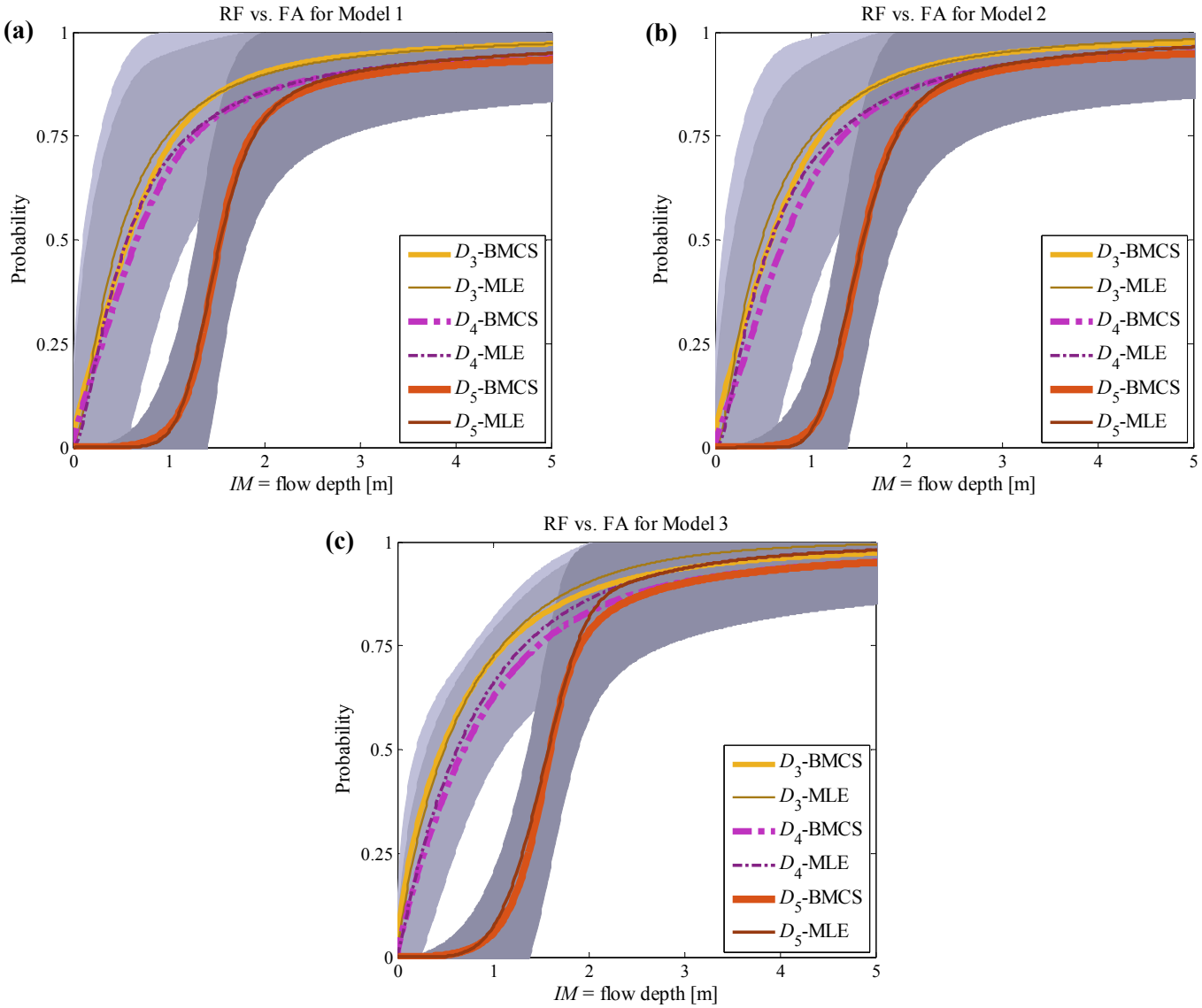
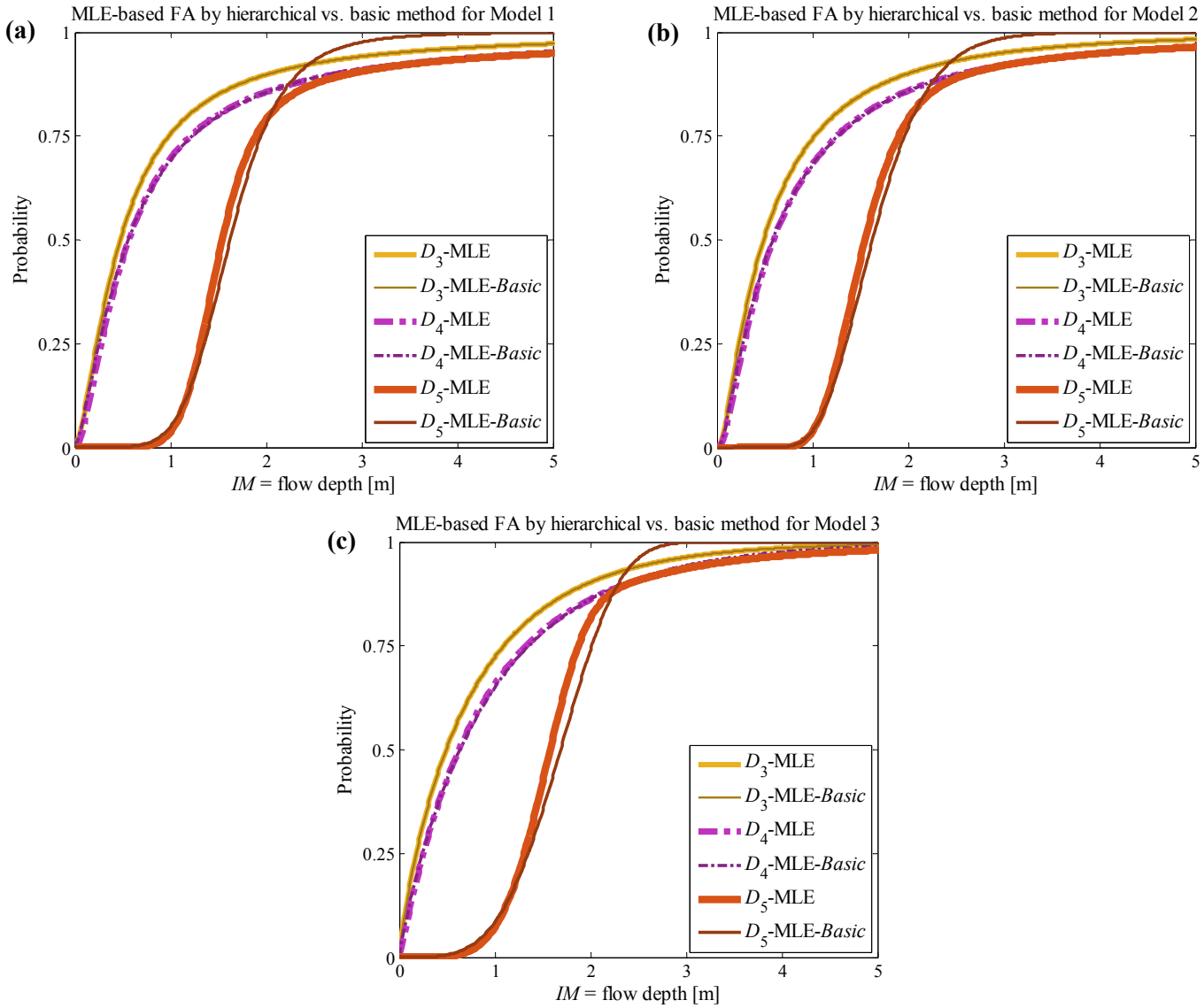
Additional fragility curves: The detailed results

