

B-200 (UC-12B) - LARC 06/08/21

NOTE: All flight reports will be archived as NASA public data in the DAAC.

Aircraft: [B-200 \(UC-12B\) - LARC](#) ([See full schedule](#))

Flight Number: Activate Flight 72/73 (Researcher #81/82) (Update each flight)

Payload Configuration: HSRL II/RSP

Nav Data Collected: No

Total Flight Time: 6.9 hours

Submitted by: Michael S. Wusk on 06/08/21

Flight Segments:

From:	KLFI	To:	KLFI
Start:	06/08/21 12:30 Z	Finish:	06/08/21 15:50 Z
Flight Time:	3.3 hours		
Log Number:	21B005	PI:	Armin Sorooshian
Funding Source:	Hal Maring - NASA - SMD - ESD Radiation Science Program		
Purpose of Flight:	Science		
Miles Flown:	720 miles		
Comments:	<p>Morning UC-12 event for a scheduled 2-event day; cooperative flight with the HU-25. Planned route: KLFI ATLIC ZIBUT TILED ZIBUT ATLIC KLFI. Takeoff from runway 26 immediately following HU-25 takeoff. Uneventful departure with north turn out to a climb on course direct ATLIC. Final cruising altitude was FL280 for the entire flight back to ATLIC. Initial ATC vectors for climbout, combined with a headwind at high altitude and a tailwind at low altitude, resulted in the UC-12 falling behind the HU-25 and being unable to catch up. Coincidence was maintained within 10 minutes, but was not optimal during outbound tracks. Further complicating coincidence was a convective build up approximately 40nm east of ZIBUT along the planned track. The UC-12 deviated north of track to circumnavigate, with a maximum lateral separation of 13nm north of desired ground track; cloud tops were above the performance envelope of the UC-12, estimated at ~ FL340, with a distinct anvil extending to the south of track that prevented a south deviation. UC-12 regained ground track approx.. 2/3 the distance from ZIBUT to TILED. HU-25 executed turn point approx.. 20 nm short of TILED; researchers confirmed desire for UC-12 to continue to same turn point then reverse—sacrificing opportunity to regain coincidence for gathering data on the same ground track as HU-25. Executed 30-deg bank angle reversal at turn point. On return leg to TILED, was able to maintain planned track—towering cumulus build ups had shifted northwards enough to maintain track. UC-12 did penetrate extended portion of anvil formation to maintain track. Commenced descent 12nm east of ATLIC for uneventful recovery at KLFI to runway 26. 4x dropsondes deployed: ZIBUT/Turn Point/half-way point back to ZIBUT/12nm east of ATLIC. Crew was Jamison, Wusk, Harper</p>		

From:	KLFI	To:	KLFI
Start:	06/08/21 17:27 Z	Finish:	06/08/21 21:03 Z
Flight Time:	3.6 hours		
Log Number:	21B005	PI:	Armin Sorooshian
Funding Source:	Hal Maring - NASA - SMD - ESD Radiation Science Program		
Purpose of Flight:	Science		
Miles Flown:	720 miles		
Comments:	<p>Second flight of a two flight day. ACTIVATE statistical research flight. The plan was from KLFI - ATLIC - ZIBUT - N3630/W07145 - N3645/W06915 and reverse. Flight deviated from plan in that a fuel management issue on the HU25 prevented going out to the turn point, but not soon after the reversal to come home early, they resolved the issue and aircraft reversed course to continue as far as it could on original plan. They turned short by about 50 nm. The UC12 was delayed getting ATC clearance to make the early turn and had to continue east for an extra 30 or so miles. The UC12 had some tailwind help on the return and gained ground to have good coincidence for much of the return. UC-12 aircraft performed nominally and is ready for the next mission. Crew was Coldsnow, Wusk, Seaman.</p>		

Flight Hour Summary:

