Recent advances in the BRAMS project

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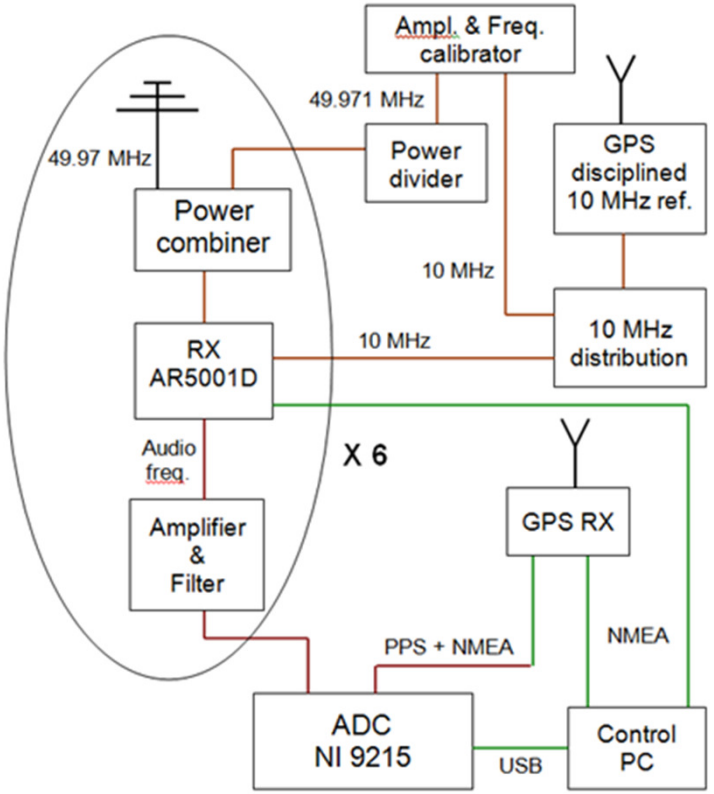
27 june 2015

Amplitude calibrator for the BRAMS stations

- Main goal : monitor gain and frequency offset/drift at every station
- See talk by Michel Anciaux for details
- Distribution at the end of the meeting

Interferometer in Humain

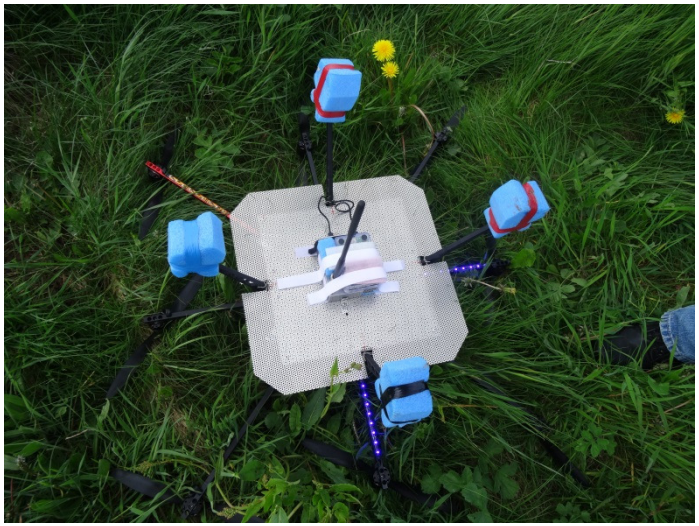


- Station fully operational since April 2015
- Data are collected for the 6 antennas and are available on the BRAMS viewer. Tests of the direction retrieval will be done soon.

