



# SportsTrace

Moneyball for Motion

TURNING GAME AND PRACTICE VIDEO INTO WAYS TO TRAIN SMARTER

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# SportsTrace API - Intro

The **SportsTrace API** provides a programmatic capability for uploading video and returning the data that hydrates pre-built visualizations. The visualizations are provided as a courtesy for free use. You can also use the data outside of the visualizations.

This document reviews:

- Email confirmation and API key delivery,
  - API Calls and detailed information on how to use API calls for submitting jobs, checking job statuses, and retrieving job details for currently supported endpoints, and
  - Web Component Visualizations with instructions on implementing prebuilt visualizations for MP4 video files on web pages.
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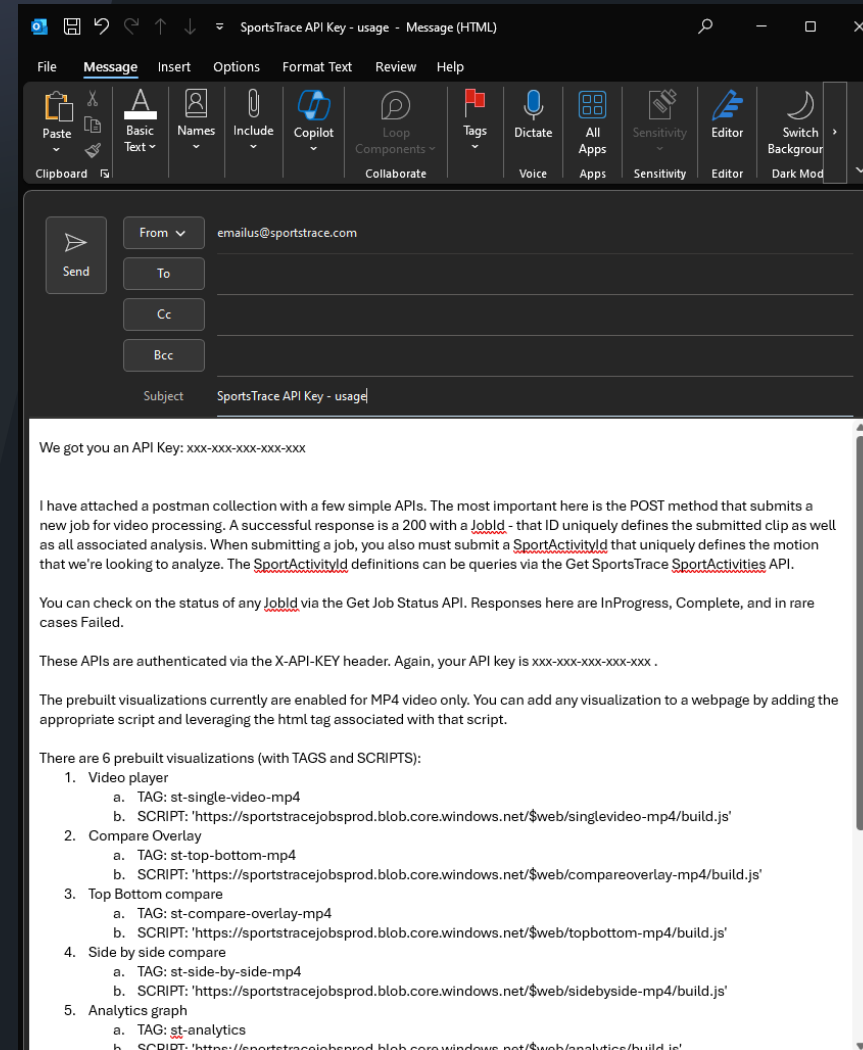
A collection of sports equipment including a baseball bat, tennis racket, basketball, football, and soccer ball.

# EMAIL

## CONFIRMATION

# THE EMAIL

- Part 1 - Access
- Part 2 – Endpoints (Visualizations)
- Part 3 – Web Component implementation



# EMAIL Part 1

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We got you an API Key: xxx-xxx-xxx-xxx-xxx

I have attached a postman collection with a few simple APIs. The most important here is the POST method that submits a new job for video processing. A successful response is a 200 with a JobId - that ID uniquely defines the submitted clip as well as all associated analysis. When submitting a job, you also must submit a SportActivityId that uniquely defines the motion that we're looking to analyze. The SportActivityId definitions can be queried via the Get SportsTrace SportActivities API.

You can check on the status of any JobId via the Get Job Status API. Responses here are InProgress, Complete, and in rare cases Failed.

These APIs are authenticated via the X-API-KEY header. Again, your API key is xxx-xxx-xxx-xxx-xxx .

