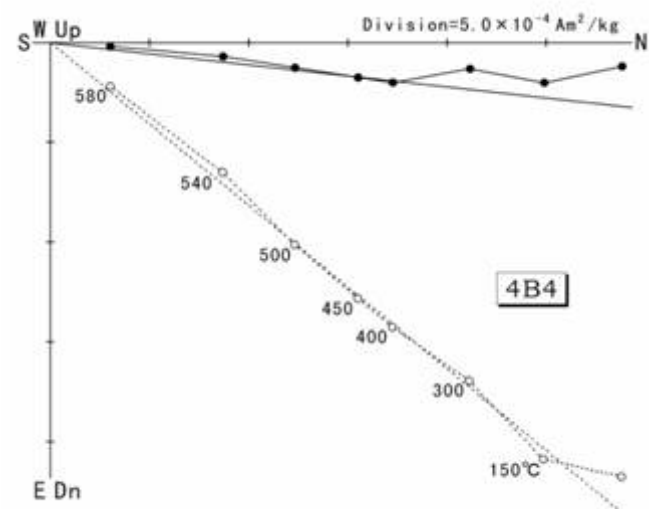
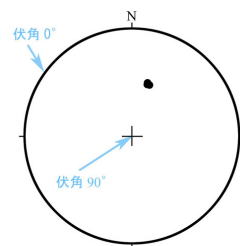
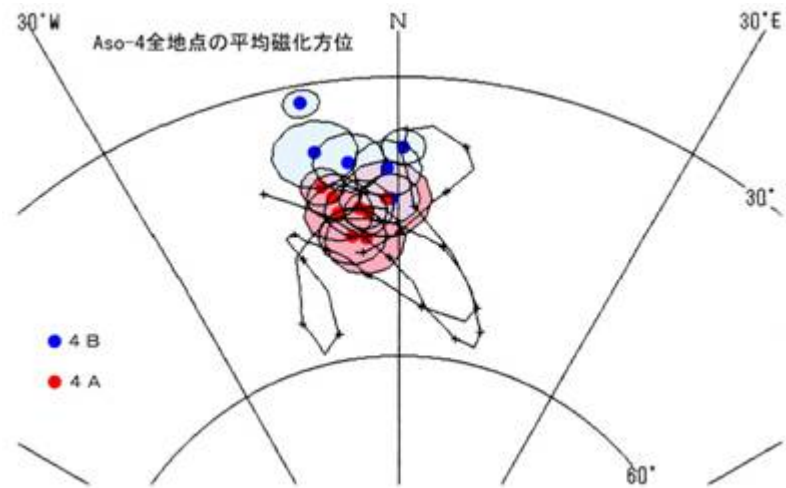
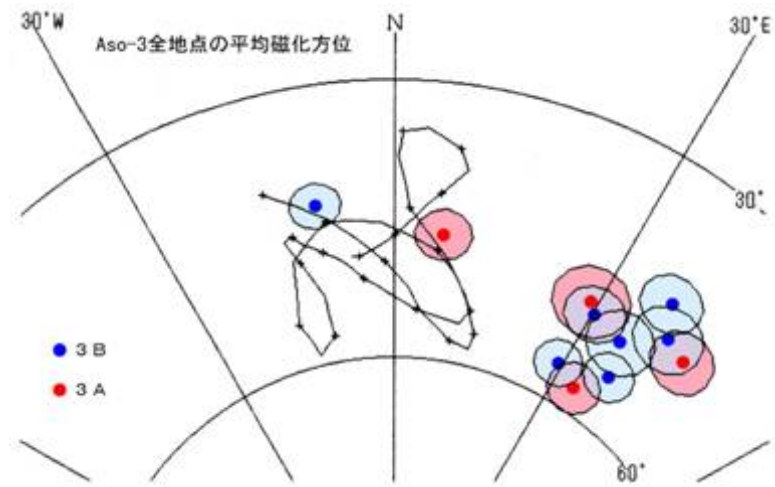