Interferometer in Humain

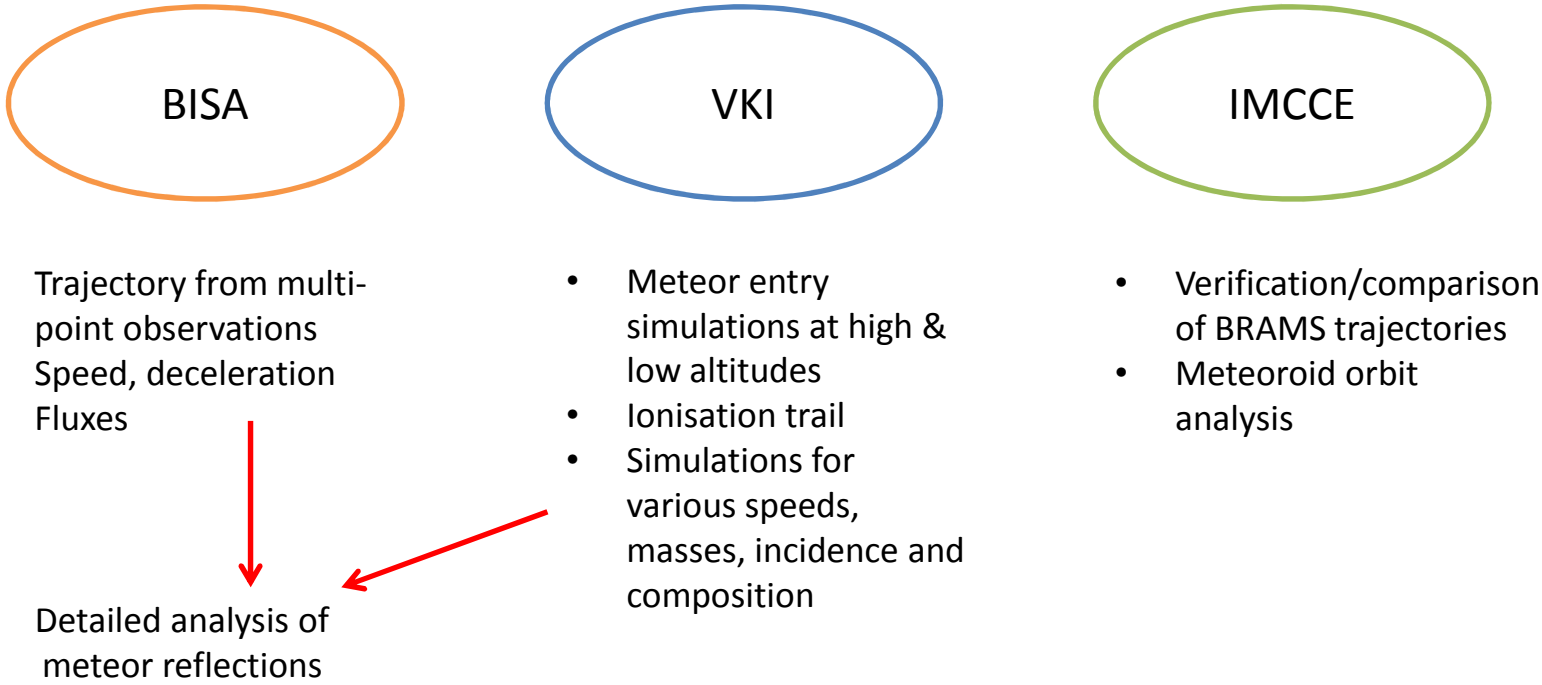
Calibration measurements

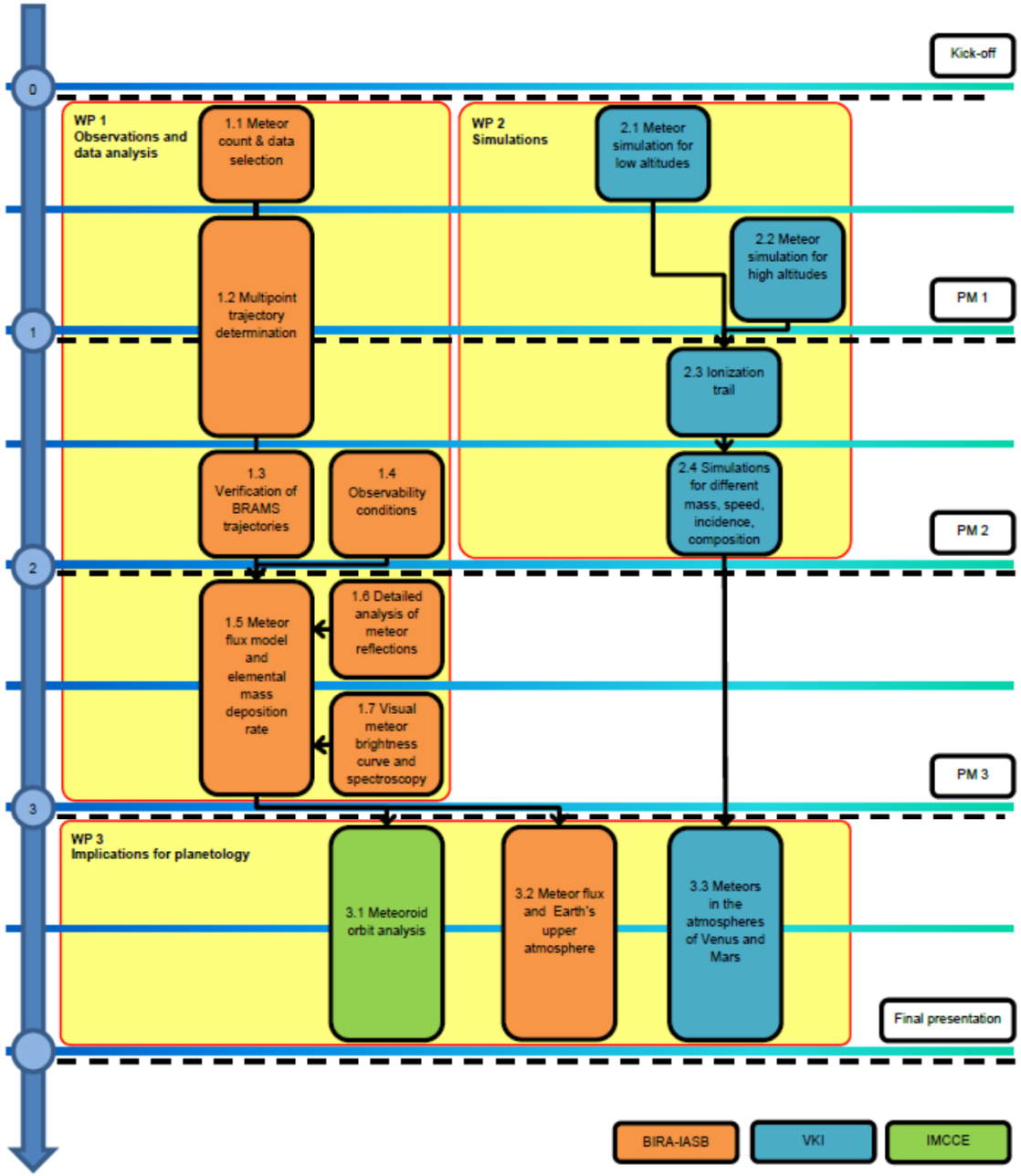
- Continuation of the work done by Antonio Martinez Picar (ROB)
- Uses the amplitude calibrator as the transmitter (payload on the drone)
- Tests currently under way at Humain, done in Dourbes in July, then ???



METRO : MEteor TRajectories and Origins

- BRAIN-Be networking project of Belspo
- Partners : VKI (BE – PI : Thierry Magin) – IMCCE (FR – PI : Jérémie Vaubaillon)
- Duration : 4 years (start 12/2014 + 6 months extension)





