



LoveReading

**YOU LOVED YOUR LAST BOOK...
BUT WHAT ARE YOU GOING TO READ NEXT?**

Using our unique guidance tools, **LoveReading** will help you find new books to keep you inspired and entertained.

Opening Extract from...

A CLOUD A DAY

Written by **Gavin Pretor-Pinney**

Published By **Batsford Ltd,**
imprint of Pavilion Books

All text is Copyright © of the author

This Opening Extract is brought to you by
LoveReading. Please print off and read at your leisure.

This book is dedicated to all the members of the Cloud Appreciation Society.

First published in the United Kingdom in 2019 by
Batsford
43 Great Ormond Street
London
WC1N 3HZ

An imprint of Pavilion Books Company Ltd

Copyright © Pavilion Books Company Ltd 2019
Text copyright © Gavin Pretor-Pinney 2019

All rights reserved. No part of this publication may be copied, displayed, extracted, reproduced, utilised, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical or otherwise including but not limited to photocopying, recording, or scanning without the prior written permission of the publishers.

ISBN 978-1-84994-578-3

A CIP catalogue record for this book is available from the British Library.

10 9 8 7 6 5 4 3 2 1

Reproduction by Mission Productions, Hong Kong
Printed and bound by [TO COME]

This book can be ordered direct from the publisher at www.pavilionbooks.com

Page 2: Fluctus wave formations, also known as Kelvin-Helmholtz clouds, forming in fog spotted by Pat Cooper over Bridgnorth, Shropshire, England.

Contents

Introduction 6

The clouds 14

Picture credits 360

Index 363

100 223	60 135	65 115 244	31 135 266-7	92 129
Cumulus LOW	Stratocumulus LOW	Stratus LOW	Alto cumulus MID-LEVEL	Altostratus MID-LEVEL
213 258 281	73 135 154	288	95 120	260 315
Cirrus HIGH	Cirrocumulus HIGH	Cirrostratus HIGH	Cumulonimbus MULTI-LEVEL	Nimbostratus MULTI-LEVEL

The 10 main types

KNOWN AS GENERA

	169			
	219	66		117
	232	252	110	172
	Lenticularis	Fibratus	Castellanus	Volutus
16	66			
67	183	33	78	121
352	273	342	290	213
Fractus	Undulatus	Radiatus	Lacunosus	Uncinus

Species and varieties

The Cloud Types

(SELECTED HIGHLIGHTS)

Other clouds

Contrail	Distrail	Fog	Diamond dust
106	146	184	
148	344	196	72
330		294	322
Cap cloud	Noctilucent	Nacreous	Horseshoe vortex
86	126	39	
123	167	335	55
	241		295

Supplementary features and accessory clouds

Mamma	Arcus	Fluctus	Virga	Cavum	Tuba	Murus	Asperitas	Pileus
34	36	44	69	198	255	215	38	21
171	293	249	318	344		264	104-5	112
332		359					276	

A Cloud A Day

IT IS EASY TO FORGET that you live in the sky – not beneath it, but within it. Our atmosphere is an enormous ocean, and you inhabit it. This ocean is made up of the gases of air rather than liquid water, but it is as much of an ocean as the Atlantic or the Pacific. You may think of yourself as living on the ground, but all that means is that you are a creature of the ocean bed. You still inhabit the atmosphere like a sea creature does the water.

‘It is a strange thing how little in general people know about the sky,’ wrote the Victorian art critic John Ruskin (see page 40). Strange indeed, given how important it is to us. One reason for this might be that the sky is always there. It is the ever-present backdrop to our lives, and anything as ubiquitous as this is easily missed because it hides in plain sight.

We at the Cloud Appreciation Society believe that you would do well to pay more attention to the sky. Having your head in the clouds, even for just a few moments each day, is good for your mind, good for your body and good for your soul. This book aims to show you why.

