

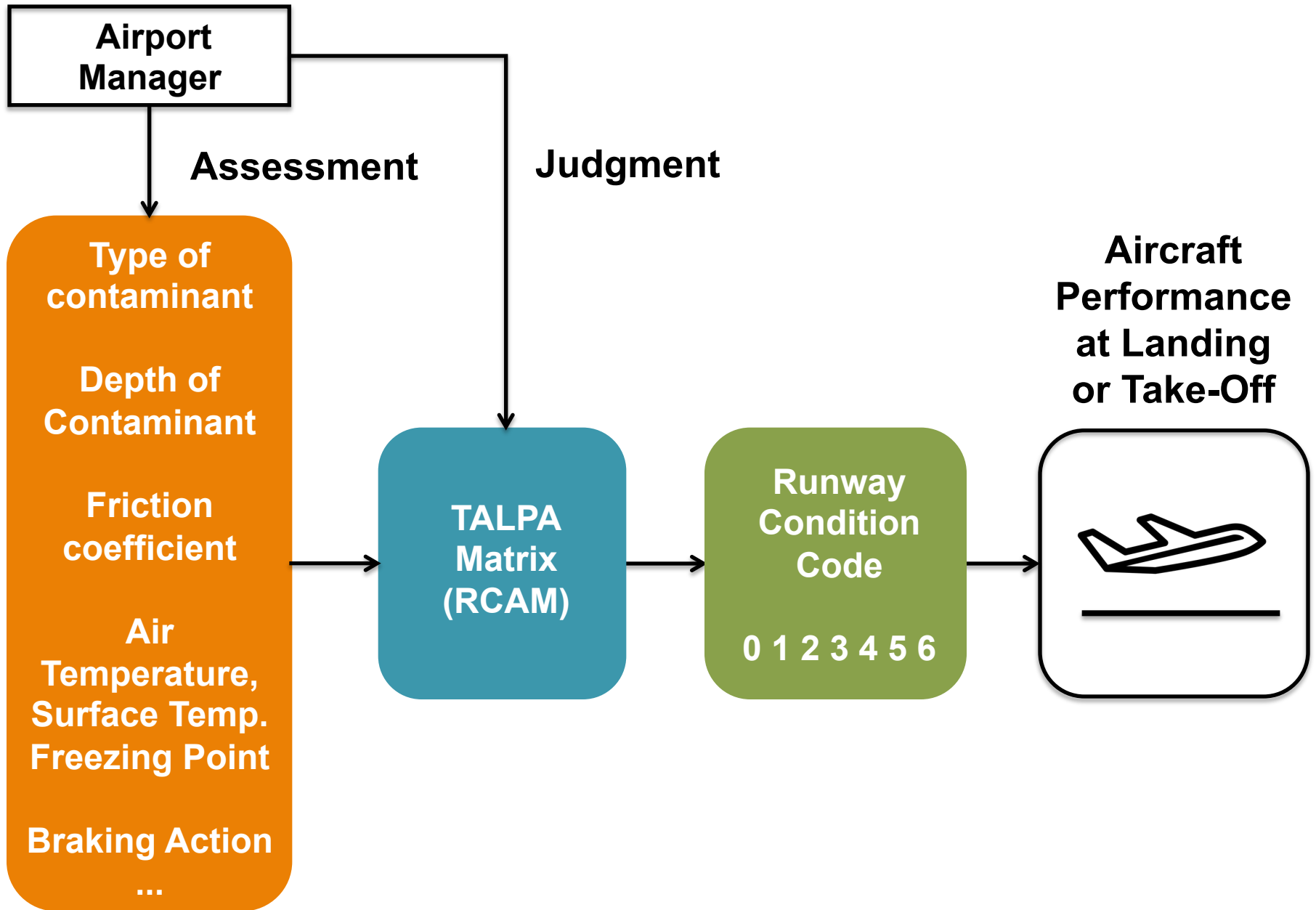


The French TALPA Trial Results of Winter 2014-2015

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THE FRENCH TALPA TRIAL

Purpose:

To determine the correlation between braking action assessed by airport operators (through RWYCC) and braking action reported by pilots (through PIREPs), in relation to local contaminants and weather in France.

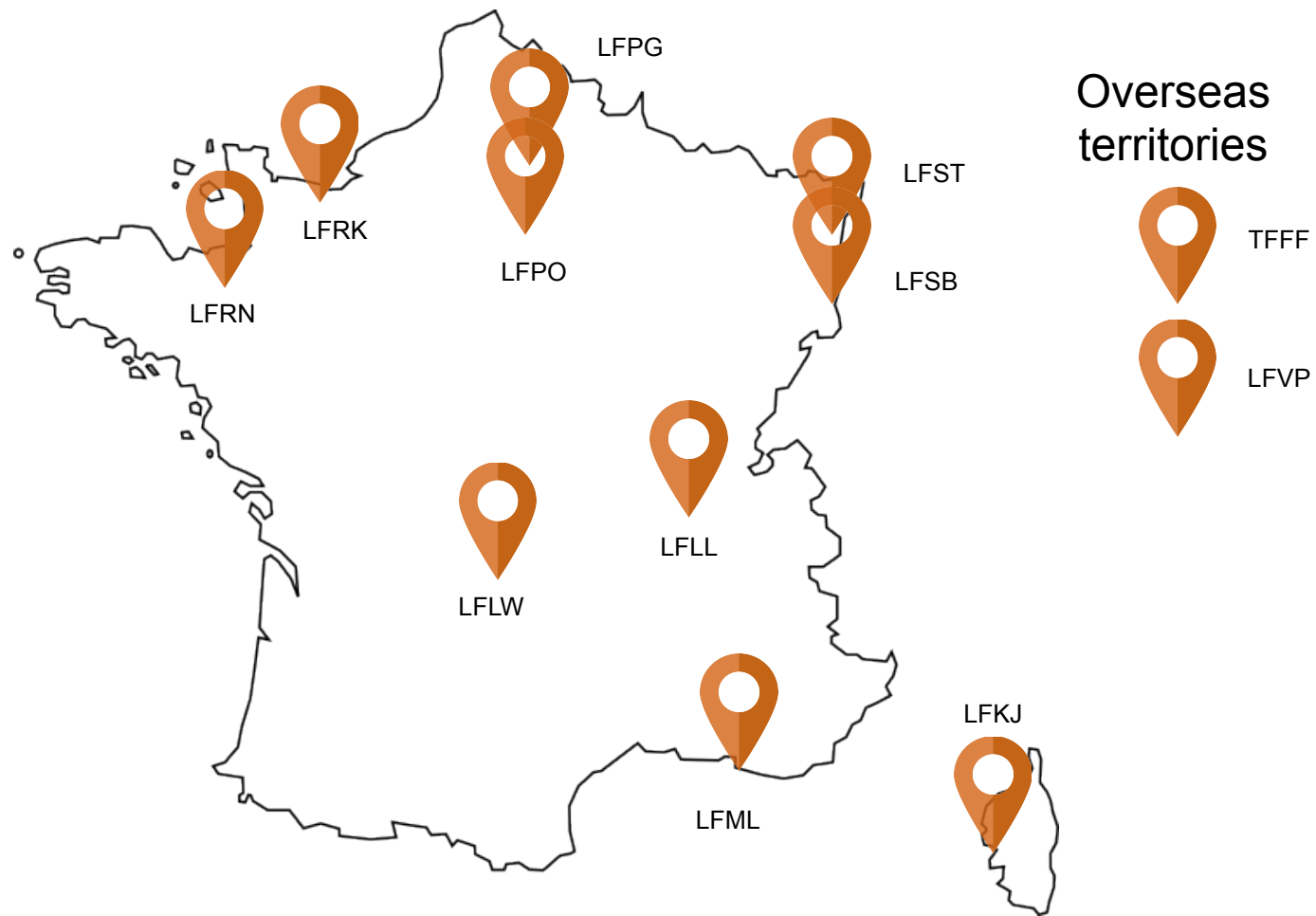
Methodology: by collecting runway inspection data from airport operators and air traffic controllers