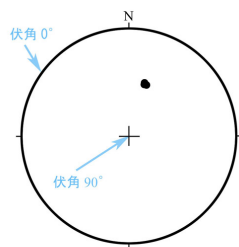
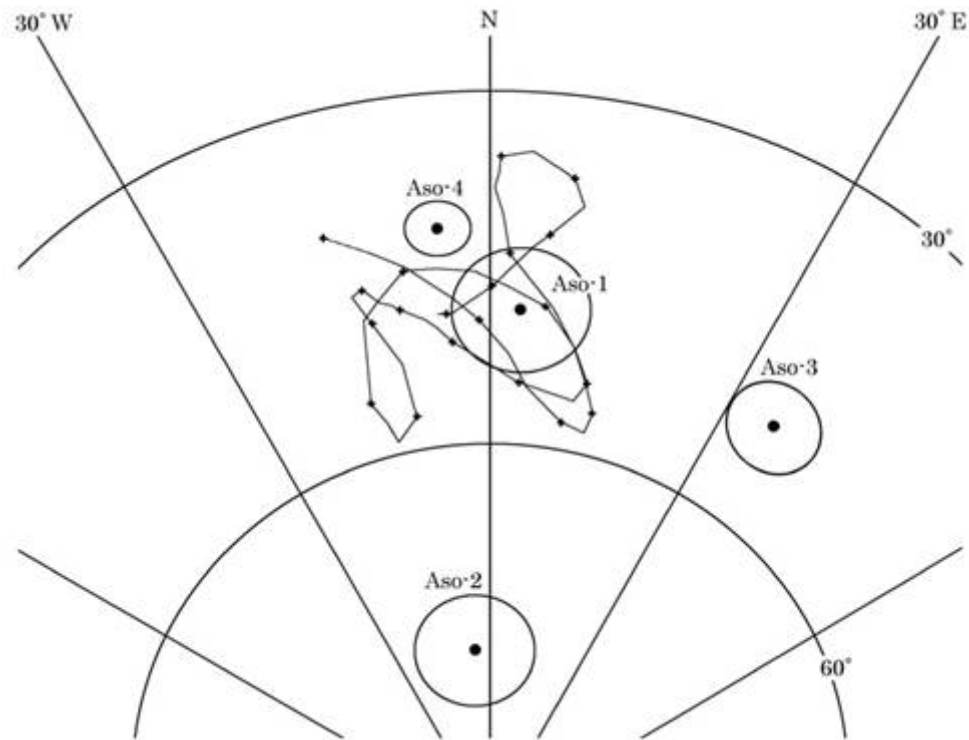
溶結凝灰岩（Aso-4A, Aso-4B）の  
段階交流消磁例



溶結凝灰岩（Aso-4B）の段階熱消磁例



シュミット・ネット図



シュミット・ネット図

Aso-1からAso-4までの各ユニット平均磁化方位

Kyushu region					Chugoku region
Kitakyushu district (Gohara <i>et al.</i> , 1964)	Kumamoto district (Watanabe, 1978)	Miyanoharu district (Kamata, 1997)	Taketa district (Ono <i>et al.</i> , 1977)	Beppu and Inukai districts (Hoshizumi <i>et al.</i> , 1988; Teraoka <i>et al.</i> , 1992)	Yamaguchi Prefecture (Kameyama, 1968)
	Kunomine scoria-flow	Aso-4B (welded tuffs)	Aso-4B (welded tuffs) ●		
Tosu loam	Tosu orange pumice-flow	Aso-4T (pumice-flow)		Aso-4T (pumice-flow) ●	PYU ●
	Benri scoria-flow				
	Motoigi grey pumice-flow				
Yame clay ●	Yame pumice-flow	Aso-4A (welded tuffs)	Aso-4A (welded tuffs) ●	Aso-4A (non-welded) ●	PYL ●
	Hatobira pumice-flow				
	Koei ash-flow				
	Oyatsu white pumice-flow				

