- Cumulated training load over the last 4 weeks

2. ANALYSIS ON QSA WEB
Training Analysis
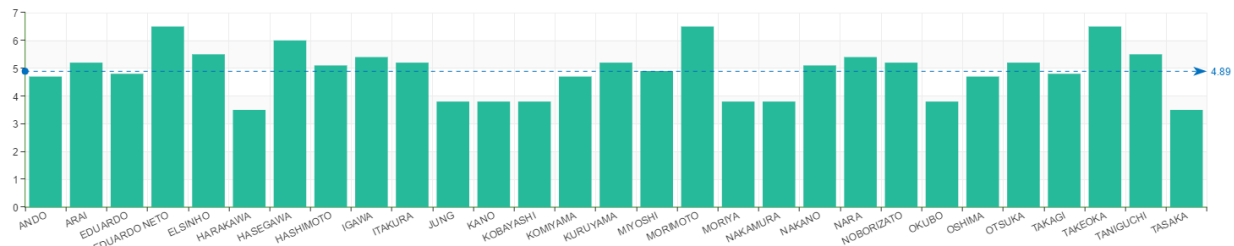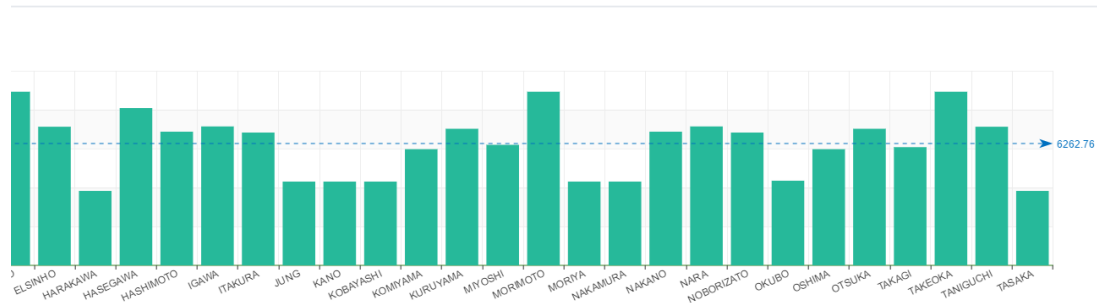
- Type of sessions
- Interactive legend, add/remove them by clicking on them

- Team RPE, athlete by athlete
- Team Training Load, athlete by athlete
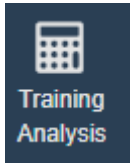
2. ANALYSIS ON QSA WEB

Training Analysis

Training
Analysis

Summary Table

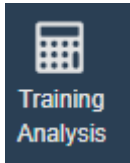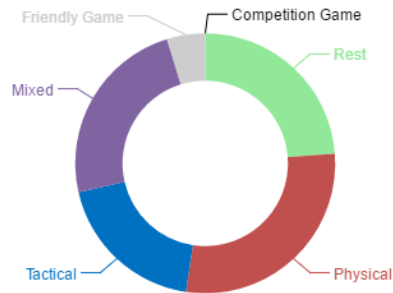| Date	Type	Start Time	Duration (min)	R.P.E.	Description
June 21, 2016	Mixed	14:00	60	7.0	Stamina, games
June 20, 2016	Mixed	10:00	90	7.0	Stamina, games
June 19, 2016	Physical	15:00	120	6.0	Stamina
June 18, 2016	Physical	10:00	90	8.0	Musculation, Exercises
June 17, 2016	REST				
June 16, 2016	REST				
June 15, 2016	Tactical	10:00	45	5.0	Video,opposition
June 14, 2016	Mixed	15:00	120	4.0	Stamina, games
June 13, 2016	Tactical	10:00	90	6.0	Oppositions,games
June 12, 2016	Physical	10:00	60	7.0	Musculation, Exercises
June 11, 2016	Mixed	10:00	60	5.0	Stamina, games
June 10, 2016	REST				
June 09, 2016	Friendly Game	14:00	120	5.0	Friendly
June 08, 2016	Tactical	14:00	60	4.0	Video,opposition
June 07, 2016	Physical	10:00	90	6.0	Musculation, Exercises
June 06, 2016	REST				
June 05, 2016	Mixed	14:00	60	4.0	Stamina, games
June 04, 2016	Tactical	14:00	90	3.0	Video opposition
June 03, 2016	REST				

