



## S3 Ch

### Identification of the installation/facility :

Country: FRANCE  
Location (city): Meudon  
Name of the facility: S3Ch  
Date of construction or of acquisition or of main refurbishment: 1986  
Owner: ONERA  
Contact point: chanetz@onera.fr  
Internet site: www.onera.fr

### Technical characteristics:

#### 1 - Type of infrastructure

Wind tunnel	<input checked="" type="checkbox"/>
Propulsion bench	<input type="checkbox"/>
Structures facility	<input type="checkbox"/>
Material facility	<input type="checkbox"/>
Simulator (ex. Flight simulator, tower, ...)	<input type="checkbox"/>
Flight test bed (aircraft, embedded facilities, ...)	<input type="checkbox"/>
Supercomputers	<input type="checkbox"/>
Other	<input type="checkbox"/>

#### 2 - Main technical characteristics

Mach number :  $0.6 < M < 1.35$   
stagnation pressure : atmospheric pressure  
stagnation temperature :  $290 \text{ K} < T_{i0} < 330 \text{ K}$   
Test-section : 0.76 m x 0.80 m, length : 2.20 m

#### 3 - Research domains which can be addressed (refer to ACARE taxonomy)

1. Flight Physics/Airflow control/flow control/P

#### 4 - Main (or specific) associated measurement techniques

Particle Image Velocimetry  
Pressure Sensitive Paint  
Laser Doppler Velocimetry

#### 5 - Operational status

- Fully operational (hours available in 2010)



6 - picture



**Financial elements:**

Replacement cost (M€uros)

Less than 10

10 to 30

30 to 60

60 to 100

More than 100

**Practices concerning:**

Access policy : contract, eventually voucher

Support : European, private, national

**Origin of information** ('signature'): author and date

B. Chanetz, 10 February 2011