With whom: 12 French Airports (2 overseas)

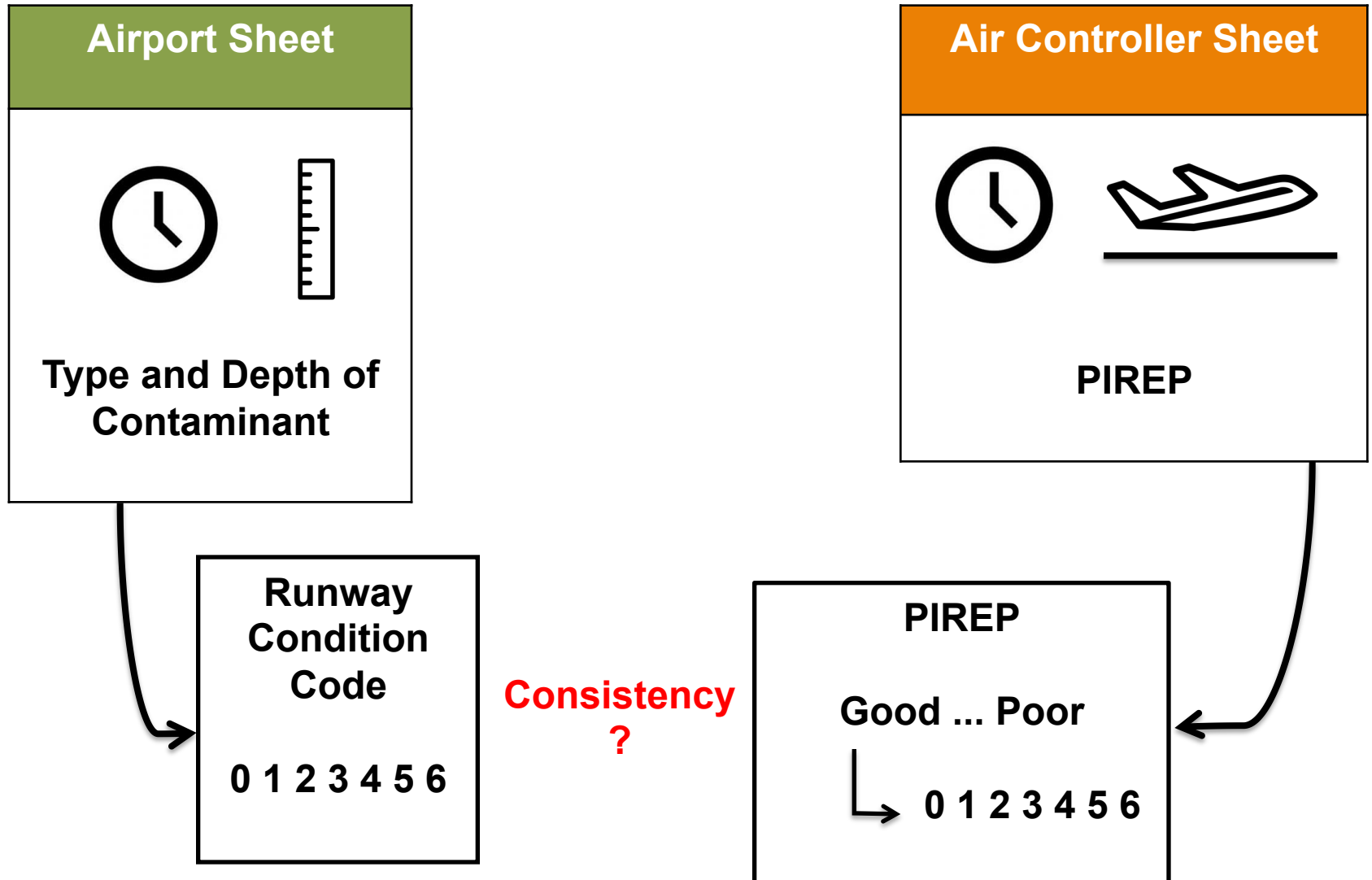
When: during 3 winters between 2014 and 2017 (period from November to April)



12 PARTICIPATING AIRPORTS



METHODOLOGY



AIRPORT SHEET

Airpo rt	Dat e	Loc a l time	Oper ator	Piste	% of contamination			Contaminant depth (mm)			Type of contaminant			Air Temperature			Mu (<1)			Information
					E 1	E 2	E 3	H 1	H 2	H 3	C 1	C 2	C 3	T 1	T 2	T 3	M 1	M 2	M 3	

AIR CONTROLLER SHEET

Date (JJ/MM/AAAA)	Local Time (HH/MM)	Flight Nuber	Type of aircraft	Airline Company	Runway	PIREP*	Information

ANALYSIS OF PAIRS

<u>Airport-based information</u> (Runway inspector)	
Time	RWYCC
08:00	3
10:00	2
11:00	5
14:00	4

Example :
time interval
of 60 minutes



<u>Airborne information</u> on the braking performance (Pilot)	
Time	PIREP
08:30	3
10:15	3
13:00	4
14:20	3