- Training schedule recap

PART 3. DATA ANALYSIS
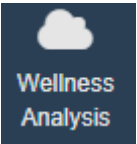
Wellness Analysis

2. ANALYSIS ON QSA WEB
Wellness (and Recovery) Analysis

Wellness Summary

Sleep Quality	
Fatigue	
D.O.M.S.	
Stress	
Mood	

- Wellness card
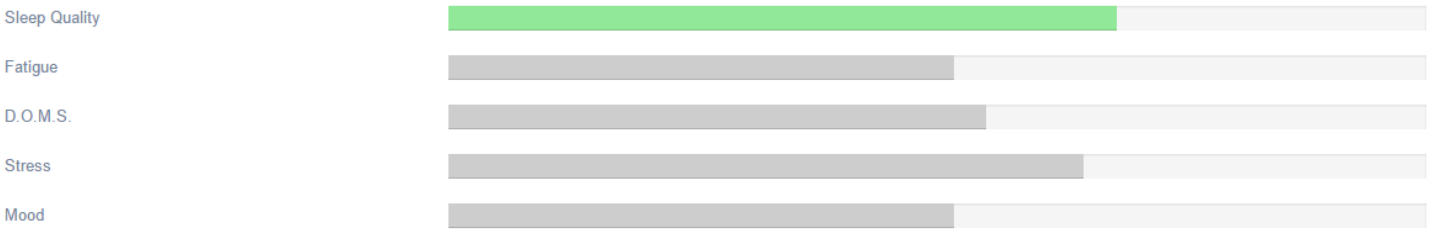
- Green zone : optimal zone
- Help

Wellness Index

Wellness Index
-0.2
Average
Average between
June 01, 2016
and
June 21, 2016

Last Wellness Note
8

Wellness Per Day

From June 01, 2016 To June 21, 2016

-O- Well Being -O- Z-score

- Wellness index and variations over time
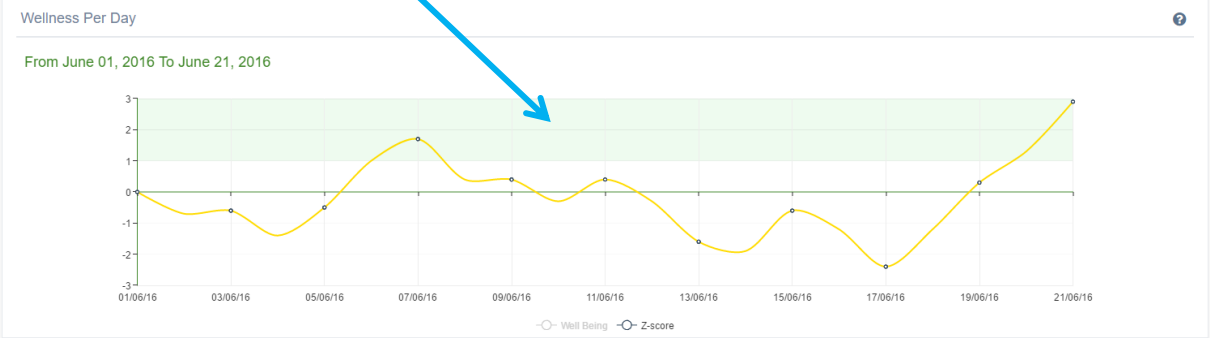
Recovery Index

Recovery Index
-0.7
Average
Average between
June 01, 2016
and
June 21, 2016

Last Recovery Note
10

Recovery Per Day

From June 01, 2016 To June 21, 2016

-O- P.R.S.S. -O- Z-score

- Recovery index and variations over time

Continue on the same topic
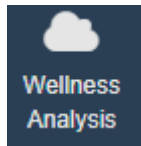
2. ANALYSIS ON QSA WEB
Wellness (and Recovery) Analysis

- Sleep quality, DOMS, fatigue, mood, stress

Sleep Quality, DOMS, Fatigue, Mood And Stress Per Day

From June 01, 2016 To June 21, 2016
Click onto the legend to show or hide values.

