Table 5

Experiment set-up and results.

Exp.no	Config.	Grav. accell. [G]	Proj type and diameter [mm]	Lower target layer	Upper target layer and thickness (H) [mm]	U [ms^{-1}]	h [mm]	D_{out} [mm]	D_{rim} [mm]	D_{in} [mm]	D_{in}/D_{out}	D_{out}/H	$D_{t,\,out}$ [mm]	h_t [mm]	$D_{t,\,in}$	Time at D_t [s]
Boeing_9434	HS	10	Polyethylene, cylindrical, 12	Chromite	Quartz sand, 5 ± 0.5	1824	13.5 ± 0.5	119 ± 5	145 ± 5	95 ± 5	0.80 ± 0.054	23.80 ± 2.58	n/a	n/a	n/a	n/a
Boeing_9191	HS	50	Polyethylene, cylindrical, 12	Chromite	Quartz sand, 5 ± 0.5	1774	10.8 ± 0.5	91 ± 5	118 ± 5	69 ± 5	0.76 ± 0.069	18.20 ± 2.08	n/a	n/a	n/a	n/a
Boeing_9035	HS	150	Polyethylene, cylindrical, 12	Chromite	Quartz sand, 5 ± 0.5	1800	13.5 ± 0.5	82 ± 5	102 ± 5	60 ± 5	0.73 ± 0.076	16.40 ± 1.92	n/a	n/a	n/a	n/a
Boeing_9433	HS	500	Polyethylene, cylindrical, 12	Chromite	Quartz sand, 5 ± 0.5	1720	11.1 ± 0.5	72 ± 5	87 ± 5	48.5 ± 5	0.67 ± 0.084	14.40 ± 1.75	n/a	n/a	n/a	n/a
Boeing_8905	HS	10	Polyethylene, cylindrical, 12	Quartz sand	n/a	1766	20.1 ± 0.5	145 ± 5	190 ± 5	n/a	n/a		n/a	n/a	n/a	n/a
Boeing_8904	HS	51	Polyethylene, cylindrical, 12	Quartz sand	n/a	1780	16.2 ± 0.5	112 ± 5	151 ± 5	n/a	n/a		n/a	n/a	n/a	n/a
Boeing_8902	HS	150	Polyethylene, cylindrical, 12	Quartz sand	n/a	1754	16.6 ± 0.5	98 ± 5	125 ± 5	n/a	n/a		n/a	n/a	n/a	n/a
Boeing_8903	HS	502	Polyethylene, cylindrical, 12	Quartz sand	n/a	1966	15.5 ± 0.5	79 ± 5	107 ± 5	n/a	n/a		n/a	n/a	n/a	n/a
EPIC_03	QS	1	Delrin, 20	Iron grit	n/a	414	42 ± 1	223 ± 5	296 ± 5	n/a	n/a		217 ± 5	45 ± 1	n/a	0.089
EPIC_04	QS	1	Delrin, 20	Iron grit	Beach sand, 8 ± 0.5	419	42 ± 1	263 ± 5	373 ± 5	226 ± 5	1.05 ± 0.028	32.88 ± 2.15	236 ± 5	43 ± 1	226 ± 5	0.089
EPIC_05	QS	1	Delrin, 20	Iron grit	Beach sand, 11 ± 0.5	421	39 ± 1	282 ± 5	356 ± 5	227 ± 5	0.80 ± 0.023	25.64 ± 1.25	250 ± 5	38 ± 1	214 ± 5	0.102
EPIC_06	QS	1	Delrin, 20	Iron grit	Beach sand, 19 ± 0.5	410	42 ± 1	278 ± 5	350 ± 5	193 ± 5	0.69 ± 0.022	14.63 ± 0.47	277 ± 5	43 ± 1	196 ± 5	0.092
24*	QS	1	Delrin, 20	Beach sand	n/a	410	81 ± 1	355 ± 5	433 ± 5	n/a	n/a		339 ± 5	84 ± 1	n/a	0.115

*EPIC reference shot in beach sand obtained from Ormö et al. (2015)

HS = Half space QS = Quarter space

U = projectile velocity.

h = Apparent crater depth D_{rim} = Final crater rim crest-to-rim crest diameter $D_{t,\,out}$ = Transient crater diameter $D_{t,\,in}$ = Transient inner crater diameter

D_{out} = Apparent crater diameter D_{in} = Apparent inner crater diameter h_t = Transient crater depth

Uncertainties are estimated reading errors, and for the ratios calculated by error propagation.