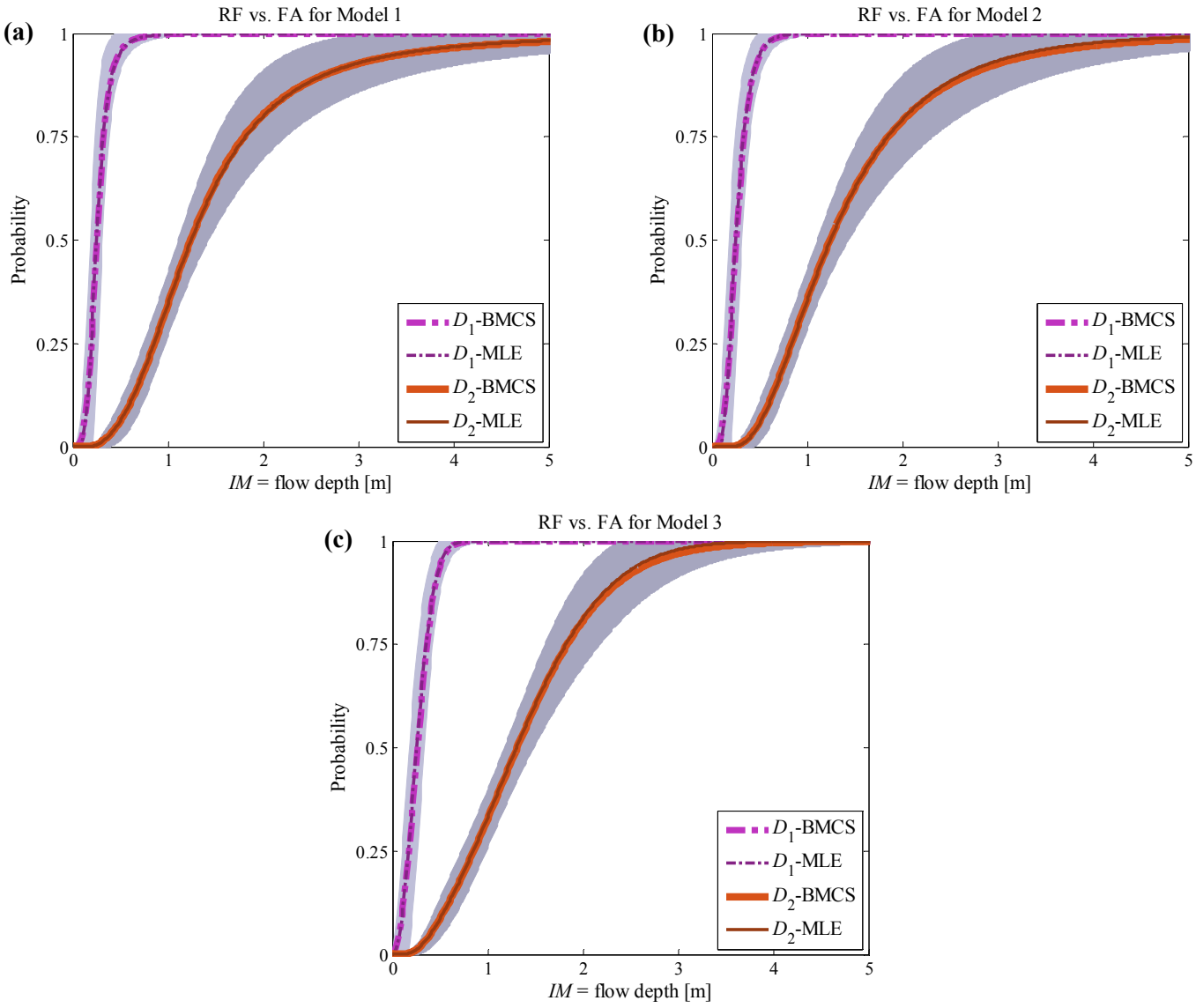
Building Class 2, 2009 South Pacific Tsunami: Timber Residential