Project logic: an overview of work packages and tasks

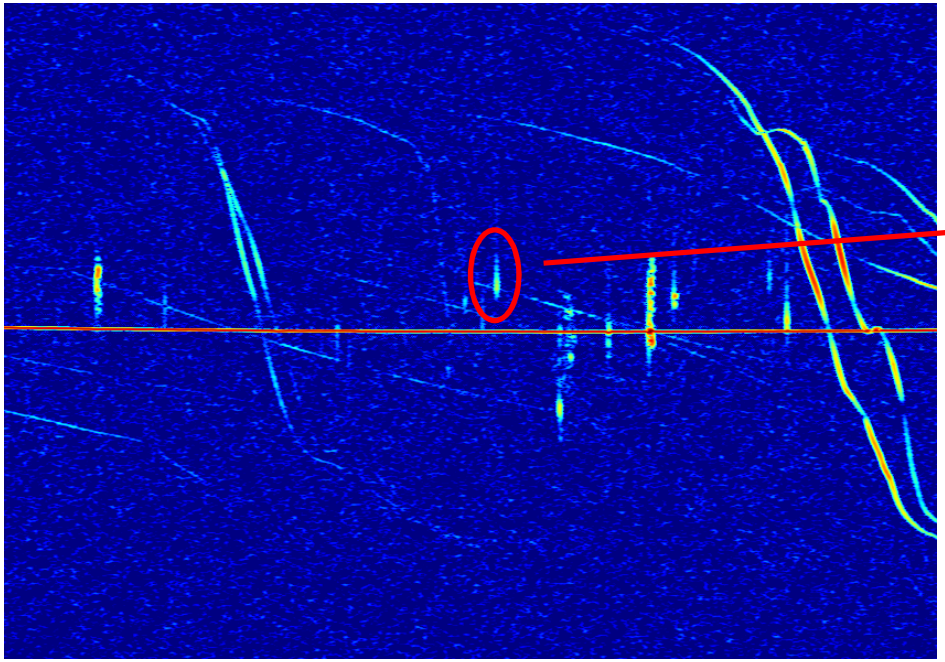
Automatic detection algorithms

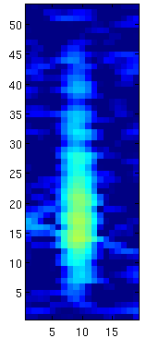
- Tests of the method proposed by Tom Roelandts (using the raw signal) mostly made with the help of a student from ULB.

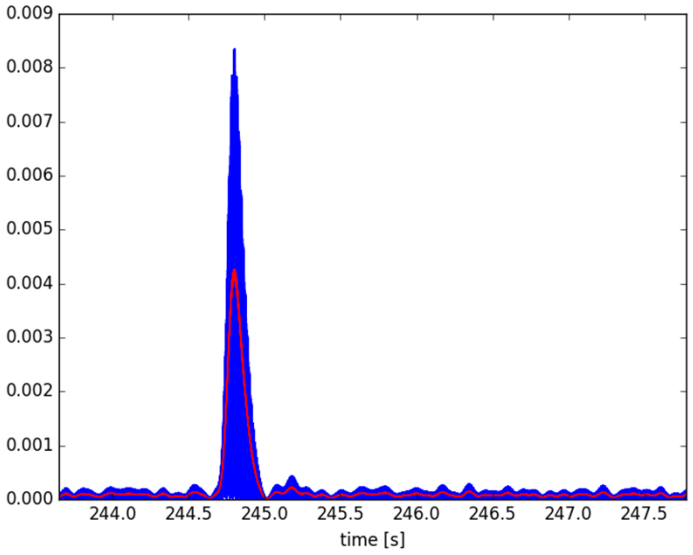
- 2 sets of data for which manual counts are available were used.

- Victor Roman (Romania) has developed an algorithm of automatic detection using artificial neural networks. Detection rate is around 85%. False negatives are around 18%. Results will be presented at IMC2015.