‘The first step to wisdom’, as the biologist E.O. Wilson noted (see page 161), ‘is getting things by their right names.’ Learning the names for a few of the different cloud types is a good way to start a new relationship with the sky. Every cloud is unique, but we humans love to put things into groups and so we gather their chaotic forms according to ten main types, known as cloud genera. You might have learned some of them at school – names like Cumulus, Stratus and Cirrus. There are also many sub-categories of cloud. These cloud species and varieties and cloud features crop up here and there among the main types. Some of them are rare and fleeting, and you have to really pay attention to the sky to be able to spot them. To start getting used to which cloud is which, you can navigate your way through the notable examples using the **Cloud Types** map.



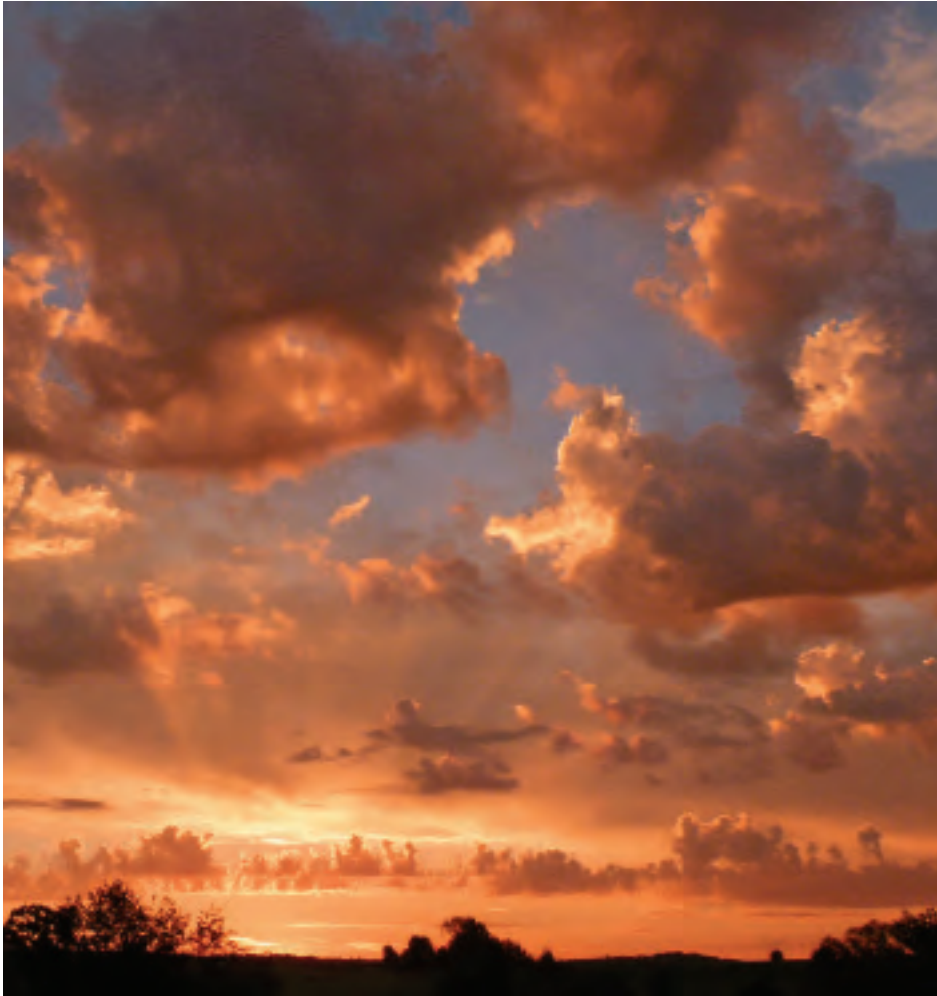
A fragment of a rainbow, spotted in a shower over the Sierra Almijara mountains, Andalucia, Spain by Rodney Jones (Member 15,695).

SOMETIMES A SHOWER just doesn't cover enough of the sky to form a proper rainbow. The colour in this evening downpour might better be described as a 'rainsquare'.