PYU: Upper part of the Ube volcanic ash

PYL: Lower part of the Ube volcanic ash

## 阿蘇4テフラのサブユニット

地域によって、分け方が異なる

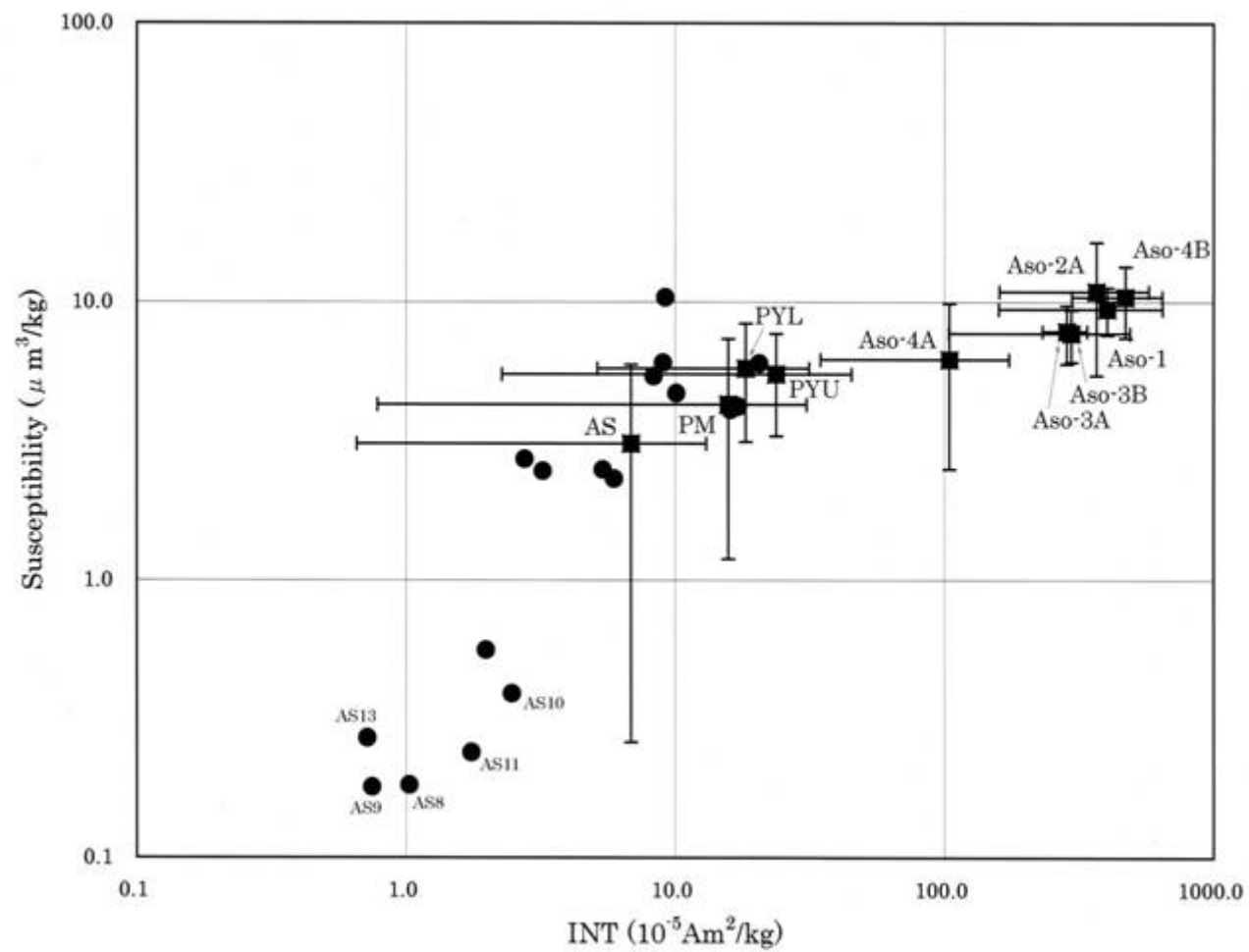
# 実験方法

- 段階交流消磁実験 （全ての試料）