						21B005
Flight Hours Approved in SOFRS						200
Total Used						180
Total Remaining						20
21B005 Flight Reports						
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
01/20/21	Activate Flight 33	Science	3	3	197	600
01/29/21	Activate Flight 34	Science	3	6	194	700
02/03/21	Activate Flight 35	Science	3.3	9.3	190.7	700
02/10/21	Activate Flight 36	Science	3.7	13	187	670
02/20/21	Activate Flight 37 (Researcher #46)	Science	3.3	16.3	183.7	600
02/21/21	Activate Flight 38 (Researcher #47)	Science	4	20.3	179.7	650
03/04/21	Activate Flight 39 (Researcher #48)	Science	3.1	23.4	176.6	620
03/05/21	Activate Flight 40 (Researcher #49)	Science	3.5	26.9	173.1	706
03/05/21	Activate Flight 41 (Researcher #50)	Science	3.3	30.2	169.8	650
03/08/21	Activate Flight 42 (Researcher #51)	Science	3.3	33.5	166.5	680
03/09/21	Activate Flight 43 (Researcher #52)	Science	3.4	36.9	163.1	708
03/12/21	Activate Flight 44/45 (Researcher #53/54)	Science	3.4	40.3	159.7	700
03/12/21	Activate Flight 44/45 (Researcher #53/54)	Science	3.5	43.8	156.2	700
03/20/21	Activate Flight 46 (Researcher #55)	Science	3.4	47.2	152.8	705
03/23/21	Activate Flight 47 (Researcher #56)	Science	4.1	51.3	148.7	704
03/29/21	Activate Flight 48 (Researcher #57) (Update each flight)	Science	3.9	55.2	144.8	767
03/30/21	Activate Flight 49 (Researcher #58) (Update each flight)	Science	3.4	58.6	141.4	712
03/30/21	Activate Flight 50 (Researcher #59) (Update each flight)	Science	3.6	62.2	137.8	797
04/02/21	Activate Flight 51 (Researcher #60) (Update each flight)	Science	2.6	64.8	135.2	710
04/02/21	Activate Flight 51 (Researcher #61) (Update each flight)	Science	4.7	69.5	130.5	710
05/12/21	Activate Flight 52 (Researcher ICF) (Update each flight)	Science	1.3	70.8	129.2	250
05/13/21	Activate Flight 53 (Researcher #62) (Update each flight)	Science	3.7	74.5	125.5	0
05/14/21	Activate Flight 54/55 (Researcher #63/64) (Update each flight)	Science	3.7	78.2	121.8	730
05/14/21	Activate Flight 54/55 (Researcher #63/64) (Update each flight)	Science	3.5	81.7	118.3	720
05/15/21	Activate Flight 56 (Researcher #65) (Update each flight)	Science	3.5	85.2	114.8	0

05/18/21	Activate Flight 57 (Researcher #66) (Update each flight)	Science	3.6	88.8	111.2	720
05/19/21	Activate Flight 58 (Researcher #67) (Update each flight)	Science	3.4	92.2	107.8	710
05/19/21	Activate Flight 59 (Researcher #68) (Update each flight)	Science	3.4	95.6	104.4	720
05/20/21	Activate Flight 60 (Researcher #69) (Update each flight)	Science	3.8	99.4	100.6	710
05/21/21	Activate Flight 61 (Researcher #70) (Update each flight)	Science	3.6	103	97	750
05/21/21	Activate Flight 62 (Researcher #71) (Update each flight)	Science	3.3	106.3	93.7	710
05/25/21	Activate Flight 63 (Researcher #72) (Update each flight)	Science	3.4	109.7	90.3	713
05/26/21	Activate Flight 64/65 (Researcher #73/74) (Update each flight)	Science	3.3	113	87	700
05/26/21	Activate Flight 64/65 (Researcher #73/74) (Update each flight)	Science	3.3	116.3	83.7	722
06/01/21	Activate Flight 66 (Researcher #75) (Update each flight)	Science	3.6	119.9	80.1	710
06/02/21	Activate Flight 67/68 (Researcher #76/77) (Update each flight)	Science	3.4	123.3	76.7	0
06/02/21	Activate Flight 67/68 (Researcher #76/77) (Update each flight)	Science	3.1	126.4	73.6	0
06/05/21	Activate Flight 69 (Researcher #78) (Update each flight)	Science	3.4	129.8	70.2	726
06/07/21	Activate Flight 70/71 (Researcher #79/80) (Update each flight)	Science	3.5	133.3	66.7	720
06/07/21	Activate Flight 70/71 (Researcher #79/80) (Update each flight)	Science	2.9	136.2	63.8	690
06/08/21	Activate Flight 72/73 (Researcher #81/82) (Update each flight)	Science	3.3	139.5	60.5	720
06/08/21	Activate Flight 72/73 (Researcher #81/82) (Update each flight)	Science	3.6	143.1	56.9	720
06/15/21	Activate Flight 74 (Researcher #83) (Update each flight)	Science	3.2	146.3	53.7	680
06/16/21	Activate Flight 75 (Researcher #84) (Update each flight)	Science	3.7	150	50	690
06/17/21	Activate Flight 76 (Researcher #85) (Update each flight)	Science	3	153	47	600
06/22/21	Activate Flight 77 (Researcher #86) (Update each flight)	Science	3.3	156.3	43.7	690
06/24/21	Activate Flight 78 (Researcher #87) (Update each flight)	Science	3.5	159.8	40.2	690
06/26/21	Activate Flight 79/80 (Researcher #88/89) (Update each flight)	Science	3.4	163.2	36.8	690
06/26/21	Activate Flight 79/80 (Researcher #88/89) (Update each flight)	Science	3.4	166.6	33.4	680
06/28/21	Activate Flight 81 (Researcher #90) (Update each flight)	Science	3.3	169.9	30.1	690

06/29/21	Activate Flight 82 (Researcher #91) (Update each flight)	Science	3.3	173.2	26.8	687
06/30/21	Activate Flight 83/84 (Researcher #92/93) (Update each flight)	Science	3.4	176.6	23.4	685
06/30/21	Activate Flight 83/84 (Researcher #92/93) (Update each flight)	Science	3.4	180	20	680

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

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