

4	140.02	53.54	5800	35	0	19470	359.72	363.72	437.3	441.3	Drive Tube	1	10	4	S 2-2	If drive tubes prove difficult, the sensors may all be placed in a shallow shoveled hole Person responsible for drive tubes and seismic sensors joins after completion of those tasks Install, level, and cover (mylar sheet or regolith backfill) seismic sensors, test power	
	-75.71									Suite	Samples	2	35		S 1-2		
										Install	Seismic	1	5		E 1-2		
LS		32.22	3490	25	26	22960	416.94	446.94	N/A	N/A	Flag	2	10	LS		Video flag planting; Presidential phone call, etc. Prioritize samples and remove any superfluous samples Pack and seal sample collection; transfer to LM Additional time to help set up LSEP if not complete.	
										Downselect		2	3				
										Pack		2	12				
										LSEP			26				
Totals		126.18		145	30	22960	416.94	446.94									Station 2 is expendable.

Traverse Plans for Schrödinger Sortie Mission

EVA	TEAM 2														EVA1 TEAM 2					
Site Number	Lat/Lon	Travel time from previous (min)	Distance from previous (m)	Site Time (min)	Potential Extension (min)	Elapsed Distance (m)	Elapsed Time (min) Max: 480 min	Extended Time (min) Max: 480 min	Walkback Time (min) (along route at 2.7 km/hr) Elapsed	Extended Walkback Time (min) (along route at 2.7 km/hr) Elapsed	Sample/Activity*	Sample Type	Number of People	Activity Time (min)	Site Number	Objectives Addressed not correlated with activity	Justification/Notes:			
LS				200	15		200	215	N/A	N/A	Unload			2	20	LS		Reconnaissance, Installation - If scheduling conflicts arise, stops 1 and 3 may be skipped; Both EVA 4 routes will be altered to compensate for the loss of two short period seismic sensors. Team 2 will begin their EVA 15 minutes prior to Team 1.		
											LSEP	Deploy		2	35			Remove from LM		
											Drill Core	Core		2	25			Carry to site and unpack the instruments; antennas and power; set up small experiments		
											Samples	Hand		1	15			depth: 3 m; person sampling will help extract the core; after extraction, insert Neutron Probe plus 10 min to assist in extracting core		
											Heat Flow	Probe		1	60			depth: 2.3 m; 15 to drill each hole, 30 min to remove cores and emplace heat flow probes		
											ISRU	Deploy		1	60			Deploy, power, and test; process samples from first EVA (leave running during crew rest)		
											Rover			2	40			25 min to unpack, 15 min for test drive; install camera/lights, geology package		
1	139.84 -75.8	32.22	3490	53	0	3490	285.22	300.22	439.2	454.2	Drive Tube			1	10	1	S 2-2			
											Suite	Samples		2	40		S 1-2	Person responsible for drive tubes and seismic sensors joins after completion of those tasks		
											Install	Seismic		1	15		E 1-2	Install, level, and cover (mylar sheet or regolith backfill) seismic sensors (broadband and S.P.)		
											Bulk	Shovel		1	3			Dig hole (1m x 1m x 0.5m) to characterize regolith; bulk sample used for ISRU (part of Suite)		
2	139.31 -75.76	38.40	4160	35	15	7650	358.62	388.62	420.2	450.2	Drive Tube			1	10	2	S 2-2			
											Suite	Samples		2	35		S 1-2	Person responsible for drive tubes and seismic sensors joins after completion of those tasks		
											Install	Seismic		1	5		E 1-2	Install, level, and cover (mylar sheet or regolith backfill) seismic sensors, test power		
LS		25.57	2770	30	0	10420	414.18	444.18	N/A	N/A	ISRU	Test		1	15	LS	E 1-1	Load bulk materials into ISRU package; test working capability, run during crew rest		
											Flag			2	10			Video flag planting; Presidential phone call, etc.		
											Downselect			1	3			Prioritize samples and remove any superfluous samples		
											Pack			1	12			Pack and seal sample collection; transfer to LM		
Totals		96.18		318	30	10420	414.18	444.18										Traverse route can be reversed to allow for "rescue" opportunity if Team 1 is in distress.		