# EMAIL Part 2

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The prebuilt visualizations currently are enabled for MP4 video only. You can add any visualization to a webpage by adding the appropriate script and leveraging the html tag associated with that script.

There are 6 prebuilt visualizations (with TAGS and SCRIPTS):

1. Video player
  - a. TAG: st-single-video-mp4
  - b. SCRIPT: 'https://sportstracejobsprod.blob.core.windows.net/\$web/singlevideo-mp4/build.js'
2. Compare Overlay
  - a. TAG: st-top-bottom-mp4
  - b. SCRIPT: 'https://sportstracejobsprod.blob.core.windows.net/\$web/compareoverlay-mp4/build.js'
3. Top Bottom compare
  - a. TAG: st-compare-overlay-mp4
  - b. SCRIPT: 'https://sportstracejobsprod.blob.core.windows.net/\$web/topbottom-mp4/build.js'
4. Side by side compare
  - a. TAG: st-side-by-side-mp4
  - b. SCRIPT: 'https://sportstracejobsprod.blob.core.windows.net/\$web/sidebyside-mp4/build.js'
5. Analytics graph
  - a. TAG: st-analytics
  - b. SCRIPT: 'https://sportstracejobsprod.blob.core.windows.net/\$web/analytics/build.js'
6. Kinematic sequence graph
  - a. TAG: st-kinematic-sequence
  - b. SCRIPT: 'https://sportstracejobsprod.blob.core.windows.net/\$web/kinematicsequence/build.js'

# EMAIL Part 3

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The scripts can be added in the HTML footer as follows:

```
<script  
src=https://sportstracejobsprod.blob.core.windows.net/$web/kinematicsequence/build.js></s  
cript>
```

The UI components can be leveraged as follows:

- Single Video Example - `<div class="st-single-video-mp4" data-client="jobs" data-key="YOUR-API-KEY" data-id="YOUR-JOB-ID">`
- Two Video Example - `<div class="st-compare-overlay-mp4" data-client="jobs" data-key="YOUR-API-KEY" data-id="YOUR-JOB-ID" data-id-second="YOUR-JOB-ID-2">`

Each visualization requires both your API Key as well as a JobId to render the component. As demonstrated above, for visualizations with multiple videos, multiple JobIds are required.



The background of the slide is a close-up, slightly blurred image of many baseballs. Each baseball is white with red stitching and has the words "sports trace" printed on it in a black, sans-serif font. The baseballs are arranged in a dense, overlapping pattern, creating a textured, repetitive background.

# API CALLS

POST/GET

# ENDPOINTS

---

- SportsTrace Jobs
  - Jobs
    - POST Upload Video
    - POST MP4 URL Upload
    - GET Get Job Status
    - GET Get Job
    - GET Get Job MP4 URL
    - GET Get SportsTrace Sport Activities

# Sample Response (partial)

SportsTrace Jobs

- Jobs
  - POST Upload Video
  - POST MP4 URL Upload
  - GET Get Job Status
  - GET Get Job
  - GET Get Job MP4 URL
  - GET Get SportsTrace Sport Activities**

GET <https://st-jobsservice-prod-centralus.azurewebsites.net/v1.0/jobs/sportActivities> Send

Params Authorization Headers (8) Body Scripts Tests Settings Cookies

Auth Type: API Key

Heads up! These parameters hold sensitive data. To keep this data secure while working in a collaborative environment, we recommend using variables. Learn more about [variables](#).

