

L Band Continuation Workshop

November 28-30 2017

CESBIO*

(Dated: 23rd November 2017)

Goal of the workshop

The Goal of this workshop is mainly to get our acts together in view of having an L band mission and keep providing useful measurements without a data gap as much as possible. For this, the idea is to hear about agency plan and user's requirements. Then we will review the existing concepts from almost on the shelf to futuristic ones. We will evaluate the TRL and feasibility as well as adequacy to fulfill user's requirements. The idea is to arrive to a consensus as to what to push forward to our sponsoring agencies and in which framework.

The agenda is very tentative. We will adapt in real time as a function of how the discussion evolves and when the issues appear.

Logistics

Location

The workshop will take place at CESBIO in the conference room (1st floor). To access CESBIO there are of course taxis and rental cars but the most adequate transportation is the metro line B up to either "faculté de Pharmacie" or Université Paul Sabatier. From there to CESBIO it is a 1/4 hr walk (see maps at the end. There are buses from metro stations to CESBIO but it will take you at least the same time. General information on metro bus tram and the airport shuttle is available on <https://www.tisseo.fr/en>.

You can also rent bikes. From the city centre to CESBIO depending on where you stay it is between 15 to 30 minutes and most of it on a cycle path along the canal.

Toulouse access and where to stay

There are plenty of hotels covering the whole price range in Toulouse. I recommend staying in the centre and possibly close to a line B metro station if you intent to use metro to come to CESBIO. there are plenty near Jean Jaures for instance. If you come by train the railway station Toulouse Matabiau is close to the centre. From the airport : two options for public transportation the Tisseo shuttle (every 20 min during the day , about 20-25 min to reach the centre (<https://www.tisseo.fr/en/airport-shuttle>), 8 € one way; or the tram, cheaper but a bit longer and will bring you at Palais de Justice where you can take the metro.

*13 avenue du Colonel Roche 31400 Toulouse France

Tentative Agenda

Time	subject	Presenter/ Moderator	Affiliation
Tuesday November 28th, 2017			
9:30	<i>Welcome</i>		
9:45	General Introduction	Marie -Anne Clair	CNES
10:00	Workshop introduction goals and expected output, general organization and logistics	Yann Kerr	CNES
10:15	Self introductions	all	
10h30	<i>Break</i>		
Part 1 General Context and background			
11:00	Programmatic context at CNES	Juliette Lambin	CNES
11:30	Programmatic context at NASA	Lisa Callahan	NASA
12:00	Programmatic context at ESA	Pierluigi Silvestrin / Martin Suess	ESA
12:30	Summary		
13:00	<i>Lunch</i>		
14:00	Lessons learned from SMOS	Manuel Martin Neira Yann Kerr	ESA / CNES
14:45	Lessons learned from Aquarius	Gary Lagerloef, Tony Lee	ESR / NASA
15:30	Lessons learned from SMAP	Simon Yueh / Dara Entekhabi / Rajat Bindlish	NASA / MIT
16:15	<i>Break</i>		
16:45	Decadal survey concepts	Simon Yueh / Dara Entekhabi / Tony Lee	NASA / MIT
17:15	ESA Requirement study out come	Maria Jose escorihuela / Yann Kerr	Isardsat/ CNES
17:45	General discussion consensus on expression of needs and related mission requirements	all	
18:30	<i>adjourn</i>		
DAY 2 November 29th, 2017			
Part 2 Potential Concepts			
9:00	SMOS follow-on	Manuel Martin Neira	ESA
9:30	W-COM	JC Shi / Xiaolong Dong	NSSC
10:00	SMOS -Ops (Hexagonal structure)	Manuel Martin Neira	
10:30	SMOS-HR	B Rougé, JM Morel, Y Kerr	CESBIO CMLA
11:00	<i>Break</i>		
11:30	GSFC input for a future low frequency microwave mission	Rajat Bindlish et al.	NASA
12:15	<i>Lunch</i>		
14:00	P/L band measurements and JPL plans	Simon Yueh, Tony Lee	NASA
14:30	CryoRad	Giovanni Macelloni	IFAC
15:00	<i>Break</i>		
15:30	ULID	François Cabot / Eric Anterrieu	CNES CESBIO
16:00	Technology challenges and potential solutions	Josep Closa Soteras	ADS
16:30	P-Band and Wide Band radiometry	Alexandra Bringer	OSU
17:00	General discussion and open floor for any other concept ideas		
18:00	Summary of findings		
18:30	<i>Adjourn</i>		
20:00	<i>Informal group dinner for those interested</i>		
DAY 3 November 30th, 2017			
Part 3 Towards a general consensus solution ?			
9:00	Discussion on Adequation requirements - potential technical solutions		
	Discussion on TRL and inter-comparison of concepts		
10:30	<i>Break</i>		
11:00	Discussion on way forward and next steps		
12:30	<i>Lunch</i>		
14:00	Summary of findings, write ups		
15:30	<i>Break</i>		
	<i>Adjourn</i>		