Results

Winter 2014-2015



Journée technique du STAC 2015

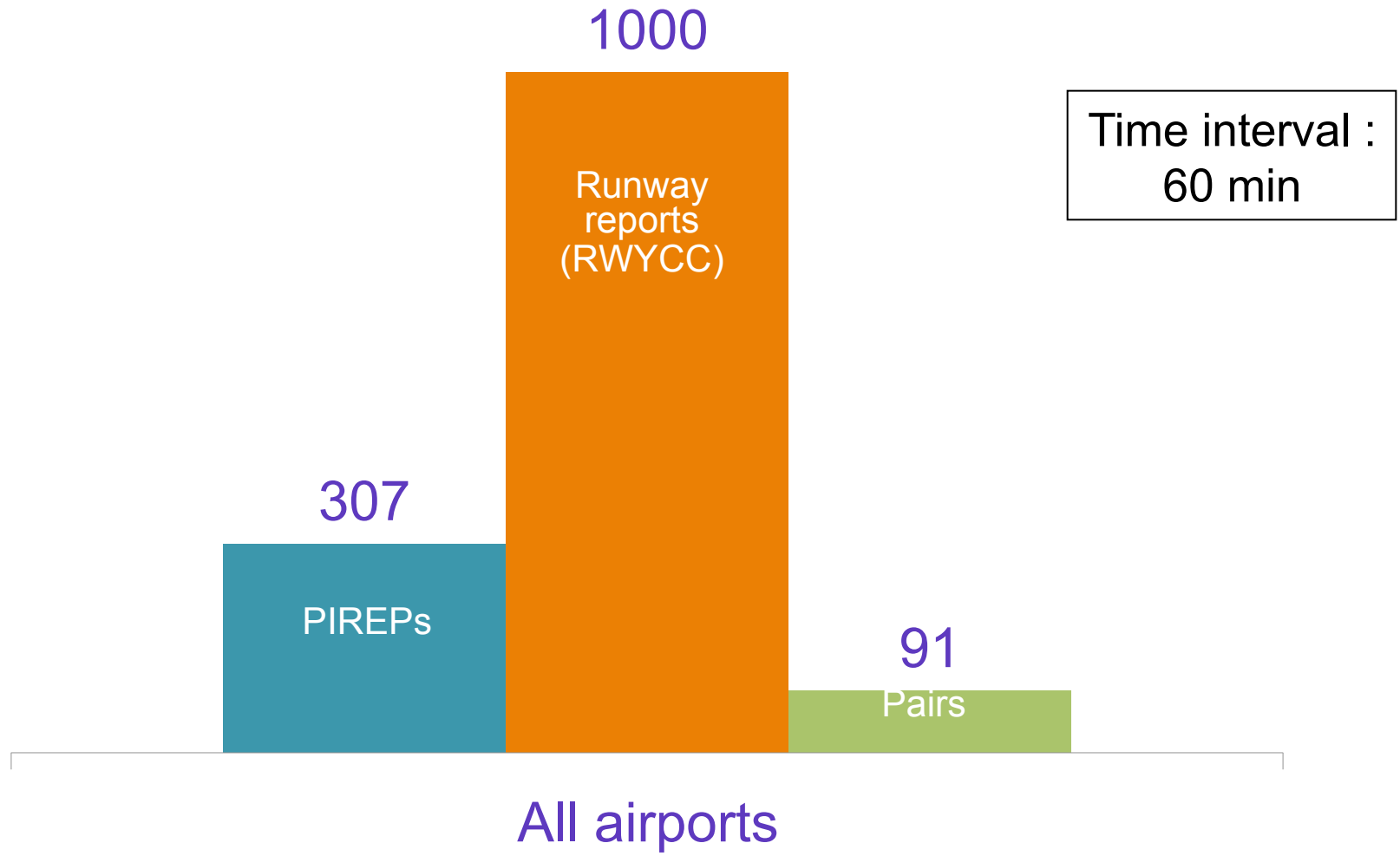
STAC

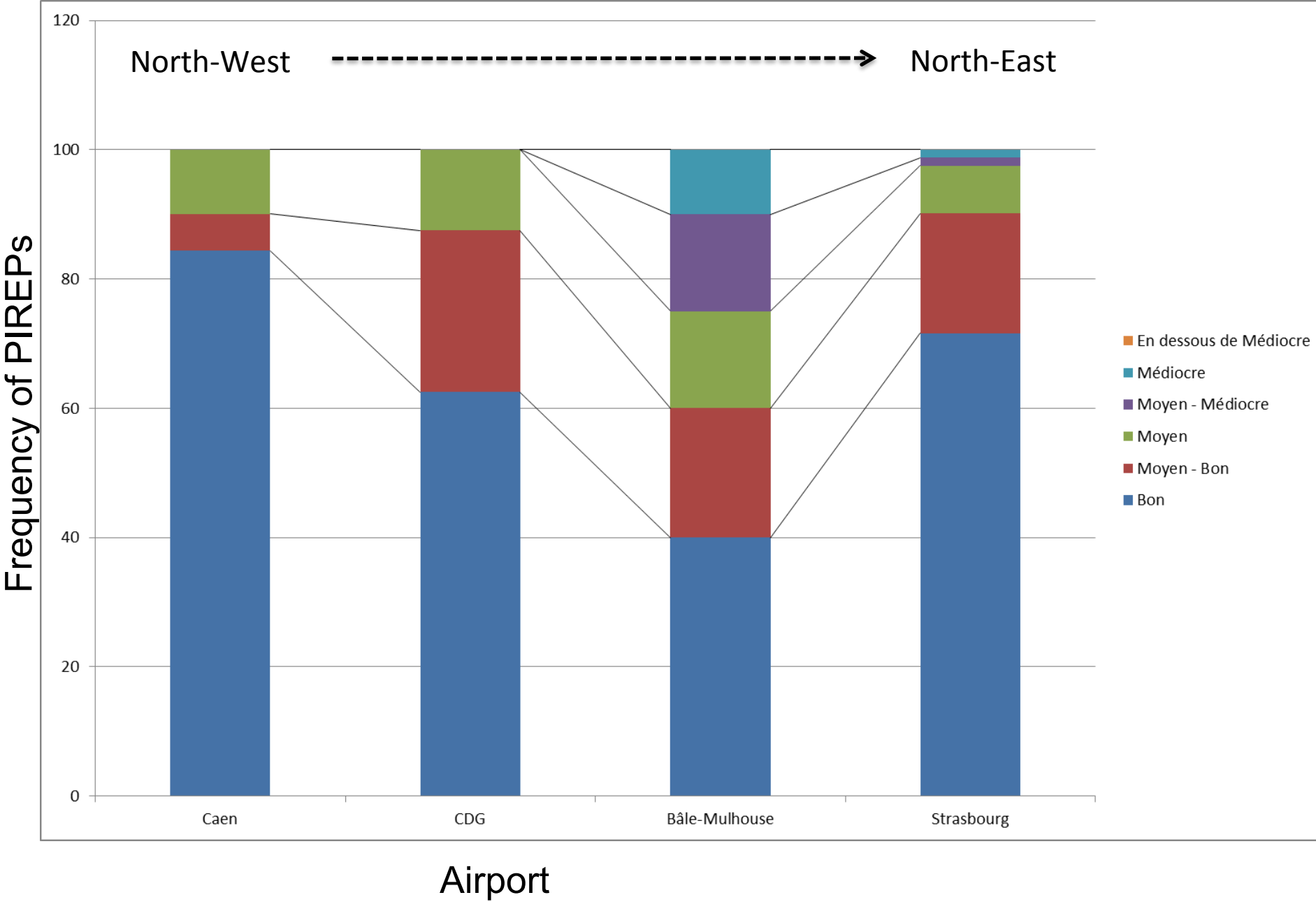
www.stac.aviation-civile.gouv.fr

NUMBER OF PAIRS AS A FUNCTION OF TIME INTERVAL

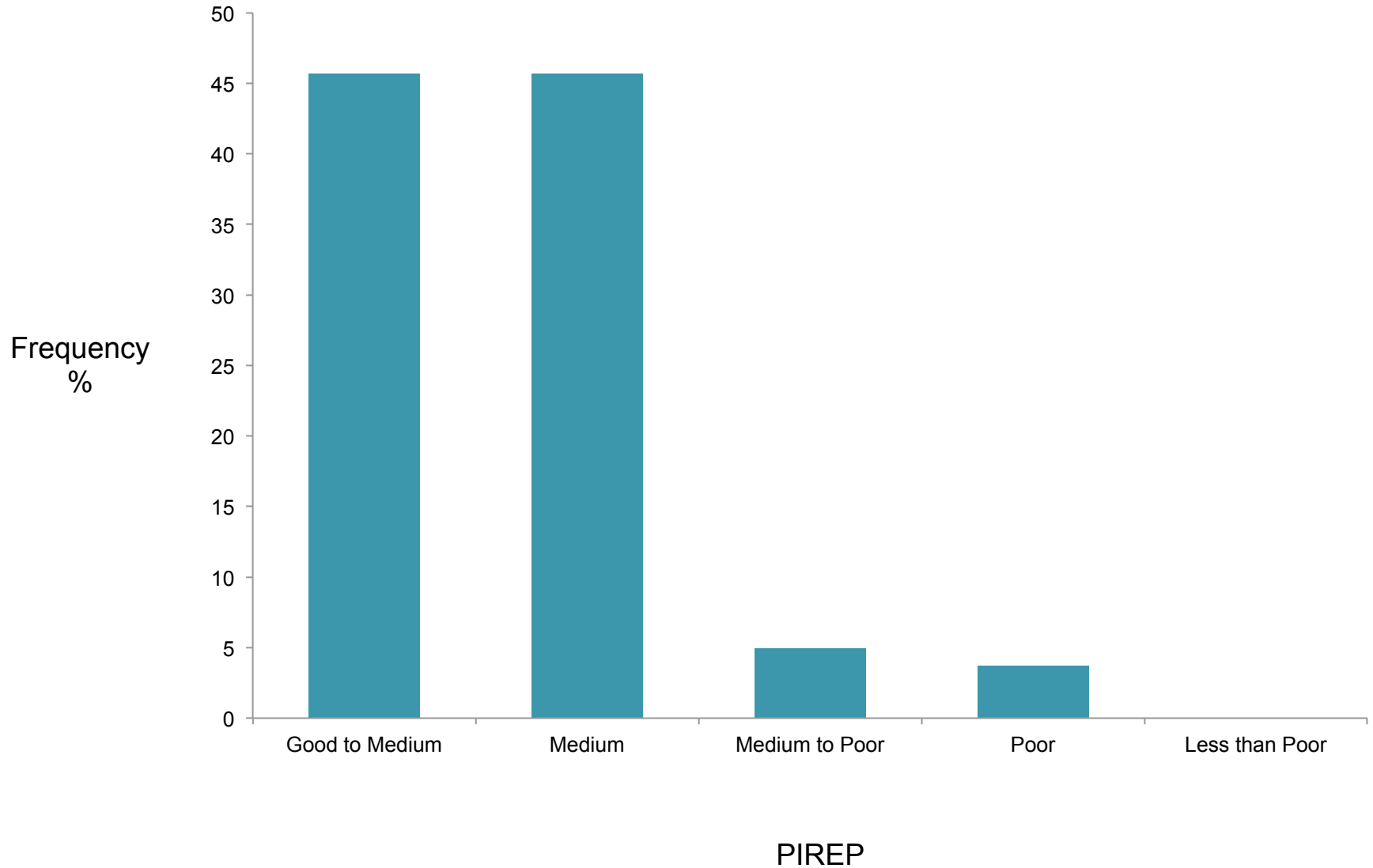
Interval (min)	RWYCC-PIREPs pairs
30	64
45	83
60	91
75	107