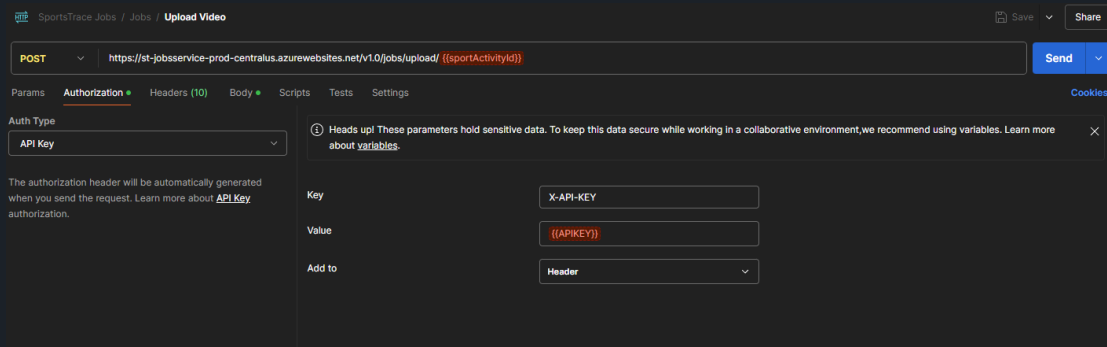
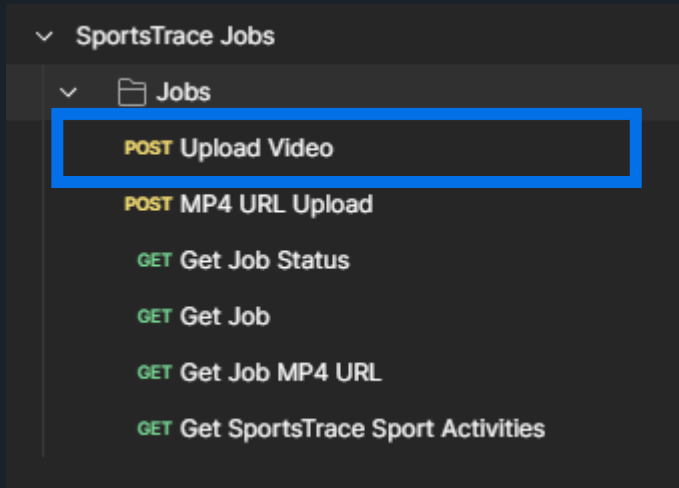
Key	X-API-KEY
Value	{{APIKEY}}
Add to	Header

```
[
  {
    "sportId": 1,
    "name": "Baseball",
    "activities": [
      {
        "sportActivityId": 0,
        "name": "Hitting"
      },
      {
        "sportActivityId": 1,
        "name": "Pitching"
      }
    ]
  },
  {
    "sportId": 2,
    "name": "Softball",
    "activities": [
      {
        "sportActivityId": 2,
        "name": "Hitting"
      },
      {
        "sportActivityId": 3,
        "name": "Pitching"
      },
      {
        "sportActivityId": 7,
        "name": "Throwing"
      }
    ]
  }
]
```

<https://st-jobsservice-prod-centralus.azurewebsites.net/v1.0/jobs/sportActivities>



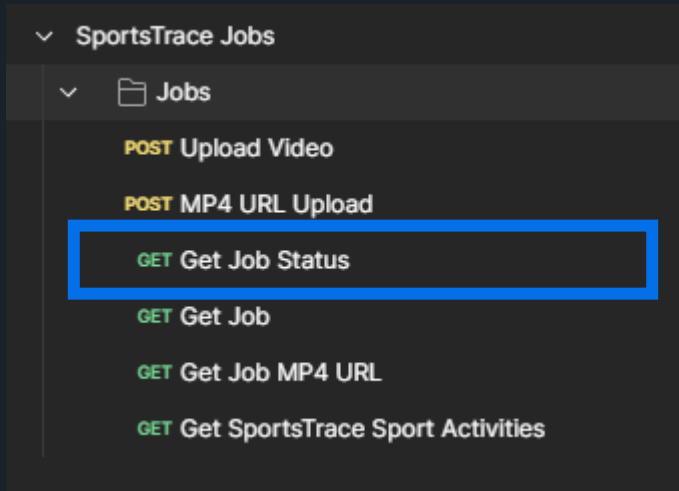
# Sample Response



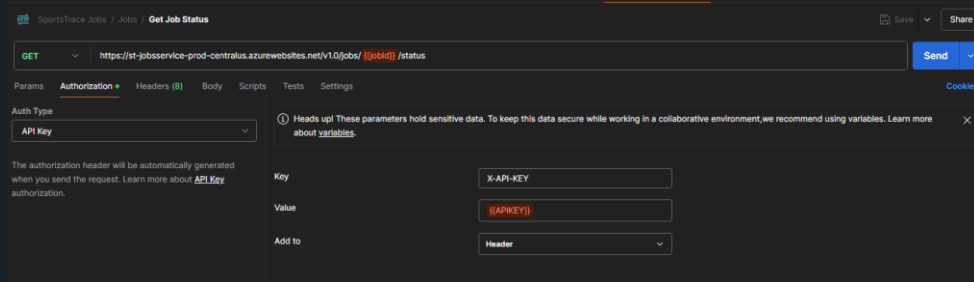
https://sportstracejobsprodCUS.blob.core.windows.net/9a8c0287-eeb6-4a5a-8b6d-b00b27f90a95/82ce0cff-e0aa-4c40-a38d-f612f8dfff34/20250211181517\_Andrew McCutchen.mp4?sv=2024-05-04&se=2025-02-11T19%3A49%3A38Z&sr=b&sp=r&sig=4Ca77RXEfiNaotrQ9wj8jcpvfh6yRJEbbA%2B%2BkbDN%2F4%3D

https://st-jobsservice-prod-centralus.azurewebsites.net/v1.0/jobs/upload/{{SportActivityId}}