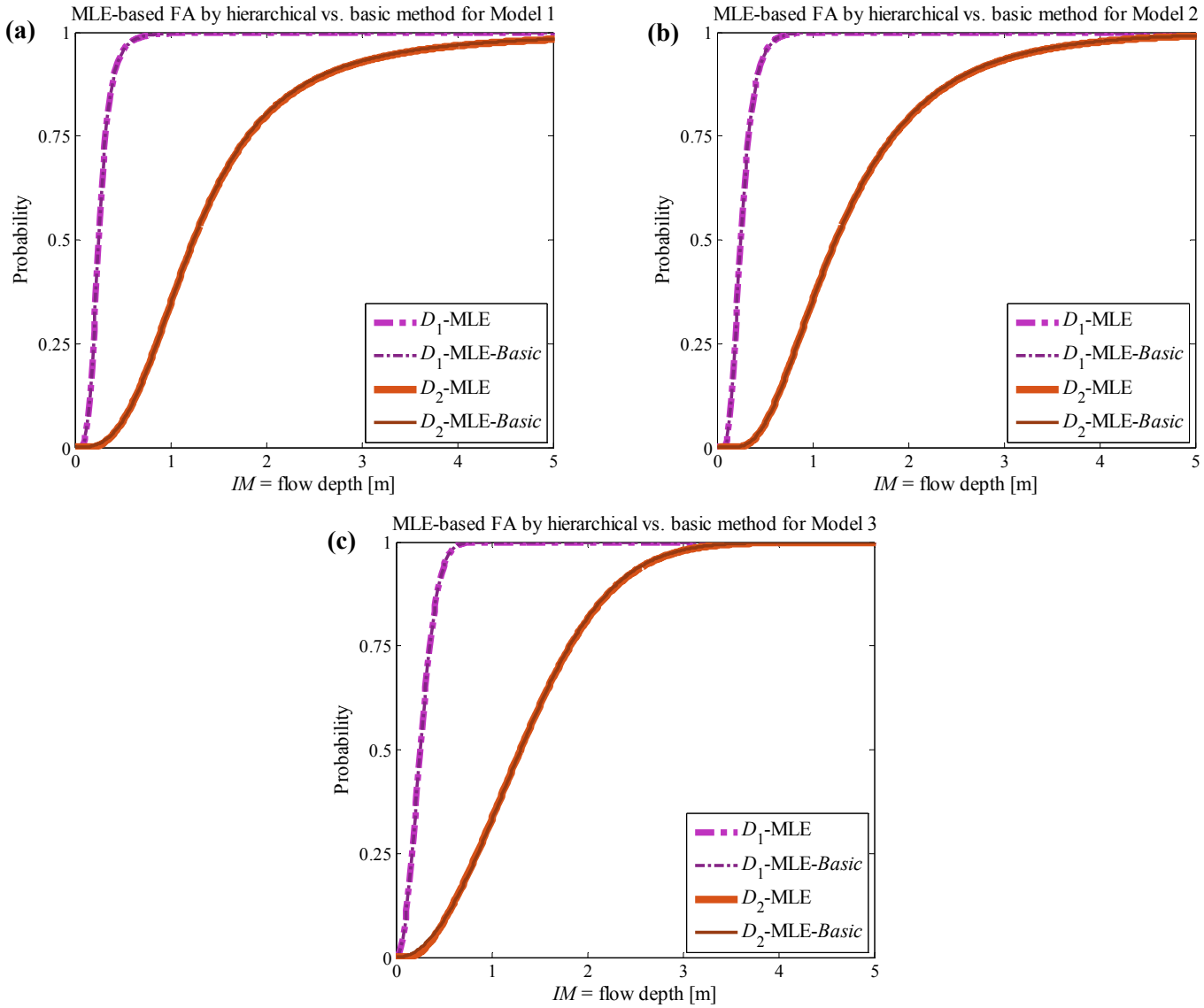
Model Class	*Term* 1: Average Data Fit	*Term* 2: Information Gain	Log-Evidence	Posterior Probability of each model
$\mathbb{M}_1$	-19.3442	5.3210	-24.6631	0.30
$\mathbb{M}_2$	-19.2930	5.0772	-24.3702	0.41
$\mathbb{M}_3$	-18.5401	6.1717	-24.7117	0.29


