

## Activities of Météo-France related to Task 3.1

Sylvie Jourdain, Emeline Roucaute - Météo-France

Direction de la Climatologie, Toulouse

19-21 November 2014, Reading





Introduction

Historical upper air data rescue Domain : France and ex- French territories

Data rescue activities started in ERA-CLIM have been continued and expanded under ERA-CLIM 2

Results of ERA-CLIM: inventory with 370 lines, 300 000 images of climate reports, delivery of 4 millions of radiosonde data, 2 millions of upper wind data keyed but not delivered (QC in process)





### **ERA-CLIM2** Results

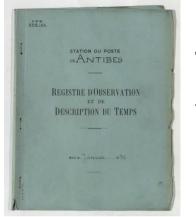
ERACLIM2 Météo-France inventory: Upper-air data in France and French ex-colonies More data were identified, cataloged and imaged than could be digitised within the project ERA-CLIM2

375 lines with 170 lines of high priorities (France mainland, oversea, austral and antartic territories): large amount of long series from original archives 1900-1957 over the world

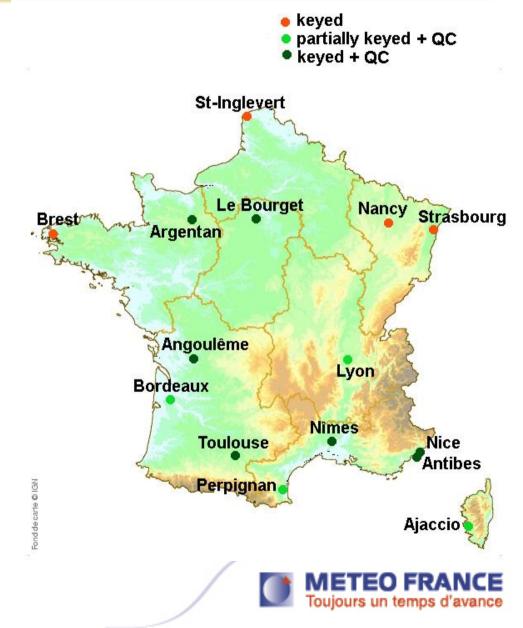
Selection of high priorities according to location, length of series, accessibility of the sources and quality of original sources)



# France mainland pilot balloons long series 1923-1948



14 long series pilot balloons f daily reports completely <u>imaged</u>

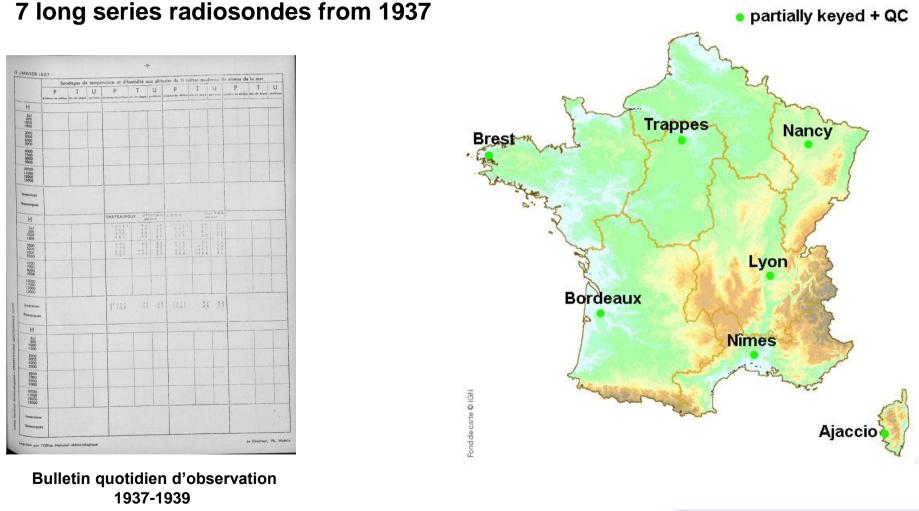


#### 6 series keyed and QC

Stations	Period	Data keyed (DD/FF)					
Le Bourget	1923-1948	236 357					
Argentan	1923-1935	125 797					
Angoulême	1923-1932	55 586					
Toulouse	1923-1947	425 831					
Nîmes	1923-1940	297 309					
Antibes	1923-1942	24 8991					
Nice	1943-1948	31 657					
Total		1 421 528					



## France mainland radiosondes : long series from 1937



ICE

ETEO FRAN Toujours un temps d'avance



## Upper Air stations in French Territories



#### Main difficulties :

-Archives are stored in the territories far from Toulouse. Some reports are locally imaged and some are sent to Toulouse (we are waiting for Dumont Durville reports !)