# Sample Response

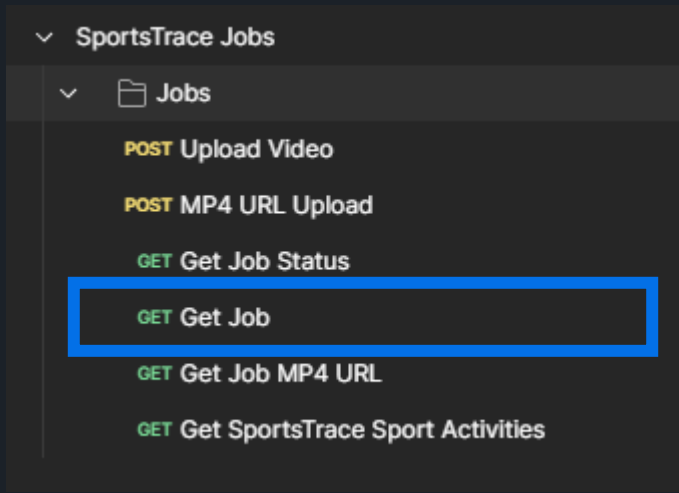


```
{  
  "jobId": "82ce0cff-e0aa-4c40-a38d-f612f8dfff34",  
  "jobStatus": "Complete"  
}
```

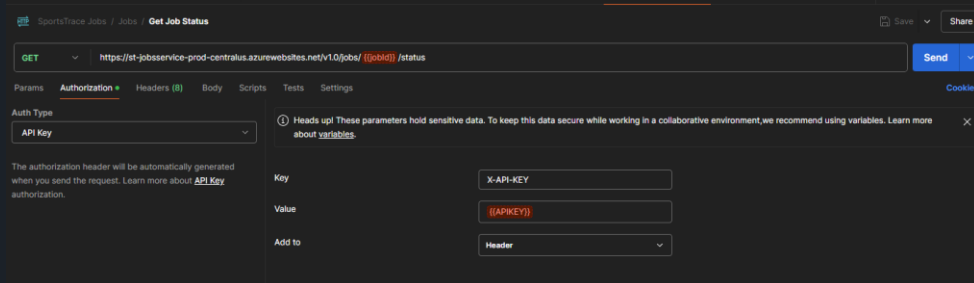


<https://st-jobsservice-prod-centralus.azurewebsites.net/v1.0/jobs/{{jobId}}>

# Sample Response

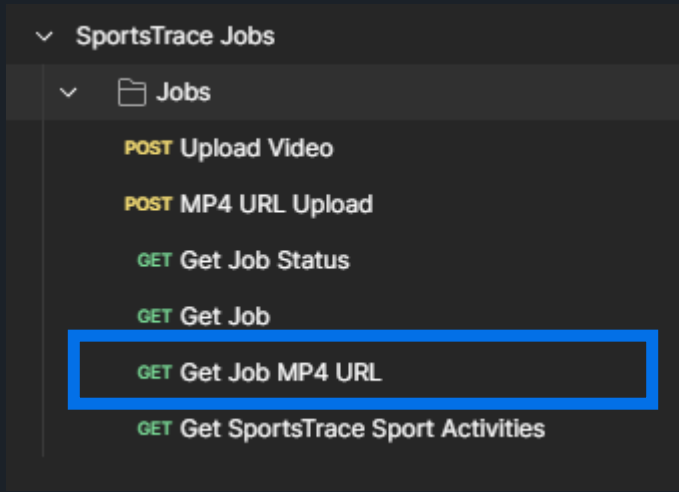


```
{  
  "jobId": "82ce0cff-e0aa-4c40-a38d-f612f8dfff34",  
  "jobStatusId": 2,  
  "jobFileTypeId": 1,  
  "sportActivityId": 0,  
  "videoName": "20250211181517 Andrew McCutchen.mp4",  
  "videoBlobURL": "82ce0cff-e0aa-4c40-a38d-f612f8dfff34/20250211181517 Andrew McCutchen.mp4",  
  "framesBlobURL": "82ce0cff-e0aa-4c40-a38d-f612f8dfff34/frames.json",  
  "analyticsBlobURL": "82ce0cff-e0aa-4c40-a38d-f612f8dfff34/analytics.json",  
  "fps": 29.97,  
  "width": 854,  
  "height": 480,  
  "rotate": 0  
}
```