(a)
MLE-based FA by hierarchical vs. basic method for Model 1
Probability
IM = flow depth [m]
(b)
MLE-based FA by hierarchical vs. basic method for Model 2
Probability
IM = flow depth [m]
(c)
MLE-based FA by hierarchical vs. basic method for Model 3
Probability
IM = flow depth [m]
D3-MLE
D3-MLE-Basic
D4-MLE
D4-MLE-Basic
D5-MLE
D5-MLE-Basic

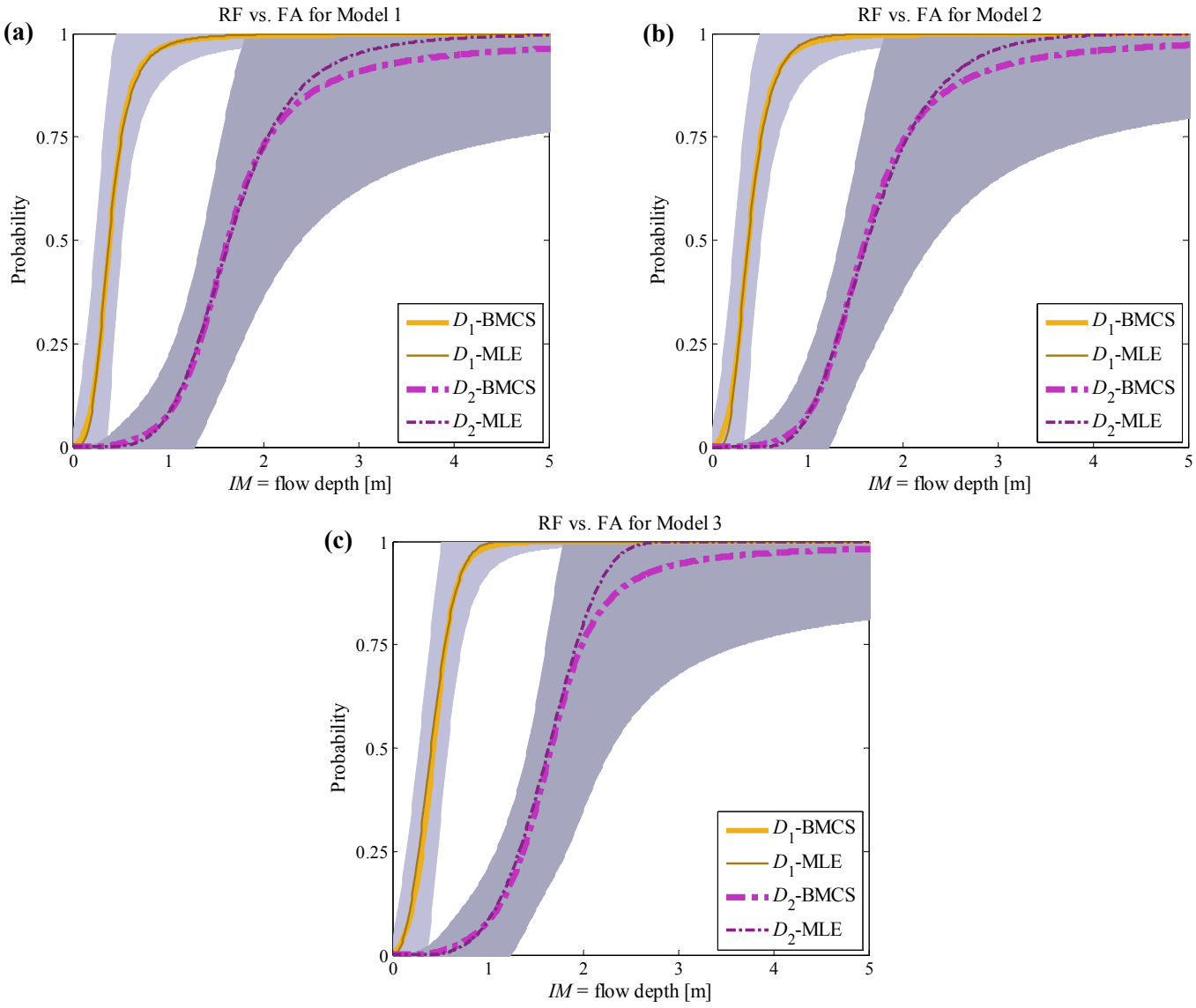
Building Class 1, 2018 Sulawesi Palu Tsunami: Non engineered masonry, unreinforced with clay brick, 1 storey