- 段階熱消磁実験 （Aso-4AとAso-4Bの溶結凝灰岩試料のみ）
- IRM獲得実験と三成分IRMの熱消磁実験

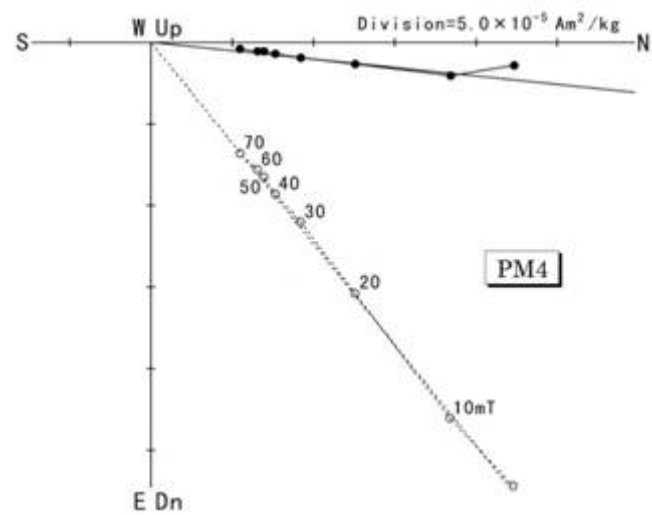
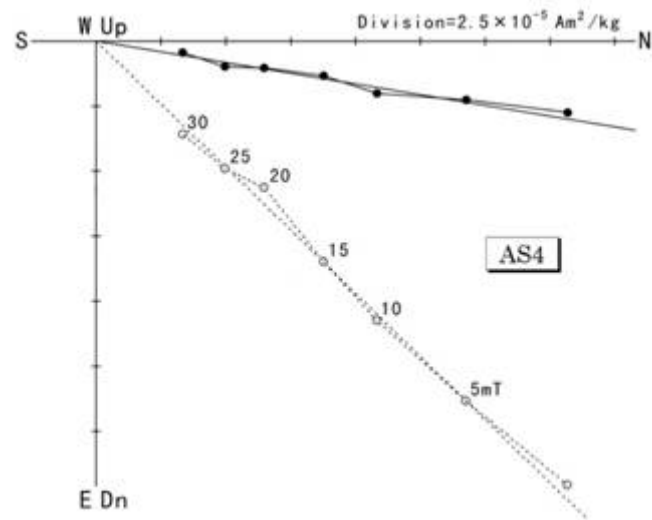
火山灰試料中の強磁性鉱物を調べる。