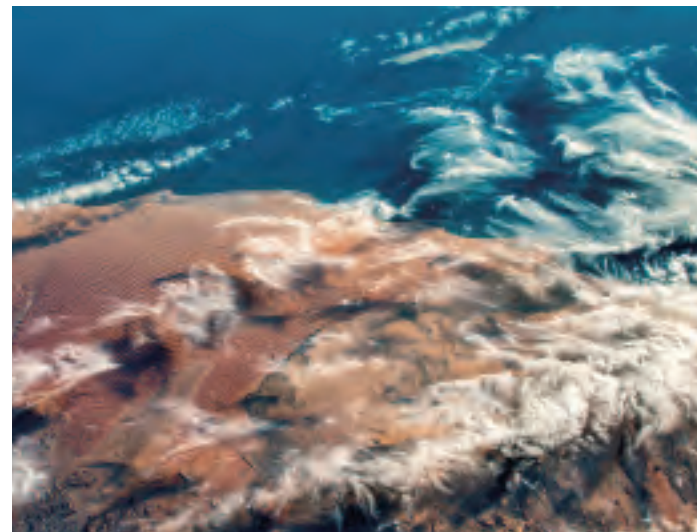
Altostratus stratiformis perlucidus, spotted over Dorset, England, by Poppy Jenkinson (Member 39,335).

HERE IS HOW THE NAME FOR A CLOUD like this *Altostratus stratiformis perlucidus* is constructed. 'Altostratus' is the genus. A genus is one of ten main types into which most clouds can be classified. The *Altostratus* genus refers to a clumpy cloud, up at the mid-level of the troposphere. 'Stratiformis' is the species. It means that the layer of clumps extends over a large region of the sky. 'Perlucidus' is the variety. It refers to when the clumps have gaps between them, rather than being joined into a more continuous layer. In other words, it means 'those nice little puffy ones that spread across the sky', but in Latin, to make it sound official.



A mixed sky spotted over Colombey-les-Choiseul, Haute Marne, France, by Karin Enser (Member 43,050).

THIS BUSY SKY would be described as Stratocumulus castellanus and Cirrostratus that might have developed at the top of a distant Cumulonimbus. Thrown in for good measure are also the optical effects known as crepuscular rays. The Romantic poet Percy Bysshe Shelley put it another way in his 1813 poem *Queen Mab* as ‘far clouds of feathery gold / Shaded with deepest purple, gleam / Like islands on a dark blue sea’.