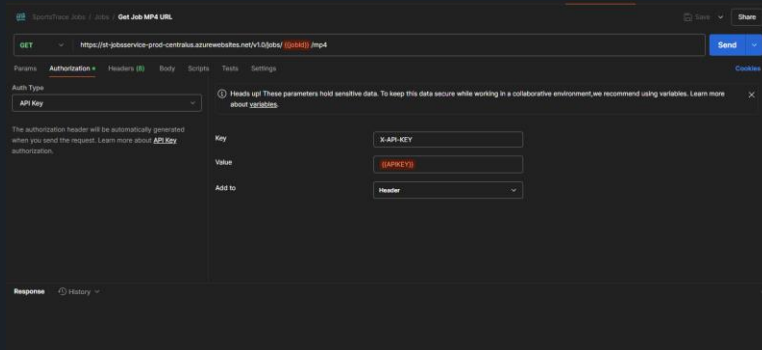


<https://st-jobsservice-prod-centralus.azurewebsites.net/v1.0/jobs/{{jobId}}>

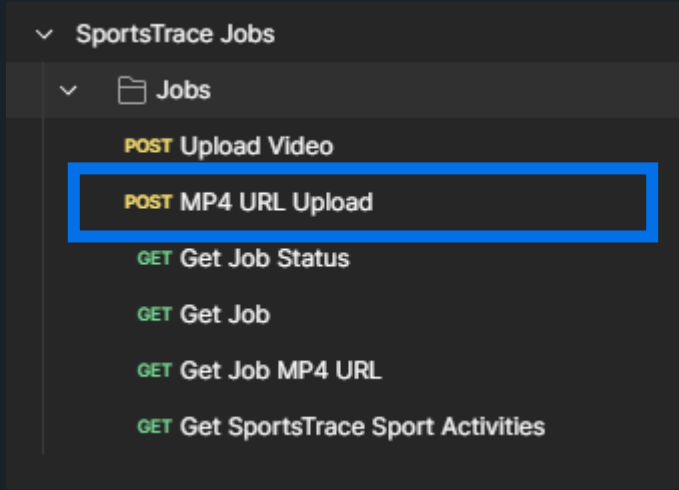
# Sample Response



[https://sportstracejobsprodCUS.blob.core.windows.net/9a8c0287-eeb6-4a5a-8b6d-b00b27f90a95/82ce0cff-e0aa-4c40-a38d-f612f8dfff34/20250211181517\\_AndrewMcCutchen.mp4?sv=2024-05-07&se=2025-02-11T19%3A49%3A38Z&sr=b&sp=r&sig=4Ca77RXEfiNaotrqr9wj8jcpvfh6yRJEbbA%2B%2BkbDN%2F4%3D](https://sportstracejobsprodCUS.blob.core.windows.net/9a8c0287-eeb6-4a5a-8b6d-b00b27f90a95/82ce0cff-e0aa-4c40-a38d-f612f8dfff34/20250211181517_AndrewMcCutchen.mp4?sv=2024-05-07&se=2025-02-11T19%3A49%3A38Z&sr=b&sp=r&sig=4Ca77RXEfiNaotrqr9wj8jcpvfh6yRJEbbA%2B%2BkbDN%2F4%3D)



<https://st-jobsservice-prod-centralus.azurewebsites.net/v1.0/jobs/{{jobId}}/mp4>