Study of underdense meteor echo profiles

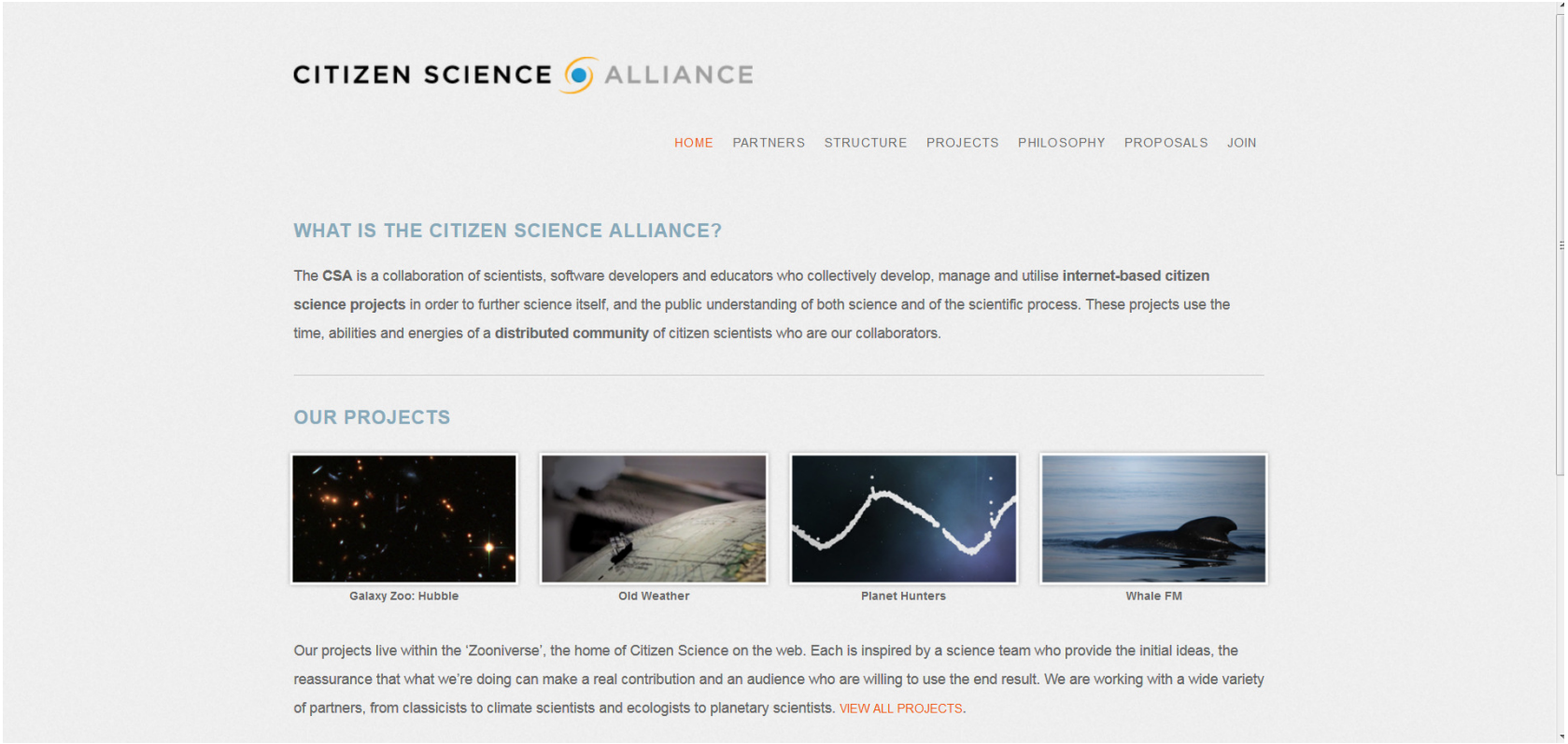






See presentations by
Stijn & Pierre

BRAMS zoo



- Crowdsourcing using the resources of Citizen Science
- Manual counts of meteors during specific meteor showers
- Questionnaire to be filled in and peer-reviewed (nearly ready)
- Last question to solve : how many times does a spectrogram need to be counted? (see talk later)

Participation to international optical networks

See talk by Jérémie

Participation to international optical networks

Single CAMS - BeNeLux

- Small FOV : 22° x 30°
- Situation above in October 2013 (projections at 90 km)

Open discussion

Vertical vs inclined