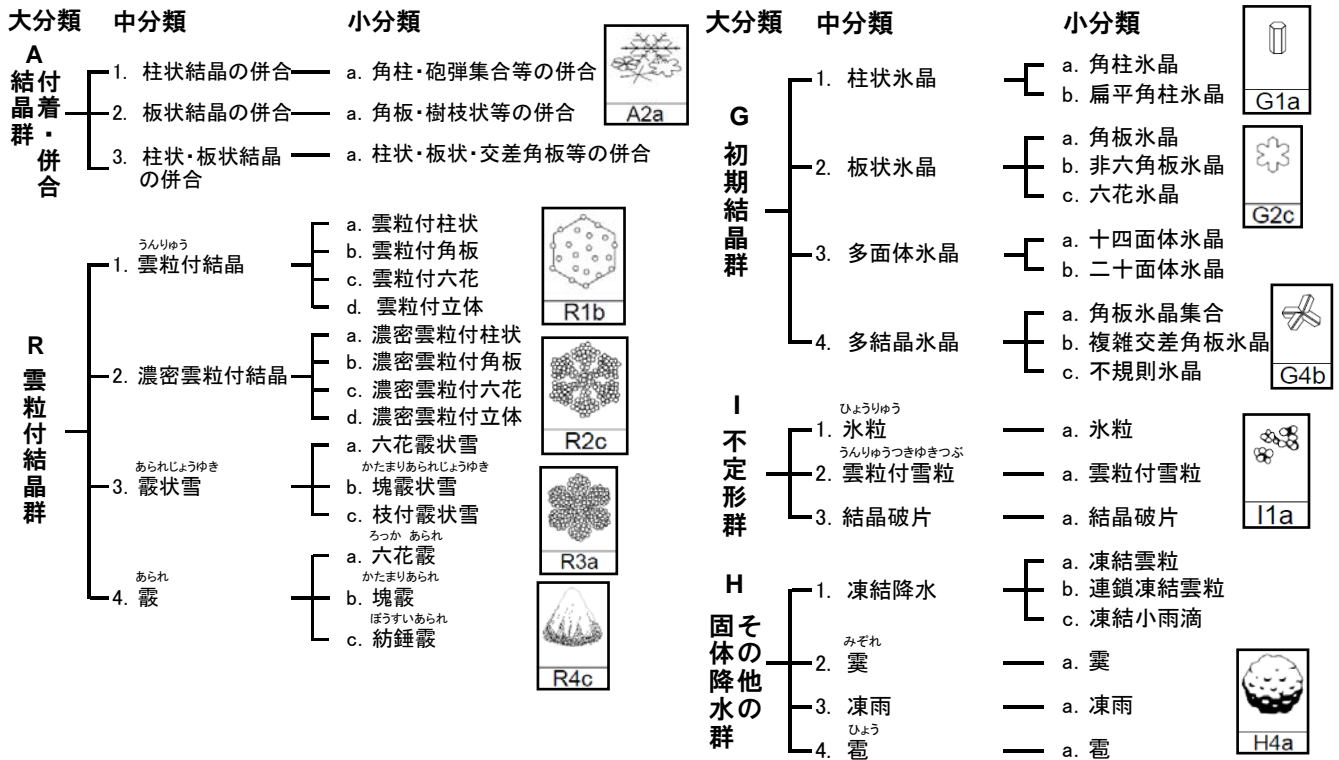


雪結晶のグローバル分類表 (菊地ら(2012)より)

菊地ら(2012)は、世界各地の観測をもとに、雪結晶の「グローバル分類」を作成した。分類は、8大分類、39中分類、121小分類からなる。観測地点は、これまでの分類より拡大して、日本、カナダ、アラスカ、ノルウェー、スバルバル、スウェーデン、フィンランド、グリーンランド、南極:昭和基地、ドーム基地、マクマード基地、極点基地など、北半球から南極まで広範囲にわたる。

表. 雪結晶のグローバル分類(菊地ら,2012). 表中に代表的結晶の模式図を付す.