RESULTS





FREQUENCY OF PIREPS, EXCLUDING GOOD



RWYCC VS. PIREPS

RWYCC is lower than PIREP: the assessment of braking action by the pilot is better than the assessment provided by runway inspector

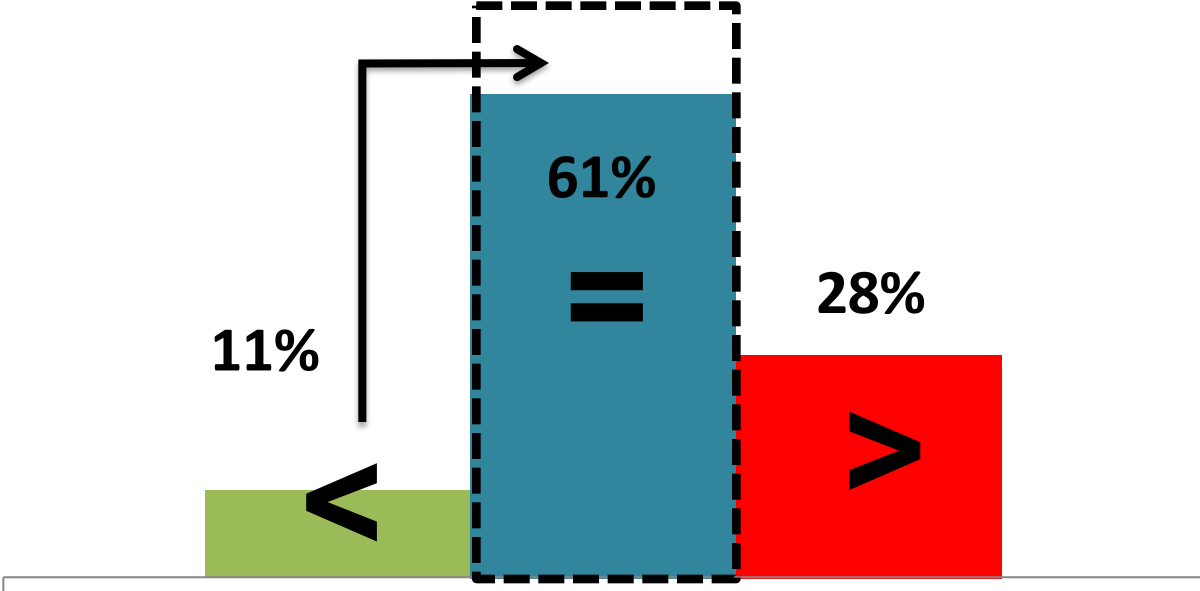
RWYCC is higher than PIREP : the pilot assesses conditions as worse than the runway inspector