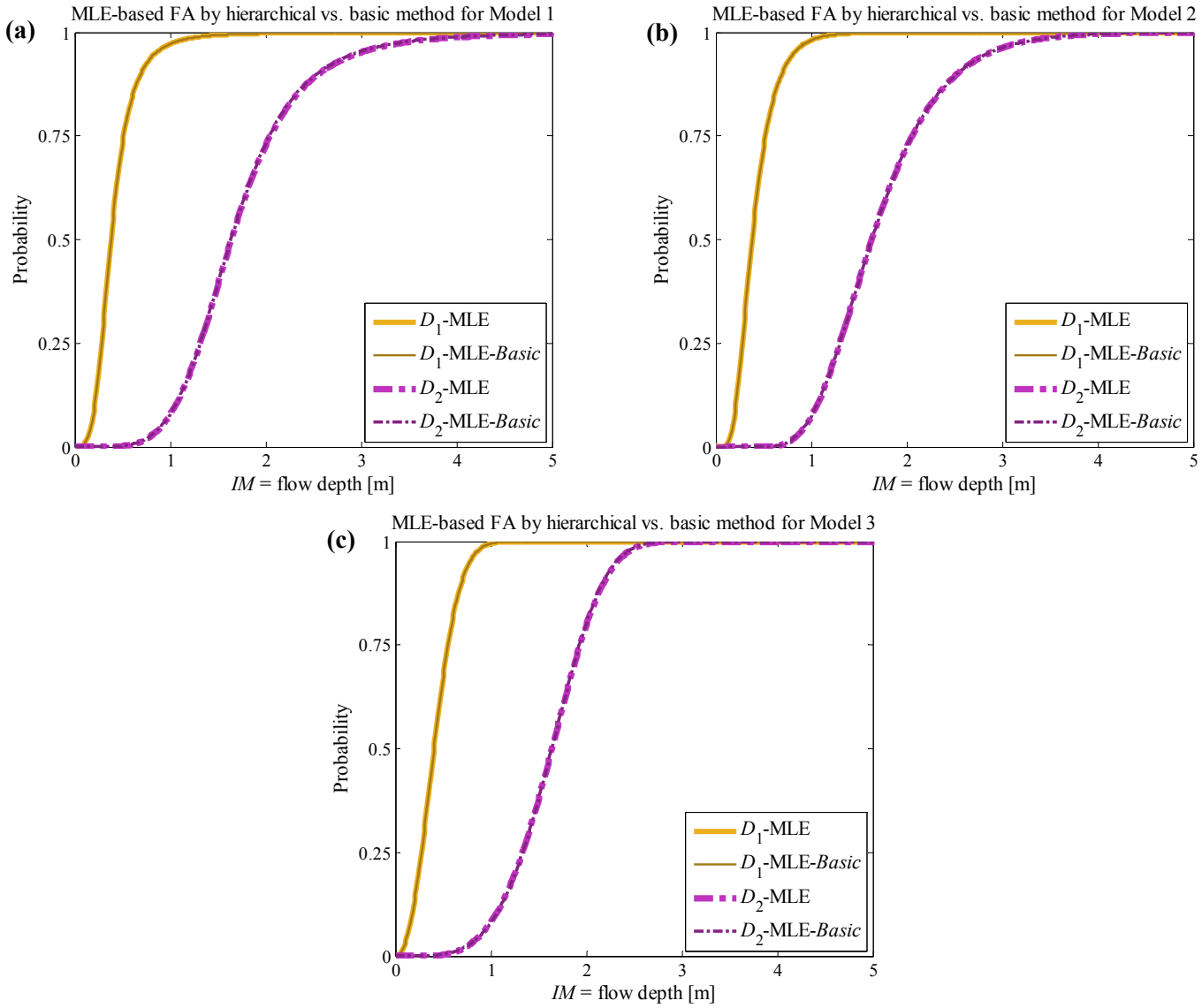
Model Class	*Term* 1: Average Data Fit	*Term* 2: Information Gain	Log-Evidence	Posterior Probability of each model
$\mathbb{M}_1$	-161.8184	7.0014	-168.8198	0.96
$\mathbb{M}_2$	-161.0047	12.0943	-173.0990	0.01
$\mathbb{M}_3$	-161.5005	10.7668	-172.2673	0.03