大分類	中分類	小分類	大分類	中分類	小分類
C 柱状結晶群	1. 針状結晶 <small>しんじょう</small>	<ul style="list-style-type: none"> a. 針 b. 束状針 c. 針集合 	CP 柱状・板状結晶群	1. 鼓状結晶	<ul style="list-style-type: none"> a. 角板鼓 b. 樹枝鼓 c. 多重鼓
	2. 鞘状結晶 <small>さやじょう</small>	<ul style="list-style-type: none"> a. 鞘 b. 束状鞘 c. 鞘集合 		2. 砲弾・板状結晶	<ul style="list-style-type: none"> a. 角板付砲弾 b. 樹枝付砲弾 c. 角板付砲弾集合 d. 樹枝付砲弾集合
	3. 角柱状結晶	<ul style="list-style-type: none"> a. 角柱 b. 骸晶角柱 c. 巻込骸晶角柱 d. 細長角柱 e. 角柱集合 		3. 柱状・板状結晶	<ul style="list-style-type: none"> a. 針付六花 b. 角柱付六花 c. 巻込骸晶付六花 d. 針付角板 e. 角柱付角板 f. 巻込骸晶付角板
	4. 砲弾状結晶	<ul style="list-style-type: none"> a. 角錐 b. 砲弾 c. 骸晶砲弾 d. 砲弾集合 		4. 交差角板状結晶	<ul style="list-style-type: none"> a. 交差角板 b. 連鎖交差角板 c. 放射交差角板
P 板状結晶群	1. 角板状結晶	<ul style="list-style-type: none"> a. 角板 b. 厚角板 c. 骸晶角板 	5. 柱状・板状の不規則結晶	<ul style="list-style-type: none"> a. 角柱・砲弾・交差角板の不規則 	
	2. 扇状結晶 <small>おうぎじょう</small>	<ul style="list-style-type: none"> a. 扇六花 b. 広幅六花 	6. 骸晶状結晶	<ul style="list-style-type: none"> a. 骸晶四角形 b. 多結晶骸晶四角形 c. 多重骸晶四角形 d. 複雑骸晶多角形 e. 骸晶角柱・交差角板 f. 骸晶砲弾・四角形 g. 多角形骸晶集合 h. 複雑柱面構造 	
	3. 樹枝状結晶	<ul style="list-style-type: none"> a. 星六花 b. 樹枝六花 c. 羊歯六花 	7. 御幣状結晶 <small>ごへい</small>	<ul style="list-style-type: none"> a. 御幣 b. 砲弾付御幣 c. 交差角板付御幣 d. 角柱御幣 e. 対称御幣 f. 水柱御幣 g. 多重菱形御幣 	
	4. 複合板状結晶	<ul style="list-style-type: none"> a. 角板付六花 b. 扇付六花 c. 角板付樹枝 d. 扇付樹枝 e. 枝付角板 f. 扇付角板 g. 樹枝付角板 	8. 矛先状結晶 <small>ほこさき</small>	<ul style="list-style-type: none"> a. 矛先 b. 砲弾集合付矛先 c. 交差角板付矛先 d. 多重矛先 	
	5. 分離・多重六花状結晶	<ul style="list-style-type: none"> a. 二花 b. 三花 c. 四花 d. 十二花 e. 十八花 f. 二十四花 	9. 鷗状結晶 <small>かもめ</small>	<ul style="list-style-type: none"> a. 内側角板付鷗 b. 外側角板付鷗 c. 両側角板付鷗 d. 内側鋸歯付鷗 e. 外側鋸歯付鷗 	
	6. 立体状結晶	<ul style="list-style-type: none"> a. 立体扇付角板 b. 立体樹枝付角板 c. 立体扇付樹枝 d. 立体樹枝付樹枝 			
	7. 放射状結晶	<ul style="list-style-type: none"> a. 放射角板 b. 放射樹枝 			
	8. 非対称板状結晶	<ul style="list-style-type: none"> a. 非対称板状 b. 複雑多重角板 			



※記号の由来: C: Column(柱状), P: Plate(板状), A: Aggregation(集合), R: Rime(雲粒), G: Germ(胚, 芽), I: Irregular(不規則), H: Other solid hydrometeor group(その他の固体降水群)


























































































































																	
C1a	C1b	C1c	C2a	C2b	C2c	C3a	C3b	C3c	CP6c	CP6d	CP6e	CP6f	CP6g	CP6h	CP7a	CP7b	CP7c
																	
C3d	C3e	C4a	C4b	C4c	C4d	P1a	P1b	P1c	CP7d	CP7e	CP7f	CP7g	CP8a	CP8b	CP8c	CP8d	CP9a
																	
P2a	P2b	P3a	P3b	P3c	P4a	P4b	P4c	P4d	CP9b	CP9c	CP9d	CP9e	A1a	A2a	A3a	R1a	R1b
																	
P4e	P4f	P4g	P5a	P5b	P5c	P5d	P5e	P5f	R1c	R1d	R2a	R2b	R2c	R2d	R3a	R3b	R3c
																	
P6a	P6b	P6c	P6d	P7a	P7b	P8a	P8b	CP1a	R4a	R4b	R4c	G1a	G1b	G2a	G2b	G2c	G3a
																	
CP1b	CP1c	CP2a	CP2b	CP2c	CP2d	CP3a	CP3b	CP3c	G3b	G4a	G4b	G4c	I1a	I2a	I3a	H1a	H1b
																	
CP3d	CP3e	CP3f	CP4a	CP4b	CP4c	CP5a	CP6a	CP6b	H1c	H2a	H3a	H4a					

図. 雪結晶グローバル分類の模式図と分類記号 (Kikuchi *et al.*, 2013)