DEPRECATED DO NOT USE

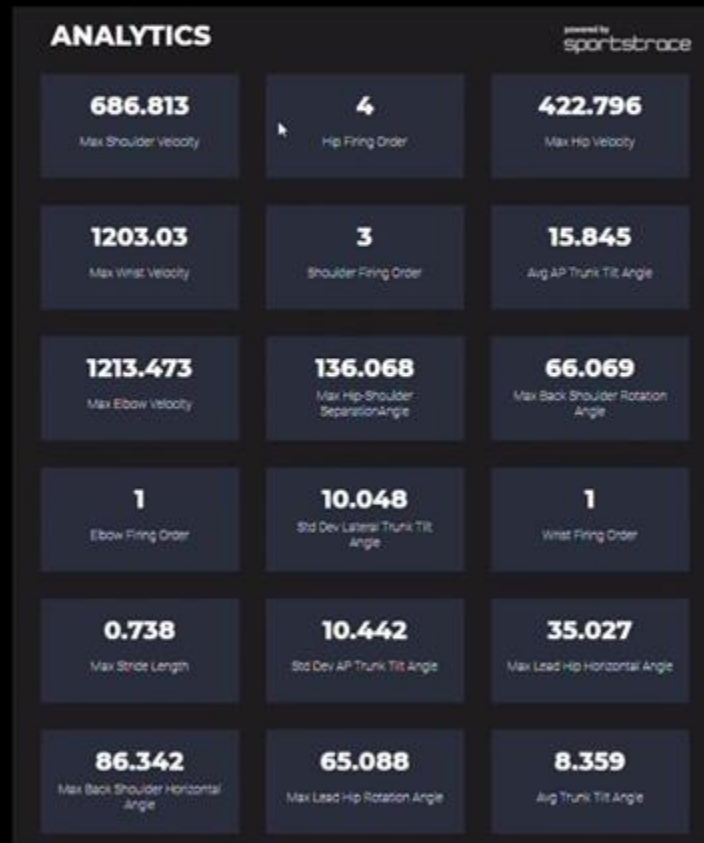


The background of the slide is a dense, close-up shot of numerous yellow softballs. Each softball has the words "sports trace" printed on it in a dark, sans-serif font. The softballs are arranged in a way that creates a sense of depth and texture, with some in sharp focus and others blurred in the foreground and background. The overall color palette is dominated by the bright yellow of the softballs, with some darker shadows and highlights that give them a three-dimensional appearance.