- Interactive legend
- Add/remove a curve by clicking on the legend
- Build your own analysis

PART 3. DATA ANALYSIS
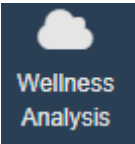
Wellness Analysis

2. ANALYSIS ON QSA WEB
Wellness (and Recovery) Analysis

- Team view

Team View

Player	Position	Sleep Quality	Fatigue	DOMS	Stress	Mood	Recovery
ANDO	Goalkeeper	2.3	2.5	2.5	2.2	2.0	6.9
ARAI	Goalkeeper	1.9	2.3	2.3	1.7	1.6	8.1
EDUARDO	Centre Back	1.8	3.5	3.0	1.5	1.5	5.5
EDUARDO NETO	Centre Midfielder	2.0	3.1	3.4	1.7	2.1	8.3
ELSINHO	Centre Back	1.9	3.1	3.3	3.9	2.9	7.3
HARAKAWA	Centre Midfielder	2.3	2.6	2.6	2.4	2.1	7.0
HASEGAWA	Centre Midfielder	2.3	3.1	2.6	1.9	1.7	7.0
HASHIMOTO	Centre Midfielder	2.1	2.9	2.9	2.4	2.0	6.5
IGAWA	Centre Back	2.3	2.5	2.4	2.2	1.9	7.0
ITAKURA	Centre Back	2.2	2.4	2.4	2.1	1.9	7.1

- See instantly for each athlete if data is good, average, or bad

Pain & Injury

2. ANALYSIS ON QSA WEB
Pain & Injury Analysis

Team	Date	Period
KAWASAKI FRONTALE ▼	📅 December 20, 2017 ⌄	Last Week ▼

Select a date and a period.
Here, last week data from 20/12/2017

2. ANALYSIS ON QSA WEB
Pain & Injury Analysis

+
Pain & Injury

- Help

- Sort column

Team's Injuries

| Low Intensity | High Intensity | Injury |

⚠ - this icon indicates pain or injury during training

Player		Thu 12/14/17		Fri 12/15/17		Sat 12/16/17		Sun 12/17/17		Mon 12/18/17		Tue 12/19/17		Wed 12/20/17	
ELSINHO		L Foot ⚠		R Hip/Groin ⚠										L Hip/Groin	

- Example : Left foot Injury after training on the 14th of December 2017

Legend

| Low Intensity | High Intensity | Injury |

⚠ - this icon indicates pain or injury during training

PART 3. DATA ANALYSIS

+ Pain & Injury

2. ANALYSIS ON QSA WEB
Pain & Injury Analysis
Historical data

- Help

- Period selected
- Sort column
- Search box to refine your data by player

Pain/Injury History   ?

From Thursday December 14, 2017 To Wednesday December 20, 2017 - 7 days

Search:

Player	Number of Low Intensity Pain Reports - and %	Number of High Intensity Pain Reports - and %	Number of Injury Reports - and %	Most Reported Pain/Injury Body Region
ANDO				
ARAI				
EDUARDO				
EDUARDO NETO				
ELSINHO	1 day - 14.29 %	1 day - 14.29 %	1 day - 14.29 %	L Hip/Groin (x1) R Hip/Groin (x1) L Foot (x1)
HARAKAWA				
HASEGAWA				
HASHIMOTO				

- Low intensity pain reported for 1 day by Elsinho during the chosen period (=1 day out of 7 days selected = 14.29%)

- Most reported pain or injuries during the period

PART 3. DATA ANALYSIS

Export Data icon

2. ANALYSIS ON QSA WEB
Export Data

Team

KAWASAKI FRONTALE ▾

SELECT TEAM

Player

All team ▾

SELECT PLAYER
You can select "All team" or a given player

Team Data Type

Team Average Report ▾

SELECT TEAM DATA TYPE
Between "Team Average Report" or "Player by Player Report"
Note: This filter won't be selectable if you selected a given player on the Player filter.

Date Range

📅 December 13, 2017 - December 20, 2017 ▾

SELECT DATE RANGE

Download Data

DOWNLOAD in Excel Format !