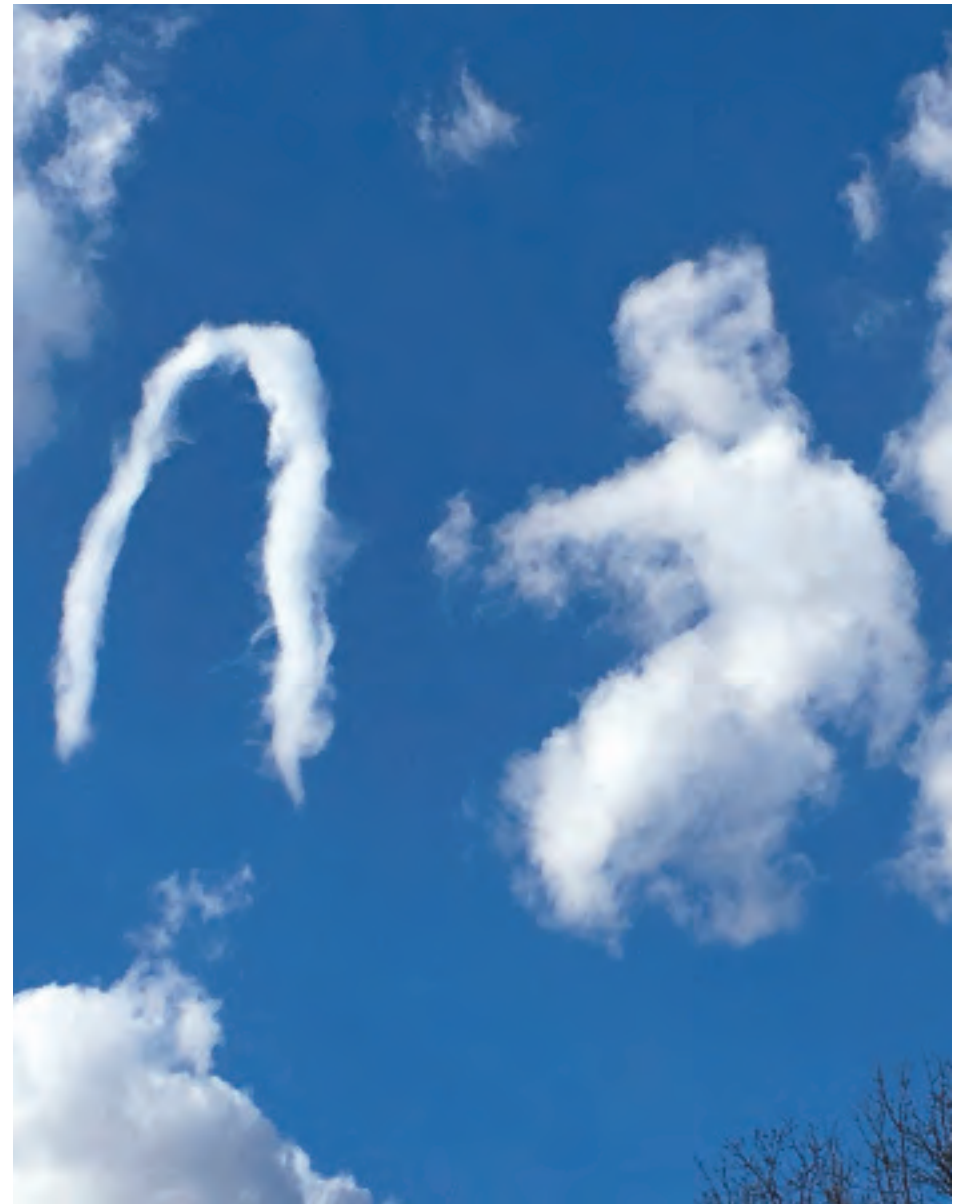


Above: A lightning man caught tip-toeing across the Bahamas, spotted by Michael Sharp (Member 19,947). Left: Delicate bands of Cirrus sweep like brushstrokes on a canvas, spotted over the west coast of southern Africa by Commander Alexander Gerst aboard the International Space Station.



A volcano shroud cloud, spotted by Chito L. Aguilar from his balcony in Daraga, Albay, the Philippines.

SHROUDED IN A HUGE CAP cloud with a lenticularis above and a layer of Stratocumulus below, the Mayon Volcano in the Philippines is clearly not up for facing the tourists today.



Throwing a ball through a hoop over Paterson, New Jersey, US, spotted by Edward Hannen. Also known as a horseshoe vortex cloud and Cumulus humilis.



Alto cumulus castellanus, spotted over north-west Oregon, US by Sallie Tisdale (Member 42,126).

THE CLOUD SPECIES known as castellanus is not the most distinctive of formations. In fact, it is easily missed, even by cloudspotters. But castellanus clouds like these spotted by Sallie Tisdale over Oregon, US are worth looking out for because they often forecast storms later in the day. The cloud's turrets indicate that the atmosphere up at the cloud level is unstable. When the crenellations of castellanus appear in Alto cumulus clouds like these, they indicate that the unstable air is up at the mid-level of the clouds. This is significant. It suggests that any Cumulus clouds building from below as the day progresses will, upon reaching the unstable air, just keep growing. They'll likely continue to develop taller and taller until they've matured into Cumulonimbus storm clouds. 'The sky was active all day,' Sallie confirmed, 'and that night we did indeed have thunderstorms.'