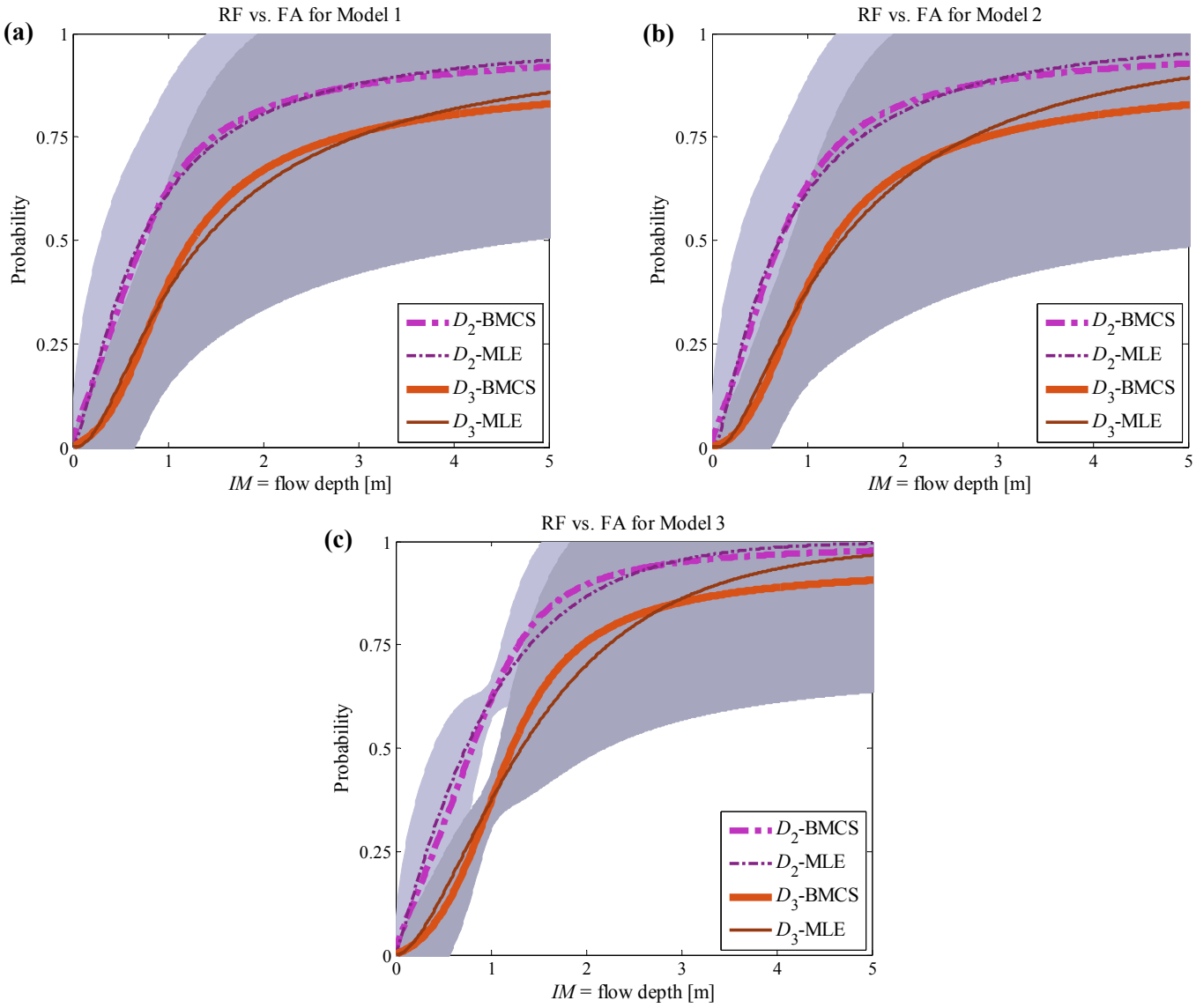

(a)
MLE-based FA by hierarchical vs. basic method for Model 1
Probability
IM = flow depth [m]
D1-MLE
D1-MLE-Basic
D2-MLE
D2-MLE-Basic
(b)
MLE-based FA by hierarchical vs. basic method for Model 2
Probability
IM = flow depth [m]
D1-MLE
D1-MLE-Basic
D2-MLE
D2-MLE-Basic
(c)
MLE-based FA by hierarchical vs. basic method for Model 3
Probability
IM = flow depth [m]
D1-MLE
D1-MLE-Basic
D2-MLE
D2-MLE-Basic

Building Class 2, 2018 Sulawesi Palu tsunami: Non engineered masonry, unreinforced with clay brick, 2 storey