# SAMPLE SCREENS

## VISUALIZATIONS

# Upload your video



# Understand your game

# Upload your video

## ANALYTICS

powered by  
sportstrace

**953.821**

Max Shoulder Velocity

**-1.11**

Avg Lead Shoulder Elevation Angle

**10.692**

Avg AP Trunk Tilt Angle

**2**

Shoulder Firing Order

**1**

Hip Firing Order

**10.345**

Std Dev AP Trunk Tilt Angle

**8.603**

Avg Trunk Tilt Angle

**0.24**

Max Stride Length

**379.879**

Max Wrist Velocity

**1051.128**

Max Hip Velocity

**23.874**

Std Dev Lead Shoulder Elevation Angle

**3**

Elbow Firing Order

**394.205**

Max Elbow Velocity

**170.98**

Max Front Knee Angle

**6.06**

Std Dev Lateral Trunk Tilt Angle

**48.995**

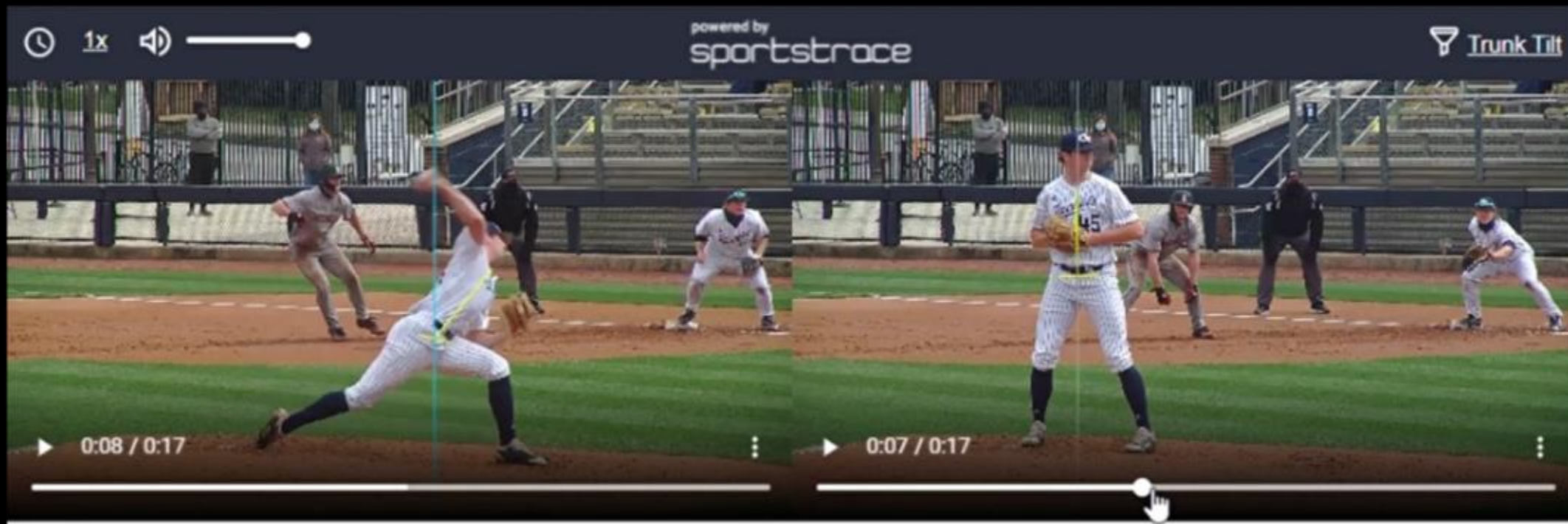
Max Hip Shoulder Separation Angle

**4**

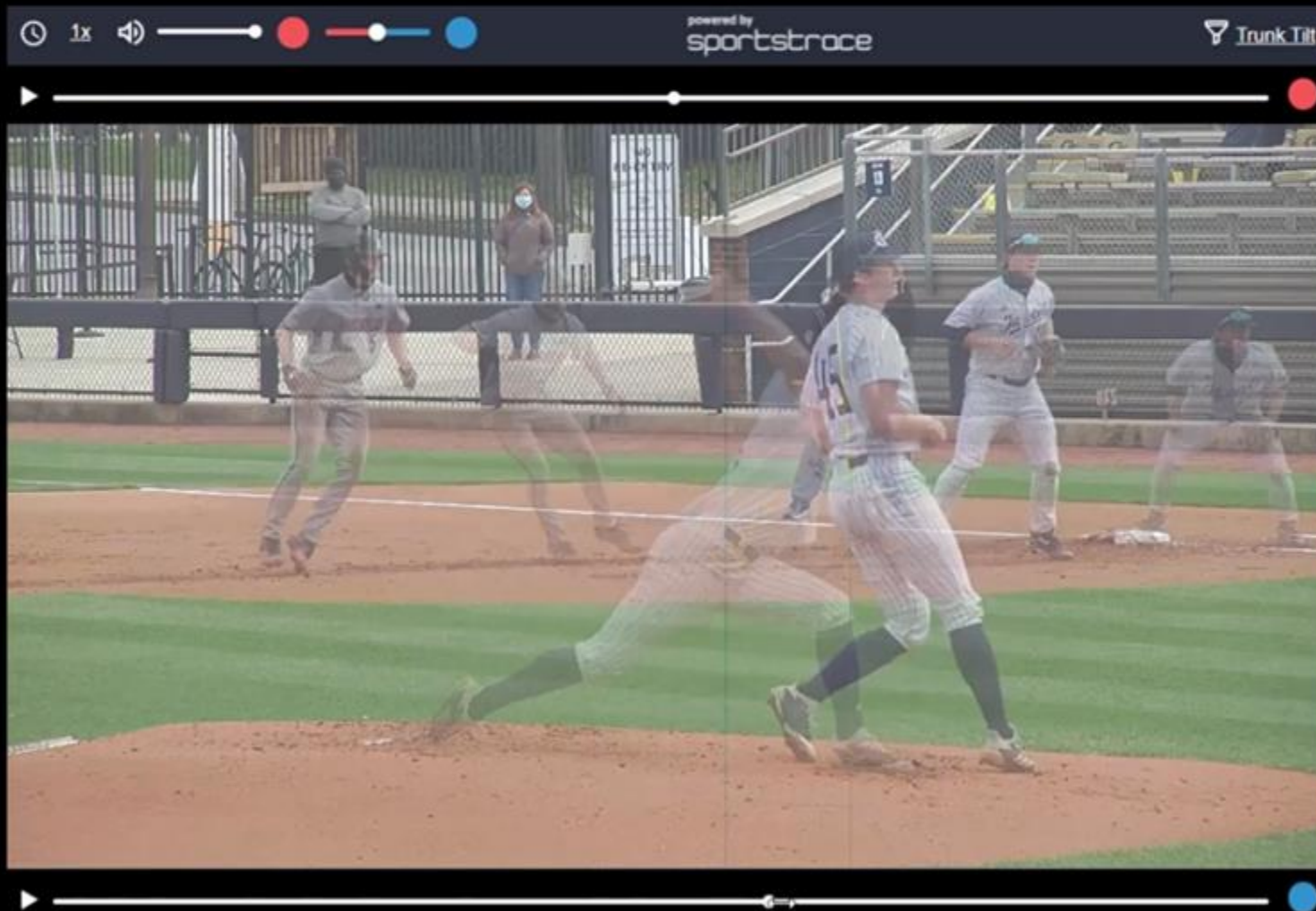
Wrist Firing Order



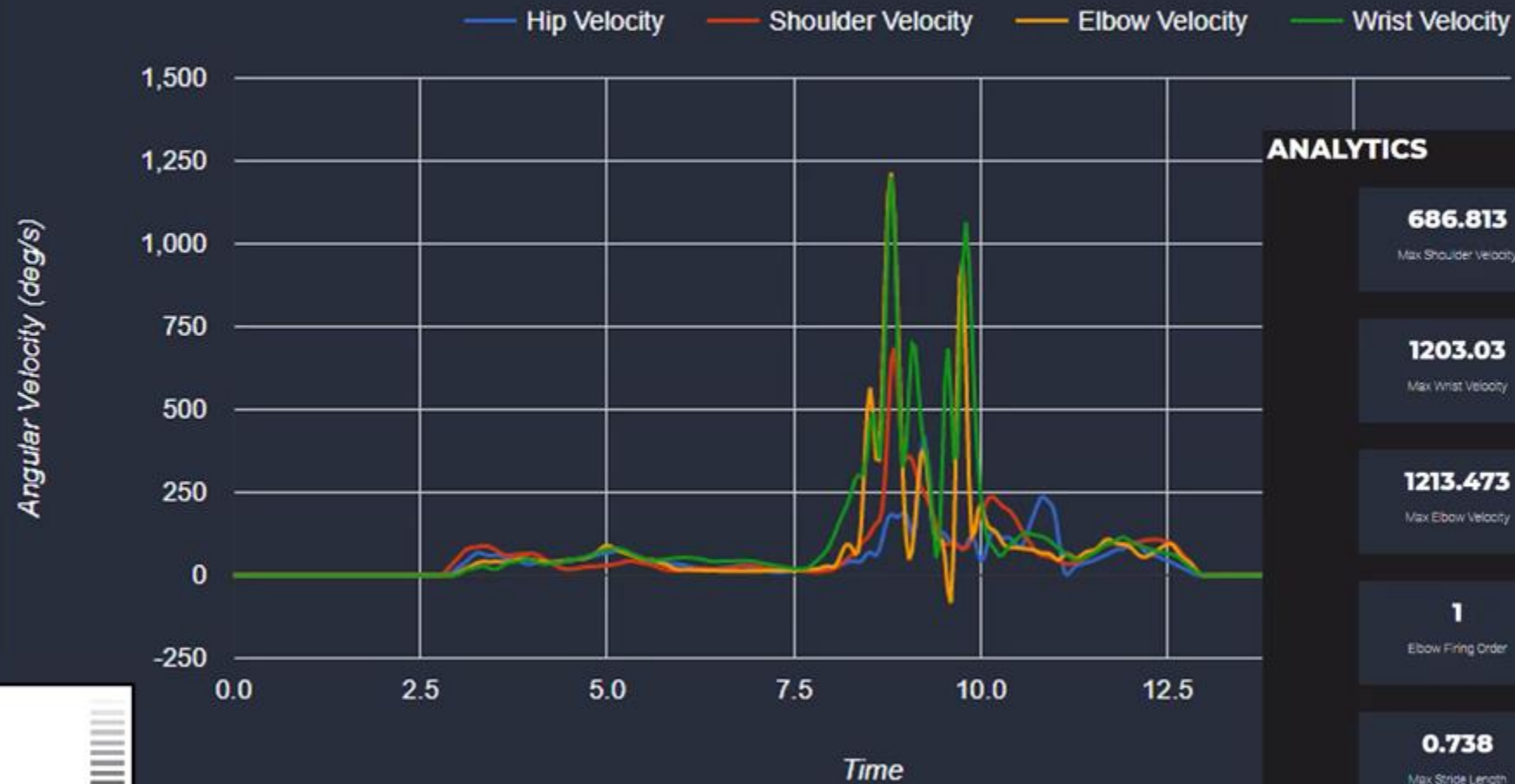
# Compare



# Compare



# Analyze



## ANALYTICS

powered by  
sport

**686.813**

Max Shoulder Velocity

**4**

Hip Firing Order

**422.796**

Max Hip Velocity

**1203.03**

Max Wrist Velocity

**3**

Shoulder Firing Order

**15.845**

Avg AP Trunk Tilt Angle

**1213.473**

Max Elbow Velocity

**136.068**

Max Hip-Shoulder Separation Angle

**66.069**

Max Back Shoulder Rotation Angle

**1**

Elbow Firing Order

**10.048**

Std Dev Lateral Trunk Tilt Angle

**1**

Wrist Firing Order

**0.738**

Max Stride Length

**10.442**

Std Dev AP Trunk Tilt Angle

**35.027**

Max Lead Hip Horizontal Angle

**86.342**

Max Back Shoulder Horizontal Angle

**65.088**

Max Lead Hip Rotation Angle

**8.359**

Avg Trunk Tilt Angle





# SportsTrace

Measure what matters.

[emailus@sportstrace.com](mailto:emailus@sportstrace.com)

<https://www.sportstrace.com>

@sportstrace