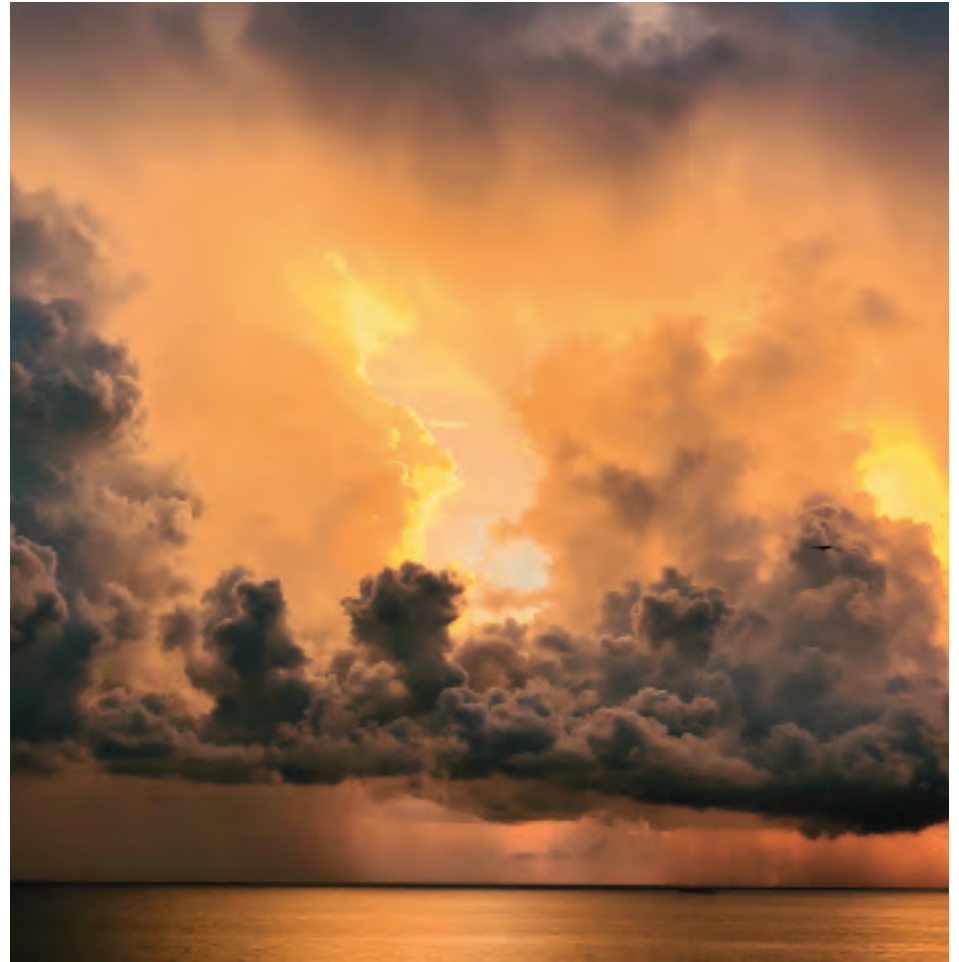


Alto cumulus perlucidus, spotted over Mount Fuji, Japan in around 1830 by Katsushika Hokusai.

WHEN THE CLOUDLETS in a layer of mid-level Alto cumulus have gaps between them like this, they are described as perlucidus. This print by the 19th-century Japanese artist Katsushika Hokusai is from his classic series *Thirty-six Views of Mount Fuji*. It is titled *South Wind, Clear Sky (Gaifu kaisei)*. That strikes us as a bit of a misnomer.



Astronauts aboard Space Shuttle Columbia in 1999 submit their winning entry for the 'Most Clouds Spotted in One Go' competition.



Towering Cumulus and Cumulonimbus gilded by the setting Sun, spotted over Singer Island, Florida, US by Luda Sinclair (Member 46,659).

As the skies appear to a man, so is his mind. Some see only clouds there; some, prodigies and portents; some rarely look up at all; their heads, like the brutes', are directed toward Earth. Some behold there serenity, purity, beauty ineffable. The world run to see the panorama, when there is a panorama in the sky which few go to see.

The Journal of Henry David Thoreau, 17 January 1852