2つの実験を組み合わせることにより，中に含まれる強磁性鉱物を推定できる。

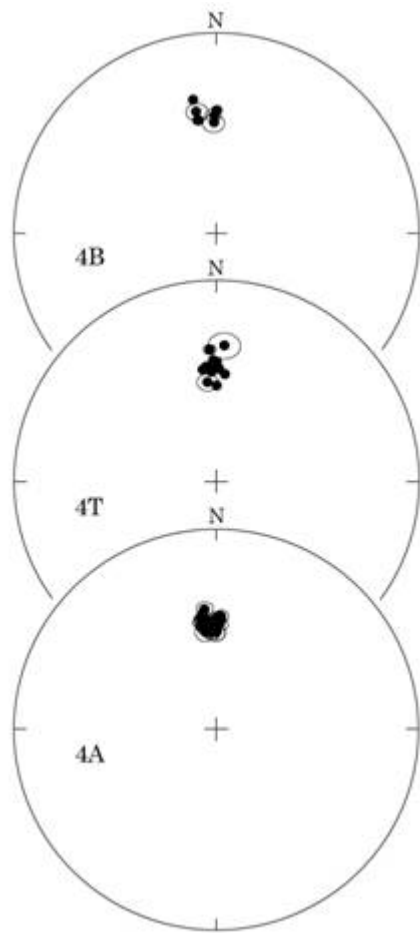
- 帯磁率の測定 （すべての試料）



磁化強度と帯磁率のサブユニット平均



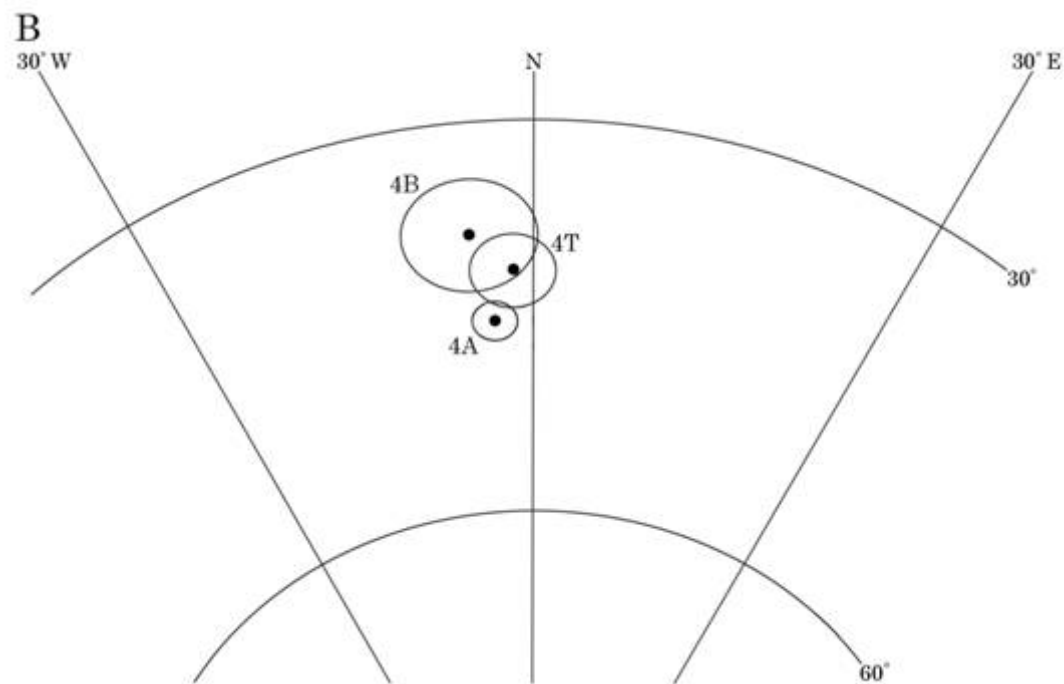
降下火山灰（AS），宮崎の火砕流堆積物（PM）の  
段階交流消磁例



3つの層準の磁化方位

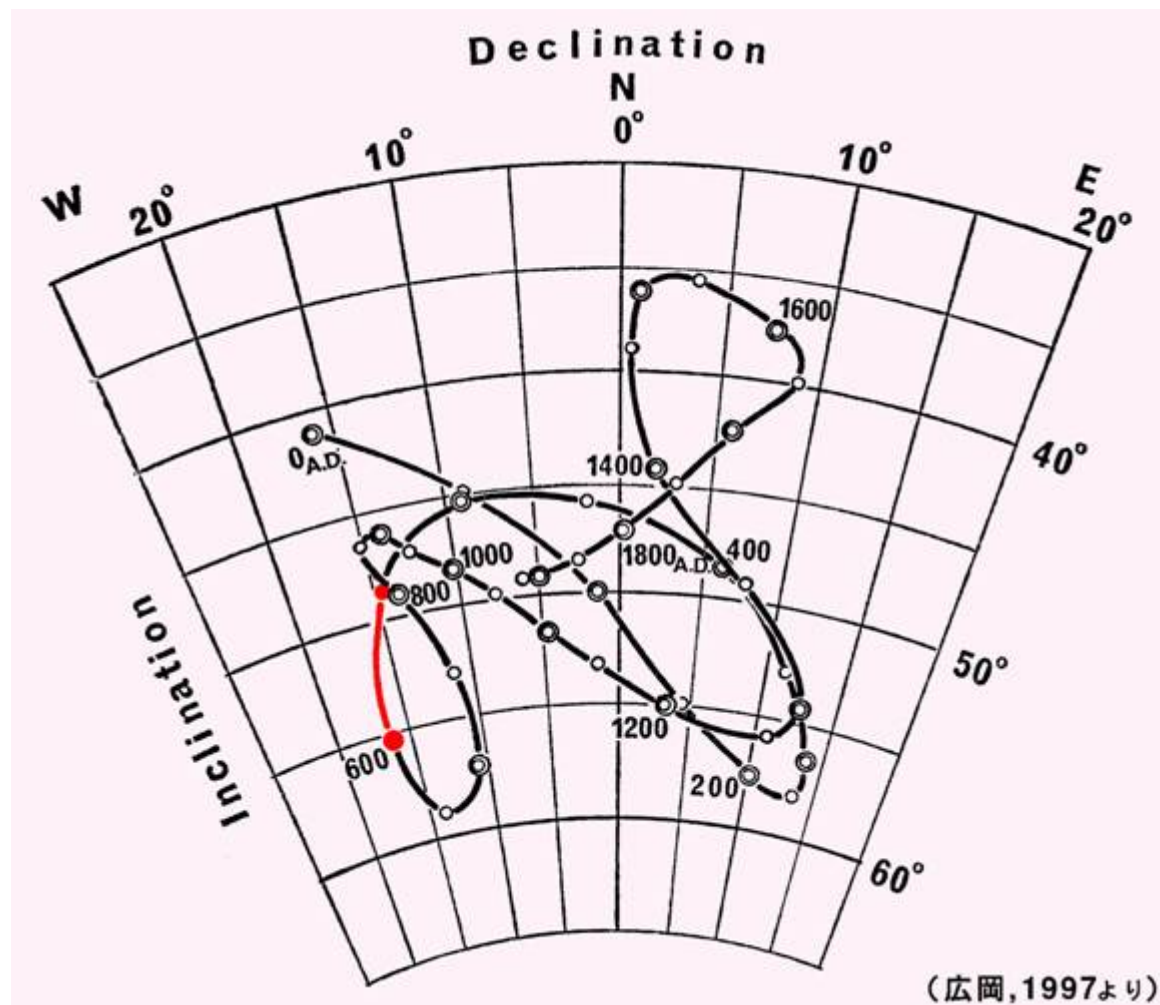
Kyushu region					Chugoku region
Kitakyushu district (Gohara <i>et al.</i> , 1964)	Kumamoto district (Watanabe, 1978)	MiyanoHaru district (Kamata, 1997)	Taketa district (Ono <i>et al.</i> , 1977)	Beppu and Inukai districts (Hoshizumi <i>et al.</i> , 1988; Teraoka <i>et al.</i> , 1992)	Yamaguchi Prefecture (Kameyama, 1968)
	Kunomine scoria-flow	Aso-4B (welded tuffs)	Aso-4B (welded tuffs) ●		
Tosu loam	Tosu orange pumice-flow	Aso-4T (pumice-flow)		Aso-4T (pumice-flow) ●	PYU ●
	Benri scoria-flow				
Yame clay ●	Motoigi grey pumice-flow				
	Yame pumice-flow	Aso-4A (welded tuffs)	Aso-4A (welded tuffs) ●	Aso-4A (non-welded) ●	PYL ●
	Hatobira pumice-flow				
	Koei ash-flow				
	Oyatsu white pumice-flow				