Traverse Plans for Schrödinger Sortie Mission

EVA1 TEAM 2

Traverse Plans for Schrödinger Sortie Mission

EVA2 Number	TEAM 1 Site Lat/Lon	Travel time from previous (min)	Distance from previous (m)	Site Time (min)	Potential Extension (min)	Elapsed Distance (m)	Elapsed Time (min) Max: 480 min	Extended Time (min) Max: 480 min	Walkback Time (min) (along route at 2.7 km/hr) Elapsed	Extended Walkback (min) (along route at 2.7 km/hr) Elapsed	Sample/ Activity*	Sample Type	Number of People	Activity Time (min)	Site Number	Objectives Addressed not correlated with activity
1	139.29 -75.39	96.00	10400	75	15	10400	171.00	186.00	449.4	464.4	Drill Core Suite Sample Sample	Core Samples Drag Trench	2 2 1 1	25 45 5 5	1	S 1-2 S 1-3
2	141.43 -75.68	21.51	2330	45	8	12730	237.51	260.51	464.2	487.2	Suite Bulk	Samples Shovel	2 1	45 5	2	S 1-2 S 1-3 E 1-2
3	139.41 -75.48	24.00	2600	30	0	15330	291.51	314.51	460.4	483.4	Suite Bulk	Samples Shovel	2 1	30 10	3	S 1-2 E 1-2
4	139.48 -75.6	35.54	3850	30	0	19180	357.05	380.05	440.4	463.4	Suite Sample	Samples Trench	2 2	30 5	4	S 1-1 S 1-2
LS		34.62	3750	30	5	22930	421.66	449.66	N/A	N/A	ISRU Downselect Pack		2 2 2	15 3 12	LS	E 1-1
Totals		211.66		210	28	22930	421.66	449.66								

Traverse Plans for Schrödinger Sortie Mission

EVA2 TEAM 1		Justification/Notes:
		Vent; Time for LRV samples of opportunity ~15mins depth: 3 m; person sampling will help extract the core
		Dig hole (1m x 1m x 0.5m) to characterize regolith; bulk sample used for ISRU
		Dig hole (1m x 1m x 0.5m) to characterize regolith; bulk sample used for ISRU
		Load bulk materials into ISRU package; test working capabillity, run during crew rest Prioritize samples and remove any superfluous samples Pack and seal sample collection; transfer to LM

Traverse Plans for Schrödinger Sortie Mission

EVA2	TEAM 2															
Site	Lat/Lon	Travel	Distance	Site	Potential	Elapsed	Elapsed	Extended	Walkback	Extended	Sample/	Sample	Number	Activity	Site	Objectives
Number		time	from	Time	Extension	Distance	Time	Time	Time	Walkback	Activity*	Type	of	Time	Number	Addressed
		from	previous	(min)	(min)	(m)	(min)	(min)	(min)	(min)			People	(min)		not
		previous	(m)				Max:	Max:	(along	(along						correlated
		(min)					480 min	480 min	route at	route at						with activity
									2.7 km/hr)	2.7 km/hr)						
									Elapsed	Elapsed						
1	138.35	86.86	9410	55	5	9410	141.86	146.86	472.8	477.8	Suite	Samples	2	45	1	S 1-2
	-75.65										Sample	Drag	1	5		S 1-3

Traverse Plans for Schrödinger Sortie Mission

EVA2 TEAM 2		Justification/Notes:
		Fracture and Crater; Time for LRV samples of opportunity ~20min

LS	41.77	4525	30	5	23215	419.29	449.29	N/A	N/A	ISRU	2	15	LS	E 1-3	Load bulk materials into ISRU package; test working capability, run during crew rest
										Downselect	2	3		E 2-2	Prioritize samples and remove any superfluous samples
										Pack	2	12			Pack and seal sample collection; transfer to LM
Totals	214.29		205	30	23215	419.29	449.29								

Traverse Plans for Schrödinger Sortie Mission

EVA3 TEAM 2																EVA3 TEAM 2		
Site Number	Lat/Lon	Travel time	Distance from previous (m)	Site Time (min)	Potential Extension (min)	Elapsed Distance (m)	Elapsed Time (min)	Extended Time (min)	Walkback Time (min)	Extended Walkback Time (min)	Sample/Activity*	Sample Type	Number of People	Activity Time (min)	Site Number	Objectives Addressed not correlated with activity	Justification/Notes:	
		from previous (min)					Max: 480 min	Max: 480 min	(along route at 2.7 km/hr) Elapsed	(along route at 2.7 km/hr) Elapsed								
1	140.78 -75.83	89.35	9680	75	15	9680	164.35	179.35	403.9	418.9	Drill Core Suite	Core Samples	2	25	1	S 1-1 S 1-4	depth: 3 m; person sampling will help extract the core	
													2	50				
2	140.63 -75.84	10.71	1160	40	5	10840	215.06	235.06	428.8	448.8	Suite	Samples	2	40	2	S 1-1 S 1-4		
3	140.43 -75.87	15.23	1650	40	5	12490	270.29	295.29	447.4	472.4	Suite Bulk	Samples Shovel	2	40	3	S 1-1 E 1-2 S 1-4	Multiple shovel scoops of pyroclastics (majority used for ISRU; portion for sample return)	
													1	5				
4	140.25 -75.86	12.37	1340	45	5	13830	327.66	357.66	475.0	505.0	Suite Drive Tube Install	Samples	2	35	4	S 1-1 S 1-4		
													1	10				
												Seismic	1	5			Install, level, and cover (mylar sheet or regolith backfill) seismic sensors, test power	
LS		61.20	6630	30	0	20460	418.86	448.86	N/A	N/A	ISRU		2	15	LS	E 1-3 E 2-2	Load bulk materials into ISRU package; test working capability, run during crew rest Prioritize samples and remove any superfluous samples Pack and seal sample collection; transfer to LM	
											Downselect		2	3				
											Pack		2	12				
Totals	188.86			230	30	20460	418.86	448.86										

Traverse Plans for Schrödinger Sortie Mission