RWYCC is equal to PIREP : the pilot has the same assessment as the runway inspector

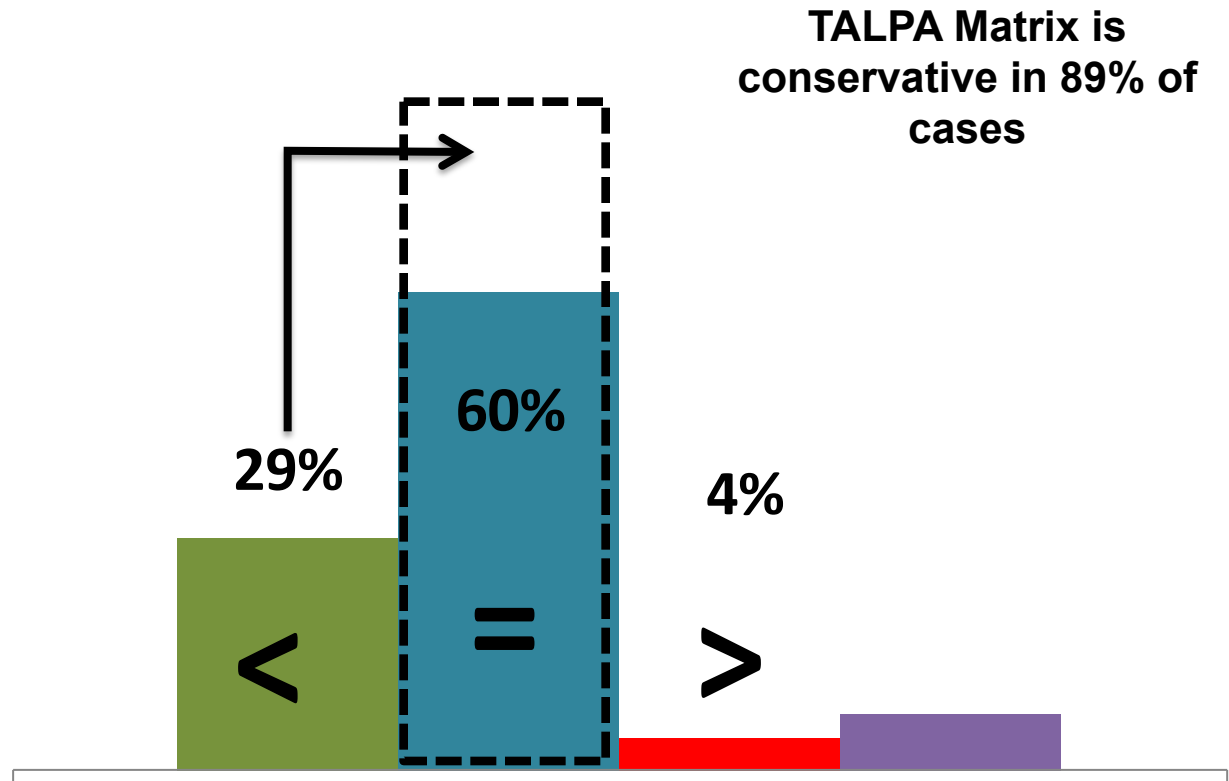


CORRELATION BETWEEN RWYCC AND PIREPS (XP FRANCE)

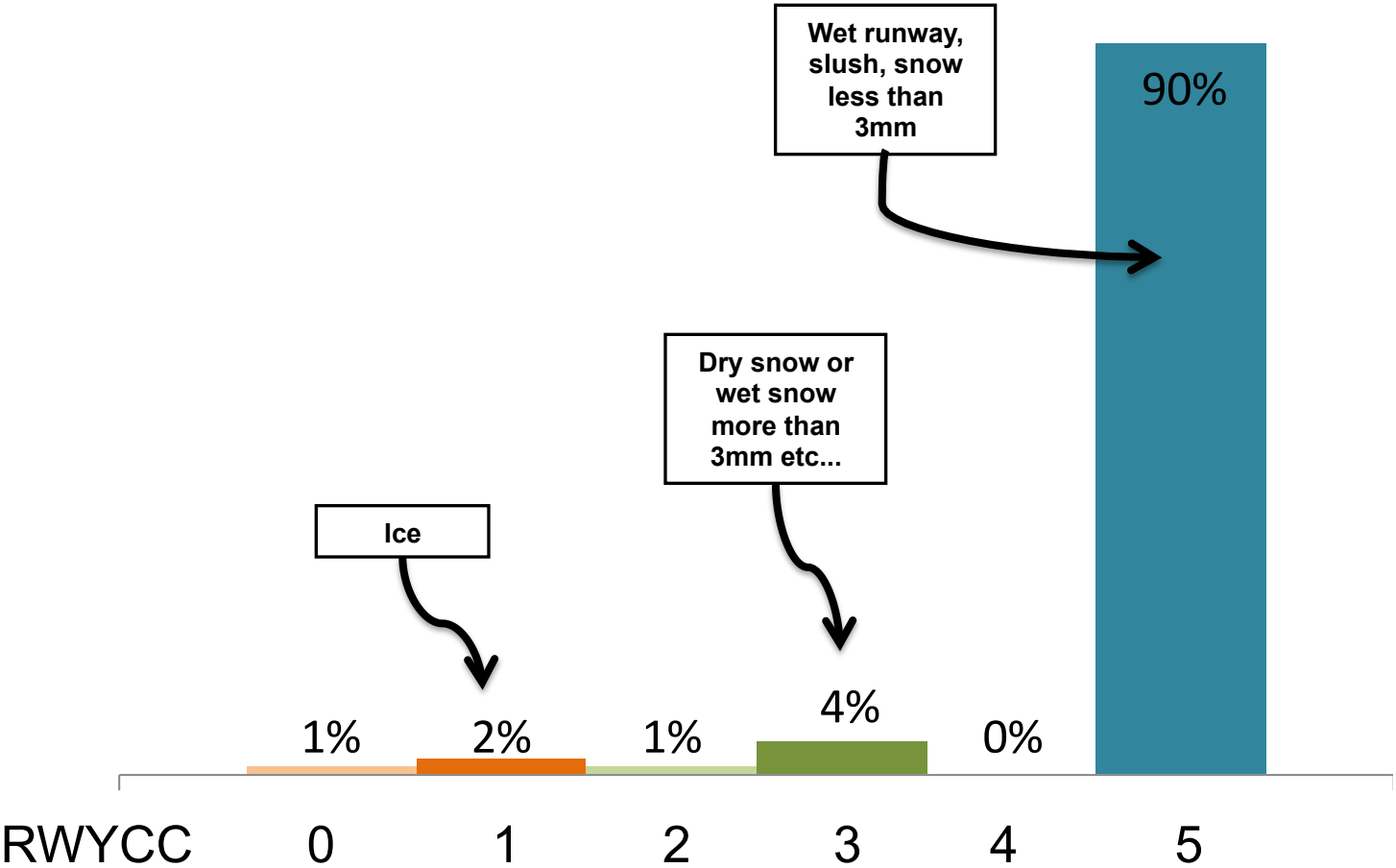
**TALPA Matrix is
conservative in
72% of cases**



