

Summary of UPR Trial Benefits

As of Jan 22, 2024				1-Year			
		City Pairs		Time (min)	Fuel (kg)	CO2 (kg)	Cost (USD)
1	Jul 9 - Oct 6, 2021	KATL↔SPJC	DAL	2,089	267,520	845,360	384,033
2	Jul 27 - Oct 25, 2021	KATL↔SBGR	DAL	1,175	140,693	444,590	209,625
3	Aug 6 - Nov 3, 2021	TTPP↔KMIA	BWA	1,038	86,055	271,934	160,170
4	Sep 1 - Nov 27, 2021	KIAH↔MMPR	UAL	2,263	97,204	307,168	296,027
6	Dec 6, 2021 - Mar 5, 2022	SAEZ↔KMIA	ARG	1,115	118,970	375,944	209,420
7	Use DAL KATL->SPJC	KMIA↔SPJC	AAL	2,089	267,520	845,360	384,033
8	Aug 29 - Nov 27, 2022	MMUN→SAEZ	ARG	410	46,939	148,327	106,347
9	Oct 20, 2022 - Jan 31, 2023	SKBO→KATL	DAL	1,818	243,288	768,789	380,250
10	Nov 25 - Dec 25, 2022	MPTO→KLAX	CMP	1,166	40,723	128,684	149,782
11	Dec 1, 2022 - Feb 28, 2023	KATL↔SAEZ	DAL	3,297	657,546	2,077,844	866,083
12	Dec 1, 2022 - Feb 28, 2023	KATL↔SCEL	DAL	2,977	434,709	1,373,681	652,274
13	Feb 23-May 23, 2023	KIAH↔MMSD	UAL	10,038	439,326	1,388,272	833,113
14	May 3 -Aug 31, 2023	SKBO→KJFK	DAL	1,056	119,407	377,325	203,019
15	Sep 1 - Dec 31, 2023	KATL↔MMMY	DAL	1,445	87,758	277,317	216,089
16	Dec 22 - Dec 31, 2023	KATL↔SKCG	DAL	2,665	99,519	314,480	347,628
		TOTAL		34,639	3,147,176	9,945,076	5,397,893

Note 1: the 5th Trial not included due to the duplicate city pair, KATL↔SAEZ.

Note 2: the 16th Trial contains only 5-day worth data.

Summary of SENEAM SDR Trial Benefits

As of 10/31/2023				
1-yr Estimate	Time (min)	Fuel (kg)	CO2 (kg)	Cost (\$)
AeroMexico	1,168	51,157	161,655	\$ 158,749
Delta	517	51,586	163,012	\$ 93,805
Emirates	65	11,416	36,075	\$ 15,861
FedEx	3,136	323,796	1,023,194	\$ 579,142
United	1,626	178,122	562,865	\$ 278,298
VivaAerobus	4,998	216,186	683,148	\$ 677,073
Total	11,510	832,263	2,629,949	\$1,802,928

Summary of CIIFRA Trial Benefits

- Estimated Annual Savings (as of March 11, 2024)

	Time (min)	Fuel (kg)	CO2 (kg)	Cost (USD)
Trial UPR	34,639	3,147,176	9,945,076	5,397,893
SDR	11,501	830,339	2,623,867	1,800,453
Total	46,140	3,977,515	12,568,943	7,198,346

UM219 Trial Savings Analysis

Savings	USD
Departure	\$ 28,585
Enroute	\$ 86,693
Total	\$ 115,278

(Data from April 6-9, 2023 is used.)

Assume UM219 offload trail saves \$115K per week and 52 weeks per year:

Savings of \$5,980,000/year
by UM219 Offload Operation