PYU: Upper part of the Ube volcanic ash  
PYL: Lower part of the Ube volcanic ash



3つの層準の平均磁化方位



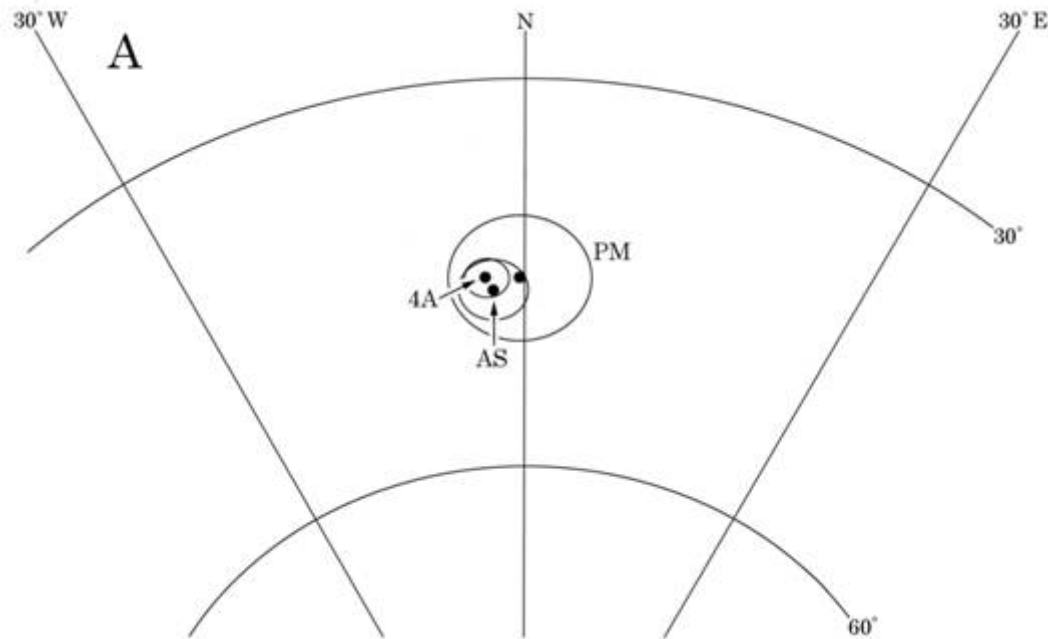


西南日本における過去2000年間の永年変化曲線

4B層準  
4T層準  
4A層準

Kyushu region					Chugoku region
Kitakyushu district (Gohara <i>et al.</i> , 1964)	Kumamoto district (Watanabe, 1978)	Miyanoharu district (Kamata, 1997)	Taketa district (Ono <i>et al.</i> , 1977)	Beppu and Inukai districts (Hoshizumi <i>et al.</i> , 1988; Teraoka <i>et al.</i> , 1992)	Yamaguchi Prefecture (Kameyama, 1968)
	Kunomine scoria-flow	Aso-4B (welded tuffs)	Aso-4B (welded tuffs) ●		
Tosu loam	Tosu orange pumice-flow Benri scoria-flow Motoigi grey pumice-flow	Aso-4T (pumice-flow)		Aso-4T (pumice-flow) ●	PYU ●
Yame clay ●	Yame pumice-flow Hatobira pumice-flow Koei ash-flow Oyatsu white pumice-flow	Aso-4A (welded tuffs)	Aso-4A (welded tuffs) ●	Aso-4A (non-welded) ●	PYL ●

PYU: Upper part of the Ube volcanic ash  
PYL: Lower part of the Ube volcanic ash



4A層準，降下火山灰（AS）および宮崎県の火砕流堆積物（PM）の平均磁化方位  
すべて基準点における偏角・伏角に補正してある。