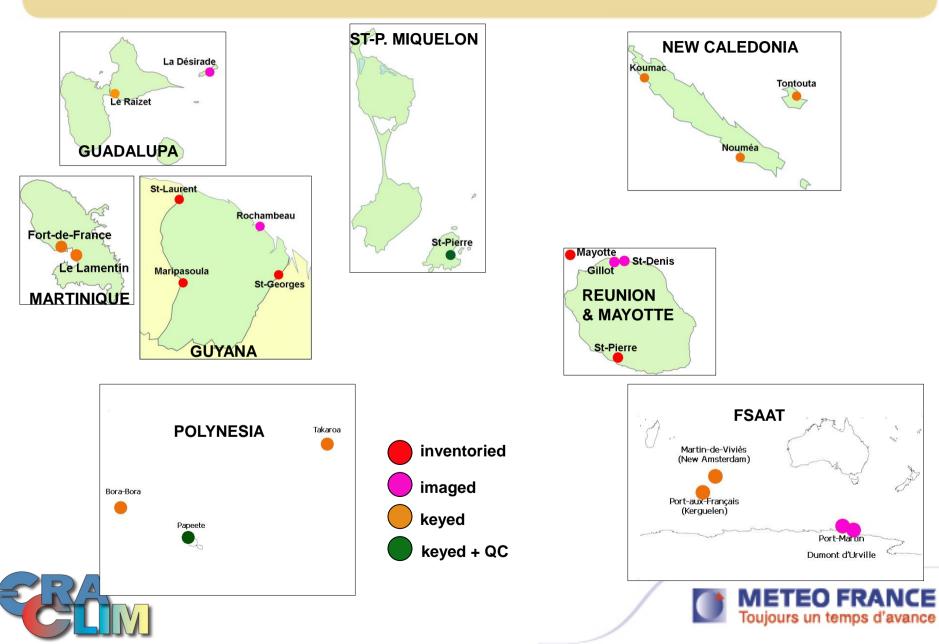
-Documents are different from France mainland and specific for each territory



First pilot balloons in 1939 in Martinique and New-Caledinia (after France mainland but during 2nd World War)

	~~~~~				and			Vent.				Moi	s:o	in
DATE	VENT A 2000 M (1)				VENT 3000 M (1)				veny a 4000 m (1)				neures o des sonda	
	Matin		Soir		Matin		Soir		Matin		Soir		Matin	
	D (2)	v (2)	D (2)	v (2)	D (2)	v (2)	D (2)	v (2)	D (2)	x (2)	D ()	v (2)		
1	E	45									10-14		Alber	
2	E	46											11400	
3	ENE	30											08.00	
4	ENE	35											08.00	
õ	ε	AO			ESE	30							08.00	
														l
6	Б	29											08.00	1
7	B	UÁ			and the								08.00	1
8	Е	53											11 00	
9	E	19			W	22							11,00	
10	ENE	30			NE	25				-			08.00	
11	3	30			15.00	16				1			11.00	
12	E	30			NE	16				1			11 00	
13	ESE	22											08.00	
14	ESE	15							-				11.00	
15	ESE	32											11.00	
16	ESE	48			ESE	25							11 00	
	E S L	43			ENE	15			13000					
17		30 11			EAC				1.302.5				08.00	
18	E SE												08.00	
19	SE	26 25			ESE	AS							08.00	
20	25	00				210							08. 80	
21	ESE	32			ESE	11							11.00	
21 22	EKE	33				+							11.00	
22 23	ENE	45											11 00	
23 24	ENE	30											0.8 00	
24	ENE	39											12 00	
-17		01											00 00	
26	ENE	48											12 00	
27	ENE	39											11.00	
28	ENE	3H											11.00	
20	ESE	32												
30	ESE	30			ENE	30							11.00	
	100													
31	ESE	30											11.00	
Total.														
Moyenne.		30				22					1	-		
(3)														

## **Overseas and FSAAT**



## **METFR Results**

Results of ERA-CLIM: inventory with 370 lines, 300 000 images, 2 millions of upper wind data keyed, QC in process

#### <u>Results after 9 months of ERA-CLIM2 and ERA-CLIM</u> Few new sources (Comores, West Indies, New Caledonia)

#### Imaging: 90% of high priorities Reunion island, Polynesia and New Caledonia reports have been imaged in 2014

Digitisation: 50% of high priorities have been keyed

Quality Check: 20% of high priorities have been digitised Development of new quality check procedures





## Météo-France Work Plan in 2015

#### Outlook for 2015

1. Imaging reports : French Guyana, Reunion Island, FSAAT

2. Digitising pilot balloons data and radiosonde data in France mainland, overseas and FSAAT:

First semester will be dedicated to Reunion island and French Guyana upper air wind (pilot) and early radiosounding in France mainland before 1945

Secund semester will be dedicated to International Ascents (1900-1912) : Trappes, Strasbourg an FSAAT pilot balloons

**3.Quality Check :** Ongoing process of QC, development of QC procedures and conversion to common format/unit of keyed long series

Delivery of 20 long series of upper wind in January 2015 Delivery of 10 long series of upper air data in November 2015