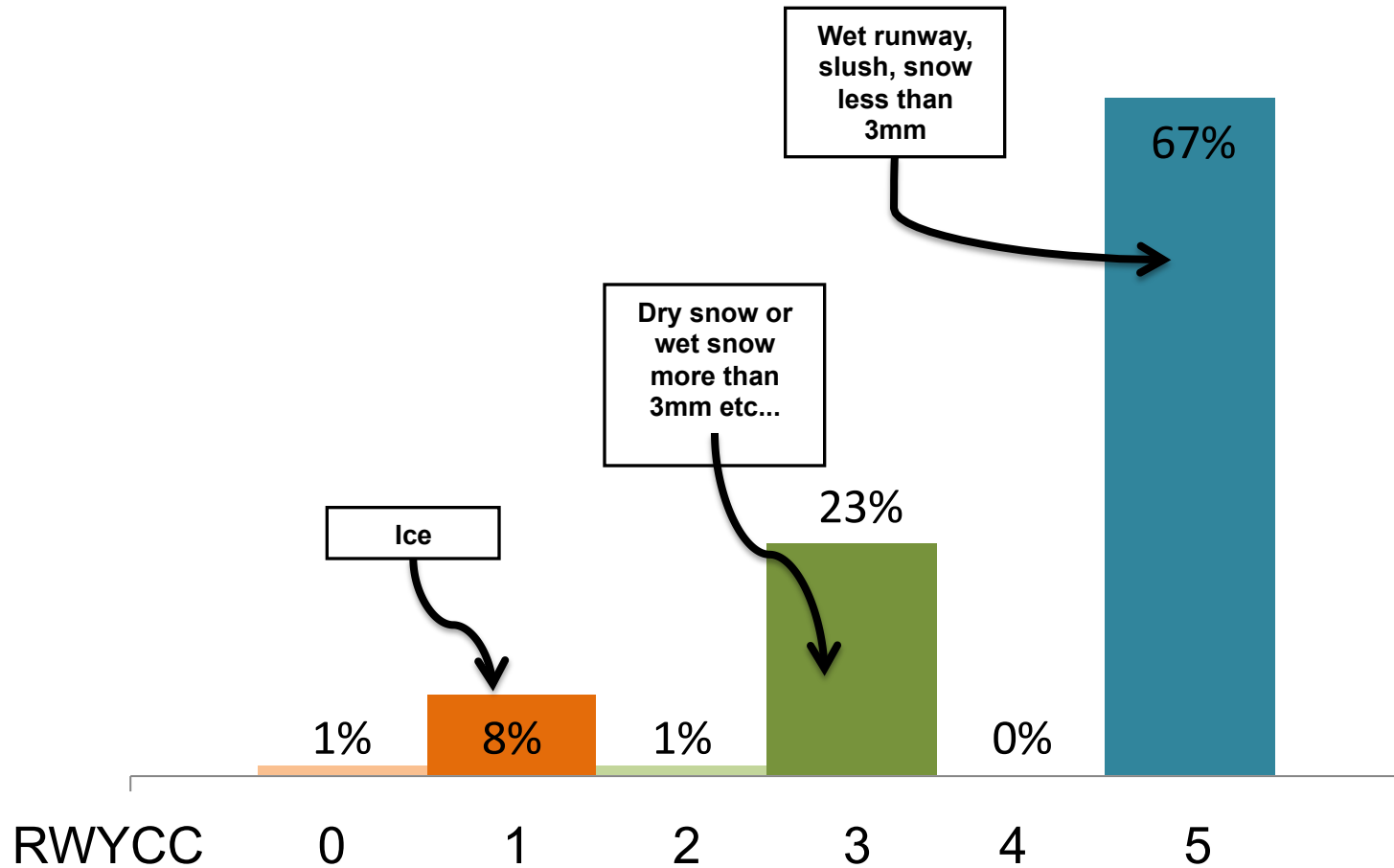
CORRELATION BETWEEN RWYCC AND PIREPS (XP USA)