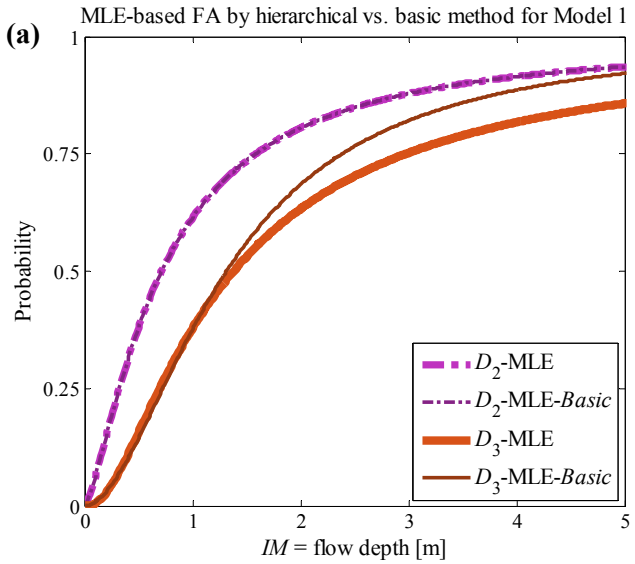


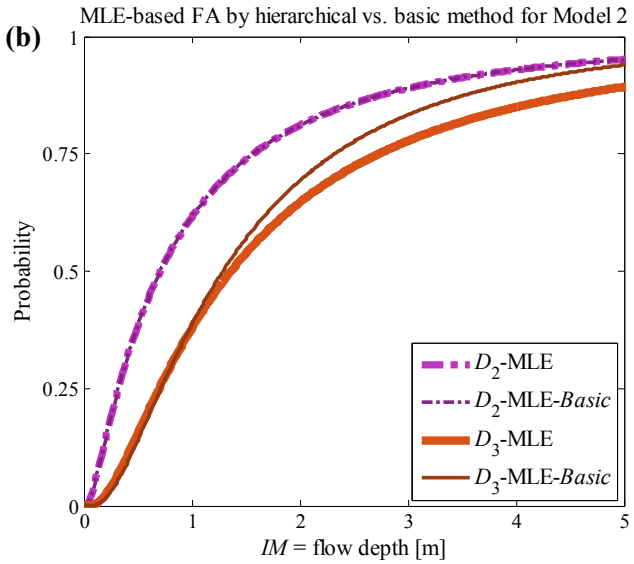
Model Class	*Term* 1: Average Data Fit	*Term* 2: Information Gain	Log-Evidence	Posterior Probability of each model
$\mathbb{M}_1$	-23.0250	4.4357	-27.4606	0.22
$\mathbb{M}_2$	-22.4372	4.8097	-27.2469	0.28
$\mathbb{M}_3$	-22.0454	4.6037	-26.6491	0.50

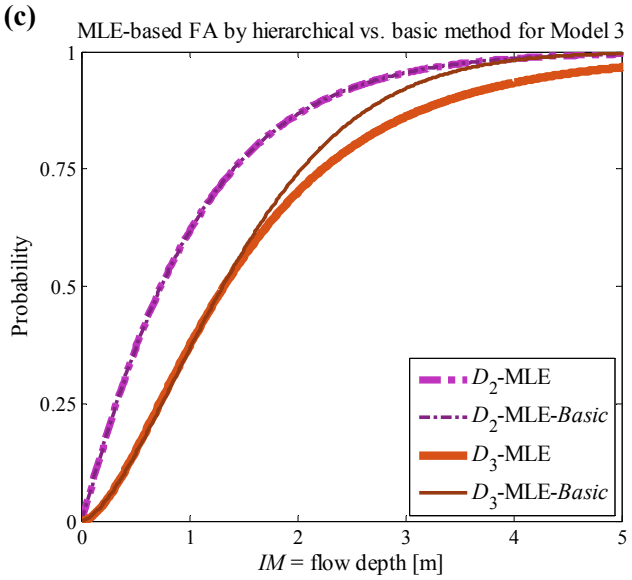

(a)
MLE-based FA by hierarchical vs. basic method for Model 1
Probability
IM = flow depth [m]
D1-MLE
D1-MLE-Basic
D2-MLE
D2-MLE-Basic
(b)
MLE-based FA by hierarchical vs. basic method for Model 2
Probability
IM = flow depth [m]
D1-MLE
D1-MLE-Basic
D2-MLE
D2-MLE-Basic
(c)
MLE-based FA by hierarchical vs. basic method for Model 3
Probability
IM = flow depth [m]
D1-MLE
D1-MLE-Basic
D2-MLE
D2-MLE-Basic



Model Class	*Term* 1: Average Data Fit	*Term* 2: Information Gain	Log-Evidence	Posterior Probability of each model
$\mathbb{M}_1$	-14.5461	1.1062	-15.6523	0.23
$\mathbb{M}_2$	-14.5717	1.1770	-15.7487	0.21
$\mathbb{M}_3$	-13.8229	0.9391	-14.7619	0.56


(a)
MLE-based FA by hierarchical vs. basic method for Model 1
Probability
IM = flow depth [m]
D2-MLE
D2-MLE-Basic
D3-MLE
D3-MLE-Basic


(b)
MLE-based FA by hierarchical vs. basic method for Model 2
Probability
IM = flow depth [m]
D2-MLE
D2-MLE-Basic
D3-MLE
D3-MLE-Basic


(c)
MLE-based FA by hierarchical vs. basic method for Model 3
Probability
IM = flow depth [m]
D2-MLE
D2-MLE-Basic
D3-MLE
D3-MLE-Basic