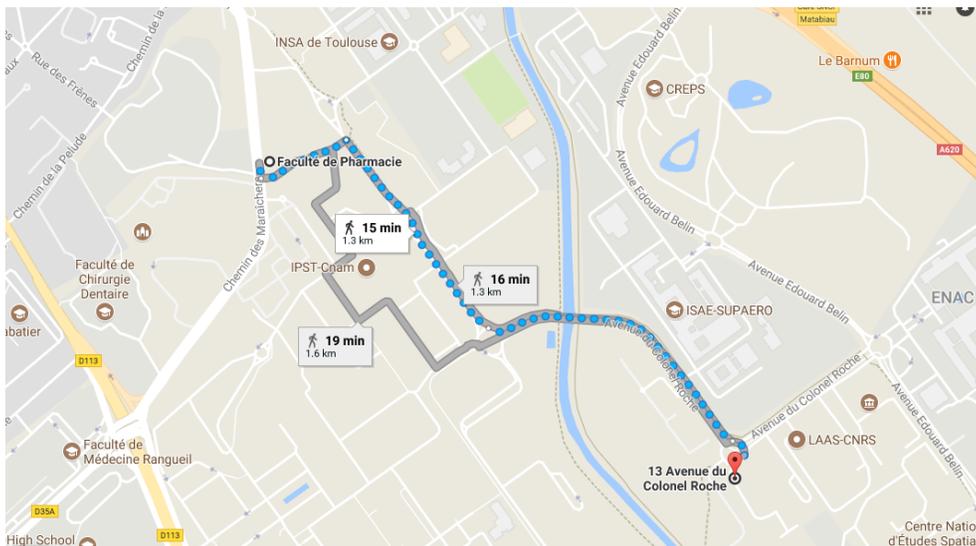


Figure 1: From metro Faculté de Pharmacie to CESBIO

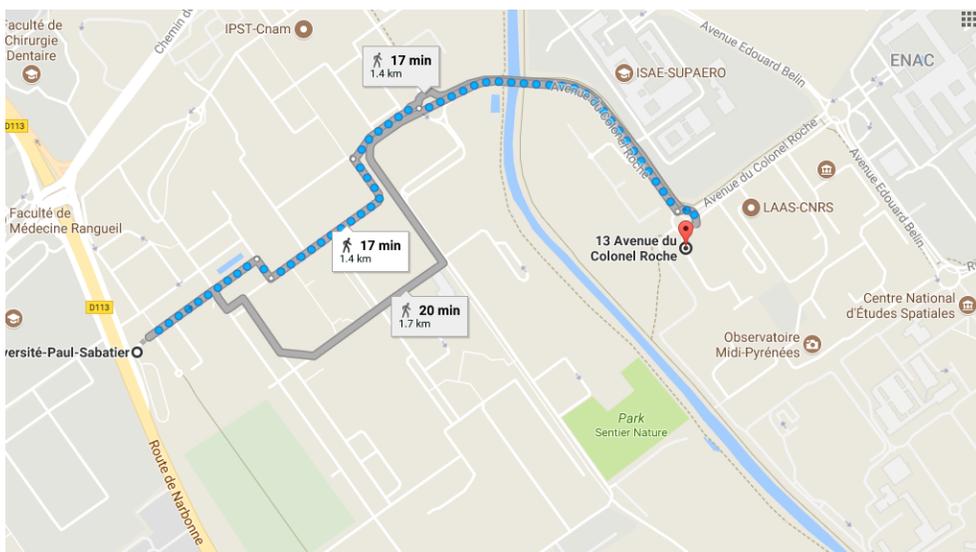


Figure 2: From Métro Université Paul Sabatier to CESBIO