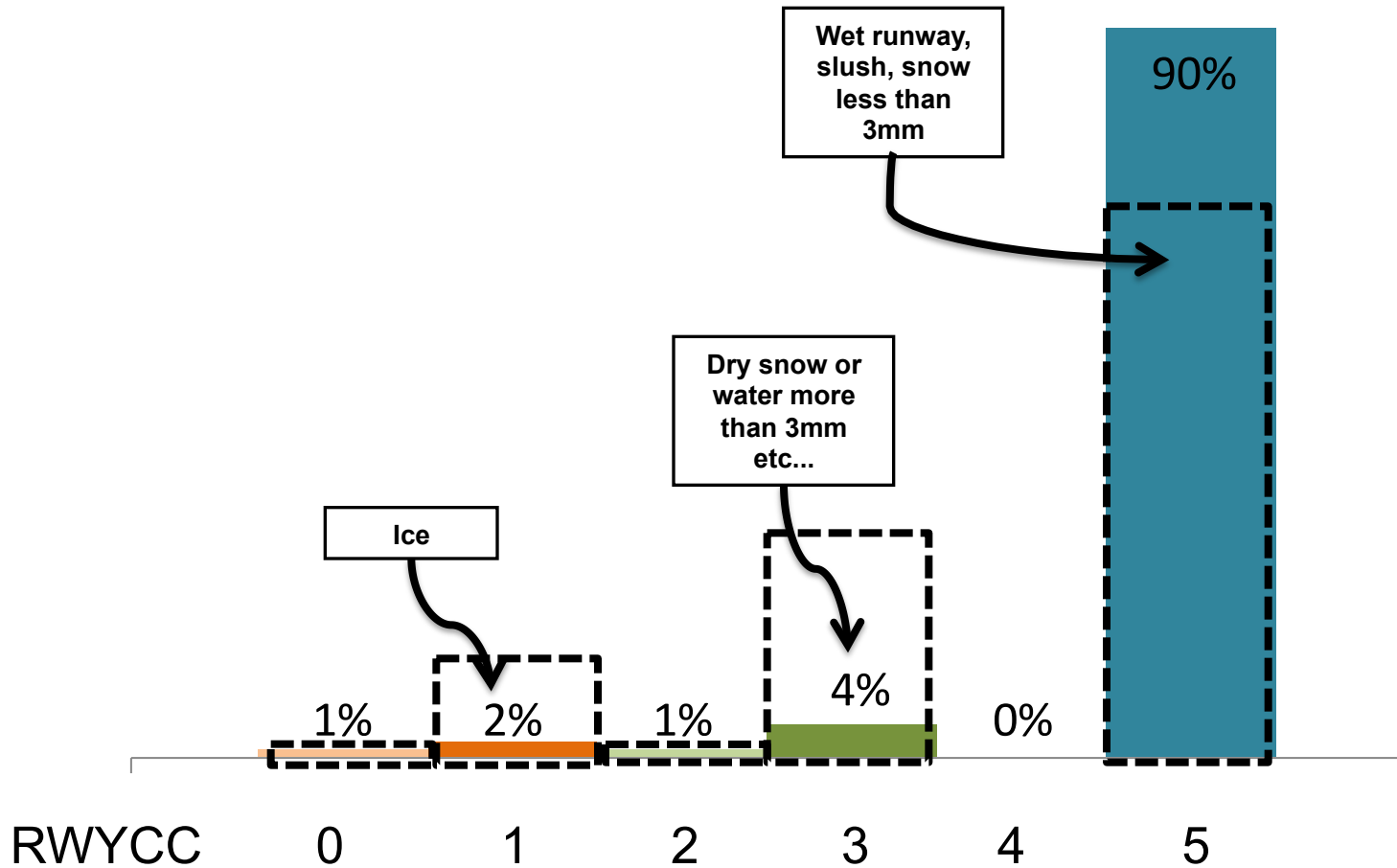
ENCOUNTERED CONTAMINANTS (XP FRANCE) – EXCLUDING DRY



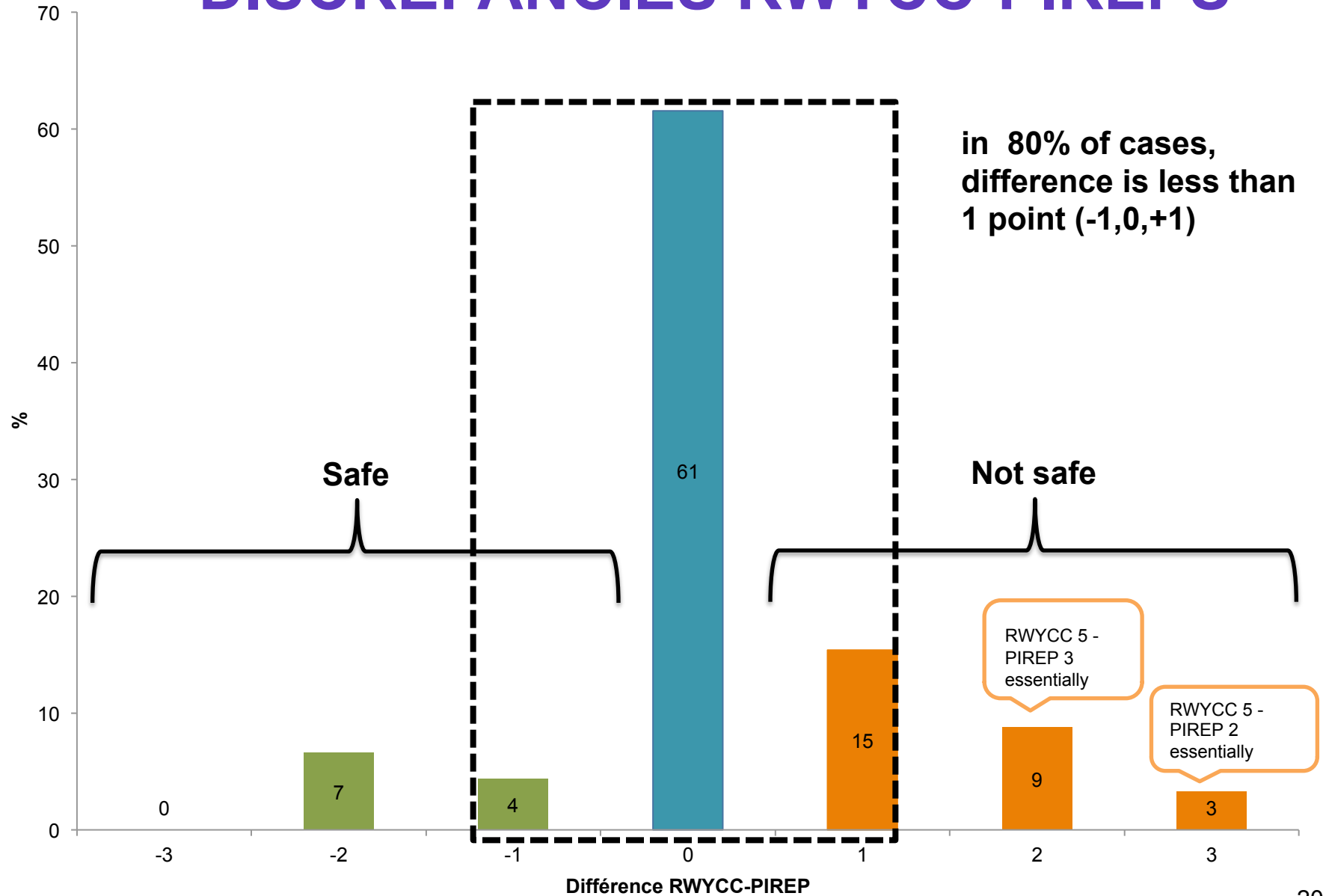
ENCOUNTERED CONTAMINANTS (XP USA) – EXCLUDING DRY



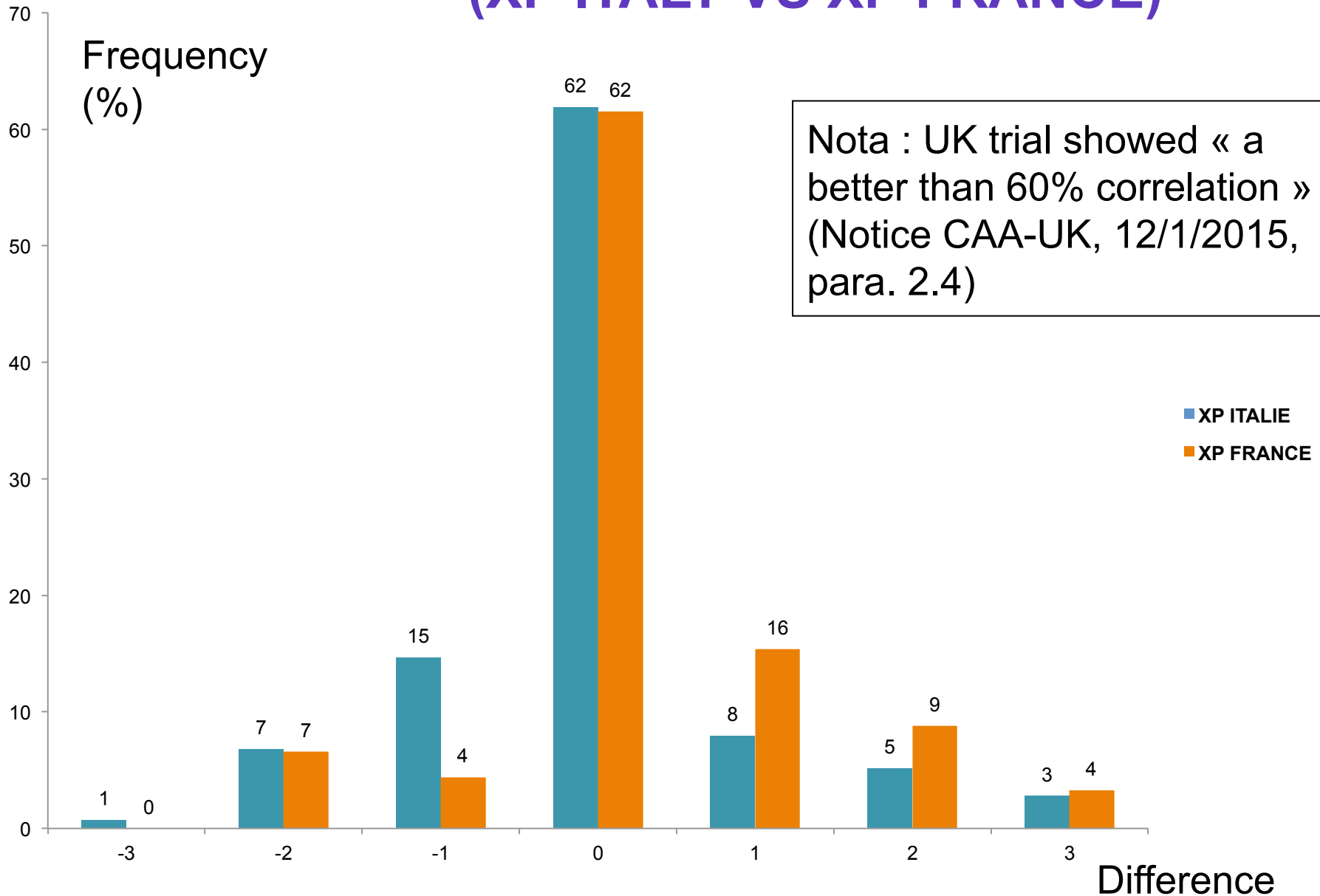
ENCOUNTERED CONTAMINANTS – EXCLUDING DRY (XP FRANCE VS XP USA)



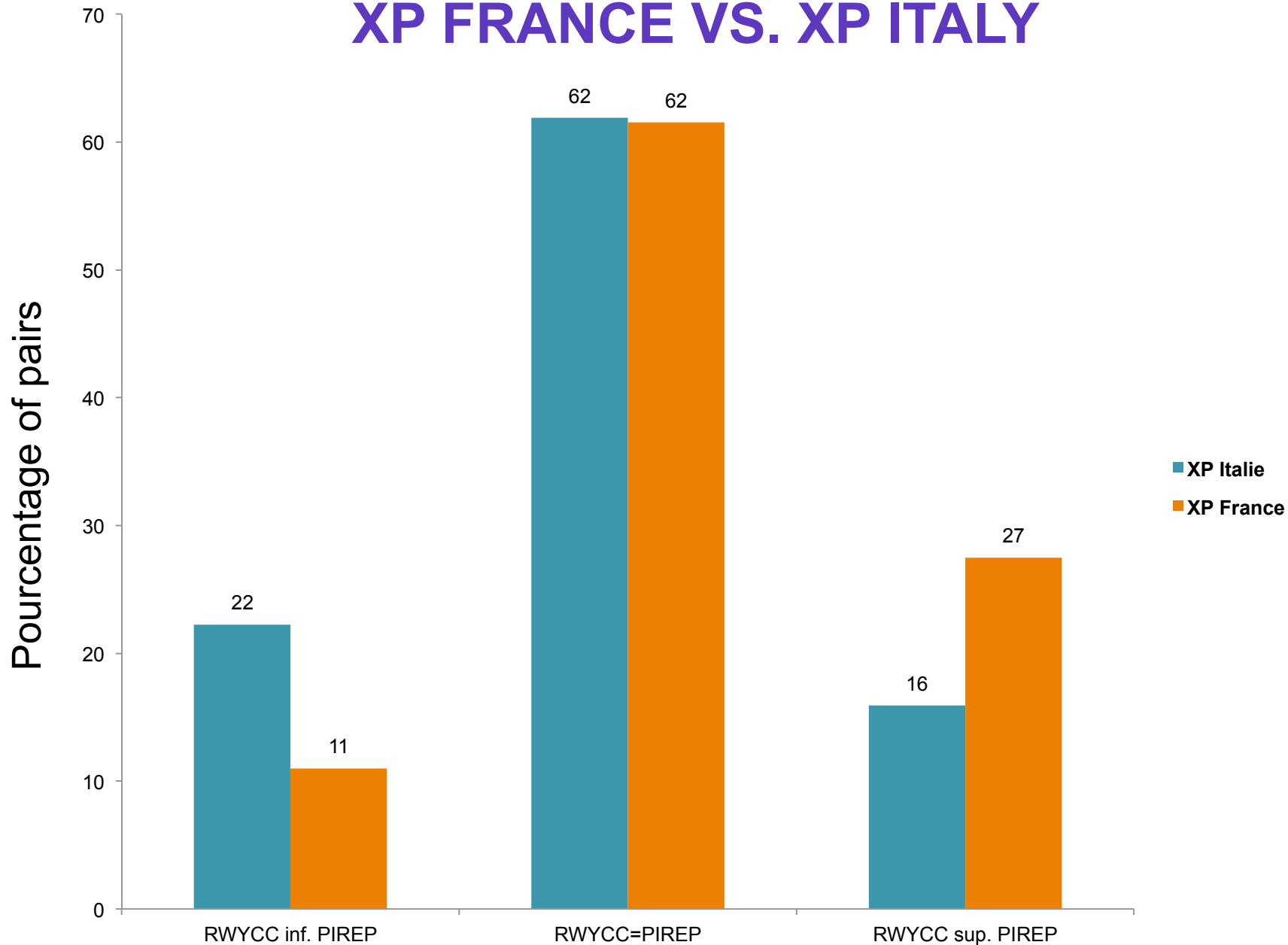
DISCREPANCIES RWYCC-PIREPS



DISCREPANCIES RWYCC-PIREPS (XP ITALY VS XP FRANCE)



XP FRANCE VS. XP ITALY



CONCLUSION

- 72% of RWYCC matched or were lower than PIREP (conservative data)
- But relatively small number of data and pairs and few contaminants encountered (mild winter)
- Discrepancies RWYCC-PIREPs in case of water (difficulties for pilots to assess braking performances)
- Difficulty of pilots to perform braking action that were correlated with PIREP in WET conditions
- The consistency of the matrix has to be studied with ICE, DRY SNOW and WET SNOW
- STAC will pursue the trial during winters 2016-2017 and 2017-2018

For any question about the French TALPA Trial, please contact:

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